



*South African Educators' Experiences Of  
Learners Who May Have ADHD In Their Classrooms*

thesis presented by

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“God is not a deceiver that he should offer to support us and then, when we lean upon him, should slip away from us.” - Saint Augustine.



## Declaration of Authenticity

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I, Maria Albertina Lopes (Student number 95146653) hereby declare that this thesis titled:

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is my own work, and has not been submitted for any degree at any University.

A handwritten signature in black ink, appearing to read 'MA Lopes'.

31<sup>st</sup> March 2008

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MA Lopes

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Date



## Abstract

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Attention Deficit Hyperactivity Disorder (ADHD), according to the DSM-IV-TR, is a developmental disorder that is first identified in childhood, where children display inattention and hyperactivity, impulsivity or a combination thereof. This PhD study focuses on understanding and explaining how educators understand learners who may have ADHD in their classrooms. The main research question is: "How do educators experience learners in their classrooms who may have ADHD?" The main research question was developed into sub-questions: 1) How do educators experience teaching and teaching the learner who may have ADHD? 2) How do educators manage their classrooms with learners in their classrooms, who may have ADHD? 3) How has the experience of educating learners who may have ADHD influenced or affected the educator? A narrative research design was employed, whereby 17 educators, from three different schools from Gauteng were interviewed. Informed consent was collected from all participants. The textual data was analysed using content theme analysis. The educators' narratives varied according to teaching experience and maturity within the diverse context of the school environment. Five themes emerged from the data generated from the study. Findings from the study indicate that: (1) learners who may have ADHD appear to be treated differently from the other learners; (2) the educators' keep learners who may have ADHD busy with different activities as one of the methods most commonly used in managing learners who may have ADHD; (3) the educators feel that learners who may have ADHD challenge them; (4) educators feel that they need to be able to share information with other educators on how to manage and support learners who may have ADHD and that they need outside assistance from a specialist and (5) the educators feel that parents do not pull their part in assisting educators and/or learners who may have ADHD. Subsequent to the theme analysis two interviews were then selected, instrumentally analysed and discussed in order to represent personalised accounts of educators' experiences of learners who may have ADHD in their classrooms. Lastly, the themes have been presented as a narrative.

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## Keywords

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ADHD	Educator
Attention Deficit Hyperactivity Disorder	South Africa
Experience	EBD (Emotional and Behavioural Disorders)
Classroom	
Learner	

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## Chapter 1: *An introduction to the Study*

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### 1.1 INTRODUCTION

This PhD study focused on understanding and explaining how educators understand and experience learners who may have Attention Deficit Hyperactivity Disorder in their classrooms. Attention Deficit Hyperactivity Disorder (referred to as ADHD), according to the Diagnostic and Statistical Manual of Mental Disorders-IV-Text Revised (APA, 2000), is a developmental disorder that tends to be identified in childhood, where learners display inattention and hyperactivity, impulsivity or a combination thereof (Barlow & Durand, 1995; Carson, Butcher & Mineka, 1996; Quay & Hogan, 1999).

### 1.2 PURPOSE AND AIM OF THE STUDY

The purpose of the study is to understand and explore educators' experiences of learners<sup>1</sup> who may have ADHD<sup>2</sup> in the classroom. The aim of this study is to determine what and how educators make sense of learners who may have ADHD in their classroom. Purdie, Hattie and Carroll (2002) state that in order to address the educational success of learners who may have ADHD it is important that educators (and parents) directly address their educational difficulties. This can be achieved if the educator knows how to address the educational difficulties, keeping in mind the challenges facing a learner with ADHD. Therefore, this study will determine the specific experiential knowledge that educators may have to be able to address the challenges of learners who may have ADHD.

Determining what and how educators make sense of learners who may have ADHD in their classroom information can assist in determining how educators include learners who may have ADHD in their classroom and what kind of psycho-educational and psycho-social information is needed in order to make it inclusive. This information may be pertinent to teacher training institutions, as institutions could gain valuable information as to how educators from different schools experience learners who may have ADHD in their classroom. The problem statement, here below, illustrates how the study came about.

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<sup>1</sup> The term 'learners who may have ADHD' is used throughout the thesis. 'Learner' is stated first as it is considered politically correct to consider the person before the disorder.

<sup>2</sup> Learners have not been clinically assessed. Therefore, for the purpose of this study reference is made to learners as 'learners who may have ADHD'.

### 1.2.1 *Problem Statement*

Imagine the following:

The place is a classroom, within a primary school that is situated approximately 25 kilometres from the Pretoria city centre. The Grade 1 classroom is a hub of activity and the learners are excited to start their day. The educator needs to raise her voice to get the learners settled and to have them sit in their seats. There is however one particular learner who does not seem to hear the educator and goes on to run around the classroom.

For some educators this scene may sound familiar and for others perhaps not. There are learners who appear to be more challenging than the rest. They appear not to be able to listen to instructions, nor do their work in the classroom or at home, they do not seem to have many friends and they cannot sit still in the classroom. The educator is faced with having to ‘discipline’ the learner. These learners may be at risk<sup>3</sup> of having ADHD. Learners at risk or who have ADHD display behaviour that may be similar to the vignette above. The educator may not have the necessary skills or instruments to identify such learners at risk of having ADHD, and they often go through the school system labelled as being the ‘naughty’ learners. According to Holz and Lessing (2002) approximately 3%-7% of South African learners could be diagnosed as having the disorder. ADHD in South Africa is discussed in more depth in chapter 2, section 2.4.1. The focus of this PhD research stemmed from my interest in how learners who may have ADHD behave within the classroom and how educators experience this.

Thus, the main research question is: “**How do educators experience learners in their classrooms who<sup>4</sup> may have ADHD?**” This question guides the study. The main question has been developed into sub-questions, and is as follows:

1. How do educators experience teaching and teaching the learner who may have ADHD?
2. How do educators manage their classrooms with learners in their classrooms, who may have ADHD?
3. How has the experience of educating learners who may have ADHD influenced or affected the educator?

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<sup>3</sup> The term ‘at risk’ has been used as the learners in this study have not been formally diagnosed.

<sup>4</sup> Throughout the thesis reference is made to educators’ experiences of learners, relating to the educator as subject and learner as subject within a sentence. However, learners are noted as subjects and therefore the term “who” instead of “whom” is used.

## 1.2.2 Rationale

I have been working in schools as a researcher and a psychologist for many years. During 2003, I had the opportunity to work in schools within the Tshwane area. The educators that a CEA<sup>5</sup> colleague, Vanessa Scherman, and I encountered seemed to be facing problems, such as those outlined above in the vignette. Of course, not all such examples of misbehaviour can be pinpointed to ADHD, but the educators expressed that they felt that they needed assistance in being able to handle the learners who ‘misbehave’ or are ‘naughty’.

If ADHD exists in our schools, one can ask whether educators can deal with such learners. Are learners at risk of having ADHD misunderstood at school, both by the educator within the classroom and also by his/her<sup>6</sup> peers? Is it possible that perhaps educators and classroom peers either do not recognise or do not understand ADHD? There are not many studies of ADHD in the classroom specifically (Purdie *et al.*, 2002) within a South African perspective. The studies that are available on the learner at risk of ADHD in the classroom, in South Africa, either focus on inclusive education (Holz & Lessing, 2002), the diagnosis of the learner (Meyer, Eilertsen, Sundet, Tshifularo & Sagvolden, 2004) or how to treat the learner with cognitive individual therapy (Karande, 2005; Yeschin, 2000). Thus, this PhD study will contribute to the body of knowledge concerning ADHD *within South African classrooms*.

This thesis is a contribution, to the body of research existing in South Africa on ADHD, to investigate how educators experience learners who may have ADHD in the classroom. A study that explores the experiences of educators, explores how educators respond to behavioural and academic problems within the classroom. Inclusive education, as stated above, means that educators need to include learners who may have ADHD and they need to be regarded in the classroom. Purdie *et al.* (2002) state that in order to address the educational success of learners who have ADHD, it is important that educators (and parents) directly address their educational difficulties. This can be achieved if the educator knows how to address the educational difficulties keeping in mind the challenges facing learners who may have ADHD.

The narratives of the educators may inform principals, parents, ADHD support groups, teacher training institutions what educators experience in the classroom. This information may be useful when looking at what kind of support educators would need from school staff,

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<sup>5</sup> CEA refers to the Centre of Evaluation and Assessment, a research centre within the Faculty of Education, University of Pretoria.

<sup>6</sup> Throughout this thesis reference is made to persons in both female and male terms in order to present gender in an unbiased manner.

what kind of further training would be needed and what kind of information and contact would be needed with parents.

A learner with ADHD may be considered to have a 'barrier towards learning' as ADHD may inhibit his/her ability to learn. As such, the Department of Education (2001) highlights the importance of classroom educators in the White Paper 6 Special Needs, and how they can contribute to the inclusion of learners. The White Paper 6 and other Department of Education documents like the Guidelines for Inclusive Learning Programmes (DoE, 2005) is discussed in more detail in chapter 3. However, according to the Department of Education (2002), schools should create the conditions for learners to succeed, addressing their barriers to learning, as experienced by individual learners (Holz & Lessing, 2002). Within South Africa there are certain schools that may have procedures or strategies in place, for example having a resident educational psychologist or learning support educator<sup>7</sup> present, but less privileged schools may not have the same benefits (Barber, 2001). However, what happens when an educator or school does not have the skills or instruments to identify and manage these learners? How do less privileged schools include learners at risk of having ADHD? How do educators include these learners in their classrooms? Chapter 3 discusses the role of the educator in depth.

The studies that have been conducted often pathologise<sup>8</sup> ADHD in the learner and sometimes do not refer to its results of pathologising learners, within the social context. The preliminary literature review suggests that the focus of researchers and practitioners is to view ADHD within the medical model pathologising the learner. (An explanation of the literature will be included under the literature review, chapter 2). There have been attempts to understand the learners at risk of having ADHD, namely the disorder itself from a medical model perspective (Purdie *et al.*, 2002), yet few, if any studies have looked at how ADHD may affect the learner relationally, specifically looking at the learner's relationship with his/her educator.

Although I have mentioned that studies and researchers often pathologise the learner, it is important that for the purpose of this study, the DSM-IV (Diagnostic Statistical Manual of Mental Disorders, which is the manual that psychologists, psychiatrists and doctors use to make clinical diagnosis) has been included refer to criteria of identifying learners whom may have ADHD, since it a disorder that is diagnosable. However, I opt to remain sensitive to the possible negative effects of pathologising, based on a diagnosis of ADHD.

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<sup>7</sup> The term 'learning support educator' refers to the educator that is specifically trained to deal with learning and behavioural disorders.

<sup>8</sup> The use of the term pathologise refers to the tendency of health care professionals to label a person with a disorder/syndrome, therefore labeling him/her with a medical condition that is often perceived as a deficit.



As ADHD is a disorder that is considered to be identified at an early age, namely around seven, according to the DSM-IV-TR, (2000), the learners who will indirectly take part in this study will be between six and nine years of age. If learners who may have ADHD are not identified and attended to, research indicates (Burke, Loeber & Lahey, 2001; Whalen, Jamner, Henker, Delfino & Lozano, 2002) they may become socially isolated and underachievers throughout their school careers. Identifying and attending to learners who may have ADHD could allow the learner an opportunity to improve his/her academic and behavioural performance, as correct<sup>9</sup> interventions can be implemented by educators and parents.

### 1.3 ATTENTION DEFICIT HYPERACTIVITY DISORDER

According to the Diagnostic and Statistical Manual of Mental Disorders-IV-Text Revised (APA, 2000) Attention Deficit Hyperactivity Disorder (ADHD) is a developmental disorder characterised by inattention and hyperactivity, impulsivity or a combination thereof<sup>10</sup>.

Quay and Hogan (1999) explain that there are three sub-types of ADHD; namely (1) predominantly inattentive, (2) predominantly hyperactivity-impulsive and (3) combined. There are also certain criteria for the symptoms in terms of the duration of the symptoms (symptoms need to be present for at least six months or longer), maladaptiveness (the behaviour lead to impairment in social, academic and occupational settings), age of onset (no later than seven) and impairment in two or more settings, for example school and home (Barlow & Durand, 1995; Gordon & Asher, 1994; Quay & Hogan, 1999).

#### 1.3.1 *Inattention*

Some of the diagnostic criteria for **Inattention** include: (1) The learner often fails to give close attention to detail, and makes careless mistakes; (2) the learner has difficulty sustaining attention in tasks; (3) the learner does not seem to listen when spoken to directly; (4) the learner does not seem to be able to follow through on a task or instruction; (5) the learner has difficulty with organising tasks; (6) the learner will avoid, dislikes or is reluctant to take part in tasks that require mental effort; (7) the learner often loses things, (8) the learner is easily distracted and (9) the learner is often forgetful in daily tasks (APA, 2000; Barlow & Durand, 1995; Quay & Hogan, 1999).

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<sup>9</sup> As psychologist I recognise that each individual learner may have individual medical, psychological and educational needs. Therefore a 'correct intervention' is reference to an intervention that suits a particular learner and that meets his/her needs.

<sup>10</sup> Reference is made to the DSM-IV-TR as it is recognised as one of the two authoritative sources of mental health disorders. The other source is the ICD-10 by the World Health Organisation. This is discussed in chapter 2.

### 1.3.2 *Hyperactivity*

With regards to **Hyperactivity** the diagnostic criteria include: (1) the learner often fidgets or squirms which is considered maladaptive and not consistent with his/her development level; (2) the learner will often leave his/her seat even though he/she is required to remain seated; (3) the learner will run or climb which is considered to be inappropriate behaviour for the learner; (4) the learner often has difficulty with keeping quiet especially when taking part in fun activities; (5) the learner seems to be always “on the go” and (6) talks excessively (APA, 2000; Barlow & Durand, 1995; Quay & Hogan, 1999).

### 1.3.3 *Impulsivity*

With regards to **Impulsivity** the diagnostic criteria include: (1) the learner will often blurt out answers before the question has been completed; (2) the learner has difficulty taking his/her turn and (3) the learner will interrupt or intrude on other learners or adults. If one takes this into account, one can understand why educators could find it difficult to provide learners who may have ADHD with assistance within the classroom setting (APA, 2000; Barlow & Durand, 1995; Quay & Hogan, 1999).

## 14 RESEARCH QUESTIONS

The research questions were developed and stated in 1.6.2, a brief description is given of how the research question and sub-questions are developed. However, in chapter 4, the research question and sub-questions are discussed in greater detail. The main research question guided the development conceptual framework, research design and methodology.

## 15 THE CONCEPTUAL FRAMEWORK

The conceptual framework used in this study is based on Bronfenbrenner’s Ecological Model (Bronfenbrenner, 1979; Bronfenbrenner, 1989; Stolzer, 2005, Bronfenbrenner & Morris, 2000; Friedman & Wachs, 1999). The conceptual framework, with the research questions, has supported the researcher in framing the data collection, data analysis and presentation of the findings. The focus of the conceptual framework is the experience of the educator of the learners who may have ADHD in their classroom. The educator forms part of the micro-system. The classroom and the learners, including learners who may have ADHD, form part of the meso-system. The conceptual framework will be discussed in detail in chapter 3.

## 1.6 RESEARCH DESIGN

This study employed a narrative research design (Creswell, 2002), as the researcher aimed to understand, explore and discuss the experiences the educators have had with learners who may have ADHD in their classrooms. In a narrative research design researchers describe the lives of persons, tell stories of people's lives and write narratives of persons' experiences (Creswell, 2002).

The focus of a narrative research design is to collect data, describe people's personal stories and discuss the meaning of the person's experiences. Personal accounts or a personal experience story was used as a method of narrative research (Creswell, 2002; Clandinin & Connelly, 2000).

Creswell (2002) states that the narrative research design has recently been implemented in educational studies that have highlighted educator reflection, educator knowledge (what they know and what they do not know, how they think professionally and how they make decisions in the classroom) and "voicing" educator experiences. I aimed to provide the means for educators to voice their own personal experiences of the learners who may have ADHD in their classrooms. The negative behaviour that is acted out by learners who may have ADHD, as listed above in the literature chapter, can impact negatively on the teaching and learning that takes place in the classroom. Therefore, this negative behaviour can be expressed as an "educational problem". Narrative researchers, thus, seek to explore an educational research problem by understanding the experiences (Creswell, 2002).

### 1.6.1 *Interpretive Paradigm*

This PhD study is an interpretive inquiry (Richardson, 1996) using a narrative research design (Clandinin & Connelly, 2000). According to Clandinin and Connelly (2000) a narrative research design seeks to understand the personal and social experiences of educators in interaction with others. In chapter 4, Interpretive inquiry, the ontological position and the role of the researcher is discussed in more detail.

### 1.6.2 *Ontological Position*

Qualitative research and using interviews in particular offer the opportunity to explore how everyday life is experienced and how meaning is understood. I, as researcher, have had the unique opportunity to probe, explore or negotiate the participants' experiences regarding learners who may have ADHD in the classroom. This PhD study is considered to be

constructivist in its ontological position as it supports the notion that social phenomena are socially negotiated in interaction (Bryman, 2004).

### 1.6.3 *The Role of Researcher*

A researcher forms an integral part of the process as he/she observes and participates in the collection of data (Parker, 1994), by bringing in his/her unique experiences and understandings to the process. The researcher does not stand outside nor is objective to the whole research process. Instead the researcher plays an important role in understanding and re-constructing the personal accounts and narratives of the participants. As a result the researcher can be viewed as a co-participant.

As researcher, I aimed to make sure that each participant understood the purpose of the research. In the interviews with the educators I aimed to listen to the responses allowing for the participants/educator to speak of his/her experience without any judgement. Therefore, the goal was for the participants to be able to speak without feeling as if they were being evaluated; without thinking that they needed to say the 'correct' thing.

## 1.7 **METHODOLOGY**

The schools, used in this study, were selected using purposive and convenience sampling. Semi-structured interviews guided by an interview schedule were conducted with 17 educators from three different primary schools in Tshwane. The interviews were recorded to obtain textual data that was analysed using content analysis. The themes that emerged from the data were then conveyed in the form of a narrative. The procedures that were applied are briefly discussed here below.

### 1.7.1 *The Research Process*

A systematic approach was followed, as it allows for the process of collecting data and developing narratives to be transparent and clear to the reader, the participants, the auditor and other interested parties. The research process, adapted from Creswell (2002, p.525), followed different parts that integrate unpacking of meaning and reflection of the research process. The research process is elaborated in chapter 4 with an accompanying diagram. The research process describes the data collection and how it was conducted. The systematic approach allowed for the study to be guided by the conceptual framework and the research questions.

### 1.7.2 *Sampling*

Purposive and convenience sampling (Gay & Airasian, 2003, Silverman, 2000) was selected for this study. Seventeen educators from three schools from the Tshwane region were interviewed. In chapter 4 the sampling is discussed in more detail.

### 1.7.3 *Interviews*

The research questions, as listed in section 1.2.1 have been posed in an interview schedule that was used in interviewing seventeen educators. The main research question: “How do educators experience learners in their classrooms, who may have ADHD?” has been posed. The main research question was further developed into sub-questions in order for the educator to articulate his/her experiences of learners who may have ADHD in the classroom.

One-on-one interviews were conducted with the seventeen educators. Interviews, as understood in this PhD, are conversations with a purpose that allow the researcher to discover the participants’ views, experiences and/or opinions but being respectful to how he/she frames responses (Marshall & Rossman, 1999). Interviews are discussed in detail in chapter 4.

Certain procedures needed to be set in place in order to ensure and/or improve the trustworthiness of the data. The trustworthiness of the data is important to ensure that the true experiences of the educators are reflected in a fair and truthful way.

### 1.7.4 *Trustworthiness of the Data*

In order for the data that has been analysed, to be considered trustworthy certain checks have been put in place to verify the data and the analysis (Fade, 2003; Pope, Ziebland & Mays, 2000). For the purpose of this PhD study, certain structures to increase trustworthiness, namely: (1) credibility; (2) transferability; (3) dependability and (4) confirmability (Seale, 1999) will be implemented. Credibility, transferability, dependability and confirmability are terms used in qualitative research (Rolfe, 2006), that refer to the procedures that strengthen the study, making it trustworthy and verified (Morse, Barret, Mayan, Olson & Spiers, 2002).

The transcripts and themes that were elicited from the transcripts were given to the educators for member checking and to a colleague for peer review. The member checking and peer review will be discussed further, in chapters 5 and 7, as part of the study.

## **1.8 ETHICAL CONSIDERATIONS**

### **1.8.1 *Informed Consent***

Two of the primary ethical considerations that were considered for this study were informed consent and confidentiality. According to Silverman (2000) informed consent is (1) giving information about the research that is relevant to the participant's decision about whether to participate; (2) it means that the participants understand the information given (that the participants understand the language of information etc.) and (3) includes ensuring that the participant's decision is voluntary. Informed consent was given by the school and individual educators after several meetings. Informed consent, as declared in the consent forms and the meetings, is discussed further in chapter 4.

### **1.8.2 *Confidentiality***

Confidentiality of the schools and educators is important in order for the educators to feel as if they can share their experiences with the researcher. Thus, confidentiality of both school and educator were kept throughout the research process, as stated in the consent forms. (The consent form has been attached as Appendix F).

## **1.9 CONCEPT CLARIFICATION**

There are certain concepts that have been used throughout this thesis for the purposes of this study. The first concept that is used is "*educator*", which is also used in the title. The educators referred to in this study are specifically from South Africa. South African educators are currently going through much transition and challenges (Le Roux, 2000; Fleisch, 2004; Vandeyar, 2005). Therefore, it seemed pertinent to focus this study on the experiences of educators within the context of their classrooms and their schools. Educators have different roles that may influence their experience of teaching and learning. Educator's roles are discussed in more detail under section 3.6.1.2.

This study makes use of the word "*experience*" which refers to that which happens or an encounter that the educator may have undergone. (Gilmour, Kerr & Kumar, 2003; Dictionary.com, 2007 Compact Oxford English Dictionary of Current English. 2005).

“*Experience*,” as used in this study, also refers to the knowledge/skill that the educator may have gained as a result of observation, encountered or undergone (Gilmour *et al.*, 2003; Dictionary.com, 2007).

The word “*learner/learners*” is used throughout this thesis and refers to the school going child/children. The phrase “*learners who may have ADHD*” is used as learners from some schools may not have been formally diagnosed with ADHD. Although there were learners who were formally diagnosed in schools where educators were interviewed for this study, other learners from some schools have not been formally diagnosed. The learners from some schools that have not been formally diagnosed appear to express ADHD type behaviour and therefore educators were interviewed to investigate how they experience these learners, who may have ADHD, in their classrooms. This study focus is educator experiences with the goal of understanding learners with ADHD. As educators’ experiences of learners who may have ADHD are explored, learners are indirectly involved. The educator and learner relationship is examined in chapter 3, section 3.6.1.1.

The last concept that is used throughout this study is “*classrooms*”. A classroom is defined as a room where groups of students or learners are taught or a room or place especially in a school in which classes are conducted (Dictionary.com, 2007). Manke (1997) discusses the power dynamics that take place within a classroom between an educator and a learner. The roles of educator and learner are socially constructed, as educator and learner interact. The focus of this study is the educator experience of learners who may have ADHD which takes place in the classroom. Thus, the interaction between educator and learners who may have ADHD which encompasses teaching and learning takes place in the classroom.

#### 1.10 THE ORGANISATION OF THESIS: OUTLINE OF CHAPTERS

The following is an overview of structure of the thesis. Chapter 2 focuses on the analysis of relevant literature to elaborate on the background of the study and further explore the research problem. Chapter 2 has been written, building on literature to highlight the complexities involved in ADHD.

The conceptual framework that was developed for this study is found in chapter 3. The conceptual framework is placed in the context of the situation with classrooms and educators in South Africa and the other possible theories of ADHD.

In chapter 4 the research design and methodology for the thesis is presented. The research design and methodology are discussed explaining what methods and strategies were employed in order to collect and analyse data.

The results and findings will be presented, as themes, in chapter 5, after content analysis is administered on the data of the transcribed interviews (see Appendix M). Chapter 6 will present a comparison of two educators' experiences and the experiences of the educators as a narrative. The conclusion chapter, chapter 7, focuses on the findings, conclusions, shortcomings and recommendations of the study.

## 1.11 CONCLUSION

As stated, the aim of this PhD study is to determine how educators may experience learners who may have ADHD in their classroom. The assumption is that this can be accomplished by adhering to a systematic process of reviewing the current available literature on ADHD, developing an interview schedule based on the research questions, collecting data, analysing the data, verifying the data and lastly presenting the findings. The following chapters deal with this research process in detail.

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## Chapter 2: Literature Review of ADHD and Interventions for ADHD

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### 2.1 INTRODUCTION

Behavioural variance among learners appears to be a common occurrence at school and at home and often does not require specialised attention. However, some cases of atypical behaviour do deserve the focused attention of an educator or parent. Attention Deficit Hyperactivity Disorder (hereafter referred to as ADHD) seems to be such a case. ADHD is catalogued as a pervasive developmental disorder that often manifests as misbehaviour (APA, 2000). Consequently, ADHD could be easily misunderstood for the reason that educators, parents and some health professionals often have little understanding of the complexity of the disorder. The complexity of ADHD stems from (a) the many factors that contribute to its etiology (cause), (b) its diagnosis, differential diagnosis and co-morbidity and (c) its epidemiology (prevalence). During the decision-making process involved in the diagnosis and treatment of ADHD, health professionals often have to depend on the subjective opinions of parents, yet without any regard for the educators' experiences of and with the learner, which practice adds to the complexity of ADHD.

The following chapter defines and discusses the definition of ADHD, describes the diagnosis and differential diagnosis involved, co-morbidity, the epidemiology, etiology, self-application of the learner with ADHD and interventions applying the conceptual framework proposed for this thesis. The subsequent critical literature review is discussed in close association with the conceptual framework proposed for this thesis, which originates from Urie Bronfenbrenner's ecological model (Bronfenbrenner, 1979).

### 2.2 DEFINITION OF ADHD

According to the Diagnostic and Statistical Manual of Mental Disorders-IV-Text Revised (APA, 2000), from this point on referred to as DSM-IV-TR, ADHD is a developmental disorder characterised by inattention and hyperactivity, impulsivity or a combination thereof. ADHD is a disorder usually first diagnosed in infancy, childhood or adolescence and found under the cluster of disruptive disorders (APA, 2000; Wodrich, 1994). A learner is thus often diagnosed in the first few years of formal education; where educators and educational psychologists are alerted to the atypical behaviour associated with ADHD (Andrews, 1999). Thus, it is often persons outside of the family unit that note that the behaviour of the learner appears to be atypical. There are three subtypes of ADHD; namely (1) predominantly inattentive, (2)

predominantly hyperactivity-impulsive and (3) combined (Gordon & Asher, 1994; Quay & Hogan, 1999). A description of the subtypes will be given below in section 2.3.

Learners can display ADHD behaviour with predominantly inattention, often referred to as ADHD-PI, ADHD with predominantly hyperactivity-impulsivity (ADHD-HI) or ADHD with combined inattention and hyperactivity-impulsivity (ADHD-C) (APA, 2000; Piek, Pitcher & Hay, 1999). Learners who present with predominantly inattention, previously known as Attention Deficit Disorder (ADD) (Green & Chee, 1994; Sonna, 2005) have difficulties with learning, paying attention during either academic work or play, often have difficulty avoiding careless mistakes, have difficulty in completing tasks, chores and projects, have difficulty in doing tasks sustaining mental effort, have difficulty in keeping track of homework, and belongings such as books, toys, clothes and school supplies, are easily distracted and have difficulty remembering.

Learners who present with predominantly hyperactivity-impulsivity will present with hyperactive behaviour and impulsive behaviour. The hyperactive behaviour (Green & Chee, 1994; Sonna, 2005) displays itself as a learner who squirms and fidgets constantly in his/her seat; often gets up from his/her seat; runs and climbs excessively in inappropriate places; has difficulty playing on his/her own and talks excessively. A learner that exhibits impulsive behaviour has the three following telltale signs of blurting out answers before the educator has finished the question; not being able to wait his/her turn and interrupts conversation or intrudes on others' activities. A description of the criteria is given in section 2.3, but a complete list of the criteria of ADHD can be found in Appendix A.

## **2.3 DIAGNOSIS**

In order for a learner to be diagnosed with ADHD certain criteria is set out by the DSM-IV-TR (APA, 2000) that need to be met. Based on these criteria (see Appendix A) the symptoms need to have persisted for six months, the behaviour should be considered as maladaptive, inconsistent to his/her development and should be present by the age of seven; the impairment should be significant in at least two settings (like home and school) and there must be significant impairment with social, academic or occupational functioning. These criteria are pertinent to this study.

The criteria state that the behavioural impairment needs to be significant in two settings; the most likely of which are home and school, thus affecting the social, academic and/or occupational functioning of the learner. Thus, it would appear that ADHD presents itself in different settings, thus effecting different persons in those settings. Not only would the

learner diagnosed with ADHD display ADHD behaviour at home, to parents, family and friends, the learner diagnosed with ADHD would also then show ADHD behaviour at school, to educators, classmates, peers and staff. The educator who spends at least six hours a day with the learner would then be able to observe and experience this behaviour first-hand.

To be diagnosed with ADHD-PI (Attention Deficit Hyperactivity Disorder Predominantly Inattentive) the learner must display at least six of the following behaviours for at least six months to be diagnosed:

- Often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities;
- often has difficulty maintaining attention in tasks or play activities;
- often does not seem to listen when spoken to directly;
- often does not follow through on directions and fails to finish school work, errands, or duties in the workplace (not due to oppositional behaviour or failure to understand instructions);
- often has difficulty systematising tasks and activities;
- often avoids, dislikes or is unwilling to engage in tasks that require sustained mental effort (such as schoolwork or homework);
- often loses things required for tasks or activities (e.g. toys, school assignments, pencils, books, or tools) and
- often seems to be easily distracted or preoccupied by extraneous stimuli or is often forgetful in daily activities (APA, 2000).

A learner with hyperactivity-impulsivity must display at least six of the following hyperactivity or impulsivity behaviours for at least six months to be diagnosed. Examples of hyperactive behaviour are: (1) often fidgets with hands or feet or squirms in seat; (2) often leaves seat in classroom or in other situations in which remaining seated is expected; (3) often runs about or climbs excessively in situations in which it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness); (4) often has difficulty playing or engaging in leisure activities quietly; (5) is often “on the go” or often acts as if “driven by a motor” or (6) often talks excessively. Examples of impulsivity behaviour are: (1) often blurts out answers before questions have been completed; (2) often has difficulty awaiting turn or (3) Often interrupts or intrudes on others e.g. butts into conversations or games (APA, 2000).

According to the International World Health Organisation (2007), the International Statistical Classification of Diseases and Related Health Problems (the tenth revision), states that Attention Deficit Hyperactivity Disorder is a disorder that is classified as a behavioural and emotional disorder with onset usually occurring in childhood and adolescence with the code

(F90-F98). The ICD-10 (World Health Organisation, 2007) goes on to describe ADHD as hyperkinetic disorder that is constituted by a

“...lack of persistence in activities that require cognitive involvement and a tendency to move from one activity to another without completing any one, together with disorganised, ill-regulated, and excessive activity” (World Health Organisation, 2007).

ADHD or hyperkinetic learners, as classified by the ICD-10 (refer to Appendix C) are often reckless and impulsive, prone to accidents, and find themselves in disciplinary trouble because of non-thinking violation of rules rather than deliberate defiance. In order for ADHD to be correctly diagnosed, it relies on the health professional collecting correct information regarding the learner’s behaviour (Karande, 2005). The current checklists, available to assist in making a diagnosis, is made up of questionnaires that a parent and educator need to fill out and are heavily criticised for the fact that it relies on the ‘observed opinion’ of others. Unlike other disorders that rely on more empirically based data, for example a blood test, ADHD diagnosis relies on someone’s perception of someone else’s behaviour. Recently, according to Sonna (2005), brain scans with the use of an EEG (electroencephalogram) can detect that the frontal lobes of learners with ADHD produced fewer beat waves than their peers; but also produce more alpha and/or theta waves, which are predominant when daydreaming. However, brain scans are less likely to be used in South Africa to diagnose learners with ADHD, primarily as it would not be cost effective. In South Africa, behaviour innate to ADHD is more noticeable in a highly structured classroom where learners are expected to keep still and to remain in their seats (Andrews, 1999). However, in classrooms where confusion exists because of a class size of more than forty learners and a lot of activity, learners who may have ADHD may be overlooked.

### 2.3.1 *Differential Diagnosis*

A differential diagnosis is the investigation conducted by the health professional to determine if the learner has ADHD and/or other symptoms of other disorders. A differential diagnosis needs to be made as the behaviour of a learner with ADHD could be mistaken for another psychological disorder. Brown (2000) highlights the fact that certain ADHD features may have symptoms similar to those found in Anxiety Disorder, where persons may appear restless and inattentive. Depression may manifest itself in problems of inattention, impulsivity and hyperkinesis (Brown, 2000). A differential diagnosis is needed by the health professional to identify if there are other symptoms that are not related to the ADHD, as discussed and illustrated by The Decision Tree in section 2.3.5 below. Thus, a learner may display ADHD-like behaviour, but may be reacting to a situation or event at home that may cause him/her to

be inattentive at school and cause restlessness. An in-depth understanding of the learner's clinical background and context; i.e. full history of what is occurring in that learner's life (and understanding) is necessary for a differential diagnosis.

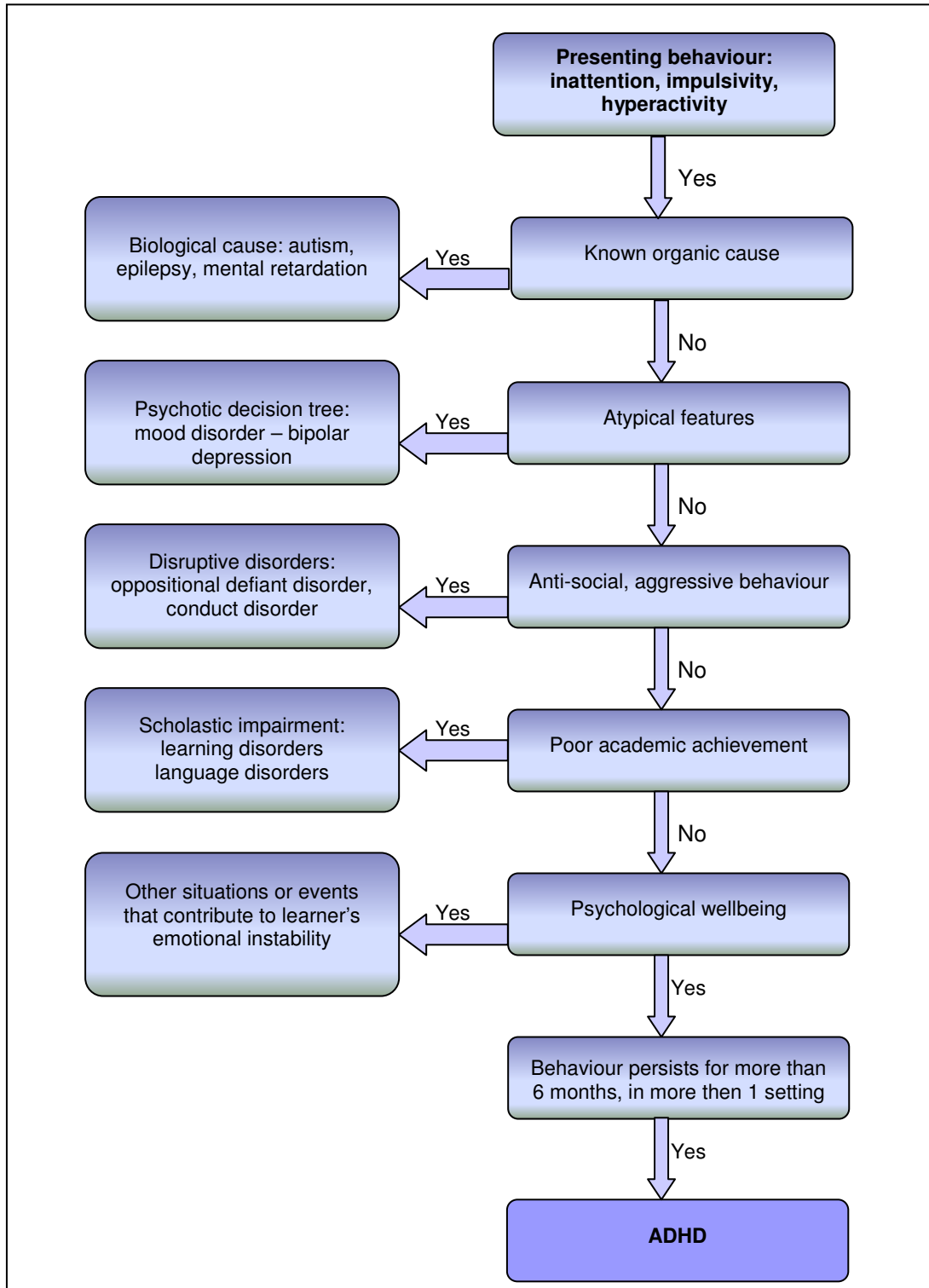
### 2.3.2 *Co-morbidity*

Co-morbidity might complicate diagnosis and prognosis of ADHD. That is there can be other disorders (as co-morbidity) that exist with ADHD, for example a learner diagnosed with ADHD can have oppositional defiant disorder or conduct disorder, mood disorder, an anxiety disorder, learning disorders and communication disorders too (APA, 2000; Brown, 2000; Cohen, Vallance, Barwick, Im, Menna, Horodezky & Isaacson, 2000, Davis, 1994, Silver, 1993, Wolraich, Wibbelsman & Brown, 2005). Figure 1 below illustrates The Decision Tree and how ADHD is diagnosed. A learner can have ADHD and it can co-exist with one or a number of disorders as mentioned above. Therefore, a learner diagnosed with ADHD can also be of an above average and gifted IQ, but might not perform very well on the assessment due to his/her inability to be attentive (APA, 2000). According to Fornes and Kavale (2001) understanding the co-morbidities that may exist with ADHD and the psychopharmacological treatment thereof, contributes to a successful treatment of learners diagnosed with ADHD. A successful treatment, for example, could be described as being able to assist the learner with a pharmacological intervention that improves his/her concentration so that academic performance is improved. A list of co-morbid factors can be found in Appendix B.

The DSM-IV-TR states that the clinician is advised to gather information from multiple sources and from a variety of settings (APA, 2000). Thus, the clinician or health care professional such as general practitioners, paediatricians, psychologists and occupational therapists are most likely to work together, as a multi-disciplinary team, in the diagnosis of ADHD.

Health care professionals therefore have certain decision-making powers in the life of the learner diagnosed with ADHD, which should only be exerted in the best interests of the learner, for health care professionals' decisions are likely to impact on the learner, his/her family life and possibly on the quality of the learner's academic self-application. By understanding and aspiring to identify co-morbid conditions, health care professionals ensure that planning and implementation of treatment regimes take place responsibly. Although decision-making rests with health care professionals, the diagnoses of ADHD and potential co-morbidities are often not decisions that are informed by other persons involved in the learner's life.

The proper diagnosis of ADHD, by the health care professional, is reliant on a thorough assessment of the learner. The following section discusses the assessment of the learner diagnosed with ADHD in South Africa.



**Figure 1: Decision Tree** (Adapted from APA, DSM IV-TR, 2000; DSM III, 1980)



### 2.3.3 Assessment of ADHD<sup>11</sup>

Diagnosing ADHD is often difficult to do in that firstly, the health professionals in South Africa who may diagnose ADHD include a neurologist, paediatrician, general practitioner, psychiatrist and a psychologist. As ADHD is a disorder that relies on the health professional collecting accurate information regarding the learner's behaviour, the current assessment is questionnaires that a parent and educator need to fill out (Innovact, 2006). Criticism on the assessment is directed at the fact that parents and/or educators' observations can be subjective (Pelham, Fabiano & Massetti, 2005). For example, the Conners Rating Scales revised (CRS-R) that includes an educator, parent and adolescent self-report questionnaire, is criticised for it is based on a person responding to recollect subjective data on a learner. The parent and educator need to fill out a questionnaire that relates to the learner's observed behaviour at home or at school, the questionnaire, for example, asks if the learner sits fiddling with objects. The parents need to rate the response on a scale: "Not at all", "A little", "Pretty much" or "Very much". Therefore the parent and educator need to firstly observe the learner's behaviour and secondly need to provide accurate information for the correct diagnosis to be made. The response plotted on the scale between "Not at all", "A little", "Pretty much" or "Very much" is viewed as being subjective (Pelham *et al.*, 2005).

There are also a number of checklists available, on the Internet, that may assist both the parent and the educator, including the American Academy of Pediatrics (Zimmerman, 2006), the National Institute for Mental Health (2006) and the South African Support Group (ADHASA, Attention Deficit and Hyperactivity Support group of Southern Africa, 2006). Similar cautions apply to the use of these checklists.

A neurological assessment is one method, according to Pocklington and Mayberry (2006), of determining if a learner has ADHD. Yet a study by Young and Gudjonsson (2005) suggests that, although ADHD has neurological underpinnings, neuropsychological tests may discriminate poorly between ADHD and mild psychiatric disorders. The DSM-IV-TR (APA, 2000: 88) states that neurological tests have not been established as a recognised and proven means of diagnosis. Neurological assessment is part of the information (i.e. together with information from parent and educator) that needs to be collected and recorded as part of the process leading up to a diagnosis. However, a diagnosis cannot rely solely on a neurological assessment due to the fact that it has been shown to discriminate poorly (Young & Gudjonsson, 2005).

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<sup>11</sup> A diagnosis of ADHD is made through the use of an assessment. The assessment of learners with ADHD as well as the assessments available is discussed in this section.

Assessment and diagnosis of ADHD in learners require cross disciplinary cooperation and integrative thinking (Gordon, 1998). Thus, different persons from different systems (micro-, meso-, exo- and macro-systems) need to be consulted. The learner with ADHD would benefit from an assessment that has been a multi-disciplinary contribution, where each discipline views ADHD from a different field and perspective, which might enrich treatment regimes with different forms of treatment. In the following section The Decision Tree examines how a health care professional would step-by-step make a differential diagnosis and assess if there is co-morbidity.

### 2.3.4 *The Decision Tree*

The Decision Tree above (figure 1) proposes a path of decision-making that a health professional would take to diagnose ADHD. The Decision Tree commences with the bubble that “Presenting behaviour: Inattention, impulsivity, hyperactivity”, which seems to be most prominent, that is where the learner or learners presents him/herself to the health professional with ADHD behaviour. The person could be a learner or adult, as adults could also be diagnosed with ADHD (APA, 2000). The presenting behaviour might include behaviours such as makes careless mistakes; is inattentive; does not seem to listen when spoken to directly; does not listen to instructions; disorganised; avoids school work or homework; loses things; is distracted; fidgets; cannot sit still; talks excessively; blurts out answers and interrupts conversations (APA, 2000). These behaviours could describe other disorders or could also be the result of events and/or situations and therefore another diagnosis, other than ADHD, cannot be ruled out. The Decision Tree therefore allows the health care professional to make an informed decision, taking into consideration other causes of behaviour.

The next step on The Decision Tree is the “Known organic cause”. Under this heading the parent and/or guardian might consult with a general medical practitioner, e.g. the family doctor. The health care professional has to consider the presence of physiological causes for this behaviour, therefore collaboration with a number of medical professionals is advised, e.g. a neurologist, paediatrician, and/or psychiatrist. The parent relies on the medical doctor to consult other persons to make the best decisions in the interest of the learner. The health care professional seeks to rule out neurological disorders that may have similar presenting behaviour like autism and epilepsy. In addition, the health care professional will need to exclude other physiological causes for the atypical behaviour.

If there is no other “Known organic cause” for the behaviour, the third step, atypical features, on The Decision Tree should be followed. With this step the health care professional



determines if the learner's behaviour is atypical behaviour found in persons associated with a mood disorder, e.g. a learner with depression (or a mood disorder), may be disinterested in school activities or have a reduced attention span (APA, 2000). The health care professional would need to be particularly careful in making a diagnosis as a learner with ADHD may also have a co-morbid mood disorder; that is, a mood disorder that may exist together with ADHD. The health care professional is required to establish if the learner presents with ADHD and depression as a co-morbidity or if the learner has depression only. A thorough medical history and an assessment, as stated above, is imperative in this decision-making process. In order for ADHD to be correctly diagnosed, it relies on the health professional collecting correct information regarding the learner's behaviour (Karande, 2005).

The next step includes reviewing anti-social aggressive behaviour. The health care professional is required to verify if the learner displays anti-social and/or aggressive behaviour. The learner with ADHD may display some anger and frustration at home and school. The learner may feel that he/she is not competent at the task he/she is busy with, not being able to concentrate, not being able to apply his/herself. The health care professional is required to establish the behaviour of the learner in at least two different settings; establish if the anger is due to ADHD or if it exists indeed without ADHD being present. If the antisocial or aggressive behaviour is such that it manifests without ADHD behaviour, as set out in the APA criteria, then a diagnosis of Oppositional Defiant Disorder or conduct disorder needs to be considered. Again the health professional is then required to enquire how the learner interacts with people and authority (Bailey, 2000). The health care professional would need to ascertain how the learner interacts with authority figures, including his/her educator.

The next step in the process of diagnosis is to determine if the behaviour is due to the poor school achievement. The learner with ADHD is often reluctant to be involved in a work activity that requires mental effort, and academically the learner may not perform according to his/her potential at school to the best of his/her ability. However, a learner that has a learning disorder or language disorder may also be reluctant to do any school work and may perform poorly in school work. Therefore, a health care professional would need to establish if the learner has either a learning or language disorder that would be the cause of the poor school achievement. This would be assisted by the health care professional, and the parents need to consult with a psychologist, educator, school and/ or occupational therapist.

With the last step in The Decision Tree one is to exclude all other situations or events that may contribute to the learner's atypical behaviour e.g., a traumatic event could account for a learner not being able to concentrate in class. Therefore a complete history that includes information of the home and school situation is essential. Persons both inside and outside of

the family system could contribute to an understanding as to what could contribute to a learner behaving atypically.

The parent and guardian may be ignorant to the behaviour of the learner; as he/she may believe that ADHD behaviour is 'normal'; 'gifted', 'cheeky', 'naughty'. In order for a correct and accurate diagnosis to be made, information from a number of sources would be beneficial. However, the learner's family or primary care system is not the only source of information for the health care professional. The health care professional should also consult with educators and staff members of the school, as well as medical practitioners, paediatricians, neurologists, psychologists and occupational therapists. The decision made by the health care professional (as positioned in the macro-system described in chapter 3) impacts learners with ADHD directly.

Another important source of information for the health care professional to make the diagnosis is the school. The school can be a wealth of information, as the learner spends about thirty hours a week at school. The educator then spends a great percentage with that learner and is an observer to his/her behaviour. This will be discussed further in this chapter and in chapter 3.

The following section discusses the prevalence of ADHD. The prevalence of ADHD is an important aspect of this study as literature suggests that it is likely that South African educators come across learners with ADHD in their classrooms. This is discussed further below.

## 2.4 EPIDEMIOLOGY

The epidemiology (or prevalence) of ADHD, according to the DSM-IV-TR (APA, 2000), has been estimated at 3-7% in school age learners. This figure is said to exceed depending on the study (Carr, 2000; Purdie *et al.*, 2002). According to Purdie *et al.* (2002) the possible reasons for the varying number in prevalence can be due to changes in diagnostic standards (evident in the difference in text of the Diagnostic and Statistical Manual of Mental Disorders-III (1983), Diagnostic and Statistical Manual of Mental Disorders-IV (1994), and DSM-IV-TR (2000). Other possible reasons include the overlap between ADHD and other externalising disorders, economic factors that have led to a reduction in mental health, education and managed care services, promoting the "medicalisation" of ADHD (Purdie *et al.*, 2002).

In the United States of America, the 2003 National Survey of Children's Health (NSCH) describes the results of that analysis, which indicated that, in 2003, an estimated 4,4 million learners aged 4-17 years were reported to have a history of ADHD diagnosis; of these, 2,5

million (56%) were reported to be taking medication for the disorder (Williams, Chapman & Lando, 2005).

It appears as if ADHD is more frequent in boys than in girls (APA, 2000; Purdie *et al.*, 2002; Quay & Hogan, 1999, Valente, 2001). The male-to-female ratio ranges from 2:1 to 9:1 depending on the type (Predominantly Inattentive type is less pronounced) and setting (where clinically referred learners are more likely to be male) (APA, 2000).

#### 2.4.1 ADHD in South Africa

According to the DSM-IV-TR (APA, 2000) ADHD occurs in various cultures. A study that took place in South Africa (a project by University of the North and Denmark) demonstrated that learners with ADHD are present within our South African (rural) schools (Meyer *et al.*, 2004). Meyer *et al.* (2004) stated that there were little intercultural differences; that is the structure and frequency of ADHD-like behaviour between various South African cultures as well as between other western cultures. However, from the same study there were similarities across language groups, taken from the teacher ratings from the six different languages (Afrikaans, English, Northern Sotho, Xitsonga, Tshivenda, Setswana), from over 6000 primary school learners from the Limpopo province (Meyer *et al.*, 2004) that were similar to findings reported in the USA and Europe. The following section discusses the etiology or causes that attribute to ADHD. The incidence of ADHD in South Africa has thus been illustrated to occur within our schools and classrooms.

#### 2.5 ETIOLOGY<sup>12</sup>

There are different and opposing views on the cause or etiology of ADHD. The possible causes of ADHD have been directed at neurological, genetic, parental and food (Samples, 2005), additives/nutritional deficiencies (Purdie *et al.*, 2002; Biederman & Faraone, 2005). There appears to be no consensus amongst researchers as to what directly causes ADHD (Purdie *et al.*, 2002), therefore the phenomenon ADHD is broadly defined. As a result there are many research studies and literature on ADHD (Dryer, Kiernan & Tyson, 2006; Biederman & Faraone, 2005). There appears to be a lack of a conceptual model that describes the links between the affected brain structures, cognitive functions, behaviour and the environment (Rapport, 2001).

It is important to note that the following sections from 2.5.1-2.7.5 have been written, highlighting the complexities of ADHD, guided by the conceptual framework in chapter 3.

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<sup>12</sup> Etiology spelling taken from APA (2004)

Also, the complexities that have been highlighted in the sections below bring to the fore the importance of the system, that is being able to work with the parents, educator and community in order to provide the best care or treatment for a learner who may have ADHD. In chapter 3, literature on ADHD, teaching and learning will be written from the perspective of the educator. The following is a description of ADHD and how it relates to learning. ADHD and specifically attention is located in the brain structures and therefore relates to cognitive functions that enable the learner to learn.

### **2.5.1 Executive Function**

Executive function (Brocki & Bohlin, 2004; Brown, M.B. 2000, Brown, T.E. 2006; Brenton, 1994) is the name that is given to the neurological model that highlights the link between attention to memory and to a cluster of other cognitive functions, contrary to the psychiatric (or the psychopathology) model, in which inattention has been linked to primarily disruptive behaviour. Burnett, Maruff, Vance, Luk, Costin, Wood and Pantelis (2001) describe executive functions as the improvement of information, the organisation of attentional resources, the inhibition of inappropriate responses and the monitoring of behaviour with respect to the current emotional or motivational state.

There seem to be several control functions, which are commonly called as “executive” in neuro-psychology and which may operate quite independently (Lehto, 1996). Learners with ADHD differ significantly on executive function measures (Berlin, Bohlin, Nyberg & Janols, 2004; Geurts, Verte, Oosterlaan, Roeyers & Sergeant, 2004). The executive functions are thought to be located in the frontal lobes of the brain and include higher-order cognitive processes which serve the purpose of “maintaining an appropriate problem-solving set for attainment of a future goal” (Berlin, *et al.*, 2004).

Brocki and Bohlin (2004) conclude from their developmental study of executive functions that there appears to be three stages of maturation: early childhood (6-8 years of age), middle childhood (9-12 years of age) and adolescence. Executive function would therefore be important to educationalists. Educational psychologists (as well as neuro-psychologists) may need to be conversant in both the psychopathology model (that is the model that views ADHD as a psychological disorder, attributing pathology to a learner with ADHD) and the neurological model (that is the model that views ADHD caused by a ‘malfunction’ in executive function attributed to structures in the brain and its neuro-psychology). Thus the neurological model views ADHD as a neurological disorder that impacts on a learner’s ability to attend in the classroom. The educational psychologist would need to be aware of the fact that ADHD is seen as a disorder that involves inattention (and possibly with ADHD with predominantly

hyperactivity-impulsivity or ADHD combined type) that may lead to disruptive behaviour. The disruptive behaviour, but more specifically inattention, may have a direct impact on the learner's ability to learn within a classroom.

Brown (in Brown 2000) explains that executive function is a wide range of central control processes in the brain that connect, prioritise and integrate operation of subordinate brain functions that allow a person to function effectively. Thus, many of the symptoms labelled under inattention are symptoms of executive function impairments. Learners, therefore, who can manage basic behavioural self-control, but are inattentive, may not be identified until they progress into secondary school.

Attention Deficit Hyperactivity with predominantly inattentive (ADHD-I) subtype is considered by Brown (in Brown 2000), as most common in the general population as compared to the prevalence of ADHD with predominantly hyperactivity-impulsivity that is common in boys in clinical settings.

Séguin, Boulerice, Harden, Tremblay and Pihl (1999) categorise executive functions into (1) set-shifting; (2) planning; (3) contextual memory; (4) inhibition; (5) fluency and (6) working memory. Working memory is considered by Brown (2000) as comprising activated information in long-term memories, the information in short-term memories, and the decision-making process that manages which information is activated in long-term memories and retained in short-term memories. Working memory, therefore, has a limited capacity and there are functional restrictions on how much information can be activated simultaneously. Individuals differ in the effective capacity of working memory. Burnett *et al.* (2001) explains that spatial working memory has the ability to hold multiple bits of spatial information simultaneously in memory; which is not present in learners who are receiving medication for ADHD.

Crucial elements of attention are arousal and energy. Varying intensities of arousal and activation engaged and disengaged from a constant flow of internal and external stimuli affects attention that involves the information within the cortex (Brown, 2000). Brown (2000) explains that emotion affects attention. This is evident in learners who appear to be tired and irritable and find it difficult to focus on the task at hand.

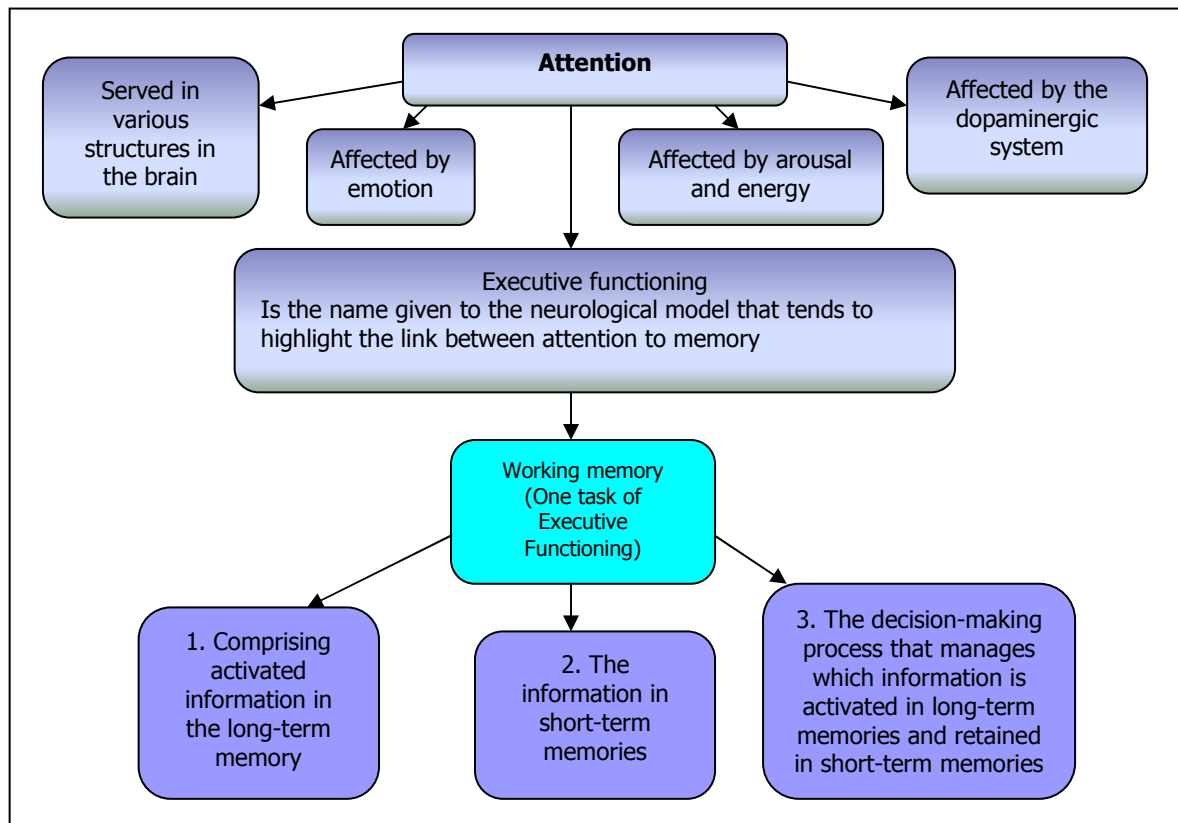
Emotion affects attention not only as a disruption that needs to be managed but also as a vital element in generating and sustaining attention (Brown, 2000). This can be seen in learners with ADHD who seem to be hyper-focused on an activity that they are interested in; for example a learner who cannot get up to go and bath because he/she is focused on the

Play Station game that he/she is playing. Thus, emotion may affect the broad range of attentional functions in ways that weaken or strengthen cognitive functioning.

Attention is a distributed process, thus it is served by many brain structures. Neuro-imaging studies show evidence of at least three anatomic networks that function separately and together to support various aspects of attention (Brown, 2000). The interconnecting networks include (1) an orienting network consisting of parietal, midbrain and thalamic circuits; (2) an executive attention network including the left lateral frontal areas and the anterior cingulate; (3) a vigilance network comprising the right frontal and right parietal lobes and the locus coeruleus (Brown, 2000).

Other functions of the executive functioning that may contribute to further understanding ADHD may be neurotransmitter chemicals like dopamine. Research on the role of neurotransmitter chemicals (catecholamines) in ADHD, have not been able to differentiate between inappropriate and hyperactive-impulsive symptoms. Yet it appears that ADHD may be related to dopamine reduction in certain areas of the brain, which is supported by the numerous studies (Levy, Hay & Bennett, 2006; Misener, Luca, Azeke, Crosbie, Waldman, Tannock, Roberts, Malone, Schachar, Ickowicz, Kennedy & Barr, 2004; Tannock, 1998) that have demonstrated that dopaminergic medications are effective in alleviating a variety of inattention symptoms. It is documented that anti-depressant medication, that increases dopamine levels in the brain, is prescribed alongside Ritalin and other stimulants for learners with ADHD (Green & Chee, 1994). Thus, these studies suggest that the neurotransmitter, the dopaminergic system, may play an important role in alleviating ADD symptoms. Inattention symptoms found in ADD may reflect the insufficient functioning of aspects of the dopaminergic transmission in the human brain.

The mind map presented in figure 2 below is a mind map of attention, representing my understanding of the various views on attention and how it relates to executive function, that are often found in the literature. The mind map is therefore a visual representation of the preceding literature study.



**Figure 2: A Mind Map of ADHD from the Neurological Model Perspective**

Neurological research is of great importance to advancing the knowledge and understanding of ADHD. The following section deals with the neurological research that has been explored in the field of ADHD.

### 2.5.2 Neurological Research

A body of research utilises and aims to explain ADHD from a neuropsychological and neurocognitive perspective through the use of neurological research (Du, Wang, Jiang, Livesley, Jang, Wang & Wang, 2006). Neurocognitive research has furthermore attempted to explain the gender differences found in learners with ADHD (Rucklidge, 2006).

Research (Green & Chee, 1994; Hynd & Hooper, 1992) using methods like the Single Photon Emission Computed Tomography (SPECT) and Positron Emission Tomography (PET scans) that assess the level of activity in the various parts of the brain, suggest that: (1) the frontal lobes and their close connections are found to under function in ADHD; (2) the areas of the brain that collect auditory and visual input seem to be overloaded in ADHD, suggesting that they are bombarded by unnecessary and inappropriate information and (3) when

stimulant medication (like Ritalin) is used the ADHD difference that is seen in the brain scan can be reversed to a great extent. A brain scan, whether a SPECT or PET scan, is one method of detecting ADHD in the learner, albeit costly. The alternative is to assess a learner using a neurological test. However, a study by Young & Gudjonsson (2005) proposes that neuropsychological tests may discriminate poorly between ADHD and mild psychiatric disorders.

Miller, Miller, Bloom, Hynd and Craggs (2006) explain that learners with ADHD, especially with atypical right-hemisphere perisylvian morphology may have an underlying risk of social comprehension. Miller *et al.* (2006) illustrates learners with ADHD who also have right-hemisphere atypicalities had difficulty in showing concern for others' feelings, listening attentively, and being a responsive, skilful partner in communication. The implications of this could be that a learner with ADHD (who also have right-hemisphere atypicalities) could be perceived by others as being difficult to understand.

Hemispheric specialisation is often linked to gender, and therefore has a genetic basis as well, in keeping with genetic research findings. Genetic research is aimed at contributing to the current body of knowledge on ADHD by being able to isolate genes, in order to find the cause and diagnose ADHD. The section below explains studies that have been in the field of genetics.

### 2.5.3 Genetic Influences

Genetic studies have investigated the relationship between phenotypic and genetic ADHD symptomology<sup>13</sup> (Levy *et al.*, 2006; Nadder, Silberg, Rutter, Maes & Eaves, 2001; Whitmore, Hart & Willems, 1999). Twin studies<sup>14</sup> have been implemented to investigate genetic influences of ADHD between girls and boys (Martin, Levy, Pieka & Hay, 2006). In a twin genetic study Nadder, Rutter, Silberg, Maes and Eaves (2002) explain that different forms of genetic liability control ADHD in males and inattention in females. This was achieved by measuring male, female and same gender twins in the Virgin Twin Study of Adolescent Behavioural Development (VTSABD) (Nadder *et al.*, 2002).

Current genetic research is attempting to isolate the gene that is responsible for ADHD (Wigg, Couto, Feng, Crosbie, Anderson, Cate-Carter, Tannock, Lovett, Humphries, Kennedy, Ickowicz, Pathare, Roberts, Malone, Schachar & Barr, 2005). In their study Misener *et al.* (2004) have isolated the genes (Haplotype 3) as being responsible for the inattentive

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<sup>13</sup> Symptomology refers to the behaviour presented by a learner with ADHD. This is the criteria for diagnosis referred to in section 2.3. The criteria are also listed in Appendix A.

<sup>14</sup> Twin studies refer to studies using identical twins. Genetic research often makes use of identical twins as they share the same genetic material.



symptom dimension, in particular and two other genes (DRD 1 and D1) as contributing to ADHD behaviour. The following section deals with how the learner with ADHD is able or unable to apply him/herself at school.

## 2.6 SELF-APPLICATION OF LEARNER'S WITH ADHD

A learner within a classroom setting needs to be able to apply him/herself in order to achieve academically. The learner is required to have gained certain cognitive, language and social skills to be able to thrive in the school environment. The learner with ADHD appears to be lacking these very skills that allow him/her to achieve academically. The subsequent section discusses the different studies that have been investigated in the field of the learner being able to apply him/herself at school.

### 2.6.1 *Learning Disorders*

Studies show that emotional and behavioural disorders (including Oppositional Defiant Disorder and Conduct Disorder) and learning disorders often co-morbid with ADHD (Dietz & Montague, 2006; Lucangeli & Cabrele, 2006; Volk, Neuman & Todd, 2005). The following section discusses the learning disorders that appear to co-morbid with ADHD.

A learning disorder can be diagnosed when a learner demonstrates abilities below the level that would be expected given their chronological age and grade level in school (DSM-IV-TR, APA, 2000). Learning disorders (also referred to as LD) consist of the following: (1) mathematics disorder (also known as dyscalculia); (2) reading disorder (also known referred to as dyslexia) and (3) disorder of written expression (also known as dysgraphia) (DSM-IV-TR, APA, 2000). In order for a learning disorder to be diagnosed certain criteria need to be met. For a diagnosis, according to the DSM-IV-TR (APA, 2000), of a mathematics disorder or dyscalculia to be made, the following criteria need to be found:

A learner's mathematical ability, as measured by individually administered standardised tests, is significantly below that expected, given the person's chronological age, measured intelligence, and age-appropriate education. The disturbance in criterion A notably interferes with academic achievement or activities of daily living that require mathematical ability. If a sensory deficit is present, the difficulties in mathematical ability are in excess of those usually associated with it.

As stated above, learners with ADHD have been shown to have a learning disorder together with ADHD (Dietz & Montague, 2006; Lucangeli & Cabrele, 2006; Volk *et al.*, 2005). Thus the health care professional and educator needs to be aware that the learner may have a co-

morbid learning disorder. A concrete example of how a learning disorder can influence an assessment could include the following: if the learner with ADHD does have a co-morbid learning disorder, the learning disorder, like dyscalculia, may be a barrier to the learner's performance on the numeracy subtests on an IQ assessment. Therefore the learner may perform much lower on the IQ test than is expected. The learner's inability to perform in numeracy tasks, in the IQ tests, may reinforce the notion that he/she is unable to complete the task; which may contribute to a low self-esteem.

As such, Monuteaux, Faraone, Herzig, Navsaria and Biederman (2005), stress the fact that that dyscalculia and ADHD are separate disorders; where ADHD is treated pharmacologically (with a stimulant like Ritalin) and dyscalculia requires academic remediation (remedial classes and/or extra tuition). Furthermore, the assessment of ADHD is clinical; dyscalculia can be psychometrically defined and requires psychological testing. ADHD cannot be psychometrically defined, which adds to the complexity of ADHD. Hazell, Carr, Lewin, Dewis, Heathcote and Brucki (1999) demonstrate in their study that learners with LD have different learning difficulties found as secondary in learners with ADHD. (Thus, learners who have a LD have different difficulties to learners who have ADHD and have a LD as secondary co-morbidity).

Learners with ADHD would profit by having their school work as colourful as possible as a study by Imhof (2004) demonstrated that learners with ADHD respond to colour stimulation with improved control of attention and motor activities. On the other hand, learners with ADHD seem to have a slower stop signal reaction time and impairments to their verbal memory (Toplak & Tannock, 2005; West, Houghton, Douglas & Whiting, 2002).

In addition to difficulty with arithmetic/numeracy/mathematics, learners with ADHD often experience language-related difficulty. Language is used as a means of communication; thus learners who find it difficult to express themselves with language (written or orally) and may discover academic tasks to be difficult. Almost all class or academic tasks require learners to express themselves with language (written or oral). The following research studied how learners with ADHD fared in memory tasks in comparison to language impaired learners.

## 2.6.2 *Language and ADHD*

Learners with ADHD are not as "disordered or deficient" in language as learners with language impairment (Cohen *et al.*, 2000). In a study by Cohen *et al.* (2000) language achievement and cognitive processing traits in learners with ADHD and LI (Language Impairment) were investigated. It was found that learners with language impairment were at

the most disadvantageous, regardless of the nature of the psychiatric diagnosis, as the working memory measure used to assess the core cognitive deficit of ADHD in executive functions were more closely associated with LI than with ADHD (Cohen *et al.*, 2000).

### 2.6.3 Behaviour

Aggressive and anti-social behaviour is 'acted out' by learners with ADHD; as a study by Zalecki and Hinshaw (2004) supports the argument that girls with ADHD are more visibly and relationally aggressive than girls without ADHD. Temperament traits or personality traits and ADHD behaviour symptoms appear to be related but not identical (Nigg, Goldsmith & Sachek, 2004). It would be advantageous for parents and educators to note, especially with regards to tasks being completed, that learners with ADHD prefer immediate reward (Tripp & Alsop, 2001). Consequently, Antrop, Roeyers, Van Oost and Buyesse (2000) demonstrated in their investigation that learners with and without ADHD benefited from extra non-temporal stimulation.

Observers who label learners with ADHD attribute behavioural difficulties or the social problems displayed by these learners to some cause that is outside of the control of the learner (Stinnett, Crawford, Gillespie, Cruce & Langford, 2001). Thus, the label of ADHD allows the learner to not have personal responsibility (Stinnett *et al.*, 2001).

Studies that relate to learners' behaviour at school (Heiman, 2005) stress that parents and educators need to be involved in assisting learners how to establish friends. Lopez-Williams, Chacko, Wymbys, Fabiano, Seymour, Gnagy, Chronis, Burrows-MacLean, Pelham and Morris (2005) are of the opinion that athletic performance and participation is an important aspect of a learner's social world and relevant in terms of how learners with ADHD are accepted or rejected by their classmates and peers - as a learner's negative behaviour increased, the likelihood that the learner would receive negative nominations from classmates also increased.

One of the learning disorders, as mentioned above, is the disorder of written expression also known as dysgraphia (APA, 2000). Dysgraphia is characterised by the following (APA, 2000):

- The learner may have illegible printing and cursive writing (despite appropriate time and attention given to the task).
- Shows discrepancies: mixtures of print and cursive, upper and lower case, or irregular sizes, shapes or slant of letters.
- Has unfinished words or letters, omitted words.
- Inconsistent spacing between words and letters.

- Exhibits strange wrist, body or paper position.
- Has difficulty pre-visualising letter formation.
- Copying or writing is slow or laboured.
- Shows poor spatial planning on paper.
- Has cramped or unusual grip/may complain of sore hand.
- Has great difficulty thinking and writing at the same time (taking notes, creative writing).

The skills needed to be efficient in writing may be a reflection of poor motor performance; for example copying or writing that is slow and laboured could be due to the fact that the learner's muscle movement is inept. The co-ordination and movement of muscles contribute to the learner being able to apply him/herself well to academic activities.

#### **2.6.4 Motor Performance**

A study by Piek *et al.* (1999) compared the movement ability and underlying kinaesthetic processes of boys with ADHD with a control group. It was found that a high percentage of learners with ADHD displayed movement difficulties consistent with developmental co-ordination disorder (Piek *et al.*, 1999). This is important to note as poor developmental co-ordination could influence the learner in performing at academic tasks and physical tasks. Learners with ADHD-PI (predominantly inattentive) were found to have greater difficulty with focused attention and distractibility and poorer manual dexterity, whereas learners with ADHD-C (combined inattentive and hyperactivity-impulsive) have greater difficulty with "sustained" attention and distractibility.

Researchers have considered if motor performance is a prediction of behavioural disorders such as ADHD, Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD). Kroes, Kessles, Kalff, Feron, Vissers, Jolles and Vles (2002) explain in their study that qualitative aspects of motor performance predict ADHD, yet motor performance does not predict ODD/CD. Biederman, Faraone and Monuteaux (2002) studied the impact of exposure to parental ADHD on clinical features and dysfunction of motor performance in offspring.

#### **2.6.5 Parental Involvement**

Parents play an important role in seeking persons and treatments that could assist learners with ADHD. As such, parent involvement is discussed in terms of how parent involvement influences the learner socially, emotionally, and cognitively. Parental involvement, thus, could have a direct impact on how the learner is able to apply him/herself to tasks. (Parental

involvement is discussed here below in terms of how parents influence the learner's treatment and treatment plan).

Parents' perceptions and/or interpretations of misbehaviour could determine how they lend support and seek out treatment for their learners (Bussing, Gary, Milis & Garvan, 2003). According to the study by Bussing *et al.* (2003) parental perception of the Caucasian boy, who needs to be taken to the doctor in order to find out possible reasons and causes for undesirable behaviour, is the 'indisposed learner'. On the contrary, Bussing *et al.* (2003) found that African-American girls that display misbehaviour are interpreted by parents as the 'sick' role, often prompts parents to modify and punish behaviour and not visit the doctor.

Parents' perception of the learner with ADHD may influence how the learner is able to apply him/herself at school. For example, a parent who does not accept that his/her learner has ADHD may not report it to the educator. Therefore, the learner may go to school and misbehave and/or is inattentive during class, which impedes his/her learning. The educator that has not been informed of the learner having ADHD may not be able to intervene and assist the learner where needed.

In order for a learner to be able to apply him/herself to a class activity, an intervention may need to be implemented. An intervention can take many forms, implemented by either the parent, or family system, educator and/or health care professional. The following section deals with interventions that are pharmacological or involves parents, the family as a system, communication between the parent and the educator themselves.

## 2.7 INTERVENTIONS

ADHD is treated<sup>15</sup> in a variety of ways, including pharmacological methods through the use of stimulants like Ritalin (Green & Chee, 1994), cognitive therapy, family therapy and psycho-educational interventions at school. Treatments for ADHD therefore can be directed at the learner with ADHD, through the use of medication, therapy and nutrition (Sample, 2005). It can be directed at parents through parental guidance and/or family therapy. Lastly, an intervention can be directed at the educator and school whereby the educator can implement education strategies to improve the scholastic achievement of the learner with ADHD. There have been many studies aimed at the treatment of ADHD. Treatment of ADHD, from pharmacology to classroom-based interventions, has been included under the heading of interventions. There is much literature available on drug interventions and the controversy around stimulant drugs. However, for the purpose of this study I chose to focus the literature

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<sup>15</sup> Using the medical model the terms intervention and treatment are used interchangeably, to mean the management of a patient (Dictionary.com, 2007 The Free Dictionary by Farlex, 2007).

review on the health care professional and the importance of gaining relevant and insightful data when making a diagnosis. The following sections describe the studies that have been investigated that address interventions or treatment of ADHD. The impact and use of medication and/or stimulants on learners with ADHD are of importance to educators and parents.

### 2.7.1 *Pharmacology*

There are studies that have measured the impact of medication on learners with ADHD (Aman, Kern, McGhee & Arnold, 1993; Scheres, Oosterlaan & Sargeant, 2006; Taylor, O'Donoghue & Houghton, 2006; Wilens, McBurnett, Stein, Lerner, Spencer & Wolraich, 2005; Zachor, Roberts, Hodgens, Isaacs & Merrick, 2006) and the impact that medication can have in the improvement of learner-parent relationships (Chronis, Pelham, Gnagy, Roberts & Aronoff, 2003).

The following two sections deal with parent involvement and discourses of ADHD within a family. I have included these two sections in this chapter as I believe they contribute to understanding the literature and 'health professionals' story of ADHD. The section on parent involvement highlights that firstly parent involvement with ADHD is important. However, the study and the recommendations given are from the perspective of a health professional. Thus, the health professional is responsible for being able to gain as much information from a parent or guardian of learner with ADHD, but also be aware that there are other factors to consider when reviewing the learner's treatment.

### 2.7.2 *Parent Involvement*

The importance of family therapy with ADHD learners is stressed by Bailey (2000). The focus of family therapy according to Bailey (2000) is:

- Getting parents to work together on establishing firm rules, behaviour constraints and hold learners responsible for behaviour.
- Getting learners out of parental roles.
- Developing parental and learner support networks.
- Preventing family members from accommodating to the learner's misbehaviour.
- Developing more positive warm and nurturing patterns of interaction within the family.

Parents have an influential role in contributing to the process of diagnosis and intervention as stated above. Parents have an important role in contributing information to the health professional in order for the correct diagnosis to be made. Parents play an even more

important role in ensuring that the treatment plan is correctly implemented. The parent is responsible for the learner to receive his/her medication on time everyday if medication is part of the treatment. The parent is responsible for transporting the learner to any psychological therapy, remedial therapy or occupational therapy that is required.

The parent is responsible for being the 'link' between the different systems. That is, the parent forms the link between the learner and educator. The parents would also be responsible for any therapeutic treatment at home (Haarmeier & Thier, 2007). The parent is the link between the learner and the health professional, between the educator and the health professional and lastly between the learner and the broader community.

With the treatment plan, the parent or health care professional decide what is in the best interest of the learner. Bussing *et al.* (2003) suggest the following for health care professionals to ensure successful treatment:

- ❑ Develop an understanding of parents' ADHD knowledge or understanding and treatment preferences. As outlined above, the parents' perception of ADHD could influence the treatment plan. Educators contribute to the treatment plan, for example, by ensuring that the learner takes medication; avoids eating junk food at school; consults psychological/remedial/ occupational therapy where necessary.
- ❑ Parents and educators may have negative perceptions of pharmacological treatment, thus the health care professional is encouraged to inquire about medication attitudes and potential fears related to psychopharmacological treatment, allowing these fears to be discussed openly.
- ❑ Find out about self-care practices, including discipline and alternative medicine approaches, and provide professional feedback about what is consistent with scientific evidence and what cannot be expected to help learners.
- ❑ Mothers most commonly bring in learners for medical appointments, yet fathers or, for example, respected family elders may hold decision-making power over whether a treatment is acceptable or not. Determine what attitudes a father or respected family elder may have regarding medical treatment.
- ❑ By addressing these issues potential cases of resistance or non-compliance can be identified, addressed, and perhaps prevented.

### 2.7.3 *ADHD within a Family System*

A qualitative study by Navarro and Danforth (2004) explains that discourses of ADHD are constructed at medical schools where they become appropriated, reframed, embraced. Yet, of importance is that Navarro and Danforth (2004) went on to find that meanings of the

diagnosis of ADHD are negotiated in “shared constructions” dialogue within families, where resistance, acceptance and reconstruction of dominant cultural images and understandings take place in moral and practical dialogues. These discourses of ADHD appear to be, according to Navarro and Danforth (2004) centred on dominant discourses used in medical school and universities. Thus, although discourses around ADHD are constructed within the confines of medical school, these discourses can be resisted by families and educators where families can then reconstruct their own understandings and meanings of ADHD within a family conversation.

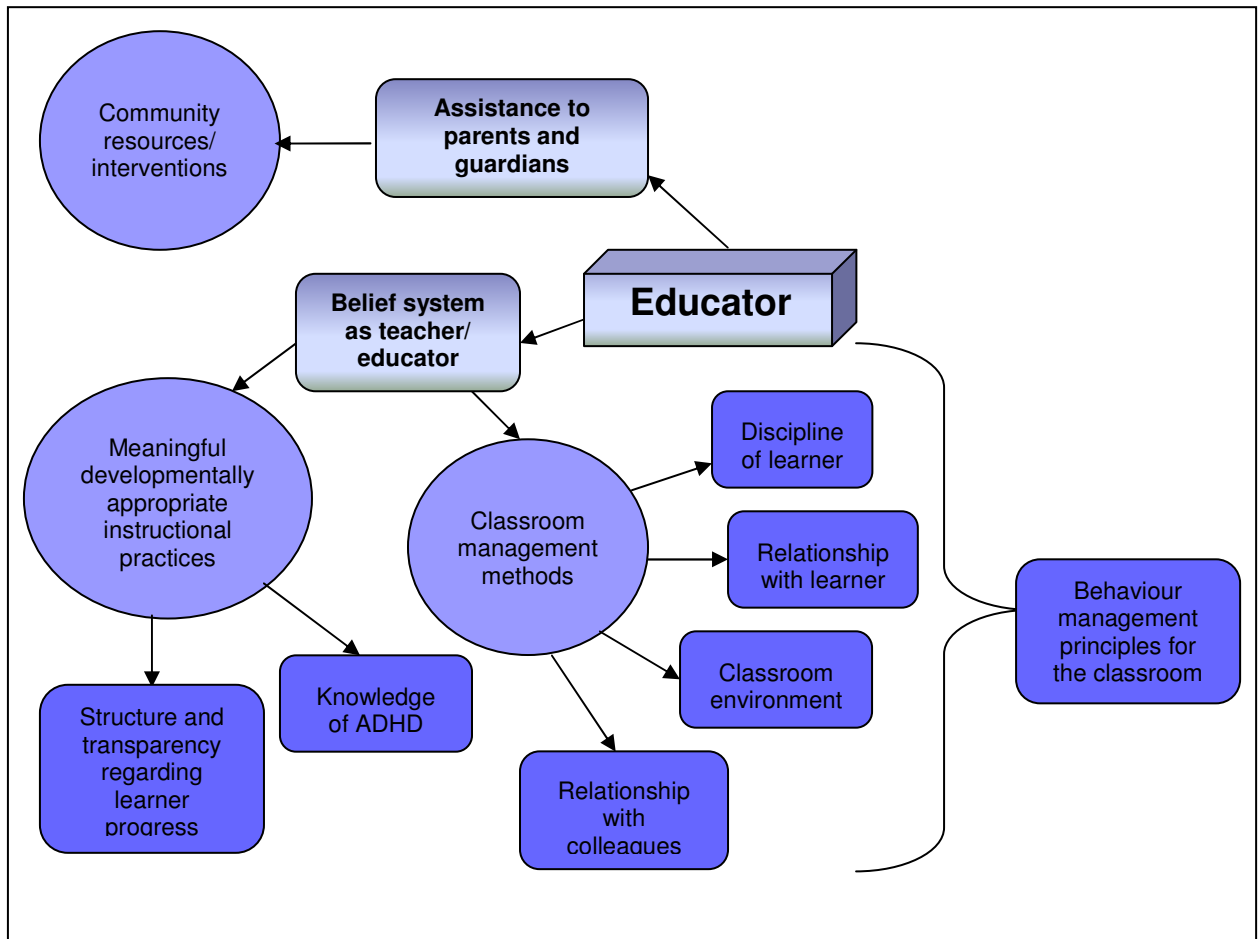
#### **2.7.4 Parent-Educator Partnerships**

Communication between the family and school can also construct new and shared meaning of ADHD. Thus, the family who has a learner with ADHD, should be able to openly state this to the school where the educator, the parent and the learner can construct their own narratives and meanings of ADHD. This partnership between parent, educator and school allows for the learner and his/her treatment to be given precedence. Communication between the different sub-systems, that is between educator and parent, will be discussed further in chapter 3.

#### **2.7.5 The Educator**

The diagram below illustrates the role that the educator plays and the processes that he/she brings into the classroom setting that could influence the learner who may have ADHD.





**Figure 3: The Educator, Behaviour and Classroom Management (Emmer & Stough, 2001)**

Figure 3 illustrates one view of the literature of behaviour and classroom management (Emmer & Stough, 2001). The educator is at the centre of this diagram and thus the centre of his/her classroom. The learner's teaching and learning is partly dependent on the educator. The behaviour and classroom management relies on the belief system as educator. That is the belief system of the educator may influence how he/she may be in the classroom. Therefore the educator's belief system (with regard to teaching) may influence how the educator implements meaningful and appropriate instructional practices. The instructional practices will determine if the educator is acquainted with ADHD. The educator's instructional practice could determine if he/she has structure and a transparent learner progress system. The educator's belief system could influence the classroom management methods that he/she implements. The classroom management methods might influence the educator's relationships with learners and colleagues at school. The classroom management methods implemented determine how the educator disciplines the learners in his/her classroom. The classroom management methods implemented could also influence the classroom environment.

## 2.8 CONCLUSION

In conclusion there are many studies that attempt to explain and understand ADHD (Barkley, 1994; Brown, 2000; Gordon & Asher, 1994; Piek *et al.*, 1999; Purdie, *et al.*, 2002; Quay & Hogan, 1999). The numbers of studies that are currently available on ADHD could indicate that it has become a subject that needs further understanding. The literature reviewed suggests that ADHD is a behavioural disorder that is a part of everyday life and therefore would be encountered by educators at school.

In chapter 3, further literature on educators and ADHD is reviewed in the aim that it provides background to this PhD study and provides a backdrop for the conceptual framework proposed in this thesis.

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## Chapter 3: A Conceptual Framework

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### 3.1 INTRODUCTION

Within the preceding chapter, ADHD is defined, the diagnosis of ADHD is explained, the prevalence and the causes and ADHD in terms of the self-application of the learner and broad interventions for the learner with ADHD are discussed. In order to clarify the phenomenon of ADHD, the conceptual framework underpinning such a diagnosis is discussed in this chapter by reflecting on the role of the educator. The educator is a pivotal person in the life of the learner with ADHD as the learner spends a great length of time with the educator. The educator, thus, in the course of the teaching spends time observing and getting to know the learner with ADHD. Educators' experiences of learners with ADHD in their classroom could therefore, assist in further understanding ADHD. The following chapter deals with aspects of the role of the educator (section 3.2), classroom interventions (section 3.3), theories of ADHD (section 3.4) and the conceptual framework (section 3.5) within which this study is conceptualised.

### 3.2 EDUCATORS IN SOUTH AFRICA

South African educators have had to face several changes in a post-apartheid era (Le Roux, 2000; Fleisch, 2004; Vandeyar, 2005). As such, some of the challenges that educators face in South African schools have led to low morale amongst educators and managers (Mestry & Grobler, 2004). As educators have experienced low morale many have left South Africa looking for greener pastures in other countries. According to the Department of Education (2005) factors, including contextual factors, that influence the attrition of teachers in South Africa include:

- Disintegration of discipline (thus causing unfavourable working conditions).
- Lack of facilities for teaching.
- Learner-educator ratios and actual average class sizes. Severe overcrowding of schools and classrooms.
- School size and class sizes, and the effects of over-crowding, shortages, and staff involvement in administrative tasks.
- Lack of adequate incentives. Inadequate remuneration and other material incentives.
- Poor parental participation at all levels: school governance and the disciplining of learners.

- ❑ Role conflict. Teachers claim they have to adapt and adopt a multitude of roles depending on circumstances presented at school. These roles include attention to counselling, teaching, acting as *locus-in-parentis*, doubling as security personnel and sometimes even performing as midwives.
- ❑ Low teacher job satisfaction and morale.
- ❑ Lack of safety at schools. School security and levels of violence.
- ❑ Statutory working hours versus estimates of actual hours of teaching.
- ❑ Teacher workloads
  - Administrative tasks as a result of new curricula, associated with more complex assessment methods and procedures.
  - Location (rural, urban, semi-rural): the nature and scale of responsibilities vary considerably.
- ❑ Contextual relations between school and community, often resulting in expectations for the school to function as a broad-based community-service centre.
- ❑ Gender issues and imposed gender identities.
- ❑ Policy overload, leading to dissatisfaction with time allocation, and making working conditions unbearable through the increase in administrative work.
- ❑ Phase and learning area demands: different phases spend different amounts of time on particular activities, sometimes caused by the nature of the learning areas taught.
- ❑ The effects of OBE: varying reactions to the requirements of OBE and the presence or absence of teaching and learning resources.
- ❑ The effect of the requirements of the implementation of the Integrated Quality Management System (IQMS).
- ❑ Numerous departmental requirements add to workload, especially that of principals.

Due to a great variety of socio-cultural contexts of schools, histories and a combination of problems it is difficult to judge what an effective school is (Harber & Muthukrishna, 2000). Studies (Howie, 2005; Liddell, Lycett & Rae, 1997; Vambe, 2005) reiterate that classrooms in South African schools are over crowded and more often than not under resourced. The educators also need to accommodate for a multi-culturally diverse classroom (Le Roux, 2000). Researchers Onwu and Mogari (2004) are aware that educators in South Africa appear to lack confidence in their ability to cope with the demands of the Curriculum 2005.

One of the great criticisms of the education change process is the governance of schools, and according to Sayed (2002) changing policy does not immediately translate into changed practice. Karlsson (2002) believes that governance reforms in bringing democracy into South African schools have fallen short. One of the factors influencing governance in South African schools is that often policy implementation is not followed through to the micro-level that is in

the classrooms (Smith & Foster, 2002). This, according to Engelbrecht (2006) appears to be true with inclusive learning and being able to recognise the right of all learners at all levels of the education system. Changes in governance and curriculum, made at a macro-level, impact the educator and ultimately the learner at the micro-level.

One of the constructs that has been designed to decentralise governance and give schools more power to implement policies and change are the School Governing Bodies. School Governing Bodies (SGBs) in South Africa have been given power at a time of great change in South Africa and are expected to become a prime vehicle for democracy, equity and equality (Bush & Heystek, 2003). Hoadley (2003) is of the opinion that relations between educator, management and parents (and possibly SGBs) differ depending on the context resulting in varying educator ethos. Thus, the relationship between educators, school management and the School Governing Body is important to the educator and can influence his/her working context.

Within the South African context, the Department of Education (Education White Paper 6, 2001) philosophy of inclusive education acknowledges that all learners and youth can learn and that they need support in being able to learn. The Education White Paper 6 on special needs and inclusive education also lists the following issues as defining inclusive education:

- ❑ Enabling education structures, systems and learning methodologies to meet the needs of all learners.
- ❑ Acknowledging and respecting differences in learners, whether due to age, gender, ethnicity, language, class, disability, HIV or other infectious diseases.
- ❑ Broadening the formal setting school in that learning also occurs in the home and community, and within formal and informal settings and structures.
- ❑ Changing attitudes, behaviour, teaching methods, curricula and environment to meet the needs of all learners.
- ❑ Maximising the participation of all learners in educational institutions and uncovering and minimising barriers to learning (Education White Paper 6, 2001, p.6).

The Department of Education's White Paper 6 (2001) states that potentially 280 000 learners with disabilities or impairments to learning could be unaccounted (that is not incorporated) in special needs schools. This figure is based on the statistics published by the World Health Organisation (WHO), reporting that approximately 2,6% of learners in any school system could be identified as learners with disabilities or barriers to learning (Education's White Paper 6, 2001:9).

According to Coleman and Webber (2002) educators are bound to encounter learners with ADHD in their classrooms due to the high prevalence of ADHD. The prevalence of ADHD, according to the DSM-IV-TR (APA, 2000), has been estimated at 3-7% in school age learners. Thus, out of every 100 learners that attend school, seven learners might have ADHD. The likelihood of educators having gained contact with learners with ADHD is thus highly based on the prevalence or number of learners with ADHD.

### 3.3 THE EDUCATOR'S ROLE

Educators play an important role in being able to identify the disorder in learners (Snider, Busch & Arrowood, 2003; Vereb & DiPerna, 2004). If the educator and school counsellor believe that ADHD is indeed present, the learner's parents need to be contacted and referred to the appropriate health professional who specialises in ADHD, to make a diagnosis. Furthermore, the educator plays an important role in collaborating with the health professional (psychiatrist, paediatrician, psychologist or occupational therapist) and parents to be able to provide support to the learner.

#### 3.3.1 *Misunderstanding and Misinformation*

Learners with ADHD, that have had ADHD left undiagnosed and/or untreated often experience being corrected for misunderstanding what was expected of them, by doing or saying the wrong things at the wrong time (Brown, 2000). Misunderstandings could lead to the learner perceiving himself/herself as being lazy, stupid, and incompetent or inadequate (Brown, 2000). Educators (and parents) are left possibly feeling frustrated and at a loss to manage these learners to, for example, keep still, to stop disturbing others, stop daydreaming, completing a task or doing their homework.

Educators in South Africa are given support with the Guidelines for Inclusive Learning Programmes (DoE, 2005) document that states guidelines as to how to include all learners in the classroom. Certain guidelines include adapting the curriculum, lesson plans and grouping of learners (DoE, 2005). However, educators are not given specific information or guidelines on how to support learners with ADHD in the classroom. Guidelines and/or training may go a long way in offering support to educators and, thus, offering support to learners with ADHD.

O'Keeffe and McDowell (2004) state that misunderstanding and misinformation from either the educator or the doctor, could compromise the management of knowledgeable and applicable support structures of ADHD. The following two studies highlight this statement. Epstein, Willoughby, Valencia, Toney, Abikoff, Arnold and Hinshaw (2005) reported ethnic differences among teacher ratings of ADHD and classroom behaviour. In a study by Wood

and Benton (2005) they found that when a learner had no disability, teachers rated a male more likely to fail than a female when a learner had ADHD. The differences between learners (male and female) seemed to be related to diagnosis and medication status ascribed to the learners (Wood & Benton, 2005).

There could be many possible explanations for the misinformation and misunderstanding of ADHD. It could be that educators do not fully understand the complexity of ADHD. Another reason could be the diagnosis of ADHD, and receiving misinformation from either the parent or health professional. It seems that health professionals tend to assume that the educators' understanding of the diagnosis and management of ADHD are similar to their own understanding (Wood & Benton, 2005).

Learners with ADHD who do not understand that they have ADHD appear to perceive themselves negatively (Brown, 2000). Awareness and understanding can go a long way in assisting a learner that has been given the label of any mental or psychiatric disorder including ADHD. Learners with ADHD may be allowed to enter a special class that deals with learners behavioural and learning disabilities or gain extra time in examinations. The label of ADHD can also mean that the educator may treat the learner differently (either favoured or disliked) within the classroom. The disadvantage of labelling a learner with ADHD could reinforce the idea that he/she is unable to learn, thus leaving him/her unmotivated to work in class.

An educator's training and knowledge of ADHD contributes to the role that the educator may play in the diagnosis and management of ADHD. The following section discusses educator knowledge of ADHD.

### 3.3.2 *Educator Knowledge of ADHD*

According to McFarland, Kolstad and Briggs (1994) if educators develop an understanding of ADHD it could help with the diagnosis of ADHD. If educators do not have any knowledge of the disorder then the responsibility would fall on the principal to ensure that they are informed. There may be a need to improve knowledge among school staff about how cognitive and behavioural problems in learners are manifested and how they influence the learner's daily life. These developmental problems, mainly in the domain of executive functions, are not always visible, and are therefore often given other explanations. Learners with executive cognitive dysfunctions need appropriate educational treatment and support in order to prevent academic underachievement and poor self-esteem (Ek, Holmberg, De Geer, Swärd & Fernell, 2004). The ideal situation would be for an educator to be able to recognise

a learner with ADHD, as it is the educator that spends at least five hours of the day with the learner and is therefore exposed to the behaviour of the learner. Identification can, hopefully, mean that the educator can implement an intervention and inform the parents who sometimes had no prior knowledge thereof.

McFarland *et al.* (1994) is of the opinion that the educator is responsible for making the learning environment accommodating by, for example, assisting the learner in becoming more organised, giving him/her specific instructions, developing his/her self-esteem and proper classroom management that ensures learning for all. The educator is responsible for adjusting the lesson plan, curriculum and management of the classroom that allows the learner with ADHD to learn (Barkley, 1994; Green & Chee, 1994; Jones, Dohrn & Dunn, 2004; Mitchem, 2005; Roffey, 2004; Sonna, 2005).

All people have a continuum of needs (physical, social, intellectual, emotional and spiritual) that can vary over time, depending on circumstances and situations (Capper, Frattura & Keyes, 2000). Educators in current times are expected to meet the diverse needs of the learners in their classroom, including those learners who may have emotional or behavioural disorders, including Attention Deficit Hyperactivity Disorder (Baker, 2005). When anti-social or unruly behaviour is common in classrooms, educators are held responsible for mismanagement and learners are blamed for lacking social and self-management skills (Kaplan, Gheen & Midgley, 2002).

The Department of Education (2000) describes the competent educator in terms of the seven roles and their associated competences in the Norms and Standards for Educators. Therefore, according to the Department of Education's Norms and Standards (2000) the educator's roles are: (1) leading mediator; (2) interpreter and designer of learning programmes and materials; (3) leader, administrator and manager; (4) scholar, researcher and lifelong learner; (5) community, citizenship and pastoral role; (6) assessor and (7) learning area/subject/discipline/phase specialist. The educator will, thus, need to be able to fulfil these roles in his/her classroom to be considered competent. Thus a competent educator is able to "mediate learning that is sensitive to the diverse needs of learners". As an interpreter and designer of learning programmes and materials the educator will identify, select sequence and pace suitable learning material that is aware of the learners' different needs and learning areas. As a learning administrator and manager the educator will manage his/her classroom that supports learners and colleagues that is flexible to changing circumstances and needs. The educator as scholar, researcher and lifelong learner will strive for professional growth through study and research in their particular learning area. The educator community, citizenship and pastoral role should reflect respect and responsibility to



all in the community. As an assessor the educator will have an understanding of the purpose and methods of assessment, providing helpful feedback to the learners. Lastly, the educator should know about different approaches to teaching and learning which are appropriate to the learners and the context (DoE, 2000). The educator, therefore, will respond to the behaviour of a learner if it is considered atypical.

The learner's behaviour is what often attracts the attention of educators and parents, yet the learner in its totality still needs to be considered. Thus, there are many aspects that could be considered when teaching a learner who may have ADHD. All the aspects of the learner, that is the whole learner includes, amongst others, his/her cognitive ability to perform academically, as well as social functioning which includes interpersonal and intrapersonal ability<sup>16</sup> (APA, 2000). With all the factors in mind, the educator's ability to effectively manage his/her classroom then becomes an important aspect that either hinders or assists the teaching and learning that takes place.

Sufficient knowledge of the disorder, that is the behavioural, neuro-developmental and hereditary nature, is needed by educators to be able to confront the challenges found in the classroom (Barkley, 1994). Educators who receive training on ADHD and its co-morbidities can assist other educators in planning the teaching, learning and classroom environment.

Multi-modal forms of treatment of learners with ADHD, that includes medication in addition to parent training, school interventions and learner interventions, are found to be the most effective (Miranda, Jarque & Tarraga, 2006). The educator is, thus, responsible for providing the learner with ADHD with assistance in the form of different interventions such as: behaviour modification, adjusting lesson plans and adjusting discipline strategies within the classroom.

Brown (2000) points out that it is important to explore what expectations educators have of medication for learners with ADHD. If a learner has co-morbidity with ADHD, the treatment and intervention can become more complex. Where the learner could take more than one medication, they possibly need a focused intervention, for example, a remedial programme for a learning disorder or communication disorder. It is important that the educator is able to communicate with the parents as well as a health professional who can assist the learner.

If the educator does not understand ADHD and its co-morbidities, an educator may feel negative about a learner who acts out, as he/she behaves negatively in the classroom. A

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<sup>16</sup> Reference is made to the whole learner this includes intrapersonal ability, which is a term meaning the thoughts, beliefs and feelings that may occur within the learners mind.

learner with Emotional and Behavioural Disorders<sup>17</sup> (EBD), who may act out anger, irritation, lack of sympathy and indifference is negatively associated (Poulou & Norwich, 2002) with the educator's motivation to help these learners. Educators could be made aware of their possible responses and learn to make sense of negative behaviour (associated with ADHD and EBD) and avoid negative consequences in order to assist these learners. Polou and Norwich (2002) suggest educators attend workshops that are aimed at addressing ADHD (or Emotional and Behavioural Disorders). These could highlight the importance of curbing such negative perceptions. A learner with ADHD can be described as having challenging behaviour that could test an educator's motivation to be an educator. The educator's ability to be assertive, friendly, approachable and the ability to change may assist the educator in his/her practice.

### 3.3.3 *Educator Self-Perceptions*

An educator's self-perceptions may impact how he/she is within the classroom and thus may impact on learners. According to Belvel and Jordan (2003) how an educator thinks about himself/herself as an educator and teacher affects how they teach in the classroom.

Baker (2005) examined educators' beliefs about their interpersonal self-efficacy regarding general classroom management skills and their readiness (i.e. ability and readiness) to implement behaviour management techniques to meet the needs of individual learners. In Baker's (2005) study it was established that educators reported low self-efficacy to get in touch with the most difficult learners, to keep problems from impacting negatively in class and to implement a behaviour intervention plan.

There are certain attributes that Roffey (2004) suggests that allow an educator to be a good educator that include the following:

- ❑ The reasons why a person has chosen to be an educator could reflect the kind of person he/she is, for example, wanting to be able to assist young people and the values associated with the profession of teaching.
- ❑ Emotional literacy (including emotional awareness, emotional regulation, emotional expression).
- ❑ The ability of changing roles - the educator needs to take on different roles within the classroom. For example, the roles for a competent educator as described by the Department of Education (2000) in the Norms and Standards, set out here above under section 3.1.

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<sup>17</sup> ADHD is considered to be an EBD, as it is viewed as a behavioural disorder

- ❑ Being friendly - an educator needs to be a friendly, approachable person to the learners, parents and fellow educators.
- ❑ Personal qualities that convey confidence and security need to be implemented within the classroom such as for example, self-respect, confidence, body language, voice, facial expression, eye contact. These qualities can assist the educator to command and manage the classroom environment.
- ❑ Being aware of the obvious and avoiding distractions.
- ❑ Appropriate assertiveness.

These aspects, therefore, according to Roffey (2004) contribute to being a good educator. An educator could possess some of these aspects to some degree. These features could possibly play a role in how the educator behaves towards a learner with ADHD. For example, an educator's ability to be emotionally aware of how a learner with ADHD can be easily irritated by others in the classroom could enhance the relationship between the educator and a learner with ADHD. It could improve the climate within the classroom and thus allow for more learning and teaching to take place.

The educator's perceptions and ability in implementing strategies may influence how or if he/she supports the learner with ADHD. Special education strategies may seem too impractical or time consuming, and many educators are unsure of what to do and need support (Webb & Myrick, 2003). It was found that an educator's tolerance level of ADHD behaviour will affect how a learner, who is perceived to have ADHD, will be treated in the classroom (Calhoun, Greenwell-Iorillo & Chung, 1997). To improve the possibility of academic success for learners who may display ADHD-like behaviour, Glass (2000) suggests that positive teaching strategies and non-traditional teaching methods can be implemented. The following methods are considered to be non-traditional methods that can be applied: (1) modifying the amount of class or homework; (2) oral testing; (3) a reward system for personal achievement; (4) allowing the learner to work at his/her own pace and (5) hands on activities (Glass 2000).

### 3.4 CLASSROOM INTERVENTIONS

In order for a learner with ADHD to achieve academic success, the educator may need to implement an intervention. There are numerous interventions that are available to the educator in order for a learner with ADHD to be able to achieve in the classroom (Purdie *et al.*, 2002; Sonna 2005). Two modes of intervening available include behaviour modification and classroom management.

### 3.4.1 *Behaviour Modification*

According to Fabiano and Pelham (2003) educators in the USA use behavioural modification strategies, to some extent, to reduce misbehaviour in the classroom. However, these interventions may have varying degrees of success in terms of clinical improvement, due to the differing intensity of the behavioural interventions implemented (Fabiano & Pelham 2003). Fabiano and Pelham (2003) also noted in their study that although educators may be able to implement behavioural interventions in the classroom, they seem to lack the ability to effectively modify behavioural interventions to individualise them for learners with ADHD. Minor modifications to an existing behavioural intervention can result in meaningful behaviour changes that can assist the learner with ADHD.

Most classroom strategies designed for learners with ADHD are behaviouristic in nature (Purdie *et al.*, 2002). However, ADHD also has a neurological component, as the learner's attention, planning and working memory skills are affected. Educators could therefore include strategies in their lesson plans that can enhance behaviour while also supporting memory. Learners with ADHD appear to exhibit fewer behavioural problems in new or unfamiliar settings (Barkley 1994) suggesting that if educational material or educational content is colourful and stimulating and new to them it could hold their interest and attention. Thus, educators could avoid learning material that may be regarded as too boring (Barkley, 1994). Learners with ADHD need to be kept stimulated and have their attention held by colours and content that is deemed interesting or thought-provoking (Imhof, 2004). However, educators would not need to make activities colourful to the extent that it is visually distracting for learners with ADHD. On the same note, learners with ADHD tend to enjoy sensory exploration of their environment which can be distracting to others in the classroom (Sonna, 2005). It seems that these studies suggest that classroom activities can be planned, by the educator, to be colourful and fun in order to engage the learner (Imhof, 2004). However, caution is also needed as they should be colourful but not visually distracting to the learner with ADHD (Sonna, 2005). The complexity of designing such learning environments can however be intricate and difficult to implement.

To embrace inclusion, the school or educators could endeavour to learn how curriculum and instruction, leadership practices and school structure could change to meet the needs of students of all abilities (Capper *et al.*, 2000). Burcham, Carlson and Milich (1993) indicate that although schools have an obligation to serve learners with ADHD, different school systems have access to different resources, which may affect service delivery. One can

perhaps extend this to educators in the classroom; that different classroom resources may influence how the educator assists or accommodates the learner with ADHD.

Educators tend to be the first to recommend that a learner be evaluated for ADHD (Snider *et al.*, 2003). Health professionals (psychologists, speech and language clinicians and school nurses) agree that educators are often responsible for commencing the referral process of learners they suspect may have ADHD (Snider *et al.*, 2003). Although, Vereb and DiPerna (2004) found that educators experiences with learners with ADHD and their knowledge of ADHD were not related.

### 3.4.2 *Classroom Management*

Effective classroom management is required before an intervention aimed at learners with ADHD can be implemented by an educator. According to Emmer and Stough (2001), some features of classroom management could include: (1) an understanding of current research and theory in classroom management and its relationship to a learner's psychological and learning needs; (2) the ability to create a positive relationship between the learner and the educator and (3) instructional methods that respond to the academic needs of each learner and to the whole group as a class. Thus, effective classroom management could incorporate understanding a learner's psychological needs, which could include understanding the learner with ADHD holistically and the possible co-morbidities. Therefore, developing a meaningful relationship between the learner and the educator would take account of the psychological and/or emotional needs of the learner with ADHD.

The success of classroom management relates to the educator's ability to understand the learner's psychological and learning needs and being able to respond to this with creative instructional methods that appeal to all learners. According to Burcham *et al.* (1993) the importance of an educator could be to consider his/her own strengths and to focus on the strengths of the learner.

The central figure of this study is the educator. In this chapter, thus far, the educator's role, knowledge, self-perceptions, interventions and classroom management have been discussed in order to build on a conceptual framework. The next section in this chapter deals with the theories that currently attempt to explain ADHD.

## 3.5 THEORIES OF ADHD

As the knowledge on the etiology of ADHD has increased over the years, through advances in research, therefore models and theories have been developed in order to further

understand ADHD and intervention for ADHD. Below I present a number of models that have been found in current literature that attempt to explain or understand ADHD.

Zentall (2005) proposes the Optimal Stimulation Theory (OST) as a means to understand ADHD. Learners with ADHD appear to have a greater need for stimulation which alters the way they selectively attend, as well as their ability to sustain attention over time (Kuntsi & Stevenson, 2000; Zentall, 2005). According to Zentall (2005) learners with ADHD do not have an attentional deficit because all learners will attend to an object that is brighter, bigger, more intense, colourful, louder, or moving.

According to Butnik (2005) neurofeedback, also known as electroencephalogram (EEG) biofeedback, has been implemented as a treatment strategy for ADHD, as it is based on the model that describes ADHD as a disorder of neural regulation and underarousal, caused by inefficient communication among neurons in the brain. The aim of neurofeedback is to “train” the learner to normalise abnormal EEG frequencies and to increase awareness of how a normalised EEG pattern “feels” by producing patterns of brain waves that occur when one is motorically still, externally focused, and alert (Butnik, 2005). EEG biofeedback is considered as one of the non-traditional approaches of ADHD. EEG biofeedback is non-traditional as it does not involve the child taking stimulant drugs as a form of treatment.

Tsal, Shalev & Mevorach (2005) propose another model of ADHD; where executive functions refer to a broad and loosely defined set of self-regulatory capabilities, such as working memory, planning, and inhibitory control. Tsal *et al.* (2005) state that learners with ADHD exhibit the following problems: (1) Difficulty in effectively ignoring irrelevant distracting information when performing a perceptual act on relevant information (selective attention deficits); (2) difficulty in sustaining attention to relevant information over a relatively long period of time while withholding responses to irrelevant items (sustained attention deficits); and (3) difficulty in benefiting from a cue that automatically attracts attention to a specified location, or failure in disengaging and reorienting attention to a different location (orienting attention deficits).

According to Yeschin (2000) the psychoanalytic theory of object relations and affect attunement may explain psychological and social problems associated with a learner with ADHD, which is linked to under inhibition of responses via dynamic intra/interpersonal processes. Heriot, Evans and Foster (2001) suggest that that interactional model of synchrony between the caregiver and the learner with ADHD is vital to understanding ADHD. According to Heriot *et al.* (2001) when dyad interactions of a learner and parent translate into a “connection” or “bond” then the outcomes of treatment appear to be successful.

A number of psychological models emphasise impulsiveness that is poor behavioural inhibition, putting forward that learners with ADHD fail to inhibit or delay a behavioural response (Kuntsi & Stevenson, 2000; West *et al.*, 2002). Firstly, Quay and Hogan (1999) state that impulsiveness in ADHD arises from diminished activity in the brain's behavioural inhibition system. Secondly, Kuntsi and Stevenson (2000) suggest that, depending on the energetic state of the learner, there are certain aspects of inhibition which are deficient in learners with ADHD. Thirdly, Schachar, Mota, Logan, Tannock and Klim (2000), state that stimuli in the environment are seen as initiating signals of both activation of responding and inhibition of responding.

Lastly, according to the theory of delay aversion, the behaviour of learners with ADHD is mainly motivated by an attempt to minimise delay (Antrop, Buysse, Roeyers & Van Oost, 2005; Kuntsi & Stevenson, 2000; Sonuga-Barke, 1995). According to Sonuga-Barke (1995) the Delay Aversion Model proposes that learners with ADHD attend to non-temporal stimuli that decrease the awareness of time or increase the level of non-temporal stimulation by their hyperactive behaviour, in order to reduce the subjective experience of the delay. Delay Aversion Model is considered to be a non-traditional approach of ADHD. Delay Aversion Model is a form of remedial therapy where the goal is to reduce the subjective experience of delay.

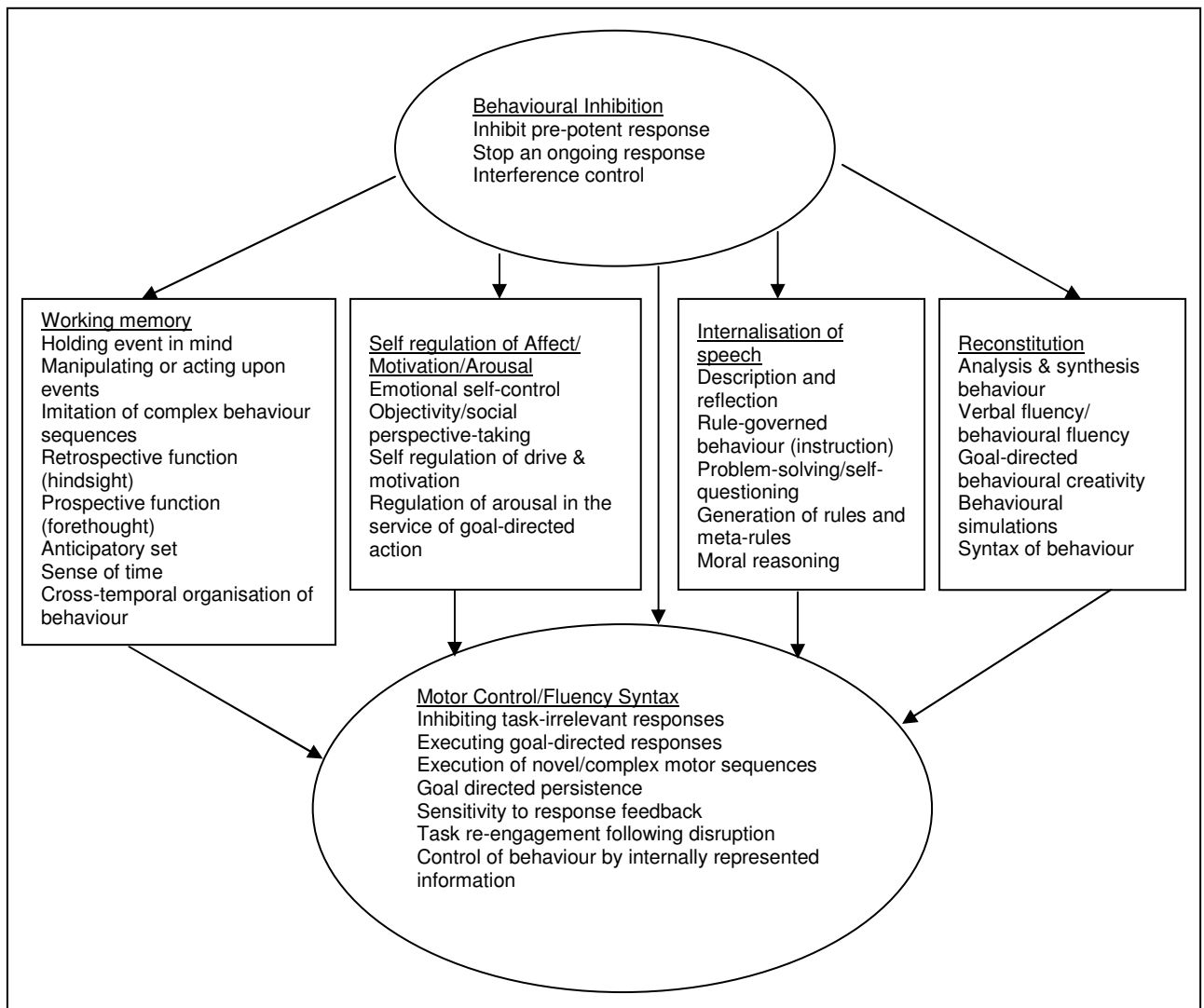
Barkley (1997) has proposed a unifying theory that complements and builds upon existing models of ADHD in an attempt to explain and understand learners with ADHD and their behaviour (West *et al.*, 2002).

### 3.5.1 *Barkley's Theory of ADHD*

Barkley's theory of ADHD is cited in literature as being the leading theory of ADHD (Bailey, 2000; Berlin *et al.*, 2004; Fischer, Barkley, Smallish & Fletcher, 2005; Meaux, 2000; Nicpon, Wodrich & Robinson Kurpius, 2004; Purdie *et al.*, 2002) and as such, much of how ADHD is understood is viewed from this theory. This theory is discussed briefly here below in order to highlight the fact that the theory is centred on the learner with ADHD, and the emphasis is on the neuro-cognitive processes of the learner with ADHD.

It is also important to note that Barkley's theory contributes to the conceptual framework that is used in this study, as Barkley included Bronowski's theory of language that arises from the pre-frontal cortex which provides for a theory on behavioural inhibition, executive functions and self-regulation (Barkley, 1994; Barkley 1997; Barkley, Edwards, Laneri & Fletcher, 2001). This hybrid theory proposed that the deficiency in behavioural inhibition that characterises

learners with ADHD reduces the effective operation of four executive functions: (1) working memory; (2) internalisation of speech; (3) self-regulation of affect, motivation and arousal; and (4) reconstitution, that sub-serve self-control and goal-directed motor behaviour (Quay & Hogan, 1999; Berlin *et al.*, 2004).



**Figure 4: Barkley’s (1997) Model of the Impairments in Executive Function Predicted to be associated with the Deficits in Behavioural Inhibition that Characterises ADD**

The following is a brief description of the four executive functions that form part of Barkley’s theory of ADHD. Refer to figure 4, which illustrates Barkley’s theory of ADHD (Barkley, 1997) and the four executive functions. The four executive functions are:

### 3.5.1.1 (Non-) Working Memory

The definition of working memory has been defined as the ability to hold an event in mind so as to use it to control a response. It includes both a verbal and non-verbal response (Berlin, Bohlin, Nyberg & Janols, 2004). According to Barkley (1994; 1997) learners with ADHD have



a diminished sense of hindsight, forethought and self-awareness which arises from working memory. One of the functions of working memory is the ability to represent events in their proper temporal order, which is found to be problematic in learners with ADHD. Therefore, learners with ADHD have difficulty in processing new information and retaining it in the proper sequence. Thus, learners with ADHD have difficulty in anticipating future behaviour and how they respond may also be challenging.

Learners with ADHD have difficulty in the psychological sense of time as they often perceive time to last much longer than perceived by “normal” learners:

“The problem then for those with ADHD is not of knowing what to do, but one of DOING what they know WHEN it would be most adaptive to do so” (Barkley, 1997: 308).

In Barkley’s model non-verbal working memory is the first aspect to be developed (Berlin *et al.*, 2004). A non-working memory could impact how an educator experiences the learner with ADHD in the classroom as the learner may have difficulty processing new information, anticipating their own future behaviour and understanding the passing of time. An educator may experience a learner with ADHD with a diminished sense of working memory, yet how do educators respond to this? The role of the educator is to respond to this challenge. Understanding the experiences of educators could assist learners, educators and parents to understand how to respond to it within the classroom and at home.

### 3.5.1.2 *Internalisation of Speech*

According to Barkley (1997) there is a delay in internalisation of speech or verbal working memory in those with ADHD. Learners with ADHD, therefore, have difficulty in using self-speech in self-regulation and are less likely to formulate problem-solving strategies. Even if they formulate strategies, the learners find it challenging to apply themselves effectively in their own task performance.

Reading comprehension in learners with ADHD is problematic due to the fact that learners with ADHD find it difficult to read silently to themselves, via internalised speech, which is held in mind so as to extract its semantic and inferential content. If learners with ADHD do experience difficulty in reading silently and with comprehension, it may impact their learning.

### 3.5.1.3 *Self-regulation of Affect, Motivation and Arousal*

Mentally represented forms of information will have affective, motivational, appetitive and even arousal states. Learners with ADHD are often unable to manipulate emotional states to positive alternatives when they are angered, frustrated, disappointed, saddened, anxious or bored. Therefore, learners with ADHD sometimes appear to be impulsive for far longer in their development than other learners. If learners with ADHD have difficulty in self-regulating emotions and motivation, this could impact their motivation to want to apply themselves in class.

### 3.5.1.4 *Reconstitution*

Reconstitution involves the analysis and synthesis of internally represented information and the behavioural structures associated with that information. Learners with ADHD thus often have difficulty with behaviour that is based on a set of rules

The following sections deal with the conceptual framework that is implemented in this study. The conceptual framework is based on the literature on the educator and other models of ADHD as discussed above in sections 3.1 to 3.4.

## 3.6 **CONCEPTUAL FRAMEWORK**

According to Bronfenbrenner (1979; 1989) development (that is psychological human development) is shaped by various interacting systems, which include the micro-system, the meso-system, the exo-system, and the macro-system. The core conceptual underpinning of the ecological model is that human development is a function of the influences from all of the various systems, and the relationships that exist between the systems (Bronfenbrenner & Evans, 2000; Bronfenbrenner, 1979; Friedman & Wachs, 1999; Stolzer, 2005). The conceptual framework of this study will be discussed with reference to Figure 5, which outlines the framework.

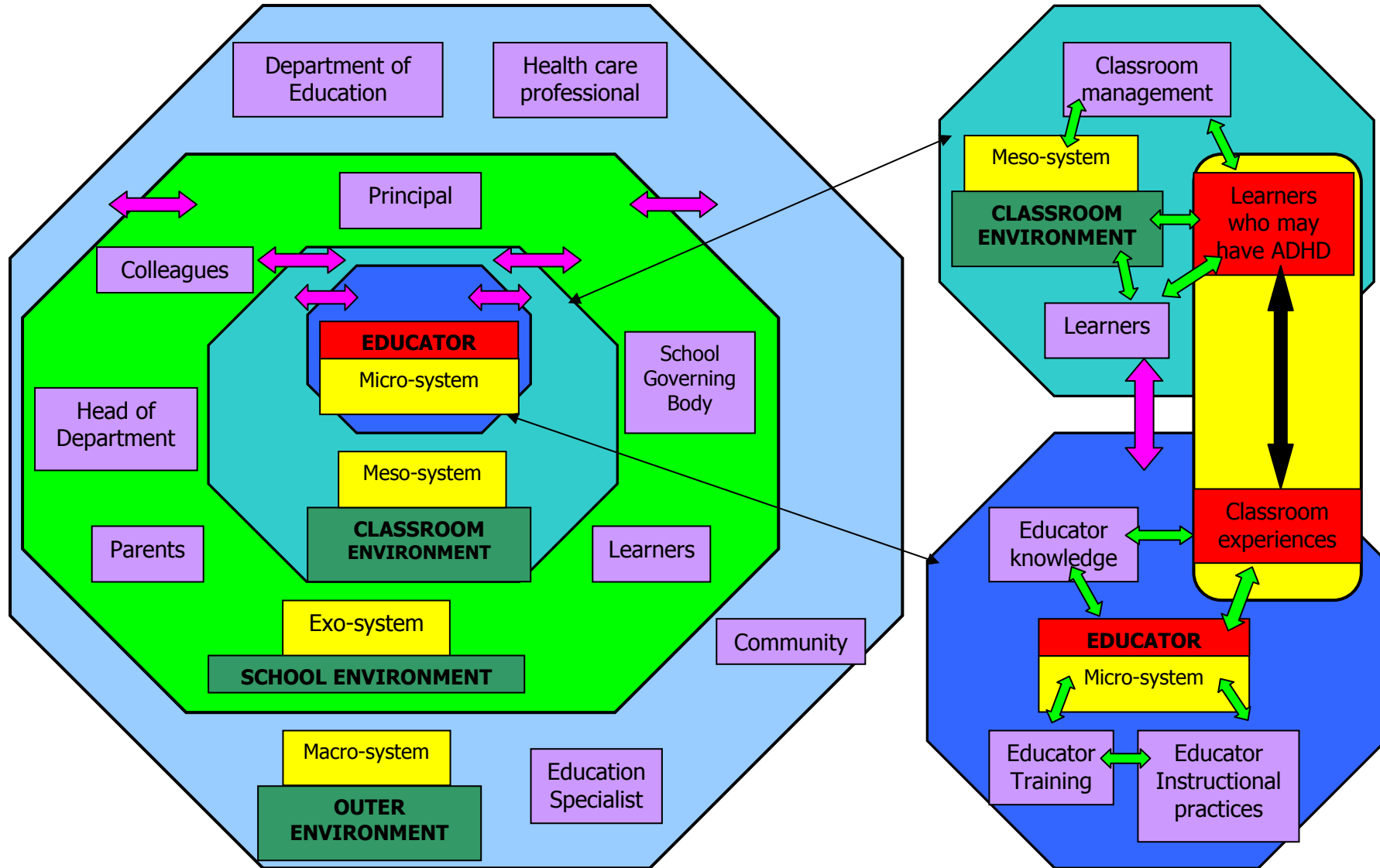


Figure 5: Conceptual Framework



### 3.6.1 *The Ecological Model*

In the conceptual framework proposed for this study, there are different environments<sup>18</sup> that have been put forward. The educator is the focus of this study and therefore the environments of the educators have been illustrated. The learners who may have ADHD are indirectly involved in this study. According to Bronfenbrenner (1979) the ecological model is a theory that notes that the environment as it is perceived influences behaviour and development of a person. Therefore, how a person perceives an environment, whether it is a school or a home, as opposed to how it may exist in reality, will influence the person's behaviour and development. Thus, how an educator experiences learners within a classroom may influence his/her own development as a person. How the educator perceives the learner who may have ADHD, may also influence the learner's development as a person

It is important to note that growth and development referred to within the ecological model does not refer to the conventional psychological processes of perception, motivation, thinking and learning but rather on the content, that is the perceived, desired, feared, thought about, acquired as knowledge and how the nature of this changes as a function of a person's experience to interact with the environment (Bronfenbrenner, 1979). Bronfenbrenner (1979) defines development as "the person's evolving conception of the ecological environment and his relation to it, as well as the person's growing capacity to discover, sustain or alter its properties". Thus, the educator, as the target or focus of the study, relies on his/her perceptions of his/her environment and the systems that exist within it for human growth and development to occur.

How the educator experiences the school (and some components that make up a school, for example: learners, learners with ADHD, school environment, principal, the Head of Department, colleagues, parents, School Governing Body) can influence the development of the educator. The ecological model focuses on the relationships between individuals (such as in a dyad) and their physical context, viewing different levels of systems of the social environment as systems where the functioning of the whole is dependent on the interaction between all the systems. Bronfenbrenner (1989) has proposed that the various systems are bi-directional in nature as they are continually influencing us, and we in turn are continually influencing them. As the school environment impacts and influences the educator, so does the educator impact and influence the school (in the figure the bi-directional nature between systems or contexts is indicated by a bi-directional arrow). As the educator impacts and influences the school so it impacts and influences the learner.

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<sup>18</sup> Setting, context and environment are used interchangeably to mean (noun) a scene (Roget's New Millennium™ Thesaurus, 2007).

The environments and the persons found in those settings are not the focus of the study. However, the importance of the settings and the direct and/or indirect influence the settings may have on the educator and the learners within his/her classroom is significant. Thus, the micro- and meso-systems have been exported from the other contexts to emphasise the fact that the study focuses on how the educators experience learners who may have ADHD. The influence that the person (and the learners in a classroom in particular) and/or the context have on the educator may be reflected in the narratives of the educators. As such, the context (expressed as the micro-, meso-, exo- and macro-systems) and persons (educator, learners, learners with ADHD, school environment, Principal, the Head of Department, colleagues, parents, School Governing Body) who influence could be thought to exert power; as they shape the narrative of the educator in the experiences that he/she may have within the classroom. This will be explained further, using figure 5, p.55.

Before explaining each of the contexts there are certain concepts that Bronfenbrenner (1979, 1989) proposes that are central to his model. These concepts have been applied to this conceptual framework. The concepts include the dyadic and triadic relationship, molar activity (which is included under the section Building Blocks), role, setting, social network, institution, subculture and culture.

### **3.6.1.1 *Dyadic and Triadic Relationships***

Bronfenbrenner (1979) explains that environments are viewed in terms of systems. The dyad is an example of a system, where the relationship is one-on-one and a two person system. Bronfenbrenner (1979) states that within a dyad, such as for example a mother and learner relationship, or a learner and educator relationship, if the one person “undergoes a process of development” then so does the other person. The one person will influence the other person, so that the system changes or grows. Human development is dependent on the existence and contribution of a third party (triad), such as a spouse and friends. If this third party of the triad is disruptive, instead of being supportive, the developmental process can break down (Bronfenbrenner, 1979). An example of this could be that the dyadic relationship between the educator and the learner is extended to the triadic relationship when a parent is added as a third party.

The triadic relationship can be experienced as supportive or disruptive, depending on how much or how little support is given to all three persons in the triadic relationship. Thus, the parent can be viewed as not being supportive to the educator if he/she does not inform the educator that the learner has been diagnosed as having ADHD. The information could be

supportive in that the educator may understand the learner with ADHD and his/her behaviour within the classroom within the context of ADHD.

The educator may also provide support to the parent in the triadic relationship. This relationship can be supported by the educator's ability to be able to identify key behavioural indications of ADHD and make recommendations for a diagnosis to a health care professional. The educator could be a support in contributing in assisting the learner in class. Thus, the triadic relationship between parent, educator and learner can be supportive, but also disruptive in terms of Bronfenbrenner's (1979) model.

### **3.6.1.2 Building Blocks of Psychological Growth**

According to Bronfenbrenner (1979) there are certain "building blocks" in the environment that relate to one another in the course of a person's development and psychological growth; the "building blocks" that affect one's psychological development are molar activity, dyad, role, setting, social network, institution, subculture and culture.

Molar activities are activities that comprise both internal mechanisms and external mechanisms of psychological growth (Bronfenbrenner, 1979). A setting is a place where people can engage in face to face interaction (Bronfenbrenner, 1979). Within particular settings or contexts there is expected behaviour that is associated "with particular positions in society" which is considered by Bronfenbrenner (1979) as being "roles". Roles are an important aspect of the ecological model as roles have the ability to alter how a person is treated, how the person acts, what the person says and does, and what the person thinks and feels (Bronfenbrenner, 1979). Within this study there are behavioural expectations from both the educators and the learners. Educators are expected to manage their classroom, to teach the learners and also consider those learners that may have obstacles to learning. The learners are expected to behave within the rules and regulations of the school and the classroom. Therefore, both the educator and the learner have certain roles to play at school and within the classroom.

The focus of this study is the perception of the educator regarding his/her classroom experiences, therefore the educator and classroom experiences have been highlighted in red in the illustration.

### **3.6.2 The Micro-System**

The micro-system is a blueprint of activities, roles, and interpersonal relations experienced by a developing person in a given context or setting with particular physical and material

characteristics (Bronfenbrenner, 1979; 1989). The educator has been positioned at the centre of the conceptual framework and is the micro-system in the study. Figure 5 illustrates that the educator is the target of the system (namely of this study). The conceptual framework is guided by Figure 5 which is based on an ecological model. The micro-system in this study is the educator. The educator within the context or setting of a school and within the role of the educator may be influenced by the educator's knowledge, instructional practices, training and classroom experiences.

### 3.6.2.1 Educator

The educator is at the centre of the study and at the centre of the conceptual framework. As such, there are factors that may influence his/her experience of teaching and learning of learners with ADHD within the classroom. These may include the educator's instructional practices (Barkley, 1994; Green & Chee, 1994; Jones *et al.*, 2004; Mitchem, 2005; Roffey, 2004; Sonna, 2005), educator's training, educator's knowledge (McFarland *et al.*, 1994; O'Keeffe & McDowell, 2004) and past classroom experiences (which are general classroom experiences) (Kaplan *et al.*, 2002; Poulou & Norwich, 2002; Roffey, 2004). The training and therefore the knowledge that the educator may have, could influence the educator's instructional practices and the classroom experiences. These four factors, while it is not exhaustive in influential factors may influence the educator and how he/she experiences learners and learners with ADHD in the classroom.

### 3.6.2.2 Educators Training and Knowledge

The training in teaching and learning that an educator may have received can influence his/her experience of learners with ADHD (Barkley, 1994; Green & Chee, 1994; Jones *et al.*, 2004; Mitchem, 2005; Roffey, 2004; Sonna, 2005). One can assume that if an educator has received instruction on ADHD; that it may lead to better understanding of learners who have ADHD (McFarland *et al.*, 1994). A better understanding of what ADHD is, and how to manage learners with ADHD within the classroom, could improve the experience of the educator within the classroom.

There are inherent factors that may influence the educator, namely intra-personal factors, for instance biological factors. For example, the educator who suffers from headaches may be different in the way he/she teaches or manages his/her classroom. The ecological model that Bronfenbrenner (1979) designed takes into consideration that biological factors could influence the growth and development of a person. In this study I acknowledge that there may be a number of intra-personal factors, including biological factors that may influence what the educator does within the classroom. An example of this could be if the educator is

experiencing a headache and may not have the patience or tolerance to be able to deal with a classroom full of learners. However, this study does not aim to focus on the psychological and development growth (as discussed above in section The Ecological Model) of the educator. Instead, this study realises the importance of the environment and how it can impact experiences and how behaviour can differ in different settings (Bronfenbrenner, 1979). The primary concern of this study is the experience of the educator and not an in-depth analysis of the factors that may influence the experience. The next system that is illustrated in the figure is the classroom environment; which constitutes the meso-system within this study.

### 3.6.3 *The Meso-System*

The interconnectedness within contexts, those that the person participates in and those that he/she may not participate in, but are affected are called the meso-systems and exo-systems (Bronfenbrenner, 1979). The meso-system includes the interrelations among two or more contexts in which the person participates (Bronfenbrenner, 1979). In the meso-system the educator comes into contact with the learners within the classroom, including learners that may have ADHD. The educator that comes into contact with the learner establishes a dyadic relationship. The following is a description of the meso-system as the classroom environment, as depicted by figure 5.

#### 3.6.3.1 *The Classroom Environment*

The classroom environment is made up of all learners, including learners who may have ADHD. One of the contributing factors that may influence the environment as well as the classroom experience of the educator is classroom management. The educator's ability to manage his/her classroom may influence the learning and teaching that is taking place in the classroom. In the same way, the educator's *inability* to manage his/her classroom may impact negatively on the educator and learners, possibly leading to the educator experiencing teaching and learning as negative. If an educator is, however, able to effectively manage his/her classroom, he/she may feel a sense of mastery and achievement with regards to learning and teaching (Kirkpatrick, Lincoln & Morrow, 2006; Romia & Leyserb, 2006). This may be positively associated with the learners in the classroom.

The role of the educator in the classroom is important as learners are reliant on the educator for teaching so that they may learn. As mentioned earlier, the role of the educator in the classroom is significant as he/she spends approximately six hours a day with the learners thus he/she gets to develop a relationship with the learners. This relationship can assist the learner with ADHD in and through the process of being identified, diagnosed and treated.



The classroom, therefore, becomes an environment whereby important behaviour can be observed and monitored within the confines of the dyadic relationship of educator-learner.

### **3.6.4 *The Exo-System***

In the exo-system, two or more settings interact but do not necessarily involve the person directly, but the person is affected by the events or what happens within the settings (Bronfenbrenner, 1979). In the exo-system the educator will come into contact with learners, parents of learners in his/her class, colleagues, the school governing body, the Head of Department and the principal. The following context is the school, which is referred to as the exo-system.

#### **3.6.4.1 *School Environment***

In this study the school environment or school system is made up of the Principal, Head of Department, colleagues, learners, parents and School Governing Body. These persons make up the school system and, in some way, exert influence on the meso- and micro-system. The Principal can exert influence over the educator, for example by insisting that he/she manage or teach the learners in a certain way (Farmer & Farmer, 1999). In the same approach, a Head of Department position of influence can be supportive to the educator's for example by encouraging continual professional development by communicating information regarding learners as well as teaching and learning.

#### **3.6.4.2 *Principal, Head of Department and Colleagues***

The Principal, Head of Department and colleagues (fellow educators) make up the school environment and the exo-system that the educator encounters. The Principal and Head of Department have the influence to assist and support the educator (Mestry & Grobler, 2004). According to Mestry and Grobler (2004) a principal should be able to motivate the educators at a school, including being able to manage conflict, stress and cultural diversity effectively. Thus, it would seem that the ideal school has the teaching staff work uniformly as a team. This could include the Head of Department contributing towards the management of the school and educators in the management of learners and the curriculum.

#### **3.6.4.3 *Parents***

Within the ecological model parent involvement extends to the school and the classroom level (Bronfenbrenner, 1979; Comer & Hayes, 1991; Keyes, 2002). Parent involvement can ensure that the learner with ADHD obtains the correct fit in terms of a medical treatment plan,

where educators assist parents in making sure that learners receive their medication at school and at the correct hour. Parent involvement can ensure that the educator can implement an academic and/or a behavioural intervention where necessary. Lastly, if a parent is involved and a supportive relationship exists between educator and parent, the educator can provide valuable monitoring and feedback on the learner to the parent. The monitoring and feedback provides the parent with information that will assist in diagnosing and treating ADHD.

#### **3.6.4.4 School Governing Body (SGB)**

According to the Department of Education the School Governing Body is required to support the principal and educators in the performance of their professional performance (General Notice, Regulation 1457 of 1997, Regulations and Rules Governing Bodies of Public schools) and to be the official “mouthpiece” of parents of learners, educators and learners of the school (Department of Education, Gauteng, 1995). The School Governing Body is required to exercise influence over the educator by being the decision-making power and role that it fulfils within the school (Department of Education, Gauteng, 1995). Therefore the School Governing Body plays an influential role in the educator’s world, since it has the same decision-making power regarding the educator’s classroom and teaching practices. An example of this could be if the SGB makes the decision to send educators on a workshop that could empower them with knowledge on ADHD or empower educators with classroom management skills.

Thus, the SGB’s could have direct influence on the educators and their world. However, the SGB’s could also have indirect power to influence the educator in that they have the power to, for example, recruit more educators. The SGB’s have the ability to assist the principal with school related events and situations that could have an indirect influence on the educators and learners at the school.

#### **3.6.5 The Macro-System**

The macro-system is viewed by Bronfenbrenner (1979) as the overarching ideology and organisation of social institutions that are found in a culture or subculture. Public policy, according to Bronfenbrenner (1979), is an example of how the macro-system can determine the properties of the exo-, meso- and micro-systems that occur in everyday life that guides behaviour and development. The macro-system could include the community, where the school is situated, education specialists, health care professionals and the department of education.

According to Bronfenbrenner's (1989) theory, the systems are intrinsically intertwined. Alterations occurring on one level have the potential to affect the entire system (Bronfenbrenner, 1989). Therefore, if a change occurs, for instance, at the macro-system level it has the potential to change the whole system. That could impact on the educator and possibly the learner who may have ADHD. Psychological, biological and social systems are open systems. They depend on interaction with each other and, therefore, are open to change due to interaction (Lefrançois, 1993). Thus, in order for any change to occur in any of the systems, the systems will need to be in interaction with each other.

Bronfenbrenner (1979) states that “children’s institutions” development depend on the extent that the physical and social environment facilitate and encourage the developing person to engage in progressively more complex molar activities, patterns of shared interaction, and primary dyadic relationships with others in the setting. Therefore, the school and educator’s development and growth are dependent on the interaction between systems and the relationships that develop between the systems.

### **3.6.5.1 The Outer Environment**

The outer environment in this study as illustrated, in Figure 5 includes the Department of Education (including the education specialists), health care professionals (the educational psychologist and psychiatrist) and social services (includes the social worker) and community. The outer community, as the macro-system, assists in the development and implementation of policies. Educational policies that are developed by the Department of Education impact on the educator and his/her learners directly. The Learner Care Act 1983, Section 28, is a policy that has been promulgated in parliament for the South African public that is the macro-system, to care and protect learners. Therefore the Learner Care Act is an example of how a policy that has been designed within the macro-system has a direct impact on the learner.

### **3.6.5.2 Health Care Professionals**

The health care professional contains the power of assessing a learner, of making a diagnosis and providing treatment and therapy to the learner. However, the health care professional can communicate with the educator as to what diagnosis and treatment has been decided on for the learner in consultation with the learner’s parents. Therefore, the health care professional has the power to include the educator in the treatment process. This process can assist the learner who may have ADHD, but it can also assist the educator in allowing him/her to understand what the treatment is and to be a part of the treatment plan of the learner.



### 3.6.5.3 *Department of Education*

The Department of Education has a hierarchical structure that provides support to the learner and educator. At a national level, the Department of Education develops policies, acts, and papers that provide guidelines and procedures for schools, principals and educators to follow (Department of Education, 2000). At a district level the Department of Education has Education Specialists that provide support to schools and educators directly.

### 3.6.5.4 *Education Specialist*

The Education Specialist, as part of the macro-system, gives assistance to educators. Thus, the Education Specialist's role of support can be perceived as being constructive by the educator depending on the nature of the support. The role of an Education Specialist is to provide individual support by visiting schools and educators or by collective support by conducting workshops that assist the educators.

### 3.6.6 *The Interconnectedness of the System*

As discussed above, the ecological model views the whole system, highlighting the fact that the whole system is dependent on the interaction between systems. Therefore, where there is change on one system there will be a change at another level. Thus, change in one section of the school could influence the school as a whole so the whole school could be changed (Van der Linde, 2002). Changes within personnel staff may affect the whole school. Creating positive perceptions of negative classroom experiences can influence how the educator views himself/herself and possibly the learners within the classroom.

Another consideration when viewing the whole system and its inter-connectedness is the referral system or the system for seeking help for learners. As pointed out in chapter 2 and previously in this chapter educators play a pivotal role in identifying learners who may have ADHD (Snider *et al.*, 2003; Vereb & DiPerna, 2004). In South Africa, depending on the situation, educators would then need to inform the parents of the learner (exo-system) of the possibility that the learner may have ADHD. The parents of the learner can then approach a health care professional (macro-system) to have the learner evaluated. Several authors (Bussing *et al.*, 2003; Eiraldi, Mazzuca, Clarke & Power, 2006; Efron, 2004) stress the importance of the "referral" system and that it needs improvement. The importance of seeking out the help from a health care professional or an education specialist could determine if the learner who may have ADHD receives the adequate support which could

impact on his/her academic performance, social and emotional wellbeing. The referral system has been discussed in chapter 2.

### 3.6.7 *The Educator and Learner who may have ADHD*

The focus of the study is the experience of the educator of the learner who may have ADHD, as stated under section 3.5.1. The interconnectedness of the systems has been stated in the section here above, and as such I am aware that any change at any level of the system could influence either the educator or the learner who may have ADHD. The relationship between the educator and the learner who may have ADHD could therefore be easily influenced by other environmental or contextual factors. The educator could be influenced by the factors such as educator's instructional practices, educator's training, educator's knowledge and possible past classroom experiences. The learner who may have ADHD could be influenced by different factors including the ADHD itself, as discussed in chapter 2.

Environmental factors could influence the real life of experience of the educators. However, the educator's experiences of learners who may have ADHD in their classroom is a story that may reflect only a part of the system, as reflected in Figure 5. However, the experiences of the educator may be of importance as it could influence the whole system directly and indirectly as highlighted under the section the *Interconnectedness of the system*. The educator's experience thus could impact the educator, the learner who may have ADHD and the parent directly. The educator's classroom experience of a learner who may have ADHD could influence the other learners in the class, the school, as well as other educators, the health care professional and the community.

## 3.7 CONCLUSION

A learner with ADHD may be considered to have a "barrier towards learning" as ADHD may contribute to his/her challenges in learning. As such, the South African Department of Education (2001) highlights the importance of classroom educators in the Special Needs White Paper 6, and how they can contribute to the inclusion of learners. According to the Department of Education (2002), schools should create the conditions for learners to succeed, addressing their barriers to learning, as experienced by individual learners (Holz & Lessing, 2002). Within South Africa there are certain schools that may have procedures or strategies in place, for example having a resident educational psychologist or remedial teacher present, but less privileged schools may not have the same benefits (Barber, 2001). This study aimed to investigate how educators experience learners with ADHD in their classrooms and how they make sense of ADHD in their classrooms through the use of narrative inquiry.

Educators are faced with the challenge of having learners who may have ADHD in their classrooms. With that responsibility, educators are then faced with the daunting task of identifying the learners. Secondly, educators are expected to support these learners academically, by considering behavioural and academic intervention strategies. The following chapter, chapter 4, discusses the research design and methodology implemented in this doctoral study.

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## Chapter 4: Research Design and Methodology

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### 4.1 INTRODUCTION

As stated in chapter 1 this doctoral study utilised narrative research design. In a narrative research design researchers describe the lives of persons, tell stories of people's lives and write narratives of people's experiences (Creswell, 2002). Narrative research was selected as the focus is being able to translate educators' experiences into a narrative. The following section discusses narrative research design in more depth.

### 4.2 RESEARCH DESIGN

The focus of a narrative research design is to collect data, describe people's personal stories and discuss the meaning of the person's experiences. Personal accounts or a personal experience story were used as a method of narrative research (Clandinin & Connelly, 2000; Creswell, 2002). In narrative research design, as Creswell (2002) explains, the researcher aims to understand, explore and discuss the experiences of educators with learners who may have ADHD, in their classrooms.

The context of an educator's story and storytelling is important when considering narratives, as narratives attempt to reveal the meaning that educators attribute to their lived experiences (Swidler, 2000). Narratives capture the individual and the context, as the researcher attempts to understand how the educator feels and thinks within a particular environmental, social, cultural and institutional context (Moen, 2006).

As such, narrative research that captures the educator's experiences (in the form of a narrative or story) offers the researcher an opportunity to present the "complexity of teaching to the public" (Moen, 2006). Thus, the narratives of the educators answer the research questions, as they reflect the experiences of the educators in the classroom. Narratives, as educators' experiences, can also be an illustration to readers as to what takes place in schools with Tshwane. As stated in chapter 1, Purdie *et al.* (2002) state that educators need to directly address their educational difficulties in order to ensure academic success. The narrative is an easy and accessible format for readers such as principals, parents, ADHD support groups, and teacher training institutions to understand what educators experience in the classroom. The narratives of the educators may, therefore, inform relevant persons.

A narrative research design seemed to be an appropriate selection, in terms of design of the research, as it allowed for the research questions to be answered. The following section looks at the research questions and narrative research design.

#### 4.2.1 *Research Questions*

The research questions were posed to elicit the personal accounts of educators' experiences of learners who may have ADHD. Therefore, the research questions were included in an interview schedule that was used in interviewing 17 educators. The primary research question: "How do educators experience learners in their classrooms who may have ADHD?" has been asked. This primary question guided the study in reviewing the literature, developing a conceptual framework and collecting and analysing the data. The primary research question was further developed into sub-questions, listed here below, in order for the educator to articulate his/her experiences of learners who may have ADHD in the classroom.

**Research Question: How do educators experience learners who may have ADHD in their classrooms?**

**Sub-questions:**

1. How do educators experience teaching and learning the learner who may have ADHD?
2. How do educators manage their classrooms with learners in their classrooms, who may have ADHD?
3. How has the experience of educating learners who may have ADHD influenced or affected the educator?

In order for the research questions to be answered a narrative design was selected. Creswell (2002) states that narrative research design has recently been implemented in educational studies that have highlighted: (1) educator reflection; (2) educator knowledge (what they know and what they do not know, how they think professionally); and (3) how they make decisions in the classroom and "voicing" educator experiences. I aimed to provide the means for educators to voice their own personal experiences of the learners who may have ADHD in their classrooms. The negative behaviour that is acted out by learners who may have ADHD, as listed earlier in chapter two, can impact negatively on the teaching and learning that takes place in the classroom. Therefore, this negative behaviour can be expressed as an "educational problem". A narrative research design allowed for the educators experience to be explored in the interviews and then to be highlighted as a narrative.



Narrative research design is considered to be qualitative research. The following paragraph discusses qualitative research, interpretive inquiry and the researcher's role and how it relates to how the educators experiences was constructed with meaning.

#### **4.2.2 *Qualitative Research and Interpretive Inquiry***

Qualitative research is focused on “describing, interpreting and understanding” the meaning people attach to their world, how they feel and think about circumstances and situations (Cutcliffe & McKenna, 1999; Thorne, 2000). This study is a qualitative study as it seeks to explore and understand the experiences of educators regarding learners who may have ADHD in their classrooms. Qualitative research often employs inductive reasoning and an interpretive understanding that looks at deconstructing meanings of a particular occurrence (Thorne, 2000). A qualitative study allows me, as researcher, to acquire the descriptions or narratives of experiences from educators.

Qualitative research, from the interpretive inquiry position seeks to understand the meaning of experience, actions and events as interpreted through the participants and the researcher (or co-participant), paying attention to the intricacies of behaviour and meaning in the context of where it naturally occurs (Richardson, 1996). Interpretive inquiry moulds well with a narrative research design as it seeks to understand the personal and social experiences of educators in interaction with others (Clandinin & Connelly, 2000).

#### **4.2.3 *The Role of Researcher***

If the researcher and the participant take an active role in the research process, the researcher assumes that he/she will have a deeper understanding of the social phenomenon chosen to study (Silverman, 2000). A researcher forms an integral part of the process by bringing their unique experiences and understandings to the process, as they observe and participate in the collection of data. The researcher does not stand outside or is not objective to the whole research process. Instead, the researcher plays an important role in understanding and re-constructing the personal accounts and narratives of the participants. As a result, the researcher can be viewed as a co-participant.

The researcher contributes by attempting to understand, explore and empathise with the participant and chooses to focus on context and the integrity of the whole story or experience, and hence, does not rely on quantitative facts (Parker, 1994). Qualitative research is not a fixed truth or fact. It is trying to make sense of the phenomenon and includes exploration, elaboration and systemisation of the phenomenon (Parker, 1994). Seeing the “whole story” and not focusing only on what is considered “fact” could allow the

researcher/co-participant to understand the particular phenomenon. The researcher is able to make use of exploration and elaboration within an interview that allows for the development of a story of an experience and rapport and trust.

As researcher, I aimed to make sure that each participant understood the purpose of the research. In the interviews with the educators I strive to listen to the responses, allowing the participants/educator to speak of his/her experience without judgement. Therefore, the participants were able to speak without feeling as if they were being evaluated and without thinking that they needed to say the “correct” thing.

#### 4.2.4 *Ontological Position*

As meaning of an experience, event or emotion is constructed between people in their everyday living, the researcher maintains that the ontological view in this study is constructivist. Qualitative research and using interviews in particular offer the opportunity to explore how everyday life is experienced and how meaning is understood. I, as researcher, have the unique opportunity to probe, explore or negotiate the participant’s experiences regarding the learner who may have ADHD in the classroom. This PhD study is considered to be constructivist in its ontological position as it supports the notion that social phenomena are socially negotiated in interaction (Bryman, 2004).

The conceptual framework, research approach and strategies to collect data, contribute to the researcher being able to answer the research question (Thorne, 2000). The following section expands further on the research methodology of this study.

### 4.3 RESEARCH METHODOLOGY

Schools were selected using convenience and purposive sampling. The educators and participants were selected by the discretion of the head of department or principal at each school. A total of seventeen educators participated in this study. The sampling of schools and participants are discussed further in section 4.3.1.

Interviews were the data collection method chosen for this study. Interviews seemed to be an appropriate choice in being able to explore the experiences of educators. The interviews, although guided by an interview schedule, were in depth. Interviews are discussed further in section 4.3.2.

In addition to the data that was collected via interviews for the purpose of narratives it was also interpretively analysed using content theme analysis. Thus, specific meanings were

constructed by the educators' interview data. Content analysis was used as the experiences from educators were elicited through interviews and certain rules of analysis, based on Tesch (1990), Krippendorff (1980) and Creswell (2002) were followed. Content analysis is described further in section 4.4.6. Words and personal life stories were used in order to convey experiences from the classroom. The method of analysis allows for the words and life stories or experiences to be interpreted by identifying themes. The themes identified were interpreted and presented as narrative which is presented in chapter 6. The interpretive nature of this study is constructivist in approach, as interpretations are deduced and constructed in analysis of the data. In the following section the schools and the participants in the study, the interviews, data collection and data analysis are presented and discussed.

#### **4.3.1 *Schools and Participants in the Study***

The type of sampling applied to one's research is determined by the methodology selected and the topic under investigation (Higginbottom, 2002). The schools, in this study, were selected using purposive and convenience sampling (Gay & Airasian, 2003, Onwuegbuzie & Leech, 2007; Silverman, 2000). Purposive sampling was selected as I believed, based on prior site visits, that the schools could have learners who may have ADHD in their classrooms. Another reason why the sampling can be considered purposive is that the schools participating in the study are situated in different contexts. Thus, I was curious to establish if experiences would be different or similar across different socio-economic contexts/environments, even though comparisons would not be possible due to a small sample size. I also decided to include participants from a variety of schools due the high variance in socio-economic contexts of South African schools.

The convenience sampling meant that educators were willing and able to participate in the study (Onwuegbuzie & Leech, 2007) as a relationship had been established with the school and educators. I worked with the schools and educators on a project conducted by the University of Pretoria. Therefore, I had worked together with a number of the educators and Head of Department (HOD's) at the schools. Devers and Frankel (2000) state that establishing and maintaining a good relationship is important for effective sampling and for the credibility of the research. Therefore, the educators felt more comfortable and open to being interviewed. The process of making contact with schools and participants are discussed further in section 4.4.5 (Data Collection).

Prior to each interview with each educator, informed consent was obtained in writing from every participant and confirmed verbally that they understood the consent letter. The interviews were, therefore, conducted with full consent from each educator and the theses

will be made available for the educators and the principal to read. Informed consent is discussed in section 4.5, (Ethical Care and Informed Consent).

Interviews were conducted as the primary form of data collection. The following section discusses the interviews as research methodology.

#### 4.3.2 Interviews

One-to-one interviews were conducted with educators from three different schools from the Tshwane region. Interviews are conversations with a purpose that allow the researcher to discover the participant's views, experiences and/or opinions but being respectful to how he/she frames responses (Marshall & Rossman, 1999). Interviews, therefore, allow the researcher to uncover the meaning that participants give to their everyday lives. The interview presents an opportunity to record the socially constructed meanings and experiences that occur between educator and learner (Kvale, 1996). Interviews allow the researcher to investigate the story behind the experience.

Before the interviews were conducted, the research questions were rephrased into operational questions (data questions) that were included in the interview schedule. Thus, the operational questions were posed to elicit the personal accounts of educators' experiences of learners who may have ADHD. The research questions and how they have been developed into operational questions and included in the interview schedule (Appendix D).

In the interview I could explore classroom experiences of learners who may have ADHD by firstly asking questions and probing the interviewee/participant. The classroom is a setting where social interactions take place between the learner and the educator and thus was also a suitable setting for the interviews to take place. The classroom and the school is where the educator or participant constructs his/her experiences, opinions, feelings, thoughts and behaviours that are relevant to the learner.

The interviews that were conducted for the purposes of this study were the primary means of data collection (Cohen & Manion, 1979), as it provided the greatest amount of data from a variety of participants (Marshall & Rossman, 1999). However, field notes were also taken during the interviews and photographs of the schools were taken. (For anonymity the photographs of the schools were not used in this study). Only one interview was conducted with each of the 17 participating educators. Permission to do the study was granted by the respective principals and Head of Departments on the grounds that it would only be one

interview and therefore not disrupt teaching and learning at school. Permission was granted to enter the schools to gain “member checking” from the educators.

#### 4.3.4 *Data Collection*

As previously mentioned 17 educators were interviewed at schools. The data, therefore, was collected by means of interviews with the educators. The interviews were recorded and transcribed in order for the textual data to be analysed (see Appendix M). The data collection process is discussed in more detail under section 4.4.5.

#### 4.3.5 *Data Analysis*

The textual data that was collected via interviews was first analysed using content analysis. Content analysis was selected in order for themes and meaning to emerge and for interpretations to be drawn. Content analysis based on the works of Tesch (1990), Krippendorff (1980) and Creswell (2003) were used. Content analysis and not thematic analysis was chosen as content analysis seemed an appropriate ‘fit’ to Creswell’s (2002) description of narrative research design, as it seeks to describe a person’s personal stories and discuss the meaning of the person’s experiences. Although content analysis and thematic analysis rely on themes being the ‘output’, both data analysis methods are distinct and have different procedures involved (Krippendorff, 1980). Content analysis is a research technique that makes inferences or interpretations from the textual data to the context (Krippendorff, 1980; Weber 1990). For the purpose of this study, content analysis was selected as the technique to analyse the transcribed textual data so as to comprehend the meaning of text, action and/or narrative through the process of interpreting the emergent themes (Tesch, 1990).

Content analysis was selected on the basis that themes identified in the analysis could be interpreted and re-told as the narratives or personal accounts of the educators/participants. Content analysis is the identification of themes and interpretation of the text and action therefore appeared to be a logical “fit” to the textual data recorded and collected in interviewing the educators. The specific steps that were followed in analysing the data are discussed in more detail under the section 4.4.6. The following section deals with the procedures involved in this study.

#### 4.4 THE RESEARCH PROCESS

A systematic approach to research allows for the process of collecting data and developing narratives to be transparent. The research process, from the literature review to developing a narrative, aims to be transparent and logical to the auditor and/or reader. The following sections relate to the procedure used in the study. Figure 6 (p.87) illustrates the research procedures that shaped this study, adapted from Creswell (2002: 525).

##### 4.4.1 *Identify the Research Problem*

As stated, Holz & Lessing (2002) believe that approximately 3-7% of South African learners could be diagnosed as having ADHD. Bearing this in mind, I believe that educators in South Africa could at some point in their careers come into contact with learners who may have ADHD. As a researcher, I identified that educators' personal stories and narratives of learners who may have ADHD in their classrooms are stories that have not been told. As stated in a previous chapter, educators in South Africa are expected to include learners who may have ADHD, according to the Department Of Education's White Paper 6 (2001), yet the narratives of how they experience learners who may have ADHD in the classroom remains understated.

##### 4.4.2 *Reviewing Literature*

Literature on ADHD (APA, 2000; Barkley, 1994; Biederman & Faraone, 2005, Brown, 2000; Purdie *et al.*, 2002; Quay & Hogan, 1999, amongst others) was consulted in order to ascertain the complexities of the disorder and to assist in the process of the design of the interview schedule. In order to design the interview schedule, literature on interviews (Kvale, 1996) was consulted. The literature chapter and conceptual framework reflects the literature and studies that are available on ADHD. Consequently, the literature review reflects the current knowledge and theory on ADHD. The literature also allows the researcher to understand and explore topics that pertain to ADHD, and therefore allow me, as the researcher, to probe into the meanings of experiences as told in the interviews.

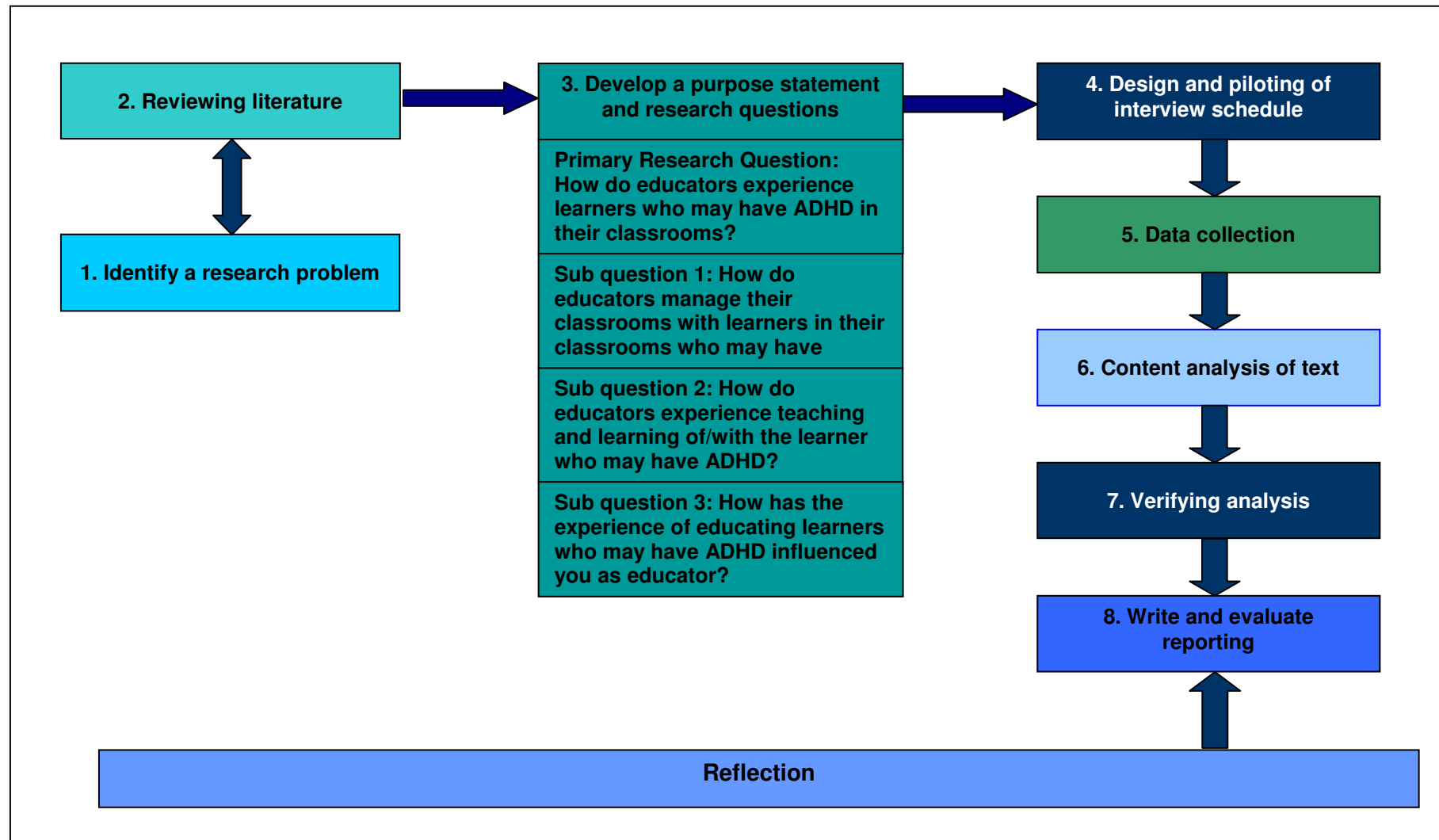


Figure 6: The Study Research Process (adapted from Cresswell, 2002, p525)

#### 4.4.3 *Develop a Purpose Statement and Research Questions*

The development of research questions evolved over time. The purpose statement was designed at the outset of the research study with the draft of the research proposal. Thus, the purpose of the study is to understand and explain how educators experience learners who may have attention deficit hyperactivity disorder in their classrooms.

The development of the research question evolved from the question namely: “How does the educator experience the learner who may have ADHD in the classroom?” In determining what and how to ask the question in an interview schedule, the research question developed sub-questions. The sub-questions permit more focus in order to elicit responses and richer data from the participants. The development of the questions and interview schedule is described further below.

#### 4.4.4 *Design and Piloting of Interview Schedule*

The interviews are semi-structured (Graham, 2000), to allow for the participant or educator to create his/her own story of classroom experiences. The interview schedule is attached herewith as Appendix D.

The interviews in the pilot phase were initially driven by a single open-ended question. This was to explore the field and generate specific operational questions for the main study. Therefore the question: “How do you as an educator experience learners in your classroom who may have ADHD?” was piloted with two teachers at one of the schools. Although the question was an open-ended question, which allowed for the educator to recount his/her own experiences, it appeared from the interview as if this question was not focused enough. This was evident by the way the educators were telling their experiences and seemed to be easily side-tracked and digressed from the topic. In order to eliminate the possibility of digression, more specific questions were developed in order for personal experiences and narratives of educator experiences of learners who may ADHD to be elicited.

Therefore, the next step included adding questions that added focus and sharpened the interview schedule. The interview schedule was then drafted and given to my primary supervisor for review and comments. The interview schedule included the main research questions: (1) how do educators manage their classrooms with learners who may have ADHD in their classrooms? (2) how do educators experience teaching and learning of/with the learner who may have ADHD? and (3) how has the experience of educating learners who may have ADHD influenced you as educator? It also included the sub-questions and space for field notes (refer to Appendix D).



#### 4.4.5 *Data Collection*

The final interview schedule was then accepted, after it was reviewed by the researcher's primary supervisor, after three drafts. It is attached in Appendix D. This schedule was used in the interviews with the participants.

The schools were approached with a letter requesting permission from the principal for interviews with the educators from the Foundation Phase. The letter in the form of a fax is included in Appendix E. Six schools were approached and three schools replied indicating that they were willing to take part in the study. A meeting was held with each of the three schools, where I met either the Head of Department or the Principal. The aim of and procedures for the study were explained.

At the first meeting with the principal and/or Head of Department, it was agreed at two of the schools that all the educators of the Foundation Phase would be interviewed. At one school there were numerous educators in the Foundation Phase. Thus, it was agreed with the Head of Department that she would arrange at least four educators, who had experienced learners who may have had ADHD in the classroom, to be selected and invited to participate in an interview.

At the first meeting the study was explained and the practical arrangements were made, for example the venue and the number of educators needed for interviewing. At this first meeting informed consent forms for educators were left for educators to read through and consider carefully before going on to the next level of interviewing. The informed consent form is listed as Appendix F. The interviews were planned to take place after school activities, as not to disrupt any learning. The educators' schedule needed to be considered, so it would not disrupt extra-mural activities at the school or marking and preparation for the next day's classrooms that the educator may need to do.

The choice of venue is significant in that the interviewees were relaxed in the environment (Silverman, 2000) that they were familiar with. At each school the choice of venue was left to the Head of Department since cooperation was regarded essential between the researcher and participant (Clandinin & Connelly, 2000; Marshall & Rossman, 1999). At two schools a classroom was selected to conduct the interviews. At one school the Head of Department chose to have the interviews in the staff room. It, therefore, provided the safety of familiarity and confidentiality (Marshall & Rossman, 1999).

The researcher, as interviewer, had the control to put the educators at ease in using effective interpersonal skills and rephrasing and repeating the question when required (Appleton, 1995). Mason (1996) suggests that there are certain questions the researcher needs to consider with regards to the interviews, namely: (1) what you ask; (2) how you ask it; (3) what you “let” your participants tell you; (4) whether you guarantee confidentiality and anonymity of your interviews; (5) what consent to ask; (6) to be sure that the consent you ask is informed and (7) the power relations that take place between interviewer and interviewee. The first two points are usually regarded in the designing and drafting of the interview schedule (which is included in Appendix D, e.g. what you “let” your participants tell you, whether you guarantee confidentiality of your interviews and what consent to ask). Informed consent is considered in the initial contact and during the interview process, which is discussed below. The issue of the power dynamics that takes place between two people is a significant aspect of interviewing that needs to be acknowledged, especially when you consider that the educators that took part in this study came from different cultural backgrounds. Therefore, it was important to consider that when going into a school, for example, the educator could be shy, submissive, afraid or nervous. All these sentiments could have a negative impact on the “richness” of the data.

Another consideration was the seating arrangements of the participants and me, as researcher. There are subtleties that can influence an interview that a psychologist should be mindful of, namely: personal space (that is if there is sufficient physical space between researcher and participant) and psychological safety (that is if the researcher creates the psychological space for the participant to express his/her true experiences and feels safe to express them). Before the interview commenced the participants/educators could choose where they wanted to do the interview. Thus, in school one, three of the interviews were conducted in a classroom, at a learner’s desk and seated on a chair. The climate created by the venue and seating arrangement made it more informal for the educators and researcher. At the second school the interviews were conducted in the staff room at a large table, where the educators sat across from the researcher. This arrangement could have been interpreted as being more formal.

Field notes allowed me to collect data that cannot be recorded via tape recording. Therefore, nuances that are communicated as non-verbal language were noted as field notes (Silverman, 2000). Field notes become a “nested set of stories” (Creswell, 2002); where the researcher enters his/her own interpretation and/or experience of events of the interview that becomes a story within a story.

#### 4.4.5.1 Recording the Interviews

The interviews were recorded. A company that specialises in recording and transcribing was utilised to be able to firstly, record interviews with a microphone and a recorder. Secondly, the company converted the audiotapes into transcriptions. The transcriptions served as the text where the exploration of themes were performed (Punch, 1995; Silverman, 2000).

#### 4.4.5.2 Transcribing

The transcribed tapes were made anonymous and then e-mailed to the researcher, whereby the transcribed text could be analysed (see Appendix M). Once the transcribed text was received via e-mail, the data needed to be cleaned. The interviews were inserted into table format that would allow me, as researcher to code and insert comments. Speaker turn units were also inserted (refer to Table 1 below).

**Table 1: An Example of the Transcribed Text with Speaker Turn Units**

Speaker turner unit	Transcribed text
840	<u>Researcher</u> : Okay.
841	<u>Participant 2b</u> : Yes, I give her a chair and then we sit and talk to her and tell her that I don't like this and this and this, "will you please do this and this".
842	<u>Researcher</u> : Okay.
843	<u>Participant 2b</u> : But I can't shout her in front of the other children.
844	<u>Researcher</u> : Okay, talking about shouting in front of other children, do you have rules and regulations in your classroom?
845	<u>Participant 2b</u> : Yes. At the beginning of the year, we just start with the rules...
846	<u>Researcher</u> : Yes.
847	<u>Participant 2b</u> : I'm asking them they must give me the rules, and then we write them there and then we agree about them...
848	<u>Researcher</u> : Okay.
849	<u>Participant 2b</u> : I don't just think and say "there are the rules" – we discuss it in the classroom...
850	<u>Researcher</u> : Together...

Pope, *et al.* (2000) cautions researchers that the transcripts offer a good descriptive record of the interviews but cannot provide explanations. Thus, the researcher needs to make use of analysis and interpretation of data.

#### 4.4.6 *Data Analysis and Interpretation*

Qualitative researchers seek to “extract meaning” from the data that they have collected (Onwuegbuzie & Leech, 2007). Classical content analysis was administered to the textual data that was collected.

According to Tesch (1990), the hermeneutical circle is where I, as researcher, consider each part of the data in relationship to the whole, the part receives meaning from the whole. Understanding each part, is to some extent to understand the whole text. In taking the whole into consideration, one would consider context, the researcher’s own circumstances and the greater social/historical context or situation (Tesch, 1990). This is an important aspect to consider when analysing the transcripts, when considering the challenges of reductionism and the context of the narratives of the educators. Reducing the data may mean losing the richness of meaning when the “whole” or context is not considered. Meaning of words, actions, themes and/or codes should thus be considered with the broader context in mind. The broader context can include the social, economic, political and historical background of the educator. Although such information is not recorded for the purposes of this study, I am aware that the social, economic, political and historical background would have influenced the personal account and narrative of the educator in the classroom.

The following eight steps guided the study in coding the data (Creswell, 2003, p.192; Tesch, 1990, p.142-144;):

*Step 1: The researcher should get a sense of the whole:* The researcher read the transcripts and jotted down ideas that came to mind. This allowed the researcher to gain background information to the data. An overall picture of the experiences of the educators was jotted down.

*Step 2: Go through a document and ask “what is it about?”* The researcher made notes of changes of topic in the text; noting what was talked about and not what was said. When reading through the transcriptions, the question “ask what the underlying meaning of the text is?” was applied. Thus, the underlying meaning of the conversation and text was sought. The essence of the conversation was recorded without reducing the data or disregarding the educator’s personal experience.

*Step 3: Make a list of all the topics:* A comparison of all the topics was drawn up. Connections or links to topics that are similar, clustering similar topics were made. This was

done by arranging the data into columns; column 1 holds major topics that are constructed from clusters, column 2 holds unique topics that seem important to the research study, column 3 holds the “left over” topics. Refer to Appendix G for an example of how the data was organised into topics. The management of data allows for the data to be “audited” and for the logic of the analysis to be transparent to the reader and the colleague that audits the analysis. An audit of the data performed by a colleague is also called peer examination; where analysis of the data is checked (Creswell, 2003; Krefting, 1991, Marshall & Rossman, 1999).

*Step 4: Go back to the data, using the first column of topics to organise the data:*

Abbreviations of the topics as codes were written in the margins. This fulfils the coding process; which will show if the topic descriptions correspond to what can be found in the data. New topics were also found in this process.

Codes or labels are used for assigning units of meaning to the descriptive data collected during a study (Miles & Huberman, 1994). Miles and Huberman (1994) recommend starting off with a “start list” of codes, where the conceptual framework, research questions and hypotheses are included. Codes can also deal with phenomena like: a definition of a situation; acts/activities, meaning/perspective/ways of thinking of people; participation; process; strategies; relationships; methods and settings/context (Miles & Huberman, 1994).

*Step 5: Refining the organising system:* Drawing lines to each of the topics that appear to relate to each other were made; clusters of topics were linked to each other.

*Step 6: Make a decision regarding the abbreviation of each category and alphabetise these codes:* Coding of the data was completed by using the abbreviated topics/codes.

*Step 7: Group the categories and perform a preliminary analysis:* The content for each category was identified and summarised. Commonality in content and uniqueness, confusions and contradictions in the content and possible missing information was considered. Content analysis involved coding interviews into categories which organised the data (Smith, 2003). The categories were obtained or informed from data, the researcher’s conceptual framework (Smith, 2003) and literature published on the subject.

*Step 8: If necessary, recode the existing data:* The researcher considered the themes and stories that emerged from the data. However, recoding of the data was not necessary.

Although content analysis has been applied to the textual data in order to establish themes and understanding of the phenomenon, the researcher needs to interpret what lies “between the lines”. In order to understand the phenomenon under investigation, Weston, Gandell, Beauchamp, McAlpine, Wiseman and Beauchamp (2001) recommend going between the overall concept of the phenomenon, going through the details of the coding and moving out again to view how details could have changed the way we interpreted the “bigger picture”. Emergent themes as well as themes that the researcher anticipates, due to the literature review, need to be considered (Ziebland & McPherson, 2006).

#### **4.4.7 *Verifying Analysis***

As there can be many meanings and interpretations of one story or experience (McAllister, 2001), interpretation thereof needs to be verified before being presented in this study. Once the data was coded, a number of processes were applied in order to ensure the quality of the data. Section 4.6 below is a description of the methods implemented in this study in order to ensure trustworthiness.

#### **4.4.8 *Reporting***

Once the data has been coded and interpreted, or the stories identified, the researcher needs to re-tell the stories of the participants. Stories or narratives may contribute to understanding of an experience as they engage the listener/reader from a safe distance (McAllister, 2001). Moen (2006) states that when researchers describe in detail the participants and setting of a study, it enables the reader to judge the findings, in the hope that the narrative that is developed is a story that is believed and is faithful to facts. As such, there is more than one way of telling a story, interpreting it and deciding what to give precedence (Richardson & Godfrey, 2003). This can become an epistemological and ethical issue (Richardson & Godfrey, 2003). The next chapter deals with the reporting phase of the research process, where the findings as themes will be presented. The subsequent chapter will report the findings in a narrative format.

### **4.5 ETHICAL CARE: INFORMED CONSENT**

According to Silverman (2000) informed consent is firstly, giving information about the research that is relevant to the participant’s decision about whether to participate. Secondly, it means that the participants understand the information given (that the participants understand the language of information etc). Thirdly, it includes ensuring that the participant’s decision is voluntary. In this study the initial meeting with relevant educators, Head of Department and/or Principal provided the opportunity to explain the study in depth

and clarify any questions that the participants may have had. Although letters informing educators about the study were faxed to schools, the personal contact offered the relevant participant to enquire as much as needed about the study I informed participants (Coolican, 1999; Gay & Airasian, 2003; Silverman, 2000) that they have the alternative to opt out if necessary, at any time.

At the first meeting, informed consent forms for educators were discussed and considered carefully, before proceeding onto the next level of the formal interviews. The informed consent form is listed, as Appendix E. The interviews were planned to take place after school activities, as not to disrupt any learning. The educator's schedule also needed to be considered, so it would not disrupt extra-mural activities at the school or marking and preparation that the educator may need to do. As stated earlier, the interviews were conducted with full consent from each educator and the thesis will be made available for educators and the principal to read. One educator at a school did opt not to take part in the study, as she felt uncomfortable with the use of the microphone.

A clearance certificate issued by the Research Ethics Committee of the Faculty of Education of the University of Pretoria is attached as Appendix L.

#### 4.5.1 *Confidentiality*

The schools and participants' names were kept confidential; therefore all schools and participants' names will be changed for anonymity (Hollway & Jefferson, 2000; Mason, 1996). The consent forms in Appendix F stated that the school and educators'/participants' names were kept anonymous and confidential. The names of the participants were changed; for example the participant name was changed to 1b, which indicates to the researcher that 1b means that it is the second educator (b) from the first school (1). This allows the names of the participants to remain unknown to the peer reviewer and auditor, *yet* allows the researcher to link transcriptions to field notes.

Some authors (Smythe & Murray, 2000; Richardson & Godfrey, 2003) have raised the ethical issue of ownership: to whom does the narrative belong to - the participant or the researcher? As Smythe and Murray (2000) point out this is not clear cut, as it presents ethical issues and possible epistemological issues as participants have a stake in being able to interpret their own stories. In this study the participants will have an opportunity to comment on their transcripts and narrative with the member checking. (Member checking is discussed further here below under section 4.6 Trustworthiness of the Data).

#### 4.6 TRUSTWORTHINESS OF THE DATA

The focus of the interpretation of any social phenomenon, which is the textual data from the interviews, should be viewed as something that can be used for better understanding. However, the validity or trustworthiness of the data needs to be ensured and verified. Some strategies for ensuring validity and relevance of qualitative data (Fade, 2003; Pope *et al.*, 2000), and interview data include: (1) triangulation; (2) member checking; (3) clear exposition of methods of data collection and analysis; (4) reflexivity; (5) attention to negative cases and (6) fair dealing. Guba and Lincoln (in Seale 1999) suggest the following in order to increase trustworthiness in a qualitative study, namely: (1) credibility; (2) transferability; (3) dependability and (4) confirmability. The following table reflects Seale's (1999) adaptation of Lincoln and Guba's translation of terms.

**Table 2: Lincoln and Guba's translation of terms (Seale, 1999)**

<b>Conventional inquiry (found in Quantitative Research)</b>	<b>Naturalistic inquiry (found in Qualitative Research)</b>
Truth value (internal validity)	Credibility
Applicability (external validity)	Transferability
Consistency (reliability)	Dependability
Neutrality (objectivity)	Confirmability

The following sections discuss credibility, transferability, dependability and confirmability as methods of improving trustworthiness of this qualitative research study.

##### 4.6.1 *Credibility*

##### 4.6.1.1 *Reflexivity*

Credibility includes reflexivity, member checking and peer examination. Krefting (1991) suggests that reflexivity will increase the credibility of the research as I, as the researcher, need to reflect on what he/she brings into the interview. The researcher becomes the co-participant; reflecting and identifying how and what he/she contributes to the process in terms of his/her own experiences opinions and/or biases that may influence the process (Mason, 1996). This may also include how I interview the participant; for example how the questions are phrased and probed may influence how the educator/participant chooses to answer. I need to be aware that the educators could have felt that they needed to be politically correct and provide socially desirable answers, instead of having the freedom to express their true experiences of learners with ADHD in the classroom.



Reflexivity includes the researcher being transparent and able to write up on the methodology and procedures chosen for the study (Dowling, 2006). For this reason the research process has been clearly outlined and discussed and can be traced via a “paper trail”. The paper trail refers to the fact that the data, from the raw transcribed data to the analysed and interpreted data, can be traced and reviewed. Reflexivity in a qualitative study ensures a coherent, transparent methodology and allows for the peer review to be unproblematic.

[Note: the *reflexive process* is similar to the reflection process the researcher has described above. It is important to note when a researcher implements reflexivity, the research process is clearly outlined and the process of how the data was collected, analysed and reported is transparent and logical. In the reflection process described above, section 4.3.3, I include reflections of the research process, adding to the transparency and “spirit of openness” (Chenail, 1995)].

#### 4.6.1.2 *Member Checking*

For this study, I aimed to increase the credibility of the interview data by implementing member checking. Krefting (1991) suggests that member checking, which is where the interviewee plays an active role in being part of the process, brings in his/her own meaning or interpretation of the data. Member checking is a form of triangulation and minimises researcher bias (Creswell, 2003). The educators were given the opportunity to review the data and make comments and/or changes where they feel it is necessary (Moen, 2006). This is one method of determining the truthfulness and correctness of the data (Creswell, 2003). Thus as researcher, I determined the narratives and themes that emerged from the transcriptions. The participants/educators were then asked to check my interpretation, note if it is anything like his/her own experience, narrative or interpretation. The educator, as participant, played an active role in being part of the process, in bringing in his/her own meaning or interpretation to the data and verifying the interpretation made by the researcher. However, Krefting (1991) mentions that the participant should be chosen with care as he/she may be reading data that could be hurtful. A peer examination of the collected data was conducted.

#### 4.6.1.3 *Peer Examination*

In the peer review also referred to as an external audit (Creswell, 2003; Mason, 1996, Seale, 1999), the data is given to impartial colleagues who may have experience with qualitative methods and the research process, and findings are then discussed (Krefting, 1991). Peer examination is similar to member checks, but includes a colleague who is experienced with

qualitative methodology and is able to discuss processes and findings with the researcher (Creswell, 2003; Krefting, 1991, Marshall & Rossman, 1999). A colleague was asked to assist in reviewing the themes from the transcripts. The comments from the peer review will be given in chapter 7. Transferability is examined in the next section.

#### **4.6.2 Transferability**

Transferability proposes that the data that has been “interpreted” can be useful in other situations (Krefting, 1991; Marshall & Rossman, 1999; Moen, 2006). The data gathered would be viewed in terms of narratives, topics and themes that emerge from the interviews. The themes will be isolated for transferability by referring to literature and the conceptual framework. Qualitative data is often challenging to generalise to other populations (Marshall & Rossman, 1999), however, referring the findings back to the conceptual framework and literature may allow the researcher to draw conclusions. Dependability and a “spirit of openness” are discussed in section 4.6.3.

#### **4.6.3 Dependability**

The way the researcher presents the methodology and results of the study adds to the quality of trustworthiness (Atkinson, Heath & Chenail, 1991; Chenail, 1995; Krefting, 1991). Chenail (1995) describes it more specifically as a “spirit of openness”. Being able to describe in detail the process and steps that are to be followed, allows the reader to understand and trust the researcher and the conclusions drawn. Member checking, peer checking and auditing, as mentioned above, may improve the dependability of the study (Krefting, 1991). Allowing one’s peer to check methodology and implementation of methodology can improve the dependability of the study. Confirmability as a method of improving the trustworthiness of the data is discussed in the next section.

#### **4.6.4 Confirmability**

Reflection and member checking and the use of an “auditor” can improve confirmability (Krefting, 1991). A peer reviewer is a colleague who has not been directly involved in the process but who can go through the process of the research through the help of audio tapes, transcriptions and summaries that allow him/her to come up with the same conclusions as the researcher (Krefting, 1991; Marshall & Rossman, 1999). The “auditor,” is a peer who has expertise in qualitative methodology to appraise the study. The auditor’s role is different to the peer reviewer. The peer reviewer is a colleague who is present through the process, but not directly involved; whereas the auditor verifies the process close to the end of the study.

Through the use of both the peer reviewer and the auditor the research findings, themes and narratives, are confirmed and verified.

Confirmability is not easy to achieve as the expert qualitative researcher reviews the process the research has undertaken through the audit trail which will bring different interpretations and findings to the fore (Cutcliffe & McKenna, 2004). Thus, an audit trail does not necessarily confirm findings and interpretations, but can instead bring other findings and interpretations to the researcher's attention. Therefore, the auditor is more likely to come to other conclusions.

#### 4.7 CONCLUSION

Qualitative research can be the window to listening to and understanding how people experience and construct their world. The qualitative method of interviewing participants allows the researcher to acquire large amounts of data from different persons of different backgrounds. The interview methods, therefore, allowed me to interview different educators from different schools, who may have had varying experiences of learners who may have ADHD in their classrooms. Different processes throughout the research process allow for the data to be trustworthy and verified. The clarity and logic of the research process presented in this chapter allows for the findings and results to be understood. The next chapter, chapter 5, is a presentation and discussion of the themes that emerged from the data.

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## Chapter 5: Themes of Educators' Experiences of Learners who may have ADHD in the Classroom

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### 5.1 INTRODUCTION

In this chapter the themes that emerged from the interviews are discussed. The interviews were held with primary school educators from a variety of contexts from three schools. The findings in this specific mode that are described in this chapter are set against a description of the participants and the member checking implemented in order to improve the credibility of the research. Findings of this study have been structured and presented in three different modes, which are discussed below. The first mode presents the findings in terms of themes that emerged from the textual data.

The second means of presenting the findings of this study includes the presentation and discussion of two unique and different experiences of educator of learners who may have ADHD in their classrooms. Thus, two educators' experiences, as per the transcribed interviews, are contrasted in order to better understand their experiences and the context within which they are describing their experiences. These experiences are presented in the third mode of presenting the findings as the experiences of the educators are reflected as a narrative. This is presented in the next chapter (that is chapter 6) with the contrasting educators' experiences.

The following section (5.2) includes background to the interviews and a description of the participants. Thorne (2000) states that understanding the phenomenon in qualitative research, often includes putting the new knowledge learnt back into the context of how others have articulated the evolving knowledge. Thus a "portrait" sets the background of the context for that evolving knowledge, as the rest of the structure of this chapter.

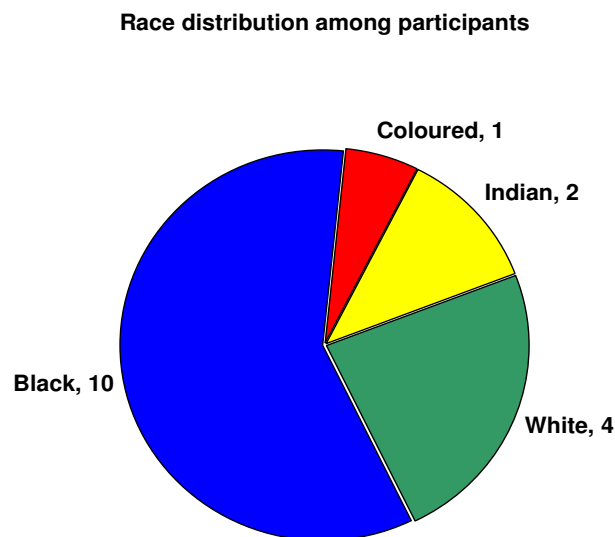
#### 5.1.1 *Description of the Participating Schools*

Three schools from the Tshwane area participated. One school is situated in suburban Tshwane and is regarded as a former model C school. In the past the learners at the school were predominantly white. However, the school presently consists of African, white, Indian and coloured learners. The learners vary in background and language, where some learners have emigrated from other countries in Africa and therefore have French, Portuguese and other languages as their first language. The staff is racially mixed with a number of black educators. The educators that took part in this study were all white.

The second school is a school situated in a township, where the learners and educators are all African. The surrounding community is considered to be poor as most of the parents of learners from the school are unemployed and, therefore, cannot afford to pay school fees. The school grows vegetables for the feeding scheme that provide meals for some of its learners. The school is resourced, in that it has sufficient table and chairs for the learners, and text books. Although a couple have been donated to the school, there are not enough computers for a class of learners to use at the same time. The Head of Department at this school also stated that they do not have enough educational products and materials, like puzzles for the learners.

The third school is a school situated in a former Indian House of Delegates school on the West side of Tshwane. Before 1994, the school consisted of predominantly Indian learners and educators. However, this school now consists mainly of African learners, with Indian and coloured learners. The educators in the school consist of Indian, coloured, black and white educators. The participants in this study were Indian, black and coloured educators.

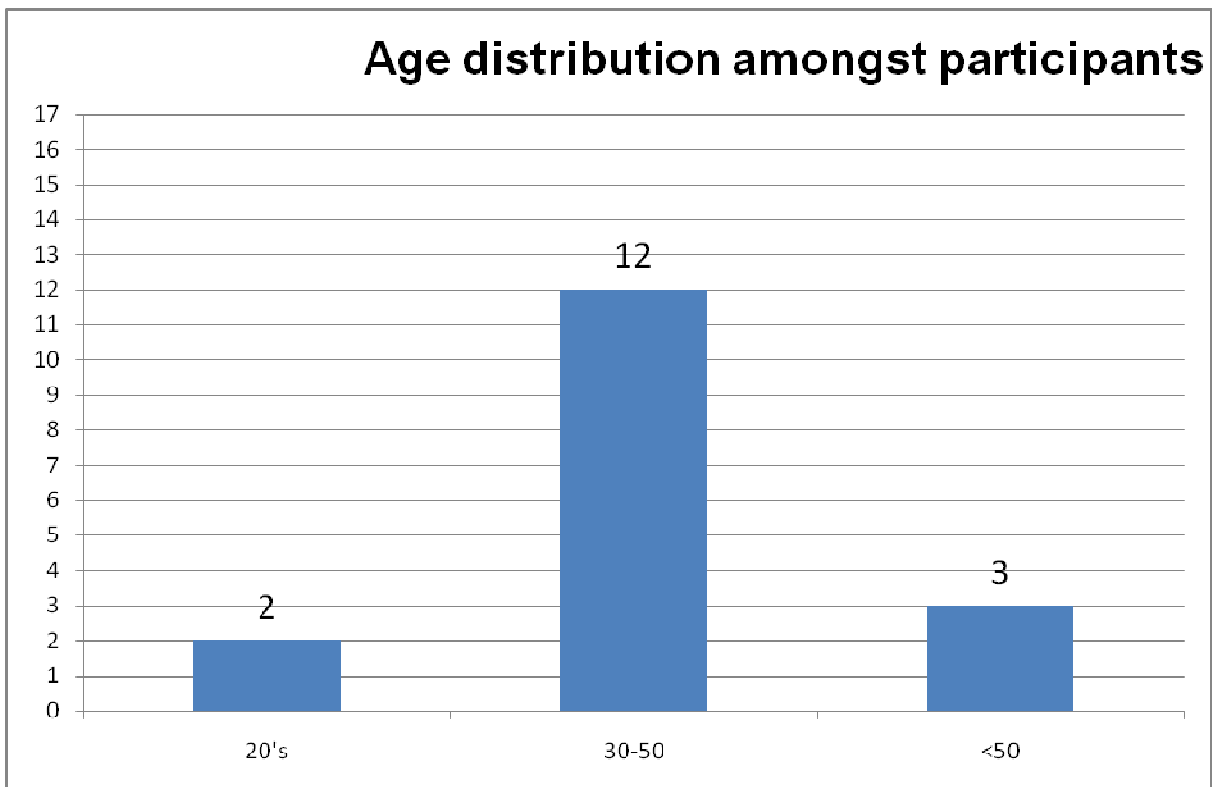
All the participants/educators who were interviewed were female. There were 17 participants/educators who were interviewed altogether, 10 were African, four were white, two were Indian and one was coloured. To be noted is that the researcher is a white female. The figure here below illustrates the distribution of face amongst the participants.



**Figure 7: The Distribution of Race amongst Participants**

The ages of the participants/educators varies greatly as there were three educators who were over the age of fifty. Two educators were in their twenties. The balance, that is 12

educators, ranged between 30 and 50 years of age. The figure here below illustrates the distribution of age amongst the participants.



**Figure 8: The Distribution of Age amongst Participants**

### 5.1.2 A Short Description of Participants and the Interview

The following section offers a short description of each of the participants interviewed. I, as researcher and psychologist, have also included my impressions or observations made during the interview. A description of where and how the interviews were conducted is described in chapter 4, under the section 4.3.2. The description of the educator's are in the same sequence as the interviews, thus the first educator listed below is the first educator interviewed.

#### 5.1.2.1 1a: School 1, Participant a

This educator is the Head of Department for the Foundation Phase at the school. She teaches Grade one and has 22 learners in her class. The educator seems to be confident during the interview. The educator stated that she had extensive experience, with learners who may have ADHD, in what appears to be a well resourced school. This participant and educator arranged that I, as researcher, could interview educators in her classroom.

#### **5.1.2.2 1b: School 1, Participant b**

This educator is a Foundation Phase educator, teaching Grade two with 33 learners in her class, and has been teaching for more than 10 years. The educator explained that she has not only classroom experience of dealing with learners with ADHD, but also personal experience. This educator has a teenage son who has been diagnosed with ADHD. The participant/educator seemed to be open to the interview and willing to speak about her experiences in the classroom as an educator and her experiences as a parent of a learner with ADHD.

#### **5.1.2.3 1c: School 1, Participant c**

The educator who was interviewed has been teaching Grade three for a number of years. She is currently teaching Grade three with 34 learners in her classroom. However, this educator has had experience of teaching learners with ADHD as she was an AID educator. The educator explained that the AID class was a class that admitted learners that may have had special needs, such as learners with ADHD or with a learning disability. This participant/educator was well prepared for the interview as she had brought along notes on each of her learners.

#### **5.1.2.4 1d: School 1, Participant d**

The last educator from the first school was a young educator that seemed to be particularly nervous in the interview process. This educator teaches Grade two and has 30 learners in her class. The educator explained that this is her third year of teaching since she qualified as an educator. The participant/ educator explained that although she is still new to teaching, she has an interest in special needs and is studying further in this field. She is studying an Honours degree in Special Education at the University of Pretoria.

#### **5.1.2.5 2a: School 2, Participant a**

Participant 2a was the first educator interviewed from the second school. She teaches Grade three and has 34 learners in her class. The educator seemed particularly excited to be able to share her experiences, as was evident in the fact that the interview lasted longer than one hour. The educator explained that she is able to manage her class in grouping learners of 15. The educator made it explicit that she would participate in the study if the researcher was prepared to reciprocate in some way to the school by way of presenting a workshop to educators and/or parents on learners with ADHD.



#### **5.1.2.6 2b: School 2, Participant b**

The second participant from this particular school is a Grade three educator and has 36 learners in her class. This educator indicated that she had read through all the letters and consent forms corresponded with the school. She requested that the researcher explain what ADHD is. When asked if she knew or understood what an Attention Deficit Hyperactivity Disorder is, she responded that she knew what a hyperactive learner is. The educator answered all the questions, although she expressed some apprehension at having to talk into a microphone.

#### **5.1.2.7 2c: School 2, Participant c**

The third educator from school two teaches Grade two and has 34 learners in her class. She also requested more information regarding ADHD. This mature educator appeared to be very nervous during the interview.

#### **5.1.2.8 2d: School 2, Participant d**

This young educator teaches Grade one and has 28 learners in her class. This educator appeared to be a young educator who is enthusiastic and enjoys teaching. She explained that she mixes all the learners and makes use of groups and leaders in her classroom.

#### **5.1.2.9 2e: School 2, Participant e**

Participant 2e is a Grade one teacher who has 30 learners in her class. She requested more information regarding ADHD. This educator seemed to be apprehensive because of the use of microphones during the interview.

#### **5.1.2.10 2f: School 2, Participant f**

The next educator is the Head of Department of the Foundation Phase and teaches Grade two and has 35 learners in her class. This educator requested that I explain ADHD. After the explanation of ADHD, the educator seemed to be more relaxed and seemed at ease to answer the questions during the interview. The educator wanted to know if the researcher could present a workshop to educators and/or parents on learners with ADHD and on parent involvement.





**5.1.2.11 3a: School 3, Participant a**

The next interview took place at the third school. This educator teaches Grade one and has 39 learners in her class. This educator appeared to be nervous, in that she was very talkative and expressed her concern that her English would not be good enough. This educator explained that she did not know what ADHD is, but she does recognise that she has “hyperactive” learners in her class. Thereafter, the educator appeared to relax and seemed open to the interview and the discussion.

**5.1.2.12 3b: School 3, Participant b**

The second educator from school three teaches Grade one and has 40 learners in her class. This educator appeared to have some, although limited, knowledge of ADHD. At first it seemed as if the educator was nervous, in that she spoke softly, but she appeared to gain more confidence during the interview.

**5.1.2.13 3c: School 3, Participant c**

The third participant from the third school teaches Grade two and has 41 learners in her class. The educator appeared to be nervous throughout the interview and seemed aware of the microphone as she sat a little away from it. I, as researcher, am not sure if the educator understood all the questions, as the educator seemed to have a limited understanding of English.

**5.1.2.14 3d: School 3, Participant d**

The fourth educator is the Head of Department of Foundation Phase at the third school. She teaches Grade two and has 41 learners in her class. The educator appeared to be confident and answered all the questions.

**5.1.2.15 3e: School 3, Participant e**

The fifth participant teaches Grade two and has 41 learners in her class. The educator appeared to be confident as she answered all the questions convincingly.

**5.1.2.16 3f: School 3, Participant f**

This participant teaches Grade two and has a class of 41 learners. The educator seemed to be shy and reserved and conscious of the microphone during the interview.

### 5.1.2.17 3g: School 3, Participant g

The last educator and participant teaches Grade one and has 40 learners in her class. The educator seemed to be interested in the study and appeared confident, as she was talkative and open during the interview.

It also noted that the number of educators/participants from school three seem to be high in comparison to the number of other educators/participants from the other two schools. Thus, schools three's 'voice' may seem to be 'louder' than the other schools. By that I mean that as school three has more educators the textual data may be influenced by their particular experiences. However, it should be stated that school three had the most varying distribution of race and is situated in a former township area. Schools three's educators' experiences were similar to school two's educators' experiences. This is reflected in the textual data; the references substantiating each theme that is presented in section 5.4, seems to reflect similar experiences.

Also noteworthy is that of the 17 educators that were interviewed, six appeared to be nervous during the interview due to the use of the microphone.

## 5.2 CREDIBILITY OF THE STUDY

### 5.2.1 Member Checking

In order to ensure that the themes and data that have emerged from this study are not biased, but are truthful and reflect the true experiences (Creswell, 2003) of the educators certain steps were taken. Firstly, each participant was given a copy of his/her own particular interview transcript with a summary of the themes (refer to appendices I, J and K). The educators were kindly requested to read through their interview transcripts and themes and consider if they wish to make any changes or comments. Any comments and feedback that the educators had were requested to be put into the comments and feedback form (see Appendix I and Appendix K). This was followed up with a meeting with the educators.

A follow-up meeting was scheduled with two schools. The researcher was unable to have a follow-up meeting with one school. Although the transcripts, themes and comment and feedback forms were left at school one and a number of messages left with the school secretary, the Head of Department of school one was not available. Feedback and comments from the two other schools were also disrupted due to a four-week industrial action that involved civil servants. Educators stayed away from school for four weeks and

thus communication with the school or with educators was almost impossible. Documentation consisting of (1) interview transcripts; (2) summary of themes and (3) feedback and comments forms were however, left with school caretakers.

Schools two and three participated and checked their transcripts and the themes. At school two the interview transcripts were explained, that is, the researcher explained the purpose of giving them each their own transcript of the interview. Although the educators were given approximately four weeks to read through all the material, very few of the participants did. Thus, when I collected the forms I gave them some time to review the transcripts and themes before comments and feedback could be collected. This was done at first break where the educators were in the staff room and it did not disrupt learning and teaching.

The comments received from school two included the fact that they were happy with the themes that emerged and did not feel it necessary to make any changes to the transcripts. One educator commented on the fact that they would have preferred an opportunity to write the answers to the questions instead of being interviewed. Some educators indicated that the fourth theme that pertains to being able to share information amongst colleagues and specialists is important for their own teaching.

At school three, two of the six educators interviewed were absent, including the head of department and feedback was received from four educators. One of the educators commented that receiving feedback and explanation of the themes from the researcher contributed to more understanding regarding ADHD. Another educator commented that she was happy with the interview, especially as she was able to discuss the problems she was encountering with learners who may have ADHD. Another educator commented that student educators should receive training in ADHD and know how to manage learners with ADHD as it will be a part of their daily teaching. Almost all the educators seemed to enjoy the opportunity to voice their experiences and discuss them within the context of being able to assist the learner with ADHD.

### 5.2.2 *Peer Examination*

The transcripts and themes were also given to a colleague, who is conversant with qualitative data. She is a registered psychologist and has much experience in conducting research on South African schools. The colleague reviewed the transcripts and themes from an African cultural perspective. As white female researcher, I greatly valued the contribution of a peer examiner who could spot cultural factors that I could miss. I was concerned that I would not understand all the cultural nuances that were revealed during the interviews. In this section

general comments given by the peer examiner will be discussed. (The comments given by the peer examiner that can be viewed as limitations to the study will be listed and discussed in chapter 7).

Her comments indicated that in some cases the educators did not understand the question or know how to answer the questions put to them, even after the researcher had explained ADHD. Possible reasons for this are given in chapter 7. There were some educators who described problems working with learners who may have ADHD and their frustrations of dealing with them. The following themes emerged from the textual data.

<p><b>Theme 1:</b> They are not treated the same as other learners</p>
<p><b>Theme 2:</b> Keep them busy</p>
<p><b>Theme 3:</b> It does challenge you, we're not perfect</p>
<p><b>Theme 4:</b> It needs sharing as teachers and help from a specialist</p>
<p><b>Theme 5:</b> They don't pull their part</p>

**Figure 9: The Themes**

### 5.3 FINDINGS FROM ANALYSIS

In the next section the themes that emerged from the interview data are discussed. The themes that have been elicited from the text appear to reflect the experiences of educators of learners who may have ADHD in their classrooms. The theme is presented and then the references are listed to substantiate each theme, as they have been found in the textual data. Thus, the references that have been listed here is mainly to substantiate the theme that is presented. There are exceptions to the main themes that have emerged in the interviews. These exceptions are described. Each theme is discussed in view of the literature and other studies' view of the particular theme. The discussion relating the findings of this study to literature will be discussed in chapter 7.

### 5.3.1 *Theme 1: They are not Treated the Same as Other Learners*

One of the emergent themes taken from the textual data is the theme of “They are not treated the same as other learners”. In the interviews, a number of educators expressed that often learners who may have ADHD are not treated the same as other learners in the classroom.

Direct quotes have been taken from the transcripts to show that the educators’ voices as experiences have been reflected in a truthful manner. Ten quotes have been selected to illustrate references from the textual data. The quotes, as reference to the textual data, substantiate the theme that is presented. Many more quotes could have been included for each theme, but ten of the most relevant direct quotes have been selected to illustrate and substantiate each theme. Thus, 10 direct quotes follow each theme. These quotes will be highlighted in italics and indented in the discussion sections after each theme. Participant and the speaker turner unit have been included after each direct quote. (Please note that (sic) has been used in the references here below to denote grammatical errors as direct quotations have been used).

#### 5.3.1.1 *References from Textual Data*

- ❑ “Because you have to handle them differently... there are so many things that are different from being just an ordinary learner in the classroom.” (Participant 1c, speaker turner unit: 302-305).
- ❑ “Because you cannot teach a whole class, you have to take those into consideration as well.” (Participant 1c, speaker turner unit: 313).
- ❑ “Just because they have got ADHD doesn’t mean that they are all the same.” (Participant 1d, speaker turner unit: 369).
- ❑ “...its been a little bit difficult because they (sic) to get them on the same level is difficult...” (Participant 2a, speaker turner unit: 612).
- ❑ “For them you may repeat (sic). Let’s say it’s after school, then the, the (sic) other group must go, they must be left behind. In order for you to share. The same thing that you have done in the class (sic).” (Participant 2c, speaker turner unit: 1263).
- ❑ “I try to give them individual attention, but sometimes I feel it’s not very fair for those who don’t have it.” (Participant 3b, speaker turner unit: 2616).
- ❑ “Yes, sometimes you feel guilty, and then at the same time if you feel this (sic), you can let this hyperactive one do whatever they want, then you lose control... (sic).” (Participant 3b, speaker turner unit: 2638).

- ❑ “But at the same time, I feel it’s not fair, because they distract the class sometimes... And sometimes you have...like to put too much attention on them... (sic).” (Participant 3b, speaker turner unit: 2626).
- ❑ “Like I said it was... it stressful (sic) and it sometimes disrupts the whole class, so it’s unfair on the other learners that are diligently willing to learn. Not all learners are the same.” (Participant 3g, speaker turner unit: 3457).

### 5.3.1.2 *Exceptions*

There were exceptions to the theme, where one educator expressed the following:

- ❑ “...he’s not unique in my class...” (Participant 1a, speaker turner unit: 35).
- ❑ “And they have to learn very quickly that they are actually one of the class and they cannot have your attention all the time.” (Participant 1a, speaker turner unit: 25).

### 5.3.1.3 *Discussion on Theme 1*

The first theme, as stated above is “*They are not treated the same as other learners*” can be interpreted as their behaviour being viewed as different and thus requires different treatment in comparison to the rest of the class. It seems that learners who may have ADHD are perceived as being treated differently from their peers.

One of the references<sup>19</sup> that was selected to illustrate the theme is:

*Because you have to handle them differently... there are so many things that are different from being just an ordinary learner in the classroom. (Participant 1c, speaker turner unit: 302-305).*

From this quote one understands that educators, interviewed in this study, seem to handle learners who may have ADHD differently to the other learners in the class. It also seems, from this reference, that the educator understands that one classroom can present itself with many different learners. Not every learner on the classroom will be the same. Therefore the educator will respond to each learners’ behaviour differently.

In the next quote the educator states that an educator attempts to give them individual attention.

*I try to give them individual attention, but sometimes I feel it’s not very fair for those who don’t have it. (Participant 3b, speaker turner unit: 2616).*

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<sup>19</sup> The terms quote, reference and extract have been used in the discussions of the themes to mean the direct quotes that were taken from the textual data.

Whilst the learner who may have ADHD is demanding of the educator's time and attention, the educator becomes aware that this learner is treated differently to other learners in the classroom. Thus, the educator seems to be aware that the learner is treated differently from the rest of his/her peers in the class. However, despite this awareness, the educator may have different feelings associated with this; for example he/she may feel guilty for not giving the same treatment to all the learners in the class.

*Yes, sometimes you feel guilty... (Participant 3b, speaker turner unit: 2638).*

The treatment given to the learner with ADHD may take up time that could be spent on teaching and learning, which could lead to the educator feeling guilty. The educator and learner dyad relationship can be strained if the educator feels guilty at not being able to give the other learners in the class the same amount of attention

*Yes, sometimes you feel guilty, and then at the same time if you feel this, you can let this hyperactive one do whatever they want, then you lose control...(Participant 3b, speaker turner unit: 2638).*

It seems that the fact that learners who may have ADHD are perceived as being treated differently from their peers challenge educators. Educators realise that learners who may have ADHD may receive extra attention or treatment and that this could influence other learners and/or the teaching and learning take place in the classroom

*...okay, I try to give them individual attention, but sometimes I feel its not very fair for the one who are... who don't have it. (Participant 3b, speaker turner unit: 2616).*

Another quote that illustrates an educator's experience of learners who may have ADHD in her classroom is the following:

*Because you cannot teach a whole class, you have to take those into consideration as well. (Participant 1c, speaker turner unit: 313).*

This reference depicts the idea that the educator has to divide his/her time between a learner who may have ADHD and the rest of the class. According to the educator one has "to take those" into consideration. The educator refers to learners who may have ADHD as "those".

The next quote depicts how the learner who may have ADHD impacts on the classroom and the teaching and learning.

*Like I said it was... it stressful (sic) and it sometimes disrupts the whole class, so it's unfair on the other learners that are diligently willing to learn. Not all learners are the same. (Participant 3g, speaker turner unit: 3457).*

The educator finds that the learner who may have ADHD disrupts the class and thus causes her stress. However, the educator mentions that the disruption is not fair to other learners who want to work. The educator seems to understand that each learner in her classroom is

different and therefore needs to be managed differently even if he/she may disrupt the teaching and learning that occurs in the classroom. The situation appears to cause stress for the educator (*Like I said it was... it stressful (sic)... (Participant 3g, speaker turner unit: 3457)*). The stress that the educator seems to be experiencing appears to be linked to the fact that learners who may have ADHD are treated differently as well as the unfairness to other learners in the class. It also seems that the educator has difficulty managing the one learner who may have ADHD who is disruptive in class.

The following reference stresses the attention an educator gives to the learner who may have ADHD.

*But at the same time, I feel it's not fair, because they distract the class sometimes... And sometimes you have... like to put too much attention on them... (sic). (Participant 3b, speaker turner unit: 2626).*

The attention that the learner receives from the educator seems to be unfair to the educator. Individual attention that appears to be given to the learner who may have ADHD is seen, by the educator, as being unfair to the other learners. It seems that educators are aware that learners who may have ADHD are treated differently.

The exception to this theme stated the following.

*And they have to learn very quickly that they are actually one of the class and they cannot have your attention all the time. ... he's not unique in my class... (Participant 1a, speaker turner unit: 25).*

It is interesting to note that this exception occurred from one educator out of the 17 educators interviewed. The educator states that the learner who may have ADHD in her classroom needs to understand that they cannot demand the attention of the educator. The learner needs to understand that he/she cannot be viewed as unique, but rather be seen as part of the group, part of the class. Therefore, according to this participant, the learner who may have ADHD cannot demand the exclusive attention of the educator. This educator's remarks, in contrast to the other remarks, do not express guilt.

Learners who may have ADHD may be treated differently in the various contexts in which they interact. Therefore within the meso-system in the classroom, they may be treated differently by educators and classmates, as stated by the educators in their interviews. Within the exo-system at school, they could be treated differently by other learners, other educators and management staff. At the macro-system level, the learner with ADHD, may be perceived and treated differently within the community. At home the learner who may have ADHD may be treated differently to his/her siblings by his/her parents, which could be reinforcing the learner's demanding behaviour.



The first theme, as stated above is “*They are not treated the same as other learners*”. The Diagnostic and Statistical Manual of Mental Disorders-IV-Text Revised (APA, 2000) describes that a learner with ADHD exhibits impulsive behaviour such as blurting out answers before the educator has finished the question; not being able to wait his/her turn and interrupts conversation or intrudes on others’ activities. The educator, it would seem, spends much time managing this behaviour (Green & Chee, 1994; Sonna, 2005), and seeing to the academic needs of the learners.

Educators are expected to teach the whole class and include learners that may have an emotional or behaviour difficulty (Department of Education, 1996), Educators, it would appear, focus their attention on learners that may have ADHD, as they often demand the attention of the educator.

*But at the same time, I feel it’s not fair, because they distract the class sometimes... and sometimes you have... like to put too much attention on them (sic)... (Participant 3b, speaker turner unit: 2626).*

Thus, the learner with ADHD comes across to the educator as being demanding of his/her time and attention. However, Barkley (1994) states educators should be consistent in responding the same way across contexts and situations, so that the learner with ADHD may learn a lesson that is applicable to all social settings.

Literature states that learners who may have ADHD are viewed as being different to their peers (Wagner, Friend, Bursuck, Kutash, Duchnowski, Sumi & Epstein, 2006). Lane, Pierson & Givner (2003) states that learners who behave in accordance with an educator’s social and behaviour expectations are more likely to get a positive response from the educator and from his/her peers. Thus, learners who do not behave as expected may not have the positive response from educators or peers. This could influence the atmosphere and climate of the classroom and could also manifest in disruptive behaviour in the classroom and/or on the playground. Disruptive behaviour in the classroom may impact the learning taking place in the classroom (Seidman, 2005).

### 5.3.2 *Theme 2: Keep them Busy*

This theme appears in the textual data as educators feel that they should keep the learners who may have ADHD busy with tasks. It would seem as if educators most often choose to keep learners busy with academic tasks, with assisting the educator in collecting material from learners, or with menial tasks that need to be done around the classroom.

### 5.3.2.1 *References from Textual Data*

- ❑ “They will work up to a point and then they don’t want to work any more so you have to keep them busy with something that they like to keep them away from the other learners or making as noise or being disruptive. So you keep them busy, with things that you, you (sic) will know the learner by the time (sic).” (Participant 1b, speaker turner unit: 129).
- ❑ “So you must keep checking them. But now because I have the collectors at least they check, and sometimes you’ll find they’re giving the (sic), the groups, little papers to do some dictation or whatever - keeping them busy (sic).” (Participant 2a, speaker turner unit: 616).
- ❑ “So I try to give them extra work... just to keep them busy.” (Participant 2b, speaker turner unit: 1522-1524).
- ❑ “I think they require more class work and homework... Don’t give them chance to play (sic)....” (Participant 2c, speaker turner unit: 1183-1185).
- ❑ “Sometimes I give them extra work because most of those that I have in class, they finish up the work quickly (sic)...” (Participant 2d, speaker turner unit: 1514).
- ❑ “They require more work. Even if sometimes it’s not the work that you wanted to give the, the (sic) whole class...” (Participant 2f, speaker turner unit: 1685).
- ❑ “You keep them busy with something else. And then if the other class are busy, then you come to him (sic)....” (Participant 2f, speaker turner unit: 2007).
- ❑ “He needs to be constantly stimulated. And the other children, they don’t finish because they’re trying to deter you (sic), like you know... (Participant 3d, speaker turner unit: 2948).
- ❑ “They need more individual attention. And it’s a problem for me with him (sic) because he finishes off his work so quickly, so I continuously need to keep him occupied. You know there has to be something on my table for him to continue with as soon as he’s finished with...” (Participant 3d, speaker turner unit: 2934).

### 5.3.2.2 *Exceptions*

Although learners are kept busy in the classroom, some educators believe that learners who may have ADHD will benefit from having to do less homework or class work.

- ❑ “Homework is the same. Class work I break up (sic) into little bits and I also tell the parents with homework, to break up their homework into 10 minute sessions. 10, 10, 10.” (Participant 1c, speaker turner unit: 242).
- ❑ “Because they are also human beings. If we give them more work, then they become bored...” (Participant 3a, speaker turner unit: 2452).

### 5.4.2.3 Discussion on Theme 2

The second theme is “*Keep them busy*”; which appears to be the response the educators have in order to avoid disruption in the class by a learner who may have ADHD. It seems that educators keep learners who may have ADHD busy with different tasks to ensure that the other learners in the class are not disrupted.

*They will work up to a point and then they don't want to work any more so you have to keep them busy with something that they like to keep them away from the other learners or making as noise or being disruptive. (Participant 1b, speaker turner unit: 129).*

Educators seem to give learners extra academic work in class to keep them busy.

*So I try to give them extra work... Just to keep them busy. (Participant 2b, speaker turner unit: 1522-1524).*

Alternatively, educators find errands for the learners, for example sweeping the classroom or sending a message to another educator.

*I just make them... let them sweep the class. (Participant 2c, speaker turner unit: 1118).*

While most educators described giving the learner who may have ADHD extra work, one educator explained that a slower work pace seemed to work better.

*We do a fair amount still because you accommodate the learner and if they to work at a slower pace, then so be it, they work at a slower pace. So you just have to have your wits about you all the time, keep control and still get through the work. (Participant 1a, speaker turner unit: 12).*

Educators seem to understand that although extra work is given to the learner to keep them busy, they need to check that the work is complete and correct.

*Sometime he'll finish and not doing (sic) the right things, I must just always check whether the work is correct or what (sic)... (Participant 2b, speaker turner unit: 897).*

One disruptive learner in a classroom could prevent teaching and learning to take place. It may also impede the learning of the other learners in the classroom. Thus to “*Keep them busy*” may be considered a creative means to manage behaviour, teaching and learning in a classroom. In one case the educator gave learners who may have ADHD reading as extra work to keep him/her busy.

*And they'll take those books and go to the reading corner – read... (Participant 2e, speaker turner unit: 1637).*

To keep the learners who may have ADHD busy appears to me, as a researcher, to be a creative method in managing the classroom. In *“Keep(ing) them busy”* by involving them in different activities, the learner is not participating in activities that may distract the other learners and educator in the classroom. Thus, the learner’s attention is diverted to another activity that may or may not necessarily be academic. However, the extra activities that are not academic in nature or that do not complement the academic activities that take place in the classroom are not beneficial to the learner who may have ADHD.

*I just make them... let them (sic) sweep the class”. (Participant 2c, speaker turner unit: 1118).*

*I’ll ask them to, to (sic) arrange the library – arrange the library there (sic) – library corner, reading corner, in our classroom. (Participant 2e, speaker turner unit: 1637).*

The teaching and learning that takes place in the classroom needs to be questioned if extra work is given without much thought to how it complements and adds to the teaching and learning of the learner who may have ADHD. The theme *“Keep(ing) them busy”* can therefore be interpreted as a method to actively deal with the learner who may have ADHD.

Another interpretation of this theme is that educators find it easier to keep the learner who may have ADHD busy with work in order to be “out of the way”. If the learner is kept busy with work (academic or non-academic), he/she cannot disrupt other learners nor demand the attention of the educator. Thus, if the learner who may have ADHD is *“kept busy,”* the educator is able to continue teaching in his/her classroom. The learner who may have ADHD who is *“kept busy”* is “out of the way”.

The exception to this theme occurred when one educator stated that the homework or class work is broken down into smaller units for the learner who may have ADHD. Thus, the learner who may have ADHD can then focus in completing the smaller units of work correctly.

*...to break up their homework into 10 minute sessions. 10, 10, 10. (Participant 1c, speaker turner unit: 242).*

Another educator pointed out that if one gives more work to learner who may have ADHD, he/she may get bored.

*Because they are also human beings. If we give them more work, then they become bored... (Participant 3a, speaker turner unit: 2452).*

These two points are important in that they highlight that if the educator divides smaller units of work, the learner who may have ADHD is more likely to complete the work. If the work is completed the learner may perhaps feel a sense of accomplishment. Secondly, if one gives the learner too much work, he/she may never feel that sense of accomplishment and instead,

and as a consequence, not feel motivated to work. These inferences, however, remain on the level of hypothesis, since it falls beyond the particular focus of this study.

To “*keep them busy*” could influence the educator and his/her relationship with the learner who may have ADHD, as the educator prepares “extra work” for the learner who may have ADHD. According to Vereb and DiPerna (2004) even though educators may receive training on how to identify ADHD, it does not translate into being able to provide an intervention. However, it seems from this theme that even though educators may not be equipped to provide a formal intervention, they are responding pro-actively by increasing classroom tasks and also simplifying learning tasks into smaller units.

The theme “*keep them busy*” reflects one possible classroom management method that the educator implements in dealing with learners who may have ADHD. It could therefore reflect educator knowledge and training.

Classroom management literature (U.S. Department of Education & American Institutes for Research, 2003; Martin & Hayes, 1998) recommends ignoring the distractions that learners may attempt in the classroom. Although it has been found that learners with ADHD prefer to receive immediate gratification for tasks that are completed (Tripp & Alsop, 2001), learners with ADHD need to set their own pace for task completion, as problematic ADHD behaviour seems to be less intense when their work is self-paced (Snider *et al.*, 2003).

School work that is colourful (but not distracting) can benefit the learner with ADHD (Imhof, 2004) and therefore the learner with ADHD will engage more with the task that needs to be completed. One educator understood that a learner who may have ADHD may respond to creative methods of teaching and learning. This particular educator described using role playing and story telling.

*And just to break away from the formal work, we make them tell stories and things like that. (Participant 3d, speaker turner unit: 2942).*

It would seem that giving learners who may have ADHD more work activities that allow for movement, is essential; therefore educators need to be flexible and modify their teaching accordingly (Barkley, 1994). Learners with ADHD would benefit from being supervised, or work will be incomplete if left unsupervised (Barkley, 1994); therefore giving the learner more work would still need to be supervised. The educator may find it useful to assist the learner with ADHD by giving him/her additional resources that will assist his/her academic performance (Barkley, 1994).

### 5.3.3 *Theme 3: It Does Challenge You - We're not Perfect*

The educators that participated in this study appear to experience learners who may have ADHD as a challenge. It seems as though learners with ADHD challenge their teaching skills. The following references from the textual data express their challenges.

#### 5.3.3.1 *References From Textual Data*

- ❑ "...and he climbed up on one of the desks that side and was hanging out the window. And, yes, it does, it does challenge you. We're not perfect." (Participant 1c, speaker turner unit: 315).
- ❑ "Yes. Because you know you are only human. You cannot be, although you have to be patient all the time, sometimes it does not work." (Participant 1c, speaker turner unit: 315).
- ❑ "It's very tiring. It drains me every day and some days I think I can't do this." (Participant 1d, speaker turner unit: 406).
- ❑ "Oh, it's so stressful. It's so stressful, and if maybe you're, you're suffering hypertension (sic)..." (Participant 2a, speaker turner unit: 708-710).
- ❑ "They challenge me because they show me I must not be short (sic)... short-tempered to them..." (Participant 2b, speaker turner unit: 921).
- ❑ "Very stressful... Eish (sic), because it needs a person to concentrate and do a lot of work..." (Participant 2c, speaker turner unit: 1201-1203).
- ❑ "Sho (sic), for the first time it was difficult – I, I felt like I, (sic) I don't know what I'm doing in this class. I, I (sic) was so, so nervous..." (Participant 2d, speaker turner unit: 1528).
- ❑ "Very challenging, but at least you are learning something. I as an educator, I'm learning, mmm (sic)..." (Participant 3c, speaker turner unit: 2816).
- ❑ "It's been frustrating. There were times when we had to swap learners from class to class until they were comfortable with a certain teacher..." (Participant 3d, speaker turner unit: 2978).
- ❑ "Okay, it's a little bit of a challenge because it's, it's (sic) not that perfect learner that's always answering questions. You have to watch them all the time, you have to have your eye on them, because they're definitely the ones that are going to slip away and end of being naughty (sic), or distract your class. That sometimes also happens when the rest of them want to do their work, and he's the one talking all the time..." (Participant 3g, speaker turner unit: 3427).

### 5.3.3.2 *Exceptions*

There were two exceptions to this theme. In the one exception the educator had taught the Aid class for 10 years.

- “I am used to them. I worked in the Aid class or pilot class for 10 years with learners with severe learning disabilities and with attention problems, so I have got used to it. Yes.” (Participant 1c, speaker turner unit: 298).
- “Mmm, (sic) to me, I can say it’s a good experience, because it, it gives me a chance to, to (sic)...it exposes me to what kind of people we are, because I might be, I might... maybe (sic) when I was young, I was like them...” (Participant 3b, speaker turner unit: 2693).

### 5.3.3.3 *Discussion on Theme 3*

The third theme is *“It does challenge you - we’re not perfect”*. In this theme educators expressed the fact that they feel challenged by the learners who may have ADHD in their classroom. The following extract illustrates how the challenge of learners who may have ADHD affect him/her.

*Okay, it’s a little bit of a challenge because it’s, it’s (sic) not that perfect learner that’s always answering questions. You have to watch them all the time, you have to have your eye on them, because they’re definitely the ones that are going to slip away and end of being naughty(sic), or distract your class. That sometimes also happens when the rest of them want to do their work, and he’s the one talking all the time... (Participant 3g, speaker turner unit: 3427).*

The educator states that the learner who may have ADHD needs to be checked all the time, as the learner who may have ADHD may be disruptive and distract the rest of the class. Educators, in this study, appear to be challenged by learners who may have ADHD as they need to be constantly monitored and may disrupt other learners.

Educators also appear to be “challenged” on their knowledge and experience when faced with learners who may have ADHD. It seems that learners who may have ADHD challenge educators to manage their classrooms differently. The educators thus appear to doubt their own ability to teach all learners.

*Sho (sic), for the first time it was difficult – I, I felt like I, I (sic) don’t know what I’m doing in this class. I, I was so, so nervous (sic)... (Participant 2d, speaker turner unit: 1528).*

The educators expressed their own ability to manage the learners in the classroom and their ability to control their own personality.

*They challenge me because they show me I must not be short (sic)... short-tempered to them... Yes. Because you know you are only human. You cannot be, although you have to be patient all the time, sometimes it does not work. (Participant 2b, speaker turner unit: 921).*

Thus, the educators seem to be challenged on their knowledge and experience of classroom management and teaching and learning. Educator knowledge (Vereb and DiPerna, 2004; Kos, Richdale & Jackson, 2004) and experience (Fabiano & Pelham, 2003; Kos *et al.*, 2004) of ADHD could influence how they possibly perceive themselves as educators. If educators are informed about a learner who is diagnosed with ADHD, the educator can design and implement academic and behavioural interventions within the classroom that may assist the learner and educator. If educators feel that they have mastery in managing their classroom and in teaching and learning all learners, then it could change how they perceive themselves as educators and not feel “challenged.”

It appears that educators who teach learners may have ADHD in their classroom are challenged to view and implement their educator knowledge and training differently. The following two quotes reflect that once their perception changes they don't feel it is challenging. (Chapter 6 discusses this point in more detail).

*You just have to learn how to deal with them. But once you prepare yourself for them, they're not so much of a challenge (Participant 2f, speaker turner unit: 2032-2034).*

*I have only been teaching for three years. So in class, when you are sitting in varsity and you like (sic), oh this is how you present a lesson, and you give these fantastic lessons. (Participant 1d, speaker turner unit: 428).*

The exception of this theme is reflected in one educator who was formerly the remedial educator. Her 10 year experience has given her the confidence to teach learners who may have ADHD.

The experience of working with learners who may have ADHD allowed another educator to reflect on herself and the fact that she could have been experienced in the same way when she was younger.

*Mmm, to me, I can say it's a good experience, because it, it gives me a chance to, to (sic)... it exposes me to what kind of people we are, because I might be, I might... maybe (sic) when I was young, I was like them... (Participant 3b, speaker turner unit: 2693).*



This experience can be considered as an exception as the reflection has allowed her to extend more understanding to the learner who may have ADHD. Thus, instead of the learner who may have ADHD being perceived as challenging and stressful, the educator attempts to extend understanding to the learner.

Mitchell and Arnold (2004) state that educators of learners with emotional or behavioural problems seem to report higher rates of emotional stress and job-related distress. Also, educator experience and stress levels could also possibly influence how the educator interprets learner behaviour (Whiteman, Young & Fisher, 2001). Obenchain and Taylor (2005) are of the opinion that one of the two reasons why educators choose to leave teaching is due to the negative learner behaviour within the classroom. Thus, it is not surprising that learners whose behaviour is joined with their educator's expectations are more likely to experience pleasing results with their peers and adults (Lane *et al.*, 2003). According to Mitchem (2005) there will be situations where the educator will feel challenged by learners and teaching. Therefore, Mitchem (2005) goes on to encourage educators to enjoy the experience of teaching as learners can sense the enthusiasm and joy that the educator brings to the class. The literature on ADHD confirms that educators feel unprepared to deal with ADHD and disruptive behaviour (Mitchem, 2005) and educators do not have sufficient knowledge of ADHD (O'Keeffe & McDowell, 2004).

#### 5.3.4 *Theme 4: It Needs Sharing as Teachers and Help from a Specialist*

The fourth theme that emerged from the textual data is that experiences should be shared with colleagues and assistance should be obtained from specialists in the field. The following references from textual data highlight these views.

##### 5.3.4.1 *References from Textual Data*

- ❑ “I would use some of that information because that I got from colleagues who knocked it up when I was in absolute desperate need, and said, well try this.” (Participant 1d, speaker turner unit: 424).
- ❑ “Yes. Because I can use my own discretion, but eish (sic), it's a little bit tough (sic). I can do it, I know I've done (sic)... I went to different courses...” (Participant 2c, speaker turner unit: 1336).
- ❑ “And I think it needs sharing as teachers.” (Participant 2c, speaker turner unit: 1304).

- ❑ “Okay. I just wanted to ask if we can get a help from the specialist at least once a month, because we are not sure we are doing the correct thing (sic)...” (Participant 2c, speaker turner unit: 1320).
- ❑ “And I think it needs sharing as teachers (sic).... Mmm, (sic) you must share with others in order to broaden your knowledge. And then I just, I just (sic) wanted to add something...” (Participant 2c, speaker turner unit: 1304).
- ❑ “Right now it’s like trial and error, so maybe we should get some training in ADHD and of the learning disorders (sic)...” (Participant 3d, speaker turner unit: 2972).
- ❑ “So I went to other teachers to get information on how to deal with learners with reversals (sic)...” (Participant 2c, speaker turner unit: 1271).
- ❑ “Because the, the (sic) previous teacher will come to you and explain to you, ‘this one is just like this’. But the new one that are (sic) from outside, no one will tell you about them...” (Participant 2f, speaker turner unit: 1933).
- ❑ “...say, ‘how did you work with this one?’ And then the, the (sic) teacher will explain, ‘no, this one is like this’, and they will be able to do this and this (sic), but this one is... because even the homework, it won’t be done (sic).” (Participant 2f, speaker turner unit: 1935).
- ❑ “Mmm, I think as much as I said (sic) we’re experiencing a difficult situation, to share it with other colleagues, then it’s good, my peer group and my, and my (sic) peer groups hey (sic)...” (Participant 3a, speaker turner unit: 2484).

#### 5.3.4.2 *Exceptions*

There seem to be no exceptions to this particular theme available in the textual data.

#### 5.3.4.3 *Discussion on Theme 4*

The fourth theme is “*It needs sharing as teachers and help from a specialist.*” It seems that educators feel that they need assistance for managing learners who may have ADHD from other educators and possibly from a specialist.

*Right now it’s like trial and error, so maybe we should get some training in ADHD and of the learning disorders (sic)... (Participant 3d, speaker turner unit: 2972).*

This theme reflects the expression of the educators’ need for assistance in being able to assist learners who may have ADHD in their classrooms. The type of assistance appears to be expressed in two ways. The first way this is expressed is from inside the school, from amongst the other educators.

*And I think it needs sharing as teachers (sic).... Mmm, you must share with others in order to broaden your knowledge. (Participant 2c, speaker turner unit: 1304).*

Sharing information between educators, as expressed in the extract here above, is an informal method of learning from other educators who may have gained knowledge through experience in the classroom. The second method of assistance that the educators expressed is through a specialist from outside the school.

*Okay. I just wanted to ask if we can get a help from the specialist at least once a month, because we are not sure we are doing the correct thing (sic)... (Participant 2c, speaker turner unit: 1320).*

The first method of assistance, that is sharing informal classroom experience amongst fellow colleagues, suggests that either: (1) this is not currently being done at schools or that (2) sharing information is not of any assistance to educators. As the educators express their need to get further information from a specialist outside of the school, it suggests that further formal knowledge is required to assist the educators within the classroom. There were no exceptions to this found within the transcribed data. Thus, it seems that all the educators interviewed think that they would benefit from sharing their knowledge and experiences and in gaining further knowledge from a specialist in the field.

The direct quotes taken from the transcribed data may also reflect the educators' lack of confidence in their own abilities to assist learners who may have ADHD. As such, the quotes expressed by educators above are a point that is cited in literature (Gurian, Abikoff, Cancro, Carlson, Chess, Furman, Hirsch, Klein, Kovacs & Parks, 2002; Mitchem, 2005; Roffey 2004) where educators have an opportunity to work as a team, they have an opportunity to share knowledge not only of learner experiences but also of "what works" in the classroom.

Educators that are currently sharing information on learners may still need the guidance of an education specialist. (It must be noted that support systems like the school based support team was not mentioned in any of the interviews and therefore I can not draw any inferences from such support or lack of support at schools). The specialist can guide the meetings to meet the classroom challenges, of learners who may have ADHD, in a meaningful way. Educators can receive assistance and training in various ways (Mitchell & Arnold, 2004) that may result in the educator implementing an intervention (DuPual & McGoey, 1997). Once educators have received assistance or training on ADHD, they can fulfil a unique role at the school in not only assisting other educators but also educating parents and the community about ADHD (Gurian *et al.*, 2002). Thus, the educator and the school can play an important role in firstly providing assistance to educators at the school and also parents, serving as a link between home, doctor, parent, learner and school (Gurian *et al.*, 2002).

### 5.3.5 *Theme 5: They Don't Pull Their Part*

The following theme relates to how educators experience parents of learners who may have ADHD. Some of the experiences seem to be negative in light of the lack of support the educators receive from parents. However, there are exceptions to this; which have been listed here below.

#### 5.3.5.1 *References from Textual Data*

- “Parents today don’t teach routine and structure. They run circles around the children so they cannot plan and organise for themselves. And because the learner has a problem at home, they just take, they don’t allow the learner to do anything, in desperation they’ll do everything for the learner instead of structuring and teaching that learner how to do I (sic), they just give it up and then the learners are spoilt.” (Participant 1a, speaker turner unit: 37).
- “No. The parents are very resistant to it. They don’t want to follow up on any suggestions. They haven’t even taken them for assessments or anything.” (Participant 1b, speaker turner unit: 181).
- “You get very positive parents, very positive parents (sic) and then you get parents who don’t really care. You now they see them for two hours per day and that’s what they see, you know (sic). They come home, they go home, they eat in front of the television, they watch television with them. They come on a Monday, they tell me they saw the movie *The Matrix*, it’s a 16, language, violence movie and they saw this on a Sunday evening, they watched the movie because my mummy said we may watch it and on a Monday you can see the children. But your get very positive parents who will do everything, you know, let’s try it, and then they try it. You know (sic). Or you will tell them what you do in class and they will accept it.” (Participant 1b, speaker turner unit: 131).
- “Yes. So sometimes, you know they will have the same problems. Most of the time they will have the same problem at home. They won’t be able to handle them, you know (sic). They don’t know what to do. So the learner is used to getting away with everything at home and it just gets worse. You know (sic), I think it just gets worse.” (Participant 1b, speaker turner unit: 177).
- “Most definitely. I think if it is not (sic) for the parents’ involvement there is not much you can do as a teacher. They need help with their homework, with remembering to bring things to school.” (Participant 1d, speaker turner unit: 379).
- “I’ve got a child who is supposed to be on medication but the parents don’t send it. Then, you know, then they fall flat (sic) in class and then the parents say, but they

are on medication. You know, but (sic) they don't pull their part (sic)." (Participant 1d, speaker turner unit: 383).

- "Yes. It, it seems they, they (sic) don't just care. Even if the learner comes home with incomplete work..." (Participant 2a, speaker turner unit: 688).
- "Mmm. Especially (sic) the parents are not involved in their children's education. They should be involved..." (Participant 2f, speaker turner unit: 2129).
- "They're just not interested. Uh huh (sic), because some are not working... because usually we have... most of them they don't pay school fees... because they don't have money... yes, but when you call them... because we usually say if a parent is not working, then he can come to school, we have many things... maybe he want to provide the tablecloth and all this (sic)... They just come when you say... they say, "no, we are not working ..." – they say all those things. Yes, but now they are not..." (Participant 2f, speaker turner unit: 2145-2164).
- "Where they can't help them. The learners are frustrated because they come to school not having done their homework, and then you ask them, 'but why didn't you do your homework?' And there was no one that could help them at home." (Participant 3g, speaker turner unit: 3477).

### 5.3.5.2 *Exceptions*

- "And his mother was very supportive, so she used to come in any time that we used to call her..." (Participant 3d, speaker turner unit: 2966).
- "A lot of the parents in my class, they know their children's problems and they work with them as best they can at home. So they set up their own programme at home. So they've set up their own programme at home (sic)." (Participant 1d, speaker turner unit: 361).
- "Yes. You can definitely see the parents who have sat and helped them and worked with them. Yes." (Participant 1d, speaker turner unit: 365).

### 5.3.5.3 *Discussion on Theme 5*

The last theme is "*They don't pull their part*". This theme seems to reflect how educators feel about parents of learners that may have ADHD. The educator's perceptions about parents' lack of involvement are reflected in this extract. In the view of the parents sometimes seem not to want to accept that their child may have ADHD and therefore resist the educator's recommendations.

*No. The parents are very resistant to it. They don't want to follow up on any suggestions. They haven't even taken them for assessments or anything. (Participant 1b, speaker turner unit: 181).*

The following extract reflects the important partnership that educators have with parents.

*Most definitely. I think if it is not for the parents' involvement there is not much you can do as a teacher. They need help with their homework, with remembering to bring things to school. (Participant 1d, speaker turner unit: 379).*

Thus, it seems that the educator feels that if the partnership between parent and educator is not what it could be, it could impede the quality of teaching and learning in the classroom. The educator, it appears, feels that the parents are responsible for the continuity of learning at home, in being able to supervise homework activities and in checking that the learner brings what is required to school.

The following quote has been selected as it depicts another way educators perceive parents could “play their part.”

*Parents today don't teach routine and structure. They run circles around the children so they cannot plan and organise for themselves. And because the learner has a problem at home, they just take, they don't allow the learner to do anything, in desperation they'll do everything for the learner instead of structuring and teaching that learner how to do I (sic), they just give it up and then the learners are spoilt. (Participant 1a, speaker turner unit: 37).*

Thus, it seems that this educator perceives that parents should provide learners with structure and routine. If parents do not provide structure and routine for their children, it may be difficult for that learner to adjust to the routine and structure that is required at school and within the classroom. Therefore, parents need to be able to continue with the routine and structure at home, so that learners can adjust more easily to the routine and structure at school.

One other aspect that seems to be reflected within this theme is that parents “*don't pull their part*” because they do not seem to be interested as reported by the participant in this study. It appears as if the educators perceive the parents do not care about their parental responsibility.

*Yes. It, it seems they, they don't just care (sic). Even if the learner comes home with incomplete work... (Participant 2a, speaker turner unit: 688).*

The educator, it seems perceives that the parents do not care if the learner's homework is incomplete. However, there are exceptions to the experience of disinterest, as stated above.

*Yes. You can definitely see the parents who have sat and helped them and worked with them. Yes. (Participant 1d, speaker turner unit: 365).*

If a learner with ADHD needs to take medication, communication and cooperation between parent and educator is important, for example the educator may be expected to assist the

learner in taking a dosage of medication during school hours. Understanding what expectations educators have of treating ADHD, including medication, could improve the relationship between learner and educator. Understanding educator expectations of treatment could also assist the learner with his/her academic progress at school. The educator could contribute to the treatment by monitoring the learner's behaviour and academic progress, which could mean adjustments to treatment and medication.

How parents perceive the learners academic performance could influence their involvement. It appears as if mothers of learners with ADHD rate their children's level of school-related performance as above that of their peers, and most of those peers do not have ADHD (Stultz & Flannagan, 1999). This could indicate that mothers do not recognise that their learner may have ADHD. If a mother does not recognise that the learner may have ADHD, the learner may not receive academic or emotional support needed (Van Beijsterveldt, Hudziak & Boomsma, 2005; Sanders, 2002) to be able to succeed at school. Thus, the relationship between parent and educator is important in order for collaboration to take place in order for the learner to succeed at school.

The consistent use of medication prescribed by a physician (and thus the cooperation of educator and parent) can improve learner-parent relationships (Chronis *et al.*, 2003). Studies that relate to learner's behaviour at school (Heiman, 2005) stress that parents and educators could be involved in assisting learners in friendship relationships. Assisting learners who may have ADHD to establish and maintain a friendship could support them in acquiring positive behaviour from another learner. The learner who complies with his/her educator's social and behavioural expectations will receive a positive reaction from his/her peers (Lane *et al.*, 2003). Brown (2000) recommends that health professionals explore what expectations parents and educators have regarding treatment of ADHD.

#### 5.4 CONCLUSION

In conclusion the themes that emerged from the data and that the educators checked are: (1) They are not treated the same as other learners; (2) Keep them busy; (3) It does challenge you and we're not perfect; (4) It needs sharing as teachers and help from a specialist and (5) They do not pull their part. It does not seem surprising that they view the learners who may have ADHD as being challenging (Dietz & Montague, 2006; Lucangeli & Cabrele, 2006; Volk *et al.*, 2005; Holz & Lessing, 2002), as it would seem from the literature that learners who have ADHD are indeed challenging.



The themes also revealed that information and assistance regarding ADHD are not shared. The next chapter looks at two different experiences of ADHD in more detail followed by the narrative.

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## Chapter 6: *A Comparison of Experience and a Narrative of Educators' Experiences of ADHD in the Classroom*

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### 6.1 INTRODUCTION

Narrative research includes incorporating place and context and collaboration between researcher and participant (Creswell, 2002). In this chapter I will attempt to describe two different educator experiences and draw interpretations from the experiences that place the 'stories' of the participants/educators in context. This will be followed by a narrative, which is the 're-storying' of the participants, written by the researcher, based on the interviews conducted with the educator.

### 6.2 INTRODUCTION TO THE COMPARISON OF EXPERIENCES

The two educators' experiences for this chapter were selected as they seemed to make an impression on me as a researcher and as a person. (The experiences of these two educators seemed to stand out for me the most in contrast to the other educators). For the purpose of this chapter and for clarification, fictitious names have been assigned to the participants/educators. The first person chosen is an educator from the first school, who is a novice educator, teaching for only three years in suburban Tshwane. The name that has been assigned to her is Sally. The second educator is an experienced teacher, who is a Head of the Department of Foundation Phase at a township school. The name that has been allocated to this educator is Moira. The educators are from very different contexts and thus have different experiences of learners who may have ADHD in their classrooms. These two interviews were selected as the educators were forthcoming with personal experiences and understanding of ADHD. These two interviews have similarities in experiences, for example both educators felt that grouping learners is not always effective. The two educators also seem to have different experiences with regards to parental involvement. The following section illustrates the similar and different educator experiences of learners who may have ADHD in the classroom.

#### 6.2.1 *Sally (Participant/Educator 1d)*

Sally is the fourth educator interviewed from school one. School one is a public school situated in a suburban area in Tshwane. Sally is a young (in her mid-twenties) white educator and English speaking. In the interview process she seemed to be particularly nervous. Sally teaches grade two and has 30 learners in her class. This is her third year of teaching since

she has qualified as an educator. This interview took place in one of the educator's classrooms.

Sally shared personal information that allowed me as researcher to understand her experiences as educator in the classroom. She is newly married and her husband is a medical student. Therefore, she is the breadwinner, providing the family with an income. Sally explained that although she is still new to teaching she has an interest in special needs and is studying further in this field. She is currently completing an Honours degree in Special Education, through the University of Pretoria.

### 6.2.2 *Moira (Participant/Educator 2f)*

The next educator is the Head of Department of the Foundation phase, from a previously disadvantaged school in Tshwane. Moira teaches grade two and is a black educator. Although English is Moira's second language, she is a mature and confident educator. Moira stated that she is married and appears to be in her mid-fifties. She has 35 learners in her class and has only five learners more than Sally. I explained ADHD to her and Moira seemed to be more at ease with the interview process and better able to answer the questions. The reason why I explained ADHD to Moira was that she explicitly asked for me to explain this to her. (*"Yes, I wanted to know because..." Moira/Participant 2f, speaker turner unit: 1805*). I was concerned that this would influence the data, and thus brought it to the attention of the peer examiner. The examiner expressed that although ADHD was explained to all the educators it does not seem to have influenced the data. (Refer to chapter 5, section 5.3.2 and also chapter 7, section 7.6.1.3 Peer Examination). This interview took place in the staff room after school hours, so as not to disrupt the teaching and learning.

### 6.2.3 *Different Educator, Different Experience*

According to information gained from the interview and informally after the interview Sally has been a teacher for three years

*I have only been teaching for three years. So in class, when you are sitting in varsity and you like (sic), oh this is how you present a lesson, and you give these fantastic lessons. (Sally/Participant 1d, speaker turner unit: 428).*

She is experiencing teaching as being very different to what she has been taught at university. The stresses and strains that go hand in hand with being a novice educator seemed apparent in this interview. It seems that for Sally the experience of *actually* teaching and the theory of teaching are very different. The reality of teaching a class has meant that she has needed to adapt. It appears as if the novice educator is learning from her experience in the classroom.

*So I have, you have had to (sic), I have had to learn how adapt to actually teaching children, because the theory of it is one thing, but the actual practical teaching is a different thing. (Sally/Participant 1d, speaker turner unit: 430).*

Moira, on the other hand, expressed that she has been an educator for a long time, yet still feels inadequate to respond to learners who may have ADHD. As a result Moira states that she would like to get more assistance from outside the school.

*Yes, I just wanted to know otherwise, how can we (sic) deal with them, just like we, we have said with... these type of learners– do you have any idea how can we... yes, just later, we should just give them... because usually we do have some learners which are, you know you should pity for them, as teachers you know... (Moira/Participant 2f, speaker turner unit: 2062-2064).*

Moira's text here above seems disjointed, but this could be due to the fact that she was revealing her uncertainty. It seems that Moira does understand that educators play an empathetic role (“*you know you should pity for them, as teachers you know*”). However the learners who may have ADHD could be shown understanding, instead of pity, if educators knew how to intervene. Moira asked the researcher if assistance could be given with workshops for educators and parents. The explicit request for assistance was not recorded, yet from the above quotation, the request for assistance is implied. Moira appears to have been more comfortable asking this request for assistance after the interview and thus, “*off the record*”. She mentions, however, that the other educators interviewed at this school asked her, as Head of Department, what they would get out of doing the interview.

*Even some of our educators you know, they say no, we are going for (sic), interviewing but what about, what... how are we going to handle those things... (Moira/Participant 2f, speaker turner unit: 2219).*

One could infer that the educator felt that she needed to ask for assistance so that she could inform the other educators on how “to handle those things”.

From this interview the experienced educator, Moira, refers to learners who may have ADHD as “*those learners*”. In the interview it seemed that it was easier to refer to learners who may have ADHD, than having to repeat the acronym “ADHD”. However, most educators (i.e. 10 of the 17 educators) who were interviewed from the township schools referred to learners who may have ADHD as “*those learners*”.

Moira related that at first she was against inclusive education.

*RESEARCHER: How has including these learners who may have ADHD been for you – how has it been like for you as a person?*

*MOIRA: I, I (sic) was against it because I thought that maybe during that time when they say if you have a, a learner who's this (sic) you keep them to the relevant school (Moira/Participant 2f, speaker turner unit: 2024).*

However, her experience in including all learners meant that she needed to prepare herself and make sure that she had her lessons prepared.

*You just have to learn how to deal with them. But once you prepare yourself for them, they're not so much of a challenge (Moira/Participant 2f, speaker turner unit: 2032-2034).*

Thus, it would seem that accommodating learners who may have ADHD has been challenging to this educator, yet the outcome appears to be positive. As Moira has learners who may have ADHD in her classroom, she feels that she needs to be more prepared. Thus, it seems that she makes sure her lessons are well prepared. This could benefit all the learners in the class, not only the learners who may have ADHD.

In comparison, the novice educator (Sally) appears to be of the opinion that she can learn from her fellow teachers and ask for advice. The humility that she shows could be attributed to her personality as well as the fact that Sally is a novice educator. As a novice educator Sally can ask for assistance as it is seen as appropriate, as opposed to an experienced educator asking for assistance. Thus, as Sally is young and a novice educator it seems appropriate that she would seek assistance from other educators who are more experienced. It seems that the novice educator follows other educators in how she groups her learners and refers learners who misbehave to the Head of Department to discipline. In the following extract Sally is referring to the misbehaviour of the learner who may have ADHD in her classroom. She indicates that one method of discipline, as an experienced colleague does, is to separate a learner from his/her group, giving him/her "Time Out". Another method of discipline is to send a learner to the Head of Department.

*The thing is they become very disruptive and when the one gets hyperactive it is almost like it rubs off on the others. It's been a big challenge for me this year and they're separated from the group like name: Educator 1c<sup>20</sup> does. Time out against the wall (sic). It doesn't. It works sometimes, but occasionally it doesn't and then I send them to our (indistinct) Educator 1a and they are petrified of her so they don't like that. (Sally/Participant 1d, speaker turner unit: 341).*

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<sup>20</sup> In the interview the names of educators were stated, but to keep anonymity and confidentiality of educators the educator number has been assigned.

From the interview I got the impression that she makes use of her colleagues, knowledge and asks for advice where needed, but does not necessarily rely heavily on them. This was apparent when the educator stated at the end of the interview that she has learnt much from the experience of having learners who have ADHD in her classroom. In the following extract Sally expresses what she has learnt, including disciplining learners in her classroom. One of the strategies she used to assist learners who may have ADHD is to insert a screen around the learner. This is a structure, made of steel and plastic that forms a u-shape around the learner, so that he/she may not be distracted by other learners or objects in the class. The learner who has a screen placed around him/her is placed at the back of the classroom.

*I think I have learnt a lot of patience this year and a lot of discipline. How to, how to (sic) handle the discipline. So, I think I would use, in future (sic), I would know exactly, right, this is where, how you do this and using the screen. I would use some of that information because that (sic) I got from colleagues, who knocked it up when I was in absolute desperate need, and said, well try this. (Sally/Participant 1d, speaker turner unit: 424).*

The screen that is used seems to assist the learners as well as the educator, as the learner is forced to focus on the task in front of him/her. The term that the educator uses “knocked it up” (a term that is used by English first language speakers) suggests that it was erected in a hurry. It seems that learners who may have ADHD challenged this educator to take active steps in her own learning and knowledge regarding discipline and learning strategies that work best in the classroom. Therefore, although the experience has been challenging it has also resulted in a positive outcome for this educator. However, the effects on the learner, needs further investigation.

The novice educator, Sally, expressed her need for assistance explicitly by stating “*I would use some of that information because that (sic) I got from colleagues*”. The novice educator also expressed her frustrations more openly than Moira. The novice educator expressed the frustration as “*absolute desperate need.*” Sally is a young educator and it is more socially acceptable for someone who is considered inexperienced to ask for assistance. In comparison the experienced educator (Moira) holds a position of power as Head of Department. The other educators in the Foundation phase would look up to her for guidance and leadership. It could be that as the Head of Department, she would be seen as someone who is supposed to have all the answers. However, Moira, did ask from assistance outside of the school by asking “how are we going to handle these things”.

*Even some of our educators you know, they say no, we are going for interviewing (sic), but what about, what ... how are we (sic) going to handle those things... (Moira/Participant 2f, speaker turner unit: 2219).*

It seems from the two different experiences of these educators that they feel the need to get assistance from other colleagues and from outside of the school in order to assist learners who may have ADHD. The need for assistance could be attributed to their different contextual circumstances and from their own classroom experiences. One of the contextual factors that could influence the educator is that township schools are less resourced than the suburban schools. Thus, the educator may feel that if she had more resources she would be better equipped to assist learner who may have ADHD in the classroom.

*Especially if ever we can have some learning equipment, just to keep them busy. Even if, if I'm teaching this (sic)... (Moira/Participant 2f, speaker turner unit: 2005).*

The novice educator could feel that her teacher training is inadequate, as she feels that she needs to put lesson plans together that work in the classroom.

*So I have, you have had to (sic), I have had to learn how adapt to actually teaching children, because the theory of it is one thing, but the actual practical teaching is a different thing. (Sally/Participant 1d, speaker turner unit: 430).*

#### 6.2.4 *Teaching and Learning*

The following section relates the educators' teaching and learning within the classroom. The schools are described in chapter 5; however the classrooms of these educators/participants are described here for the purpose of more in-depth clarification. The educators' classrooms are very different, due to the fact that the one school is more resourced than the other. School one is a well resourced school and therefore Sally's classroom reflected this. Sally's classroom is brightly painted in light blue; the walls are decorated with educational printed posters, self-made posters and the learners' activities. The desks and chairs have been arranged in rows, but the arrangement changes depending on the task that needs to be completed. The classroom is clean and seems to be brightly lit. The environment of the classroom can contribute to the learning and teaching of the learners (Downer, Rimm-Kaufman & Pianta, 2007; Kohn, 1996; Lieberman, 1982).

In stark contrast, Moira's class seems to be dark, as there appears not to be enough light in the classroom. The walls are brightly decorated with printed posters. In some areas, including the learners' desks, the alphabet and certain words in English and Sepedi have been written out for the learners. An example of this is: there is a label of "desk" on the learner's desk in English and Sepedi. The classroom floor is dusty, as the dust tends to blow in from outside as there is no grass. (Grass would trap dust and soil). School two does have electricity and toilet facilities for learners.

Educators need to discipline learners in the classroom, as part of classroom management, in order for teaching and learning to take place. However, during the interview process, the more experienced educator, Moira, at times gave the impression that she was in a hopeless situation.

*It's tougher for that teacher because she, she is even new in our school you know...She just see problem... (Moira/Participant 2f, speaker turner unit: 2107-2109).*

If a new educator is exposed to learners, she may only see problems. However, it seems that Moira understands that an educator needs to understand the behaviour and academic performance of a learner in order to be an effective educator.

*Because the, the previous teacher will come to you and explain to you, "this one is just like this." But the new one that are from outside, no one will tell you about them ... (Moira/Participant 2f, speaker turner unit: 1993).*

Moira also expressed her frustration at her inadequacy to discipline and teach learners who may have ADHD.

*Yes, it is, it's difficult because you'll be trying, and then sometimes you'll feel like you will just kick (sic), but you can't you know (laughter). He is just harassing you, but it's not good, it just make me sometimes just get fed up (sic), just say "sit down", that's the only way that you can concentrate. (Moira/Participant 2f, speaker turner unit: 1917-1919).*

#### **6.2.4.1 Class work and Homework**

According to Sally, there are five learners in her class who have been diagnosed with ADHD and are being treated with medication. The novice educator, Sally, seemed to believe that less class work is one strategy that appeared to assist the learners who may have ADHD in her classroom. Less work is easier for the learner with ADHD to complete and achieve. If one task is divided into smaller tasks the activity doesn't seem overwhelming or unachievable. However, the same amount of homework as other learners is given to learners who may have ADHD. Parent involvement and awareness seems to play a great role as to the amount of homework the learner can be given.

*I think that they maybe (sic) a little bit less class work or maybe just a slightly modified worksheet, sometimes also help (sic). Homework, they do the same homework as the others. A lot of the parents in my class, they know their children's problems and they work with them as best they can at home. (Sally/Participant 1d, speaker turner unit: 361).*

With regards to class work and homework, Moira's experience seems to differ greatly from Sally's experience. According to Moira the learners who may have ADHD require more class work.

*They require more work. Even if sometimes it's not the work that you wanted to give the, the (sic) whole class. (Moira/Participant 2f, speaker turner unit: 1979).*

Moira's main priority, it appears, is being able to keep the learners busy. Moira believes that learners who may have ADHD should get less homework. It seems that Moira believes that learners who may have ADHD cope better if they have less homework. The educator states that if she gives learners who may have ADHD the same amount of homework the learners will not be able to do it all.

*Yes, because if you give them more, they (sic) will be no product. (Moira/Participant 2f, speaker turner unit: 1991).*

It would seem that different beliefs as to how much work to give to a learner who may ADHD differs according to the educators' different experiences. As with other educators as mentioned under the themes, one of the strategies implemented in the classroom is to keep the learners busy with work or other tasks. Moira gives her learners extra class work in order to keep them busy. This extra work is very often class work that is completed incorrectly, but fulfils the purpose of keeping the learners busy.

*But if you give them something that will just keep them busy and try to concentrate, because if ever you say you want 1 up to 10 (sic), you just write something, maybe even if it's not correct (sic)... (Moira/Participant 2f, speaker turner unit: 1981).*

It must be noted that although the work is incomplete or incorrect it does not seem that the work is corrected immediately. The educator did not state that the work is corrected or completed at a later date. Other educators (Participant 2a and Participant 2c), from the same school, mentioned that if work is not completed they keep the learners in after school.

*PARTICIPANT 2A: That's why most of my, my (indistinct), I do them after school or I just keep carry the whole lot and then take it home to go and mark them at home. (Participant 2a, speaker turner unit: 481).*

*PARTICIPANT 2C: And then you must repeat your lessons ... For them you may repeat. Let's say it's after school, then the, the other group must go, they must be left behind .... (Participant 2c, speaker turner unit: 1259-1261).*

If the learners are given the opportunity to complete work and to correct work that they have done incorrectly, teaching and learning does take place. If learners who may have ADHD who do not complete or perform incorrect work do not stay after school, then it is possible that there is little teaching and learning taking place.



From the interviews it seems that different experiences inform educators to give learners who may have ADHD more or less class work and/or homework. The novice educator (Sally) seems to be informed by her colleagues and by her experience in the classroom. Similarly, the experienced educator (Moirá) relies on her own experience and the situation in the classroom to decide what work to give, whether it is extra academic work or sweeping the classroom. In contrast literature suggests that learners who may have ADHD should get less class work or work that is adjusted (Glass, 2000; McFarland *et al.*, 1994). If a task is divided into smaller tasks or adjusted for the learner who may have ADHD, he/she may feel that the task is achievable.

#### 6.2.4.2 ADHD in the Classroom

It seems that educators, in this study, have found that learners who may have ADHD are challenging, as this is one of themes that emerged from the textual data. Sally finds teaching learners who may have ADHD as being difficult.

*This year has been very difficult because I have got so many. I have only got so many places in my class as well. (Sally/Participant 1d, speaker turner unit: 331).*

However, the educator illustrates that she attempts to teach all learners in her classroom, including those who may have ADHD. She does this by discovering what is special about each learner and using this to be able to teach them.

*You have got to just (sic) also get to know them and find out what's special about them. What, what they (sic), what is the special quality in that learner. (Sally/Participant 1d, speaker turner unit: 357).*

Realising that each learner is different regardless of the label of ADHD, means that this educator can adjust her teaching strategies and classroom to improve teaching and learning.

*You have to take each learner into consideration. Just because they have got ADHD doesn't mean that they are all the same. I think you have to also take their personality. You have got some kids who have got ADD more, and they are as quiet as mice. (Sally/Participant 1d, speaker turner unit: 369).*

It is interesting to note that that the novice educator feels at times that she cannot teach learners who may have ADHD. It seems that Sally finds that learners who may have ADHD demand so much from her, that she finds she is tired and feels that she can't do this.

**RESEARCHER:** *Now there is so many of them in the classroom, how has your experience been and how's this experience been for you?*

**SALLY:** *It's very tiring. It drains me every day and some days I think I can't do this. (Sally/Participant 1d, speaker turner unit: 406).*

However, the positive attitude and the assistance that she receives from her colleagues allows her to carry on teaching.

Moira felt that teaching learners who may have ADHD is challenging and that one needs to be prepared for such a challenge.

*Eish (sic), it was tough, it's tough, but it needs preparation (sic)... (Moira/ Participant 2f, speaker turner unit: 2030).*

One can deduce that this educator does not feel that she is trained adequately to be able to manage learners who may have ADHD. Thus, preparation that takes into consideration the challenges and experiences that educators' face in the classroom could be beneficial for educators.

One way the novice educator (Sally) attempts to assist the learner who may have ADHD in her classroom is by being aware that ADHD is complex. Understanding that each learner is different means that each learner behaves differently in the classroom amongst other learners.

*So it's not, it's not about the work actually that she's on the medication for (sic). She can't control her actions. She really can't. She literally explodes. So that, you know, to her (sic). I have got another one who also she is just also (sic) very disruptive and she will just, on purpose, pull things off peoples' desks. Vindictive. So there is definitely, I think there is a (sic)... (Sally/Participant 1d, speaker turner unit: 400).*

Understanding that ADHD is complex and that other factors could be present (for example co-morbidities) allows the educator to understand her learners. Sally understands that this particular learner who may have ADHD cannot control her actions and has temper outbursts. Therefore, the educator takes this into consideration when planning class work, where the learner will not be disrupted and where the learner cannot disrupt other learners. Thus, the educator is better able to manage her classroom and the lesson.

In contrast the experienced educator (Moira) found teaching younger learners who may have ADHD as being difficult. The educator found that she needed to repeat herself many times before she could be understood.

*But the small ones, you'll be saying the one thing I, I (sic) don't know how many times. It's difficult for the smaller ones (laughter). For me it was difficult... (Moira/Participant 2f, speaker turner unit: 1999).*

It seems that for this educator what makes teaching learners who may have ADHD difficult is if they are young and starting school. It appears that if the learners who may have ADHD are young the educator has to repeat herself in order to be heard.

One other aspect that makes teaching learners who may have ADHD difficult is that their work needs to be constantly checked. According to the experienced educator (Moira) work that is completed in the classroom needs to be constantly checked and guided.

*They are able to concentrate, they have... after doing whatever instruct (sic) I've given... I have to go back to them – and try to let them concentrate, and try to direct them (sic). (Moira/Participant 2f, speaker turner unit: 1885-1887).*

Moira contradicts herself in this direct quote from the transcriptions. In the context of the interview, I, as researcher and co-participant, understood that the educator was stating that the learners who may have ADHD do not concentrate as she often needs to check their work and repeat instructions. It seems that the educator can get frustrated with having to constantly check the learners work, realising that they often do their class work incorrectly. As stated above, if the learner who may have ADHD is given the opportunity to stay in after school to complete or correct work then learning may be taking place. However, if the learner who may have ADHD is not given an opportunity to complete or correct work then little learning is taking place. Thus, if little learning is taking place it reflects negatively on the quality of learning that is taking place at our schools.

Lastly, with regards to teaching and learning, the novice educator mentions that she has had to adjust her lesson plans to “actually teach” the learners in her classroom. Sally states that studying the theory of teaching and being able to teach are different. It seems from the educator’s experiences that planning a lesson that keeps the learners attention and learning is tougher than she expected. Lesson planning includes prior planning as to how the lesson will translate in the classroom with learners who may have ADHD. Being able to present a lesson where learners are learning seems to mean that she needs to be creative and alert.

*They have made me go back and think about how I give the difference between how to present a lesson (sic). And then you put kids into those things and the lesson falls flat. So I have, you have had to, I have had to learn how to adapt to actually teaching children, because the theory of it is one thing, but the actual practical teaching is a different thing. How to keep their attention. You have got to be creative and on-the-ball all the time (sic). (Sally/Participant 1d, speaker turner unit: 428).*

### 6.2.4.3 Grouping

One of the strategies used in classrooms as a method of managing behaviour and used as a teaching method is grouping. Grouping the learners in the classroom has not been successful for Sally.

*RESEARCHER: Okay. So it sounds as if the learners have also been able to adapt to the way you group the children in your class, as well as to the screen etc. How do you?*

*SALLY: A lot of them have, but there are some who just don't, don't fit in at all. They can't work in groups, they fight, but on the whole, most of them have. I would say about six of them you can if you, with reassurance and with say talking to them, you can get them to work. But the others, yes, they, they can't work in a group at all. (Sally/Participant 1d, speaker turner unit: 335).*

Yet, the educator does attempt to use grouping with the help of other learners and by bringing back their attention to the task at hand. Her attempt shows the determination that she has in wanting to teach learners.

*Well, I try, okay there are times when they have to do group work, then we just sit there with them and say, right now you have to focus. You have to keep talking to them. Talk them through the process actually. Because else they will just lose total concentration (sic). But, yes, I think just, just (sic) keeping them, trying, just trying to keep them (sic) focused on what they are supposed to be doing. The others seem to, seem to (sic) fit in and the other kids get them sorted out. (Sally/Participant 1d, speaker turner unit: 337).*

It seems that although, grouping is made use of, it is not a classroom strategy used with confidence, as educators believe that learners are not always able to work in groups.

In contrast Moira states that she finds it best to group learners with learners who do not have ADHD and can keep the learners with ADHD in check.

*The, the best is just to, not them in one group (sic)– keep them with some of the top one that you know this one can behave (sic), because they will help you sometimes, even to let him come to order and do all those things (sic)... Yes. That's the best to include him or her in a group that is working. (Moira/Participant 2f, speaker turner unit: 1967).*

It seems that the participants in this study experience that learners who may have ADHD need to be checked on, either by the educator or by fellow classmates. The educator could also believe that learners who may have ADHD cannot work independently. The learner who may have ADHD could learn to depend on this, feeling that he/she may not be able to do work on his/her own. The learner who may have ADHD could enjoy the attention that he/she is receiving from the educator or from the fellow classmate and come to expect or demand it. "Being checked" up on could have negative outcomes both for the learner and for the educator.

### 6.2.5 Parent Involvement

The novice educator (Sally) mentions that the parents of the learners are involved and assist the learners with homework. She points out that the parent involvement is valuable to the teaching and learning of learners.

*I think if it is not for (sic) the parents' involvement there is not much you can do as a teacher. (Sally/Participant 1d, speaker turner unit: 379).*

It seems that if parents are aware of their learner having ADHD, they assist their learner with homework. It would seem, therefore, that knowledge of ADHD can contribute to understanding what the learner's needs are with regards to his/her schoolwork and/or homework.

*...A lot of the parents in my class, they know their children's problems and they work with them as best they can at home. So they set up their own programme at home. So they've set up their own programme at home (sic)... (Sally/Participant 1d, speaker turner unit: 361).*

One of the concerns that came through in the interview with Moira is the fact that there is a lack of parental involvement at that school.

*Mmm. Especially the parents (sic) are not involved in their children's education. They should be involved... (Moira/Participant 2f, speaker turner unit: 2129).*

In the interview Moira expressed her frustration at the fact that the parents do not seem to be interested in their children's education. It seems that some parents cannot pay school fees as they are unemployed.

*...most of them they don't pay school fees... (Moira/Participant 2f, speaker turner unit: 2149).*

However, the school attempts to encourage the parents to be involved with the school by contributing time, for example: spending time reading with learners or assisting with the vegetable garden.

*...because we usually say if a parent is not working, then he can come to school, we have many things... maybe he want (sic) to provide the tablecloth and all this. (Moira/Participant 2f, speaker turner unit: 2155).*

The educator, Moira, also mentioned that parents from this school seem not to accept responsibility for their learner's behaviour. According to Moira, the parents state that the learner misbehaviour is because the learner is raised by a grandparent.

*I even call the parents, but they say, "he is just like that (sic) because he stays with the granny"... (Moira/Participant 2f, speaker turner unit: 1911).*

It seems that, according to Moira's experience, one possible reason for lack of parental involvement at Moira's school could be due to the fact that parents do not seem to know what ADHD is. Therefore, if learners are left undiagnosed parents will remain uninformed of ADHD. That is, if a parent finds out that his/her child has ADHD subsequently the parent would be given information about the disorder from the health professional. Thus, if a learner remains undiagnosed then the parent will remain unaware of the disorder. Lack of education on ADHD could result in the parents not being kept informed regarding ADHD, not recognising the importance of education and their involvement in the learners learning.

### 6.2.6 *Sharing Information*

The educator, Moira, explained that the educators at the school do share information of learners at the beginning of the school year, but not throughout the school year. Although the educators make use of learner profiles, it seems that being able to discuss a learner's behaviour "prepares" the educator. If however, learner profiles have not been received from the learner's former school the educator is required to find out that information in the classroom.

*RESEARCHER: And do you use learner profiles in your...?*

*MOIRA: Yes, I do... But if usually they are from outside you don't get them (sic). (2054). Because the, the (sic) previous teacher will come to you and explain to you, "this one is just like this." (sic) But the new one that are (sic) from outside, no one will tell you about them... (sic). (Moira/Participant 2f, speaker turner unit: 1933).*

It seems that sharing information between educators and through learner profiles, assists the educator in feeling "prepared". It appears as if the educator feels that being prepared is strongly linked to being able to cope with learners who may have ADHD. Feeling prepared as expressed by Moira seems to be linked to feeling empowered in the classroom.

### 6.2.7 *Explaining Medication to Other Learners*

One of the "stories" that Sally conveyed that needs mention, is how she was able to explain to another learner why some learners needed to take medication at break time. At break time the educator (Sally) issues medication to learners who have ADHD. She indicated that a learner, who does not have ADHD, asked her why they needed medication. The educator explained to the learner why other learners needed medication, being sensitive ensuring that they would not be labelled. The fact that the taking medication remained a "non-issue" illustrates the communication ability of the educator.

*I remember last year I had one of the girls that was very confused why everybody else, or why some of the kids in the classroom get medication and she doesn't. Can she also bring her tablets to school. And she didn't have any idea of what it was*

*about. So I think it must just become a non-issue. Well I explained to her it's to help them think in the day. She said, oh but I can think, and perhaps I don't need it. (Sally/Participant 1d, speaker turner unit: 416).*

### 6.3 GENERAL IMPRESSIONS- COMPARING SALLY'S AND MOIRA'S EXPERIENCES

During the interview, I, as researcher and psychologist, got the impression that Sally is attempting to do as much as she can to assist all learners. It seems that being “prepared” plays more of an important role for the educators from the township schools. The coping strategies that are used in the schools, for example “*keep them busy*” are creative and necessary in order to cope. It seems that educators experience grouping as not working effectively, even though it is recommended to assist educators manage classrooms. This seems to be true for all the educators interviewed in this study.

As stated above, one educator, Sally related more personal information after the interview. It seems, therefore, that Sally related more to the researcher, than Moira did. One possible reason is that Sally is white, as am I, the researcher. Other factors that could have influenced Sally sharing personal information with me is that we speak English as a first language and cultural factors. As race, language and culture could have been factors that allowed Sally and I to relate to one another, unfortunately the same factors could have been barriers to relating with Moira and I. Therefore, race, language and culture could have been why Moira was unable to ask directly for assistance. Moira could have been influenced in the interview to give certain answers due to factors like the race, language and culture differences. Thus, my race, language and culture, as a researcher/person, could have influenced the interviews and therefore the kind of data collected from the 17 different educators interviewed. It seems, from the transcribed data and interpretation thereof, that my race, language and culture as researcher/person could have prevented the educators from being able to relate to me. It could have prevented the educators from feeling that they could have shared more information, including experiences with me.

Information was shared to get an understanding of how educators experience learners who may have ADHD in their classrooms. From this comparison between the experiences of Sally and Moira it seems that there are commonalities and differences in the experiences. It appears that different educators have different experiences within different contexts. The context of the school and classrooms seem to affect the experiences of the educators. This is seen in how much class work or homework they give learners, parent involvement and the medication of learners.

## 6.4 THE NARRATIVE

According to Moen (2006) narrative research in which educators' voices are heard in their stories of experience offers an opportunity to present the complexity of teaching to readers and to stakeholders (such a principal's educators, teacher training institutions). A narrative can contribute to an understanding of a phenomenon as it provides the opportunity to engage a listener/reader in that experience from a safe distance (McAllister, 2001). In the re-telling of past experiences, it allows for reconstructing of a narrative in different ways that incorporates different perspectives on past events that may lead to an understanding of present experiences which could influence future events (Birch & Miller, 2000).

A narrative, as a story, has a plot, a beginning, middle and an end that describes a series of events or experiences that have happened (McCance, McKenna & Boo Re, 2001). The narrative that is developed should take into consideration the context (psychological context as described in chapter 3, and the cultural context) within which it is placed. The contextual features the story assists in generating a rich narrative.

The following narrative is based on the themes that were extracted from the interviews. The themes were used as the basis for the 're-storying' of the participants/ educators experiences as it was verified by the educators (Creswell, 2002). In understanding the experiences of the participants/educators, the knowledge that has been extracted from the interviews can be expressed in a narrative (Thorne, 2000).

I have chosen to write the narrative in the first person, making the narrative/story seem more of a personal story. Also, I have selected to use words that are commonly used in everyday language. Therefore, educators are referred to as teachers and learners are referred to as learners.





#### 6.4.1 A story of a teacher's classroom experience

Dear Reader

I would like to share a story with you, a story of a teacher. I am a teacher who works in a primary school that is situated in a city in South Africa. The school is what is called a township school. The majority of the children in the school are black. Most of the children in my class are black, a handful are Indian or coloured. I teach grade two, in Foundation phase. There are about 35 children in my class. Many of the children that come to this school are poor; their parents are unemployed and cannot afford to pay school fees.

Although the school is in a poor community, the school is resourced due to the fund raising projects that take place at the school. The school has a feeding scheme for the children who cannot afford to buy food from the tuck shop. The school has a soccer field and a tennis court that doubles up as a netball court. There is also a computer room, where the children can use the computers that have been donated to the school.

I am well liked by the children and I think that is because I try to go the extra mile to help them with their class work. I like the children in my class and take the time to get to know each child. The children know that if they have any problems, either with their schoolwork or at home, they can speak to me as I will listen to them.

I try to get to know all the parents of the children in my class. I meet all the parents at parents evening, which happens once a term. I discuss the strengths of each child with the parent, as well as the areas where they need more support. The parents listen and promise to help their children where they can. But for various reasons they aren't always able to assist their children with their homework.

The children in my class are all different. They come from different home backgrounds; they have different personalities and different abilities. There are some children that are well behaved, they do their work and even at times get to help me around the classroom. Then there are some children that are more challenging to me as a teacher. There are the children who seem to be very busy and find it difficult to concentrate; they often cannot apply the work that is being taught. They seem to be very slow in applying themselves to a task. And sometimes they seem to apply themselves to a task and try to get it finished as fast as possible, even though the work is not correctly done. These children are very busy. They can, at times, annoy other children, by, for instance, taking their pencils from their desk. Sometimes they turn around in their seat to start a conversation with another child, forgetting that they have work to do in front of them.

I try my best in being prepared for all my classes. I prepare my lesson plans, knowing that I will need to give extra work to some of the children. I know that I will need to give extra work to those children who find it difficult to concentrate. I need to keep them busy, so that they do not distract other children in my class.



These children also often have to ask me, the teacher, to repeat instructions to a task. The child does not appear to listen to me. Sometimes they attempt the task on their own. Sometimes they ask me or a fellow classmate to help them with the task. At times the task is not completed, as the child is distracted by someone or something else in the classroom. There are also times where the child will finish before the rest of the class. I need to be close to this child and make sure that he or she gets to do her work. This means that I often spend more time with this child than I would with the rest of the class. I spend more time explaining the task or instructions to this child than I would with the rest of the class.

As a result I feel that this child can be very demanding and needy. I feel responsible for the whole class and therefore I feel that it is unfair that one child should get more attention than the rest of the class. I feel guilty that the rest of the class does not receive as much attention as this child.

When the child finishes the task, then I need to ensure that he or she is kept busy. I give the child extra work that will help him/her for tomorrow's tasks, give him/her extra work or even ask to collect books and clean up the classroom. This child needs to be kept busy at all times. If I do not keep the child busy, I know that he/she will distract other children.

Occasionally when the child does not finish his/her task, I need to set the task aside and carry on with the lesson plan for the day. The task that is uncompleted will need to be completed after school. This way the child does not lose out on school work.

The whole class is required to write down their homework. The children need to complete their homework under the supervision of a parent or guardian. However, the child that requires more attention in the classroom often comes to school with incomplete homework. I need to reproach and discipline the child. The child will say that he or she forgot to do his/her homework. Or forgot to ask his/her mother to help him/her with homework. After a whole school term of incomplete work I feel that I need to perhaps talk to the parents of the child. The child's parents are asked to supervise the child's homework and school work.

The child demands constant attention from me. The child is often disruptive in the class, in that he/she cannot sit still and cannot concentrate. I need to be fully prepared for all the tasks and for the behavioural situations that may take place in the classroom. I feel that it is stressful and difficult to teach such a child. Yet I understand that this child, as do all the children in my class, requires my attention, understanding, tolerance and patience, even if it is hard to do at times.

There are other teachers in the school who have had more experience teaching and, particularly teaching such children. I find that I can get tips and hints on how to assist and manage the behaviour of these children from other teachers. The teachers get together and are able to share their experiences and feelings of teaching and assisting children. These meetings only happen once in a while when we get time in our busy schedule. One of



the other teachers is considered an experienced teacher with working with children who demand so much from the teacher. She is able to give me some advice and information that adds to my understanding of the child.

One of the issues that arise from the meeting between teachers is that parents of children need to be more participative and involved in the children's learning. I realise that the other teachers also have difficulty with getting parents involved. I discover that the children who seem to be so challenging in class are the children that need their parents to be more involved in their learning.

The teachers discuss options of finding out how to get further specialists to inform all the teachers on how to deal with such children. The teachers talk about opportunities to get parents more involved, including asking education specialists from the Department of Education to help us.

Knowing that I can rely on the support of colleague's means that I can give my best, as a teacher, to all the children.

Yours truly,

A South African teacher of children who may have ADHD

## 6.5 CONCLUSION

In conclusion to this chapter, the findings have been presented as a comparison between two educators' experiences of learners who may have ADHD in their classrooms and lastly as a narrative from the themes that emerged from the textual data. The comparison of the educators' experiences allows for understanding of how "Sally" and "Maira" perceive and create meaning out of their experiences of learners who may have ADHD in their classroom. The narrative allows for the voices of all seventeen educators to be reflected as a narrative that tells of their experiences of learners who may have ADHD in their classrooms. It seems that the two educators have had different experiences regarding learners who may have ADHD in their classroom. It appears that both educators have experienced frustration and feel challenged teaching learner who may have ADHD, recognising that theory and practice of teaching is very different. The educators have had different experiences managing the class work and homework of learners who may have ADHD. Both Maira and Sally recognise that parental involvement is important for teaching and learning to take place. Lastly, both educators feel that information regarding learners who may have ADHD needs to be shared between colleagues. The following chapter, chapter 7, expands on the findings of the study.

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## Chapter 7: Conclusion to the Study

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### 7.1 OVERVIEW OF THE STUDY

The aim of this study was to explore educators' experiences of learners who may have ADHD in their classrooms. The literature available on ADHD is made up mostly of medical research (Brenton, 1994; Brocki & Bohlin, 2004; Brown 2000, Brown, 2006; Burnett *et al.*, 2001; Levy *et al.*, 2006; Miller *et al.*, 2006; Nadder *et al.*, 2002; Nadder *et al.*, 2001; Séguin *et al.*, 1999, Whitmore *et al.*, 1999). The literature on ADHD is discussed in chapter 2. The literature on ADHD assisted me in being able to define a research problem, together with previous discussions I had had with educators. As much of the literature available consists of medical and/or neurological studies one can assume that the medical model is often a lens, through which ADHD is understood and contrasted in literature that is strongly located within the training of medical doctors and other health professionals. The medical model proposes that a learner needs to be understood to 'suffer' from a disorder; that his/her misbehaviour is pathological. The misbehaviour that is construed as pathological could lead to further anti-social behaviour such as substance abuse and criminal offences. The medical model constructs the misbehaviour as being treated with pharmaceutical therapy.

Although there are many ways to view ADHD, a researcher or psychologist can easily lose sight of the fact that learners who may have ADHD are children. ADHD is rooted in a neurological disorder and has other complex co-morbidities. As a researcher I question how and why the symptoms are labelled as deficits. Learners who may have ADHD are viewed as being deficient, when there are certain aspects of their behaviour and attention that may be lacking, in no way does it render them deficient.

This study focused on the educators' experiences of learners who may have ADHD in their classrooms. However, learners who may have ADHD, are situated within a system of different levels of interaction in their social world. Learners who may have ADHD cannot only be understood in terms of their medical/neurological disorder. It seems that learners who may have ADHD in a classroom can be best understood within an ecological systemic view where the medical model is not disregarded, but included. The medical model adds to the understanding of how the neurological may contribute to possible causes and treatment options of the disorder. Educator experiences of learners who may have ADHD in their classrooms reflect that their knowledge of ADHD is not viewed from a medical model. Educator knowledge of learners who may have ADHD in their classrooms, therefore, can be

addressed at a level where they can meet the challenges in their classrooms. Learners who may have ADHD can be viewed within different systems and settings (refer to figure 10, below).

In this study the educators' experiences were framed within the ecological systemic view of learners who may have ADHD in the classroom. Their experiences, as reflected in the themes in chapter 5, reflect their knowledge, training and instructional practices, including their classroom management methods. Their experiences, as revealed in the themes, comparison and narrative in chapters 5 and 6, also reflect their knowledge of ADHD and the network of interactions that take place between the micro-, meso-, exo- and macro-systems.

A narrative research design was selected for this study, as its focus is to be able to describe personal stories and discuss person's experiences (Creswell, 2002). The educators' personal experience of learners who may have ADHD in his/her classroom then is the focus, in order to be able to understand, explore and discuss the 'educational problem'. The 'educational problem' as understood in this study is educator experiences of learners who may have ADHD in their classrooms. Therefore, the research question: **How do educators experience learners who may have ADHD in their classrooms?** and sub-questions were developed. The sub-questions are (1) How do educators experience teaching and learning the learner who may have ADHD?; (2) How do educators manage their classrooms with learners in their classrooms, who may have ADHD? and (3) How has the experience of educating learners who may have ADHD influenced or affected the educator? (In chapter 4 the narrative research design and research questions are clarified).

In this study, 17 educators from three primary schools in the Tshwane area were interviewed in-depth to have their experiences of learners who may have ADHD collected, analysed and interpreted and written into a narrative. In chapter 4 a comprehensive discussion on the research methodology is provided. Schools were asked to participate in the study, using purposive and convenience sampling. The schools were situated in different areas in Tshwane and therefore have different socio-economic and social settings. A description of the schools and the educators/participants are given in chapter 5. Informed consent was obtained from each educator for the interviews that were conducted which is explained in chapter 4.

The interviews were recorded and transcribed into textual data, which were then analysed using content analysis (as described fully in chapter 4). From the data, emerged five themes which were developed further into a narrative. The themes and the narrative, therefore, reflect the educators' experiences.

The themes that emerged are: (1) “They are not treated the same as other learners”, meaning that educators realise that they were not treating learners the same, giving learners who may have ADHD more individual attention than others; (2) “Keep them busy”; which was interpreted as educators using creative methods in managing the learners in their classrooms; (3) “It does challenge you, we’re not perfect” was interpreted as educator feeling that they are challenged with learners who may have ADHD in their classrooms; (4) “It needs sharing as teachers and help from a specialist” interpreted as educators feeling that they need to be able to share information between colleagues and needing support and assistance from education specialists and (5) “They don’t pull their part” which was seen as educators perception of parents lack of involvement (further elaboration on the themes is in chapter 5).

Two educators’ experiences from vastly different contexts were also compared and contrasted. From the comparison of these educators it seems that although there are different experiences in certain aspects of teaching and learning learners who may ADHD in their classrooms, they demonstrated similar need, namely those of information shared between colleagues, as well as assistance from parents, the community and the education specialists (refer to chapter 6 for more details). (The educators/participants confidentiality was kept through the use of assigning a number/letter or a pseudonym, as described in chapters 5 and 6).

This chapter provides the final conclusion to this study and includes the following sections: a summary of the findings of study in relation to the research questions; reflections on the study in relation to the methodology and the findings in relation to the conceptual framework; limitations of the study; strengths of the study; trustworthiness of the data; conclusions and recommendations combined with the implications for practice, policy and research.

## **7.2 A SUMMARY OF THE RESEARCH FINDINGS**

The aim of this study was to determine what and how educators make sense of learners who may have ADHD in their classroom. Understanding how the educators make sense of their experiences of learners who may have ADHD in their classrooms was explored through the themes that emerged, the comparison of Sally’s and Moira’s experiences and the narrative. The research question and sub-questions were designed to explore how educators experience learners who may have ADHD in their classrooms.

The Table 3 is a matrix, where the themes are a response to the sub-questions. Thus, the first question posed is: How do educators manage their classrooms with learners who may

have ADHD in their classrooms? Three themes that emerged seem to answer this question, namely Theme 2: “Keep them busy”, Theme 1: “They are not treated the same as other learners” and Theme 5: “They don’t pull their part.” The following section, 7.3.1-7.3.3 explains the themes and how they answer the research questions as illustrated by table 3.

**Table 3: Themes that address the sub-questions**

Sub-questions	How do educators manage their classrooms with learners who may have ADHD in their classrooms?	How do educators experience teaching and learning of the learner who may have ADHD?	How does the experience of educating learners who may have ADHD influence them as educators?
Theme	<u>Theme 2</u> : “Keep them busy”	<u>Theme 3</u> : “It does challenge you we’re not perfect.”	<u>Theme 4</u> : “It needs sharing as teachers and help from a specialist.”
	<u>Theme 1</u> : “They are not treated the same as other learners.”	<u>Theme 4</u> : “It needs sharing as teachers and help from a specialist.”	
	<u>Theme 5</u> : “They don’t pull their part.”	<u>Theme 5</u> : “They don’t pull their part.”	<u>Theme 5</u> : “They don’t pull their part.”

**7.2.1 Sub-question 1: How do educators manage their classrooms with learners who may have ADHD in their classrooms?**

In answering the research question “How do educators manage their classrooms with learners who may have ADHD in their classrooms?” Firstly, it seems that educators keep learners who may have ADHD busy with tasks (academic and non-academic). Secondly they seem to give more individual attention to the learner who may have ADHD in their classroom. Lastly, the educators feel that parents do not assist educators. An explanation of how the themes answer the research sub-question follows.

The first theme is “*keep them busy*”. A common strategy appeared to be to use extra work, which is either academic activities or non-academic tasks around the classroom, to keep the learner busy so as not to distract others in the classroom. The classroom management method of “*keep(ing) them busy*” appears to be a response to the educator’s experience in the classroom as well as the educator knowledge.

*They will work up to a point and then they don't want to work any more so you have to keep them busy with something that they like to keep them away from the other learners or making as noise or being disruptive. (Participant 1b, speaker turner unit: 129).*

McFarland *et al.* (1994) believes that the educator is responsible for making the learning environment accommodating for all learners. It seems that educators accommodate the learning environment by “keeping them busy.”

The second theme that answers the question: How do educators manage their classrooms with learners who may have ADHD in their classrooms? is “*They are not treated the same as other learners*”. Educators are aware that learners who may have ADHD are being treated differently to their peers. The educators feel guilty as they know that learners who may have ADHD receive more attention than their peers.

*I try to give them individual attention, but sometimes I feel it's not very fair for those who don't have it. (Participant 2b, speaker turner unit: 1522-1524).*

Therefore, educators also seem to give more attention to learners who may have ADHD in trying to manage their classrooms. The extra attention that they may give learners who may have ADHD influences the teaching and learning that takes place in the classroom, as discussed in chapter 5. Therefore, the instructional practices, such as grouping discussed in chapter 6, that the educator implements are affected (as depicted in figure 10), as other learners may receive less individual attention.

“*They don't pull their part*” is the third theme. This theme seems to reflect how educators feel about parents of learners who may have ADHD.

*Parents today don't teach routine and structure. They run circles around the children so they cannot plan and organise for themselves. And because the learner has a problem at home, they just take, they don't allow the learner to do anything, in desperation they'll do everything for the learner instead of structuring and teaching that learner how to do I (sic), they just give it up and then the learners are spoilt. (Participant 1a, speaker turner unit: 37).*

Thus, it seems that educator's believe that if parents were able “*to pull their part*” by providing routine and structure at home, then the learner who may have ADHD would not be so “spoilt” at school. Parents do not seem to assist learners with their homework; in getting their child assessed and diagnosed and not providing routine and structure at home. This is discussed further in chapter 5.

Looking at the conceptual framework, in figure 10, the question, “How do educators manage their classrooms with learners who may have ADHD in their classrooms?” is illustrated. It seems that educators manage their classrooms by the classroom management methods (keeping learners who may have ADHD busy with academic or non-academic activities), instructional practices (giving learners who may have ADHD individual attention) and by involved parents (situated in the exo-system).



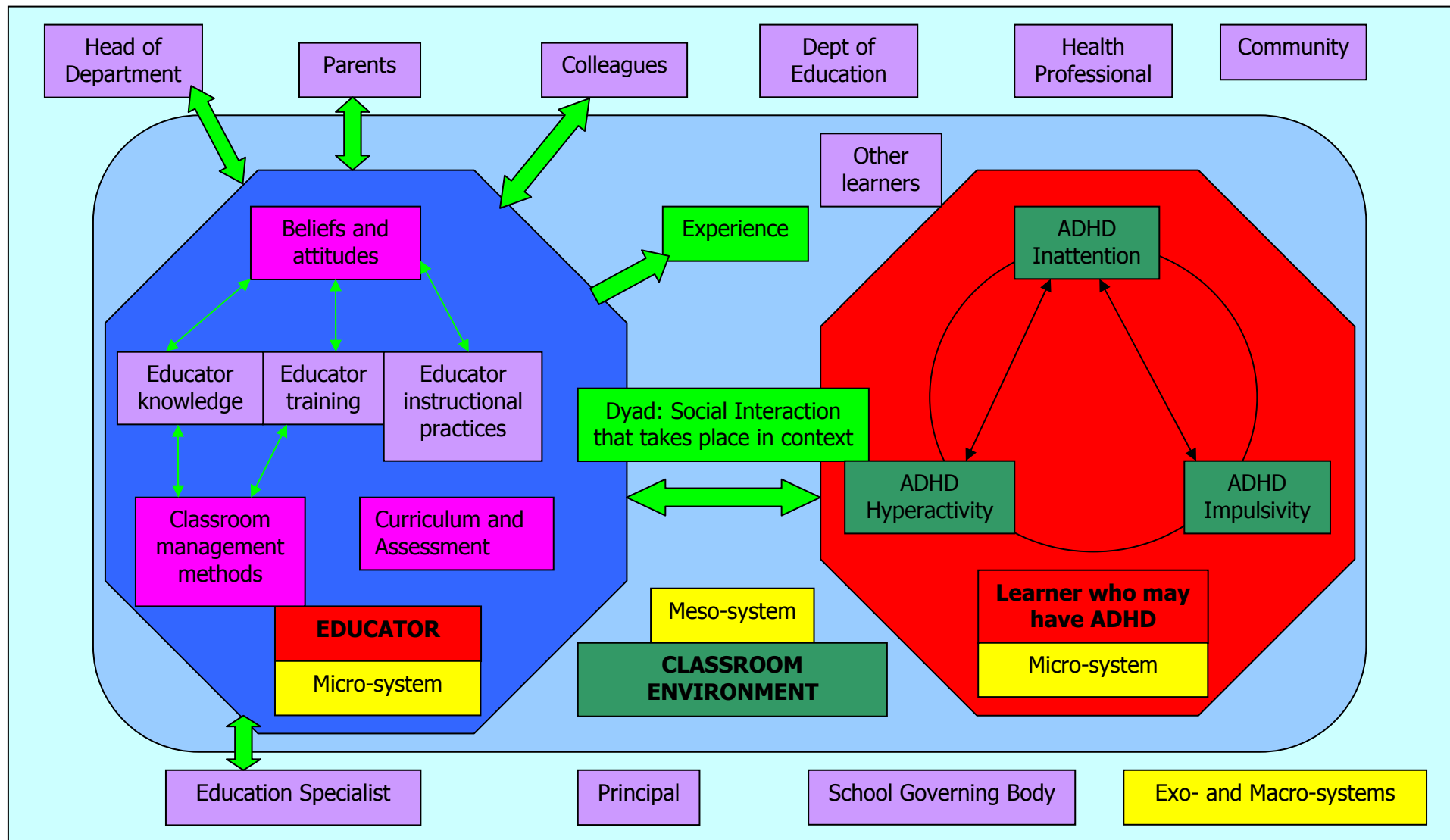


Figure 10: An ecological systemic view of learners who may have ADHD in the classroom

7.2.2 **Sub-question 2: How do educators experience teaching and learning of the learner who may have ADHD?**

In answering the research question “How do educators experience teaching and learning of the learner who may have ADHD?” Firstly, it seems that educators are challenged by learners who may have ADHD. Secondly the educators feel that educators should be sharing experiences and information that relate to ADHD and that they are assisted by an education specialist. Lastly, the educators feel that parents do not assist educators. An explanation of how the themes answer the research sub-question follows here below.

The first theme that appears to answer the second sub-question: How do educators experience teaching and learning of the learner who may have ADHD? is “*It does challenge you we’re not perfect*”. In this theme educators stated that they feel challenged by the learners who may have ADHD in their classroom. It seems that educators appear to be challenged on their classroom management skills and their knowledge of ADHD provided by the training that they have received. (This is discussed further in chapter 5).

*Sho (sic), for the first time it was difficult – I, I felt like I, I (sic) don’t know what I’m doing in this class. I, I was so, so nervous (sic)... (Participant 2d, speaker turner unit: 1528).*

The disruptions that take place in the classroom could impact on the learning and teaching taking place (Seidman, 2005). Learners who may have ADHD are viewed by educators as being challenging (Dietz & Montague, 2006; Holz & Lessing, 2002; Lucangeli & Cabrele, 2006; Volk *et al.*, 2005). If an educator is challenged in terms of their knowledge, instructional practices and training it may challenge his/her beliefs and attitudes towards learners who may have ADHD.

The second theme that may answer the second sub-questions is: “*It needs sharing as teachers and help from a specialist*”. It seems that educators feel that they need assistance for managing learners who may have ADHD. Thus, the experience that they have had teaching learners who may have had ADHD elicited a request from the educator for assistance either from within the school (exo-system) or outside of the school (macro-system), from a specialist.

The last theme that responds to the second sub-question is “*they don’t pull their part*”. It seems that educators feel that parents could be more involved with the learner who may have ADHD.

*Most definitely. I think if it is not for the parents’ involvement there is not much you can do as a teacher. They need help with their homework, with remembering to bring things to school. (Participant 1d, speaker turner unit: 379).*

Parents can contribute to the teaching and learning of a learner who may have ADHD in different ways. If a parent does not recognise that the learner may have ADHD, the learner may not receive academic or emotional support needed (Sanders, 2002; Van Beijsterveldt *et al.*, 2005). The most common example is that parents can assist learners with homework. Parents, therefore, are responsible for the continuity of the teaching and learning at home (Bailey, 2000). However, as stated in chapter 3 parents' perceptions and interpretations of misbehaviour could determine how they seek out treatment for their learners (Bussing *et al.*, 2003).

It appears that educators experience teaching and learning as being challenging. Within the educator, the micro-system, as depicted in Figure 10, the beliefs and attitudes, educator knowledge, educator training and educator instructional could influence how he/she experiences "challenging" learners who may have ADHD.

### 7.2.3 *Sub-question 3: How does the experience of educating learners who may have ADHD influence them as educators?*

In answering the research question "How does the experience of educating learners who may have ADHD influence them as educators?" Firstly, it seems that educators feel that educators should be sharing experiences and information that relate to ADHD and that they are assisted by an education specialist and lastly, the educators feel that parents do not assist educators. An explanation of how the themes answer the research sub-question is given.

There are two themes that may be considered a reply to the third sub-question. The first theme is *"It needs sharing as teachers and help from a specialist"*.

*And I think it needs sharing as teachers (sic)... Mmm, you must share with others in order to broaden your knowledge. (Participant 2c, speaker turner unit: 1304).*

Educators feel that their own knowledge and training is not sufficient in being able to manage learners who may have ADHD. If educators feel that they need to share experiences and knowledge of ADHD with each other, then learners who may have ADHD cannot stand in isolation. Learners who may have ADHD cannot be understood in isolation if educators feel that parents are "not pulling their part". Educators can feel unprepared to deal with ADHD and disruptive behaviour (Mitchem, 2005). Learners who may have ADHD cannot be understood in isolation if the educators request assistance from specialists in the field. Therefore, it seems that learners who may have ADHD are understood and probably best assisted within an ecological system. The educator who teaches learners who may have ADHD is understood and probably best understood within a context of inter-connecting systems.

The second theme that answers the third sub-question is “*they don’t pull their part*”. It seems that if parents were able to be involved with their child who may have ADHD, educators would be less affected by their classroom experiences (Bailey 2000; Bussing *et al.*, 2003).

Educators’ experiences of learners who may have ADHD could also be affected by other members of the school (exo-system) and outside of the school (macro-system). That is if other members of the school were able “*to pull their part*” and “*sharing as teachers*”, educators would be able to receive information and support within the school structure. For example, if one educator received training on ADHD, he/she may be able to share that information with educators in the school. Also, the school may decide to form partnerships with organisations like ADHASA (Attention Deficit and Hyperactivity Support Group of Southern Africa). However, this would mean that one educator needs to take the initiative to attend training courses and workshops. Outside of the school structure, the Department of Education, could contribute by providing training and support through education specialists.

Educators feel that they need to share information with their colleagues and the support of an education specialist. Colleagues, principal, head of department and school governing body could assist educators in contributing their own knowledge and training. Parents, the Department of Education, education specialist and health care professional could also support the educator, as discussed in chapter 3. Lastly, educators feel that the cooperation of the parents would assist the teaching and learning. Referring to the conceptual framework, in Figure 10, it appears that different persons, within the ecological model, fulfil a role in contributing to the teaching and learning of learners.

In answering the main research question “How do educators experience learners who may have ADHD in their classroom” it seems that educators have devised creative methods to manage learners who may have ADHD in their classrooms (*Theme 2*: “Keep them busy”). Literature (McFarland *et al.*, 1994) recommends that learners who may have ADHD be given less class work or homework. Giving a learner who may have ADHD less work will allow him/her to feel that the task is achievable. (This is explained in chapter 6). Glass (2000) recommends that non-traditional methods of teaching and learning be considered including allowing a learner who may have ADHD be able to work at his/her won pace.

Educators do feel that they treat learners differently (*Theme 1*: “They are not treated the same as other learners.”). Literature states that learners who may have ADHD are treated differently by their educators (Calhoun *et al.*, 1997; Lane *et al.*, 2003) and are treated differently to their peers (Wagner *et al.*, 2006). Calhoun *et al.* (1997) found that that an educator’s tolerance level of ADHD behaviour will affect how a learner, who is perceived to

have ADHD, will be treated in the classroom. Lane *et al.*, (2003) states that learners who behave in accordance with an educator's social and behaviour expectations are more likely to get a positive response from the educator and from his/her peers.

One of the consequences seems to be that educators feel challenged (*Theme 3*: "It does challenge you we're not perfect.") and feel uncomfortable knowing that some learners get more individual attention. Educators view learners who may have ADHD as being challenging. Behavioural disorders, that are viewed as being challenging, like Oppositional Defiant Disorder and Conduct Disorder often co-morbid with ADHD (Dietz & Montague, 2006; Lucangeli & Cabrele, 2006; Volk *et al.*, 2005). Co-morbidities such as behavioural and learning disorders are explained in chapter 2.

Educators feel that they are not being supported in managing learners who may have ADHD (*Theme 5*: "They don't pull their part."). Literature emphasise the support and role of parents in contributing to the academic success of the learner who may have ADHD (Bailey, 2000; Van Beijsterveldt *et al.*, 2005; Sanders, 2002). The role of parents is discussed in chapter 2. Educators feel that they do not have support or assistance from their colleagues, school, parents, and the community and education specialist (*Theme 4*: "It needs sharing as teachers and help from a specialist."). It seems that the findings from this study seem to be similar to what has been found in literature. Literature (Capper *et al.*, 2000; Polou & Norwich, 2002; Webb & Myrick, 2003) recommend educators attend workshops or access resources that are aimed at addressing ADHD (or Emotional and Behavioural Disorders). Sharing information between educators and education specialists is important that is true regardless of ADHD (Mitchem, 2005; Roffey 2004). The educator role, educator knowledge of ADHD, educator self-perception, classroom interventions and behaviour modifications and classroom management is discussed in chapter 3. The following section includes a reflection on aspects of the study, like the findings and methodology.

## 7.3 REFLECTION ON ASPECTS OF THE STUDY

### 7.3.1 Reflections on the Findings in lieu of the Conceptual Framework

The conceptual framework, which is built on the previous literature, is presented in chapter 3 but it is also presented here as figure 10. An understanding of the learner with ADHD within his/her social and learning world may highlight the fact that the learner can function with the 'deficits' at school. In understanding the learner in his/her social and learning world may explain the 'deficit' as being unique or individual to each learner. The context that the educator finds himself/herself in may determine how he/she manages learners who may have ADHD in his/her classroom. The unique context of the classroom, school and

community allows the educator to implement classroom management methods that are applicable and fitting for the context. The ‘fit’ and applicability of classroom management methods (and interventions) can only be effective with the necessary knowledge of ADHD. Therefore, an educator can apply effective classroom management methods and interventions if he/she has knowledge of ADHD.

However, as seen in the findings of this study (in chapter 5 and 6 and summarised in chapter 7) educators in the South African context have limited knowledge of ADHD and have requested that they receive assistance in this regard. [*Okay. I just wanted to ask if we can get a help from the specialist at least once a month, because we are not sure we are doing the correct thing (sic)... (Participant 2c, speaker turner unit: 1320)*].

In terms of the conceptual framework, the different micro-; meso- exo- and macro-systems influence the educator. Within the micro-system the educators inadequate or lack of knowledge could be influenced by inadequate educator training. [*So I have, you have had to (sic), I have had to learn how adapt to actually teaching children, because the theory of it is one thing, but the actual practical teaching is a different thing. (Sally/Participant 1d, speaker turner unit: 430)*]. Inadequate educator knowledge could also influence educator instructional practices. This is reflected in educators’ classroom management methods, like keeping learners who may have ADHD busy and also by treating learners differently, giving some learners more individual attention than others. Educator’s classroom management and instructional practices could be influenced by the educator’s beliefs and attitudes of himself/herself and also of the learners who may have ADHD. [*Yes, it is, it’s difficult because you’ll be trying, and then sometimes you’ll feel like you will just kick (sic), but you can’t you know (laughter). He is just harassing you, but it’s not good, it just make me sometimes just get fed up (sic), just say “sit down”, that’s the only way that you can concentrate. (Moira/Participant 2f, speaker turner unit: 1917-1919)*].

ADHD is a complex disorder, as described in chapter 2, and thus specific knowledge is needed to be able to assist learners who may have ADHD in their classrooms. As mentioned above in section 7.1 and also discussed in chapter 2, in order for the educator to understand the complexities of ADHD the educator would need specific training and knowledge. As depicted in figure 10, the learner who may have ADHD could present behaviour that stems from inattention, impulsivity and hyperactivity. In order for the educator to adjust or accommodate his/her instructional practices or classroom management methods he/she may need to understand the prevalence, neuro-psychological causes, treatment and possible interventions of ADHD. Thus, as stated in 7.1 the medical model should not be excluded because of pathologising learners who may have a ‘disorder’. Although certain aspects of

their behaviour and attention may be lacking, in no way does it render learners who may have ADHD as being deficient. Therefore, medical model and alternative approaches to ADHD can be incorporated into an approach such as the ecological model. An ecological model can take into account different theoretical explanations of ADHD, considering the contexts that learners' who may have ADHD finds himself/herself.

Within the meso-system which is the setting of the classroom the interactions between the educator and learner who may have ADHD occur. The educator comes into direct contact with the learner who may have ADHD. Within the context of the classroom, the learner who may have ADHD and the complexities that may co-morbid with it is presented to the educator. Lack of knowledge on ADHD could contribute to the educator feeling that he/she needs support and assistance from other colleagues and from an education specialist.

Within the meso-system, the educator encounters the parent/s of the learner who may have ADHD. The parents contribute to the teaching and learning that takes place in the classroom. This is reflected in the parents assisting the learner who may have ADHD with his/her homework, seeking out remedial education where needed and seeking out health care professionals that can provide extra treatment and care where needed. However, in order for the educator to be successful in the teaching and learning of the learner who may have ADHD, the educator needs to be able to communicate with the parent/s. The educator cannot teach learners who may have ADHD in isolation, without knowing and gaining the support of the learner's parents. Thus, parents need to be able to *"pull their part"*.

The meso- and macro- system could provide the educator with specialised knowledge and training regarding ADHD. Thus, the support that the educators receive from the exo- and macro-systems (for example parents and the Department of Education) may influence his/her knowledge of learners who may have ADHD. Also, the educator teaches within a school, where he/she may receive support and assistance from colleagues, the head of department, and principal.

The community, which could include the local district office of the Department of Education, education specialist and the health care professional, could contribute to the support of the educator. The Department of Education and the health care professional could contribute to the care and treatment of the learner who may have ADHD. The relationship between the health care system and the public schools need to be improved in order for learners who may have ADHD to receive the proper care and treatment. The meso- and exo- system within the ecological of the school and community influence the educator's experiences within the

classroom and therefore also impacts on the learner who may have ADHD. (Refer to figure 10).

Although, the interconnectedness between the educator and the meso- and macro-system do exist, it needs to be strengthened. By this I mean that the communication and the support that exists between the educator and the Department of Education, education specialist, the health care professional and community need to be strengthened in order for the educator to feel that he/she is being supported. As stated above, the macro-system, that is the Department of Education, education specialist, the health care professional could provide the educator with specialised knowledge and training on ADHD that is not currently being adequately provided.

### 7.3.2 *Reflection on Methodology*

The research design and research methods that were implemented in this study were presented and discussed in chapter 4. Narrative research design was chosen as it allowed for participants/educators experiences to be reflected in a narrative. Narrative research design allowed for the experiences of the educators to be interpreted into a narrative. This narrative is presented in chapter 6. The narrative provides a format for readers such as principals, parents, ADHD support groups, and teacher training institutions to understand what educators experience in the classroom. The narratives of the educators may, therefore, inform relevant persons.

Qualitative research, and indeed any research, should be clear and transparent to the participants. Initial contact (that is requesting to do the study via facsimile) with the educators was followed up with a meeting with the Head of Department and/or educators explaining the study in person; providing them with the opportunity to ask questions. A possible limitation to the study is that the **interviews were conducted in English**. The research was made as clear as possible to the educators', however, an interpreter could have assisted the process. Most of the educators, 10 out of the 17, that were interviewed speak an African language as their first language and therefore, using English in the interviews could have been a limitation to the study. However, if the interviews could have been conducted in the participants'/educators' first language, the study could have yielded richer data. An interpreter could have communicated all correspondence with the educator/participants in their mother tongue, which could have improved their understanding of what the study was all about.



An interpreter could have, also, assisted with the interviews, providing more clarity with the questions. The answers could have been richer if the educators were given the opportunity to answer in his/her mother tongue. It was important for me to be able to reflect their experiences as truthfully as possible. This was difficult to achieve during the interview process due to the language differences. Thus, the fact that the interviews were conducted in English could have been a limitation to this study.

The **member checking process** with the educators allowed me as researcher to explain the transcripts and themes. I had the opportunity to explain the transcripts and themes individually to 11 of the 17 educators interviewed. This process meant that the transcripts and themes reflected the experiences of educators in a truthful manner, as educators were given the opportunity to change their answers.

In this study there were a number of limitations. A major limitation could be the use of purposive or convenience **sampling**. The narratives of participants could have been different if schools or participants were randomly chosen. The schools that did participate were from different areas that contributed to the varied responses and experiences. However, the schools and contexts could have varied even greater if a random sampling method was used.

One of the limitations that transpired is that, although field notes accompanied the interviews as data collection methods, **other data collection methods could have been included**. For example, classroom observation over a period of time could have added richer qualitative data to the interview data.

One of the strengths of the study could include the fact that **17 educators were interviewed**. The number of interviews substantiates the findings. Thus, different educator experiences were taken account and new insights were gained through the number of interviews that were conducted. Data saturation was not experienced, although there were also more educators (7 educators) from one school. However, it is possible that if more educators were interviewed that data saturation could have been experienced during the analysis and interpretation of the data. Also **a series of interviews** with each of the participants/educators could have yielded richer data. A series of interviews were not conducted with the educators as the interviews were time consuming and the interviews were conducted after school, when educators were either involved with extra-murals or concerned with getting home. (Also permission granted from the schools only allowed for one interview.)

Qualitative data **cannot be generalised** to different situations; therefore one cannot state that all educators feel that learners who may have ADHD are not treated the same as other learners. However, one can assume that similar findings may be found in other schools in similar settings (refer to section 7.5.2). The different contexts of each educator meant that each educator's experience was different. Further research in the rural areas of South Africa may yield interesting results. This is discussed further under the section of recommendations, 7.7.

One limitation to the study that can be stated is that the **learners were not formally diagnosed**. Although there were learners from two schools that had been formally diagnosed, for this study assessments were not conducted. Thus, inferences were drawn from the experiences educators had with learners whom they assumed had ADHD due to their behaviour in the classroom. Therefore, the findings in this study relied heavily on the educator's informal observation of learner behaviour in the classroom.

#### 7.4 STRENGTHS OF THE STUDY

This study's strengths are discussed in this section. One of the strengths, of this study, includes the fact that **findings in this study have been presented in three different formats**, namely: thematic, comparative and narrative. The different formats allow for the educators' experiences to be expressed and analysed in different ways. The textual data needed to be interpreted in different ways. The coding of the data assisted in the interpretation of the data. However, analysis and interpretation was needed on certain extracts to provide a comparison between educators' experiences. Thus, the *different formats* allow for the experiences to be presented from different perspectives. It also allows for the researcher to make different interpretations, as the textual data is viewed differently.

Although the interviews were guided by the interview schedule (refer to Appendix D) the **interviews were in-depth**. The questions posed to the educators were explained so that the educators could understand what was asked. The interviews were guided by the interview schedule, therefore answers were probed for clarification and understanding. Thus, the interviews were in-depth, in exploring the questions that were put to the participants/educators. The longest interview with an educator was one hour long. The educators were encouraged to express themselves fully.

The **complications of everyday teaching and learning were expressed** by the educators in the interviews. It was not always easy to arrange the interviews and to follow up with member checking. The educators expressed that they were very busy with extra-murals at

about the time that the interviews were conducted. When the member checking was arranged, educators were involved in strikes. One school in particular proved to be difficult, as the educators were not always available for interviews or feedback. This could reflect that educators are busy with teaching, learning and other school activities.

A total number of 17 educators were interviewed. The number of **interviews from different contexts** allowed for rich data to emerge. Thus, different experiences from different contexts (which include different experiences, different training and different classroom management skills) emerged from the interviews. Therefore the number of interviews from different contexts can be considered a strong point of the study.

## 7.5 TRUSTWORTHINESS OF THE DATA

Certain checks were put in place to improve the quality and trustworthiness of the data (Chenail, 1995; Creswell, 2003; Krefting, 1991; Marshall & Rossman, 1999; Moen, 2006). The following section is a discussion regarding the trustworthiness of the data.

### 7.5.1 *Credibility*

#### 7.5.1.1 *Reflexivity*

Throughout the thesis I have recounted the procedures taken in the study. Thus, the thesis reflects openly what occurred in the field with the interviews and with the member checking and with the coding and interpretation of the interview data. Thus, the thesis recounts a 'paper trail' of what steps have been taken throughout the research process. Reflection of the thesis has been included in this chapter under the section, 7.4 overview and reflection of the study.

#### 7.5.1.2 *Member Checking*

The participants/educators were given the opportunity to check transcripts and the themes as described in chapter 5. Each participant/educator was given a copy of his/her own particular interview transcript with a summary of the themes (refer to Appendices I, J and K). Any comments or changes could have been made in writing on the comment and feedback form (refer to Appendices I, J and K). The one-on-one explanation of the themes given to the educators seemed to assist the educators in understanding the purpose of the themes and the study. Of the 17 educators interviewed, 11 educators checked and were happy with the themes and, thus, did not make any changes to their transcripts or themes.

### 7.5.1.3 *Peer Examination*

The transcripts and themes were also given to a registered psychologist and experienced researcher. The peer reviewer is African and could review the transcripts and themes from an African cultural perspective more especially for those educators who were teaching in an African cultural setting. Some of the issues that transpired from the peer reviewer include:

According to the peer reviewer who read the transcripts it appeared as if the educators did not understand English well, therefore they appeared to lack understanding of the questions posed to them. This came across in the interview and therefore sometimes questions were repeated and explained. The answers to questions, in turn, were also probed for clarity. The peer reviewer also stated that the educators appeared to lack comprehension of what ADHD is, and therefore lacked knowledge regarding teaching methods and ability to manage learners. Some educators were open about their lack of knowledge regarding ADHD. This is also reflected in some of the quotes used in discussion of themes and in the comparison of educators, which is discussed further in chapters 5 and 6. The peer reviewer commented that the educators expressed a lack of confidence in the subject matter. The lack of confidence in being able to teach learners who may have ADHD is reflected in the findings. This is discussed further in the conclusions, section 7.6 here below.

### 7.5.2 *Transferability*

Transferability is the assumption that data that has been ‘interpreted’ can be useful in other situations (Krefting, 1991; Marshall & Rossman, 1999; Moen, 2006). Although it is unlikely that the same results will be replicated, the findings of this study may be useful in providing assistance and support to the educators and the learners who may have ADHD. The findings may also inform specialists as to what kind of assistance the educators from schools from the Tshwane area require, that are easily applicable in the classroom.

### 7.5.3 *Dependability*

Atkinson *et al.* (1991) state that the way the researcher presented the process and results, that is keeping to an air of openness contributes to the trustworthiness of the data. This thesis reflects the steps taken in the research process in an open manner. This is reflected in the way that each step taken has been recorded in this thesis.

#### 7.5.4 *Confirmability*

The supervisors acted as auditors in this thesis, checking through the research process. Although my supervisors did not go through the transcriptions to the interviews, the peer reviewer went through the transcriptions thoroughly. The research findings, themes and narratives were confirmed and verified.

#### 7.6 CONCLUSIONS AND RECOMMENDATIONS

The following section discusses the conclusions that have been deduced from the findings. The conclusions will also be discussed with regards to the implications for practice, policy and further research.

1. Educators, from various different contextual backgrounds, do encounter a number of behavioural disorders including ADHD in their classroom, but lack formal knowledge of what it is, including treatments and interventions.

They also appear to have little knowledge of the importance of the role they could play in being able to correctly identify and assist learners who may have ADHD. In most cases, educators seem to have no knowledge of how and where to refer a learner to appropriate health care professionals. Lack of educator knowledge is reflected in the discussion of theme three *“It does challenge you - we’re not perfect”*. Educators seem to be challenged by learners who may have ADHD in their classrooms. It seems that educators attempt to address teaching and learning in different ways, as discussed in chapter 6, under the section 6.2.4. However, formal knowledge of how to intervene and cooperation with a health care professional may empower the educator to communicate and cooperate with the parents of the learner and the health care professional. An educator prepared with formal knowledge could feel more confident in approaching parents and the community for involvement in learner and school activities. A confident educator may be able to refer a learner who may have ADHD to the correct health care professional and liaise with the relevant persons that could provide better care to the learner. If educators felt they were more equipped to make use of the referral system, it could improve the relationship between the public health care and public schools (this is explained in section 7.7.3).

In terms of policy, the Department of Education could provide educators with ongoing professional development in terms of the latest developments of teaching and learning learners who have ADHD and/or other behavioural disorders. The Department of Education has provided guidelines for educators as discussed in chapter 3 on how to provide

assistance to learners with ADHD. However, hands on assistance in their classrooms could provide the educators with more knowledge on how to manage their classrooms. The conceptual framework in Figure 10 highlights the connections between the Department of Education and the educator. Education specialists at the Department of Education may provide assistance and support to educators by offering training on ADHD, emotional and behavioural disorders and learning disabilities (which are common co-morbidities). As the school and the Department of Education system could address the issues of learners with ADHD, they also could prepare to meet the needs of learners and educators (Gantos, 2001).

Cooperation and communication between the health care system and public schools could be improved through the introduction of policy that promulgates the link between educators and health care professionals. The link between health care professionals and educators is explained in chapters 2 and 3. The links between the educator and the health care professional is also illustrated in figure 10, the conceptual framework.

Other areas of research that may contribute to understanding ADHD may include the relationship between the public health care system and the public schools. For example, if an educator from a township school would like a learner who may have ADHD to be assessed by a psychologist at a public hospital like Khalafong; what kind of relationship exists between the hospital and the school? How does the educator experience the referral system available at public hospitals? What treatment options are available for learners who may have ADHD from a township school? And/or what role does the educator from a township school play in the treatment and assistance of the learner who may have ADHD? Further research needs to be done on this topic to understand how education and health care interface.

2. Some educators have devised creative methods to manage learners who may have ADHD in their classrooms.

The creative methods to manage learners who may have ADHD in their classrooms is discussed in chapter 5, section 5.4.2, with special reference to theme 2, “keep them busy”. In chapter 6, educators explain that the management of quantity of class work and grouping is a method that is also employed to manage learners. However, these methods may not always be the best method of assisting learners who may have ADHD. The ‘traditional’ method of grouping learners, as discussed in chapter 6 is not always a satisfactory or effective method of managing learners who may have ADHD.

With regards to practice these creative methods could be discussed as part of a discussion between professionals. If educators were given the opportunity to discuss their ideas and

classroom management methods within a forum, consisting of other educators, education specialists and health care professionals, it could provide interesting insights into adapting classroom management methods for learners who may have ADHD. It seems that educators understand that their own classroom management methods need to be shared with their colleagues and possibly sharing with other persons, this is clarified in chapter 5, section 5.4.4.3.

The methods that are employed by the educators to manage learners who may have ADHD in their classrooms could impact the instructional practices of the educator. This is demonstrated in figure 10. Therefore, the 'creative' methods that are used could impact the teaching and learning that takes place in the classroom. The Department of Education could take cognisance of this in assisting learners with practical and effective classroom management tools and skills that include and benefit all learners.

This could lead to identifying, through the use of research, practical and effective management of South African classrooms for learners who may have ADHD. Research in the field of classroom management and instructional practices is suggested to elucidate best practices in these fields that could include all learners.

3. Educators realise that they treat learners differently; as a consequence they feel confronted with stressful situations. (*"Like I said it was... it stressful (sic) and it sometimes disrupts the whole class, so it's unfair on the other learners that are diligently willing to learn. Not all learners are the same."* Participant 3g, speaker turner unit: 3457) and others feel guilty (*"Yes, sometimes you feel guilty, and then at the same time if you feel this (sic), you can let this hyperactive one do whatever they want, then you lose control... (sic)"* Participant 3b, speaker turner unit: 2638). The statement that educators realise that they feel that they treat learners differently is discussed in depth in chapter 5, under section 5.4.1.1.

If learners are then treated differently in a classroom this could influence the teaching and learning that takes place. It seems, therefore, that some learners receive more individual attention than others and thus, some learners could be overlooked in a classroom size of thirty-five plus. The implications, thereof, would need to be explored further in researching the effect of the learners who may have ADHD being treated differently. Again the implications seem that practical and effective classroom management tools and skills need to be imparted to educators so that they feel that they are empowered to include all learners in their classrooms.

One area of cooperation or communication could be in encouraging the learner to complete tasks and to form friendships/relationships. Parent involvement and support can contribute to the learner establishing positive peer relationships. Parental support can also contribute to the learner being able to progress in his/her academic performance, in that parents can assist the learner with homework and reinforce any learning that has taken place in the classroom.

- 4 Some educators can feel powerless and lacking in skills and support in cases where a learner with ADHD is disruptive in class the teaching and learning is disrupted for the whole class.

One of the themes that emerged from the data is *It does challenge you - we're not perfect*". The theme is discussed in chapter 5, under section 5.4.3.3. The theme reinforces the fact that educators do not have the skills to be able to support. *"It's very tiring. It drains me every day and some days I think I can't do this."* (Participant 1d, speaker turner unit: 406).

Educators who encounter challenging or difficult behaviour from learners are encouraged to meet to discuss and share knowledge regarding learners (Mitchem, 2005; Roffey 2004). Sharing information between educators is an informal method of gaining knowledge. Szabo (2006) suggests educators to write narratives as a means for educators to share their experiences in the classroom with other educators and training teachers. Polou *et al.* (2002) goes onto suggest educators prepare their opinion or feelings of learners with EBD (Emotional and Behavioural Disorders) when having to share experiences with others. Meetings between educators and even workshops that are aimed at addressing ADHD (or Emotional and Behavioural Disorders) could curb negative perceptions of learners with ADHD. Literature (Gordon, 1998) confirms that there appears to be a lack of integration between parents, health professionals and schools. Thus, educators could share information with the school, parents and members of the meso- and macro-system as depicted in figure 10. Sharing information between the different systems could allow for better understanding of ADHD, and thus, possibly implementing interventions at classroom level.

Schools and educators need easier access to information, expertise and the support and skill that will assist them in supporting learners who may have ADHD. The school could establish partnerships with higher education and special education resource centres like ADHASA, (Attention Deficit and Hyperactivity Support Group of Southern Africa) to improve learning and the learning environment for all learners (Baker, 2005). Special education resource centres could provide the school with workshops aimed at parents that will also aim at getting the parents more involved in the teaching and learning of learners. The Department of



Education could play a role in providing easier access to this information and expertise. This could be done through the use of not only relying on School Based Support Teams and School Governing Bodies as discussed in chapter 3. The access to expertise outside of the school and the wider community with information on ADHD needs to be made readily available to educators. This could mean that support groups such as ADHASA (Attention Deficit and Hyperactivity Support Group of Southern Africa) play a greater role.

- 5 Some educators feel that they are not being supported in managing learners who may have ADHD.

Educators feel that they do not have support or assistance from their colleagues, school, parents, and the community and education authorities and specialists. The fourth theme that emerged from the data is “*It needs sharing as teachers and help from a specialist*”. Chapter 4, section 5.4.4.3 discusses this in more detail with regards to support or lack of support that they receive from their colleagues and school. The following reference also illustrates the feeling of powerlessness that educators may feel. (*Okay. I just wanted to ask if we can get a help from the specialist at least once a month, because we are not sure we are doing the correct thing (sic)... Participant 2c, speaker turner unit: 1320*).

Educators thus, feel that they need more support in being able to assist learners who may have ADHD. Educators state that they need assistance from education specialists. Educators state that they need the support of persons that could assist them being able to teach all learners, especially learners who may have ADHD. The Department of Education could provide more hand on support in the form of education specialists being on site, providing assistance in the educators’ classrooms. The Department of Education could provide easier access and links to the health care system and more especially to health care professionals that specialise in ADHD. The Department of Education could provide a bridge between the health care professionals and educators and/or schools. The health care professional who specialises in ADHD could assist the educators and school by providing resources, giving workshops and talk and referrals to other specialists in the field. Also a health care professional that is linked to a Government hospital like Khalafong, may be able to support the educator and school by being able to providing a diagnosis and treatment of a learner who may have ADHD. This could be beneficial to learners who may have ADHD whose parents are not able to afford private medical care.

Educators could be encouraged to build up positive relationships based on mutual trust and respect with parents and colleagues in order for any cooperation to be effective (Mitchem, 2005). In order to promote positive dealings with families, parents can be invited to the

school (DoE, 2005). Once a positive relationship has been established between parent and educator, the “home and school team” can work together to provide the best possible care, assistance and support, considering a multi-modal approach, to a learner who may have ADHD (Gurian *et al.*, 2002; Powell, Welch, Ezell, Klein & Smith, 2003). A positive relationship between educator and learner may result in the learner, who may have ADHD, developing positive behaviour (McNally, l’anson, Whewell & Wilson, 2005).

- 6 Teacher training programmes appear not to prepare educators sufficiently to be able to manage learners with behavioural disorders especially ADHD.

It seems that educators are unable to apply the theory of education that is what is being taught at teacher training institutions, to practice of teaching, with regards to managing learners who may have ADHD. This statement is explained and discussed further in chapter 6, specifically section 6.2.4.2. A specific quote that an educator made refers to his statement directly:

*They have made me go back and think about how I give the difference between how to present a lesson (sic). And then you put kids into those things and the lesson falls flat. So I have, you have had to, I have had to learn how to adapt to actually teaching children, because the theory of it is one thing, but the actual practical teaching is a different thing. How to keep their attention. You have got to be creative and on-the-ball all the time (sic). (Sally/Participant 1d, speaker turner unit: 428).*

It seems that educators do not feel that they are equipped to support learners who may have ADHD. However, this could stem from the fact that teacher training institutions have not been able to provide adequate training in behavioural disorders, especially ADHD. It must be noted that not all educators have received similar training. Nevertheless, the youngest educator, who was exposed to teacher training and probably given access to the latest information in classroom management and instructional practices regarding learners who may have ADHD, felt that she was not sufficiently equipped to deal with the reality of teaching.

Thus, teacher training institutions could note of the fact that novice educators are feeling that they are not equipped enough to manage learners who may have ADHD in their classroom. Teacher training institutions could provide more information and support in this regard, as they have links with expertise from other academic institutions, both locally and internationally, and therefore contact with experts in the field.

- 7 It is crucial that parents support educators extensively in the management of the teaching and learning of learners who may have ADHD.

Educators view parents as not being as supportive of the teaching and learning of learners. Educators feel that parental involvement should be viewed as part of the support of the school and community and possibly a part of the management programme of a learner who may have ADHD. Lack of parental support is discussed in depth in chapter 5, under section 5.4.5.3. Chapter 6 also describes how two educators feel about the lack of involvement and how parents could contribute to the learners learning programme and thus, their academic performance.

Although the Department of Education supports the notion that schools and educators should involve parents and the community to play a greater role (as discussed in chapter 3), it seems that there is still a lack of parental involvement. Research in this field could establish what sustainable methods of achieving parental involvement in schools are. Schools could also share information regarding how they obtain the commitment of parents to be more involved. With regards to ADHD parents play an important role in being able to assist learners who may have ADHD at home with their homework. Thus, parents who have learners who may have ADHD have a vested interest in being more involved, taking note of what teaching and learning takes place in the classroom and at home. The parent of a learner who may have ADHD will also need to be able to communicate with the educator and the school. (This is discussed in chapter 3). The parent of a learner who may have ADHD also needs to be able to approach the educator and discuss issues that may pertain to academic performance and interventions; medical treatment and possibly any psycho-educational interventions.

## 7.7 CONCLUSION

In conclusion reflection on the research process has been presented and discussed. The findings are presented with the aims of the study in mind. The conceptual framework allows for the findings to be understood in context. The study is presented in terms of its limitations and strengths. Finally, recommendations are put forward and discussed in terms of implications for practice, policy and further research.

As stated in this thesis, most of the literature that is available is based on a medical model, which views ADHD as being pathological and the behaviour associated with it as being deficient. Non-traditional literature of ADHD is growing but is still considerably limited. Thus literature that views ADHD as non-pathological or non-deficient is limited. This thesis has

contributed to the body of knowledge on ADHD in South Africa as it has allowed for educators' experiences of learners who may have ADHD in the classroom, to be written and viewed as a narrative. Educators' experiences of learners who may have ADHD contribute to the body of knowledge of ADHD in South Africa by highlighting the conclusions of this study, which are: (1) Educators, from various different contextual backgrounds, do encounter a number of behavioural disorders including ADHD in their classroom, but lack formal knowledge of what it is, including treatments and interventions; (2) Some educators have devised creative methods to manage learners who may have ADHD in their classrooms; (3) Educators realise that they treat learners differently; as a consequence they feel confronted with stressful situations; (4) Some educators can feel powerless and lacking in skills and support in cases where a learner with ADHD is disruptive in class the teaching and learning is disrupted for the whole class; (5) Some educators feel that they are not being supported in managing learners who may have ADHD; (6) Teacher training programmes appear not to prepare educators sufficiently to be able to manage learners with behavioural disorders especially ADHD and (7) It is crucial that parents support educators extensively in the management of the teaching and learning of learners who may have ADHD.

The study has elevated the point that learners who may have ADHD in a classroom can be better understood within the ecological systemic framework, as it allows for different people, including the educator, and settings to be taken into account.

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**Diagnostic Criteria for ADHD according to the DSV-IV-TR (APA, 2000)**

<p><b>Diagnostic criteria for attention deficit hyperactivity disorder</b></p> <p><input type="checkbox"/> Either (1) or (2)</p> <p>(1). Six (or more) of the following symptoms of inattention have persisted for at least six months to a degree that is maladaptive and inconsistent with developmental level:</p> <p><b>Inattention</b></p> <p>a) Often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities.</p> <p>b) Often has difficulty sustaining attention in tasks or play activities.</p> <p>c) Often does not seem to listen when spoken to directly.</p> <p>d) Often does not follow through on instructions and fails to finish school work, chores, or duties in the workplace (not due to oppositional behaviour or failure to understand instructions).</p> <p>e) Often has difficulty organising tasks a activities.</p> <p>f) Often avoids dislikes or is reluctant to engage in tasks that requires sustained mental effort (such as schoolwork or homework).</p> <p>g) Often loses things necessary for tasks or activities (e.g. toys, school assignments, pencils, books, or tools).</p> <p>h) Is often easily distracted by extraneous stimuli.</p> <p>i) Is often forgetful in daily activities.</p> <p>(2). Six (or more) of the following symptoms of hyperactivity-impulsivity have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:</p> <p><b>Hyperactivity</b></p> <p>a) Often fidgets with hands or feet or squirms in seat.</p> <p>b) Often leaves seat in classroom or in other situations in which remaining seated is expected.</p> <p>c) Often runs about or climbs excessively in situations in which it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness).</p> <p>d) Often has difficulty playing or engaging in leisure activities quietly.</p> <p>e) Is often “on the go” or often acts as if “driven by a motor”.</p> <p>f) Often talks excessively.</p> <p><b>Impulsivity</b></p> <p>g) Often blurts out answers before questions have been completed.</p> <p>h) Often has difficulty awaiting turn.</p> <p>i) Often interrupts or intrudes on others (e.g. Butts into conversations or games).</p>
<p>B. Some hyperactive-impulsive or inattention symptoms that caused impairment were present before age seven years.</p>
<p>C. Some impairment from the symptoms is present in two or more settings (e.g. at school (or work) and at home).</p>
<p>D. There must be clear evidence of clinically significant impairment in social, academic or occupational functioning.</p>
<p>E. The symptoms do not occur exclusively during the course of a Pervasive Developmental disorder, Schizophrenia, or other Psychotic Disorder and are not better accounted for by another mental disorder (e.g. Mood Disorder, Anxiety Disorder, Disassociative Disorder or a Personality Disorder).</p>
<p><b>Code based on type:</b></p> <p>314.01 Attention-Deficit/Hyperactivity Disorder, Combined Type: if both criteria A1 and A2 are met for the past six months.</p> <p>314.00 Attention-Deficit/Hyperactivity Disorder, Predominantly Inattentive type: if criterion A1 is met but criterion A2 is not met for the past six months.</p> <p>314.01 Attention-Deficit/Hyperactivity Disorder, Predominantly Hyperactive-Impulsive type: If criterion A2 is met but criterion A1 is not met for the past six months.</p> <p>Coding note: for individuals (especially adolescents and adults) who currently have symptoms that no longer meet full criteria (in partial remission) should be specified.</p>

*Associated features of ADHD (APA, 2000).*

<b>Associated features and disorders</b>	
Associated descriptive features and mental disorders:	
<input type="checkbox"/>	Depends on age and developmental stage.
<input type="checkbox"/>	May include low frustration tolerance, temper outbursts, bossiness, stubbornness.
<input type="checkbox"/>	Mood liability, demoralisation, dyphoria, rejection by peers & poor self-esteem.
<input type="checkbox"/>	Academic achievement is impaired, devalued: conflict with family and school.
<input type="checkbox"/>	Family relationships: resentment, antagonism.
<input type="checkbox"/>	ADHD less schooling; poor vocational achievement.
<input type="checkbox"/>	IQ achievement is few points lower than children their own age.
<input type="checkbox"/>	ADHD children can also be above average and gifted IQ.
<input type="checkbox"/>	Severe: disorder is impairing afflicting social, familial & scholastic adjustment.
<input type="checkbox"/>	Schools related problems; inattention.
<input type="checkbox"/>	Peer rejection and injury: hyperactivity and impulsivity.
<input type="checkbox"/>	Inattention: socially passive, appear to be neglected rather than rejected by peers.
<input type="checkbox"/>	Half of ADHD children have oppositional defiant disorder or conduct disorder, mood disorder, anxiety disorders, learning disorders and communication disorders.
<input type="checkbox"/>	50% of children with Tourettes also have ADHD, but ADHD children do not have Tourettes.
<input type="checkbox"/>	Neurotoxin exposure: i.e. lead poisoning.
<input type="checkbox"/>	Infections (encephalitis).
<input type="checkbox"/>	Drug exposure in utero.
<input type="checkbox"/>	Mental retardation.
<input type="checkbox"/>	Low birth weight.
Minor physical anomalies may occur	
<input type="checkbox"/>	Hypertolerism.
<input type="checkbox"/>	Highly arched palate.
<input type="checkbox"/>	Low set ears.

ICD-10 ICD World Health Organisation (WHO) International Statistical Classification of Diseases  
and Related Health Problems 10<sup>th</sup> Revision: Mental and behavioural disorders: (F00-F99)

(World Health Organisation, 2007)

Behavioural and emotional disorders with onset usually occurring in childhood and adolescence (F90-F98)	
<b>F90</b>	<b>Hyperkinetic disorders</b>
	A group of disorders characterised by an early onset (usually in the first five years of life), lack of persistence in activities that require cognitive involvement, and a tendency to move from one activity to another without completing any one, together with disorganised, ill-regulated, and excessive activity. Several other abnormalities may be associated. Hyperkinetic children are often reckless and impulsive, prone to accidents, and find themselves in disciplinary trouble because of unthinking breaches of rules rather than deliberate defiance. Their relationships with adults are often socially uninhibited, with a lack of normal caution and reserve. They are unpopular with other children and may become isolated. Impairment of cognitive functions is common, and specific delays in motor and language development are disproportionately frequent. Secondary complications include dissocial behaviour and low self-esteem.
<b>Excludes</b>	anxiety disorders ( F41.- ) mood [affective] disorders ( F30-F39 ) pervasive developmental disorders ( F84.- ) schizophrenia ( F20.- )
<b>F90.0</b>	<b>Disturbance of activity and attention</b>
	Attention deficit: disorder with hyperactivity. hyperactivity disorder. syndrome with hyperactivity.
<b>Excludes:</b>	hyperkinetic disorder associated with conduct disorder ( F90.1 )





*Interview schedule*

South African Educators' Experiences Of Learners Who May Have ADHD In Their Classrooms	
Date of interview:	
Length of interview:	
Name of interviewee:	
School:	
Grade:	
Number of learners in a classroom:	
<b>How do educators manage their classrooms with learners in their classrooms who may have ADHD?</b>	
How do you manage your classroom knowing their may be learner who may have ADHD in your classroom?	
Have you adapted you classroom in any way to accommodate the learners who may have ADHD? And how?	
Do you have order, rules or regulations in your classroom? How do you maintain order/rules and regulations in your classroom?	
<b>How do educators experience teaching and learning of/with the learner who may have ADHD?</b>	
Comment on the teaching and learning of learners who may have ADHD in your classroom	
How have you been able to include learners who may have ADHD in the teaching and learning in your classroom?	
Do you find that learners who may have ADHD require more or less classroom work or homework?	
<b>How has the experience of educating learners who may have ADHD influenced you as educator?</b>	
How was the experience of being a teacher to learners/ a learner who may have ADHD for you?	
How could you use this experience/s in the way you may teach in the future?	
How has including learners who may have ADHD challenged you as a person?	
How has including learners who may have ADHD challenged you as an educator?	
Field Notes	

*Request to Principal*

To Whom It May Concern

**Re: Request to interview Foundation phase educators**

Dear Principal

I, hereby, request permission to interview the Foundation phase educators at your school. The interviews will inform researchers how educators experience inclusive education, particularly learners with behavioural and emotional problems in their classroom. This would entail how educators experience teaching learners with Attention Deficit Hyperactivity Disorder. The interviews form part of a study that forms part of the requirements for a PhD in Educational Psychology.

**Procedure**

The interview with the Foundation phase educators would take place at your (and your educators') convenience and therefore need not take place during school time. The interviews will be recorded for analysis, but interviews will be kept confidential. The interviews would also be conducted with full consent from each educator and the thesis will be made available for the educator and the principal to read.

Yours truly,

—



Please fill out and fax back on the tel/fax \_

Request for a meeting to discuss the study and interviews	Yes		No	
---	-----	--	----	--

Agreed to allow Foundation phase educators to be interviewed	Yes		No	
--	-----	--	----	--

Number of Foundation phase educators to be interviewed (in total)	
Number of Grade 1 educators	
Number of Grade 2 educators	
Number of Grade 3 educators	

<i>Please indicate what dates and time that would best suit principal and/or educators for first meeting and/or interview</i>	
	Time
May 18 Thursday 2006	
May 19 Friday 2006	
May 22 Monday 2006	
May 23 Tuesday 2006	
May 25 Thursday 2006	
May 26 Friday 2006	

Signed

Date

\_\_\_\_\_  
Principal /HoD Foundation Phase

\_\_\_\_\_

## *Educator Informed Consent*

To Whom It May Concern

**Re: Informed Consent**

Dear Educator

The interviews will inform researchers how educators experience inclusive education, particularly learners with behavioural and emotional problems in their classroom. This would entail how educators experience teaching learners with Attention Deficit Hyperactivity Disorder.

### **Study requirements**

The study forms part of a thesis, which is one of the requirements for a Doctorate in Educational Psychology. The Department of Educational Psychology at the University of Tshwane will thus supervise the study.

### **Confidentiality**

The study and or interviews cannot be used for forensic purposes. Any information given in an interview will be treated as confidential. Therefore all names (learner, educator or principal) will be changed in the thesis, in order to safeguard confidentiality. The thesis will be made available for reading before publishing, if requested.

### **Procedure**

The interview with the Foundation phase educators would take place at your convenience and therefore need not take place during school time. The interviews will be recorded for analysis, but interviews will be kept confidential.

I kindly request your consent to be able to conduct the interview

Yours truly,

T. Lopes



## Consent

### Confidentiality

The study and/or interviews **cannot** be used for forensic purposes. Any information given in an interview will be treated as confidential. Therefore all names (learner, educator or principal) will be changed in the thesis, in order to safeguard confidentiality. The thesis will be made available for reading before publishing, if requested.

### Procedure

The interview would be a series of three interviews; for each educator, over several weeks. The interview with the Foundation phase educators would take place at your convenience and therefore need not take place during school time. The interviews will be recorded for analysis, but interviews will be kept confidential.

I \_\_\_\_\_ (print name of educator) understand and consent to the study that is to be undertaken. I fully understand the aim of the study and what it entails.

Signed

\_\_\_\_\_  
Educator

\_\_\_\_\_  
Date

List of Topics

Major topics	Quotation	Unique topics	Quotation	Leftover topics	Quotation
Parent	"...but my mommy forgot..." (381)	Use of screens:	[...they can see me... but can't see their friends." (84)	Getting into trouble	Even negative attention is attention (171)
Parent	They don't pull their part (383)	Rules	I think we make those rules to protect those children (117)	Getting into trouble	They sometimes think they have the right to do what they like because they have got this as an excuse (373)
Teacher challenges:	It does challenge you, we're not perfect" (315)	Teachers	I think we see them more than the parents see them (153)	Behaviour	They become hyperactive, they don't want to listen anymore, don't want to do anything except play (2373)
	Its very tiring, it drains me everyday (406)		It's been a big challenge for me this year (341)		It's dangerous, but nothing we can do... (2478)
	["they get to you sometimes" (424)]	Behaviour	But those children cant help themselves (161)	Challenged	I mean as an educator you are a mother, you are a social worker, everything (1554)
Educators on learners	They write, they rub, they scratch (545)	Get to know learner	So I think you've get to really pay attention and focus on each child and get to know each of the children	Discipline	Yes because without stick, I don't know what to do (1360)
	They do everything fast (1921)			Food	After break they are so hyperactive because of the kind of food they are eating... junk (2369)
Educator on terminology	The one that are hype (1874)	Behaviour	By... it's a nightmare in the class (408) about 12h00 (406- 410)	Teaching	If I don't have tolerance, I can work with them (2513)
Colleagues	Share it with other colleagues (2484)	Teaching experience	It needs you to go the extra mile with them (592)	Behaviour	It's their behaviour, it makes more difficult to work with them in most case they don't get work done (2683)
Colleagues	It needs sharing as teacher (1302)		You are a mother to all of them (640)	Teaching	We do a lot of role play and we can tell them stories (2940-2942)
Not treated the same	Not unique in my class...(35)		They really need individual teaching and we don't have, so, because, you must include them (638)		I try and vary the tasks... something a bit fat something a bit slow, but they don't actually move exactly with the class (3116)
			They do everything fast (1921)		People are different - children can see that they are all different. not all children are the same



*The Number of Educators and Schools Interviewed*

The following table outlines the number of interviews, participants and schools:

<b>No of interviews</b>	<b>Participant</b>	<b>School</b>
1	Participant 1a	School 1
2	Participant 1b	
3	Participant 1c	
4	Participant 1d	
5	Participant 2a	School 2
6	Participant 2b	
7	Participant 2c	
8	Participant 2d	
9	Participant 2e	
10	Participant 2f	
11	Participant 3a	School 3
12	Participant 3b	
13	Participant 3c	
14	Participant 3d	
15	Participant 3e	
16	Participant 3f	
17	Participant 3g	

## *Member Checking*

To Whom It May Concern

**Re: Reviewing of Transcripts, Themes and Feedback**

Dear Educator

Herewith in this package is the recording of the interview that was conducted in June last year. The package consists of:

1. Transcript of Interview
2. Themes
3. Comment/Feedback form

### **Transcript of Interview**

Please read through the recording to make sure that the recording and your answers are correctly represented. In order to endure confidentiality your identity is represented by a number in the transcripts. Thus, your responses in the transcripts have been labelled as Participant \_\_\_\_.

If there are any corrections or comments that you would like to make regarding the Transcript of Interview please write this on the Comment/Feedback form and fax it back to me. Corrections and comments can then be included into the thesis.

### **Themes**

The themes are the results or findings taken from all the interviews. Again if there are corrections or comments that you would like to have included in my study please write this on the Comments/Feedback form. Corrections and comments of the themes can then be included into the thesis.

If you have any queries please feel free to contact me.

Thanking you in advance.

Yours truly,

**T Lopes**



### *Themes*

In order for the findings to be presented in my thesis I would like to present the findings to you, the participants. Therefore the following themes are the results for this PhD thesis. The themes that have come from the interviews administered to seventeen different educators from different schools from the Tshwane region are:

Firstly, the learners who may have Attention Deficit Hyperactivity Disorder (that is they might be diagnosed or not diagnosed) appear to be treated differently from the other learners. This relates specifically to the fact that these learners seem to demand a lot of attention from the educator.

Secondly, the next theme is that one of the methods most commonly used in managing learners who may have Attention Deficit Hyperactivity Disorder is to keep them busy, when they are not busy with a planned lesson activity. Thus the learner who may have Attention Deficit Hyperactivity Disorder is occupied with additional work or other tasks in and around the class so that he/she does not distract other learners.

Thirdly, the feeling that learners who may have Attention Deficit Hyperactivity Disorder challenges educators. Educators seem to be challenged with their behaviour and with the lack of learning and teaching taking place with learners who may have Attention Deficit Hyperactivity Disorder.

Fourthly, educators feel that they need assistance from other educators and from specialists. Educators feel that they need to be able to share information with other educators on how to manage and support learners who may have Attention Deficit Hyperactivity Disorder.

The last theme relates to the fact that most of the educators in this study feel that parents can play a more significant role in supporting the learner and/or the educator. Educators feel that parents of learners who may have Attention Deficit Hyperactivity Disorder sometimes do not contribute effectively to the support of their child and/or the educator.



**Feedback form**

PLEASE FILL OUT AND FAX BACK TO THE TEL/FAX \_  
OR EMAIL TO \_

Name	
School	
Grade	
Feedback or Comment of Transcript of Interview	
Feedback or Comment of Transcript of Themes	

Signed: \_\_\_\_\_ Date: \_\_\_\_\_




**Research Ethics Committee Clearance Certificate**



UNIVERSITY OF PRETORIA  
FACULTY OF EDUCATION  
RESEARCH ETHICS COMMITTEE

<b>CLEARANCE CERTIFICATE</b>	<b>CLEARANCE NUMBER : EP08/02/01 (Renewal)</b>
<b><u>DEGREE AND PROJECT</u></b>	PhD (Educational Psychology) South African educator's experiences of learners who may have ADHD in classrooms.
<b><u>INVESTIGATOR(S)</u></b>	Maria Albertina Lopes - 95146653
<b><u>DEPARTMENT</u></b>	Educational Psychology
<b><u>DATE CONSIDERED</u></b>	12 February 2008
<b><u>DECISION OF THE COMMITTEE</u></b>	APPROVED

*This ethical clearance is valid for 3 years from the date of consideration and may be renewed upon application*

<b>CHAIRPERSON OF ETHICS COMMITTEE</b>	Dr S Human-Vogel 
DATE	12 February 2008
CC	Prof Irma Eloff Prof Sarah Howie Mrs Jeannie Beukes

This ethical clearance certificate is issued subject to the following conditions:

1. A signed personal declaration of responsibility
2. If the research question changes significantly so as to alter the nature of the study, a new application for ethical clearance must be submitted
3. It remains the students' responsibility to ensure that all the necessary forms for informed consent are kept for future queries.

Please quote the clearance number in all enquiries.



Transcripts of Interview with Participant 2f

	13 June 2006 PARTICIPANT 2F INTERVIEW
1804	RESEARCHER: Okay, maybe I should start of ... because some of the other teachers weren't sure what ADHD is ...
1805	PARTICIPANT 2F: Yes, I wanted to know because ...
1806	RESEARCHER: Yes, okay, yes, I'm going to explain it first. I just thought I had explained it when I saw you, so that's why I just didn't write the whole name ...
1807	PARTICIPANT 2F: Yes.
1808	RESEARCHER: But ADHD stands for Attention Deficit Hyperactivity Disorder ...
1809	PARTICIPANT 2F: All right ...
1810	RESEARCHER: So it's these children that are seen as hyperactive ...
1811	PARTICIPANT 2F: All right.
1812	RESEARCHER: You know what ... which ones I'm talking about, hey?
1813	PARTICIPANT 2F: Yes.
1814	RESEARCHER: It's the children that seem to have ... that are inattentive in class ...
1815	PARTICIPANT 2F: Mmm.
1816	RESEARCHER: Hyperactive and impulsive as well. Those are the three main things that they look at. And like with inattentiveness, it can be ... they're distracted by the learners in their classroom, or by the things in the classroom, or sometimes they're distracted just inside – they sort of daydream a lot you know ...
1817	PARTICIPANT 2F: Mmm.
1820	RESEARCHER: They diff ... they find it difficult to concentrate on things ...
1821	PARTICIPANT 2F: All right.
1822	RESEARCHER: So it's those kind of learners. Sometimes they also ... it's also together with being hyperactive – where they're always busy – they fidget in their seats, they cannot keep still, they always want to go out and run and be active you know ....
1823	PARTICIPANT 2F: All right.
1824	RESEARCHER: They're, they're ... that's ... they seem like, it's almost like as if they're like a motor – they always go somewhere.
1825	PARTICIPANT 2F: Yes, just like some, some are, you know have, the IQ is high - a little bit high ...
1826	RESEARCHER: Yes.
1827	PARTICIPANT 2F: They finish ... whatever you give, they finish faster, then they want to get to some (indistinct section)
1828	RESEARCHER: Okay. And then the other ones, sometimes they're also quite impulsive – like they will also just you know, do things before thinking about it, like if they're sitting in your classroom and all of a sudden they see something outside the classroom they want to look at, they'll go and look before asking, or ...
1829	PARTICIPANT 2F: Yes, do anything ... all right.
1830	RESEARCHER: You told them to keep quiet and do their work, they won't – they'll get up and do something ...
1831	PARTICIPANT 2F: Mmm.
1832	RESEARCHER: So it's those learners.
	PARTICIPANT 2F: All right.
1833	RESEARCHER: More often than not they're altogether – they do all those things together – they have all that kind of behaviour ...
1834	PARTICIPANT 2F: All right, just like moving out of the class – they jump ...
1835	RESEARCHER: Yes.
1836	PARTICIPANT 2F: All right, yes.
1837	RESEARCHER: Yes, yes. And even if the rest of the class is quiet ...
1838	PARTICIPANT 2F: Mmm muh ...
1839	RESEARCHER: But they want to go and look at something, they'll get up and go and look at something.
1840	PARTICIPANT 2F: Do all, whatever they want.
1841	RESEARCHER: Yes, yes, whatever they want ...
1842	PARTICIPANT 2F: Yes, all the time.
1843	RESEARCHER: Yes, yes. So it's just because they ... they just lack the ability really to think before they do something – they cannot plan beforehand ...
1844	PARTICIPANT 2F: All right.
1845	RESEARCHER: They have difficulty with that, yes. Okay, so does that make sense?
1846	PARTICIPANT 2F: Yes, it does.



1849	RESEARCHER: Okay, great, all right. Okay. Do you teach Grade 3s hey?
1850	PARTICIPANT 2F: Grade 2.
1851	RESEARCHER: Grade 2s, okay.
1852	PARTICIPANT 2F: Yes.
1853	RESEARCHER: And how many learners do you have in your class?
1854	PARTICIPANT 2F: 35.
1855	RESEARCHER: 35. How many of those learners do you think sort of fit that description of what I described?
1856	PARTICIPANT 2F: Now, in my class ...
1857	RESEARCHER: Yes.
1858	PARTICIPANT 2F: I think there are 6.
1859	RESEARCHER: 6? Okay.
1860	PARTICIPANT 2F: Mmm.
1861	RESEARCHER: How many of them are girls and how many of them are boys?
1862	PARTICIPANT 2F: 2 Girls ...
1863	RESEARCHER: 4 Boys ...
1864	PARTICIPANT 2F: 4 Boys, yes.
1865	RESEARCHER: Okay. How have you as an educator managed your classroom with learners who may have ADHD
1866	PARTICIPANT 2F: Usually I try to concentrate on them because once you have them, you have to call their name time and again you, not to disturb the classroom ...
1867	RESEARCHER: Mmm.
1868	PARTICIPANT 2F: Every time when you do something, you have to call them, because if you don't call them, ah, then the whole class is mixed out ...
1869	RESEARCHER: Okay.
1870	PARTICIPANT 2F: Because they'll be running around and do all those things ...
1871	RESEARCHER: Yes.
1872	PARTICIPANT 2F: Uhm.
1873	RESEARCHER: Have you adapted your classroom in any way to accommodate the learners who may have ADHD – so have you adapted the classroom?
1874	PARTICIPANT 2F: For those one, at least the one that are hyper ...
1875	RESEARCHER: Yes, how ...
1876	PARTICIPANT 2F: But they're able to concentrate.
1877	RESEARCHER: Okay.
1879	PARTICIPANT 2F: Because after, during whatever I have given, they will go and get a book and read, even if they're not ... they don't concentrate on the book ...
1880	RESEARCHER: Mmm.
1881	PARTICIPANT 2F: They just look at the pictures.
1882	RESEARCHER: Okay.
1883	PARTICIPANT 2F: Mmm.
1884	RESEARCHER: And those that are not able to concentrate?
1885	PARTICIPANT 2F: They are able to concentrate, they have ... after doing whatever instruct I've given ...
1886	RESEARCHER: Mmm.
1887	PARTICIPANT 2F: I have to go back to them – and try to let them concentrate, and try to direct them.
1888	RESEARCHER: Okay.
1889	PARTICIPANT 2F: Uhm.
1890	RESEARCHER: All right. Do you have rules and regulations in your classroom ...
1891	PARTICIPANT 2F: Yes, we do have ...
1892	RESEARCHER: Okay.
1893	PARTICIPANT 2F: We do have, but those, those ones, they don't regard the rules ...
1894	RESEARCHER: Yes.
1895	PARTICIPANT 2F: They just do whatever.
1896	RESEARCHER: I was just going to ask you, how do you maintain your rules and regulations then, considering you may have those learners who may have ADHD in your classroom – how do you maintain the order and the rules and regulations?
1897	PARTICIPANT 2F: I try to, to remind them, "by the way, we said this in class – we don't do this in class" – always I have to just repeat - come in again – repeat whatever we have said ...
1898	RESEARCHER: Yes, okay.
1899	PARTICIPANT 2F: Hence, "what is rule number 3?", maybe if ever he, or she is behaving against the rule. "What is



	the number?" And they'll say, "this is ... you are not supposed to do this and this and I had to sit down and do all those things", but usually those ones they'll sit now for 2 minutes, later on they're up again, just like that ...
1900	RESEARCHER: Exactly.
1901	PARTICIPANT 2F: Mmm.
1902	RESEARCHER: And how do you ... do you punish them, or do you ... (intervenes)
1903	PARTICIPANT 2F: Ah no ... I try to punish, but it doesn't make any sense to them ...
1904	RESEARCHER: Yes.
1905	PARTICIPANT 2F: All, all ... even if we used to say ... even if you can say, "scrub the floor" – no, it's nothing – they'll do everything (indistinct) and then try ... wanted to sit down again ...
1906	RESEARCHER: Okay.
1907	PARTICIPANT 2F: Or even ... I had one that ... you won't be able, even if I can take a stick, try to ... you won't be able to beat him – he'll be crying like no ones business ...
1908	RESEARCHER: Yes.
1909	PARTICIPANT 2F: And then last, last time I said she should go outside – go and stand outside because she doesn't want to be in my classroom, and then he was always opening the door ...
1910	RESEARCHER: (Laughter)
1911	PARTICIPANT 2F: "Can I come in, can I come in" until, until I just said "come in and just join the class because it's not easy to discipline. I even call the parents, but they say, "he is just like that because he stays with the granny ...
1912	RESEARCHER: Okay, all right.
1913	PARTICIPANT 2F: Mmm.
1914	RESEARCHER: And the 6 children in your class now – the 6 learners in your class ...
1915	PARTICIPANT 2F: Yes ...
1916	RESEARCHER: Do you find them as difficult as that boy you just described – is it also difficult to maintain the rules and regulations in the classroom with them?
1917	PARTICIPANT 2F: Yes, it is, it's difficult because you'll be trying, and then sometimes you'll feel like you will just kick, but you can't you know (laughter) ...
1918	RESEARCHER: Yes.
1919	PARTICIPANT 2F: He is just harassing you, but it's not good, it just make me sometimes just get fed up, just say "sit down", that's the only way that you can concentrate. But some, because there's 6, the other one, she's hyper, but can concentrate ...
1920	RESEARCHER: Mmm.
1921	PARTICIPANT 2F: And the other boy, they ... it is ... they can concentrate in their work. They do everything fast.
1922	RESEARCHER: Okay.
1923	PARTICIPANT 2F: They do everything fast, but if they don't understand, they'll come, "Madam ..." ... they will be, "Madam, we don't understand what you are saying, then you have to come back to them and explain to them ...
1924	RESEARCHER: Yes.
1925	PARTICIPANT 2F: Then they will follow whatever you want.
1926	RESEARCHER: Okay.
1927	PARTICIPANT 2F: Those are the two. Then the other, this 4, they're just, they're hyper, low concentration, no attention, all those things.
1928	RESEARCHER: Okay.
1929	PARTICIPANT 2F: Mmm muh.
1930	RESEARCHER: So, it brings me onto the next question – can you comment on the teaching and learning of learners who may have ADHD in your classroom – how was it like for you to teach and learn these learners who may have ADHD in your classroom?
1931	PARTICIPANT 2F: It's ... especially ...it's easy if we have the one that were in your school ...
1932	RESEARCHER: Mmm.
1933	PARTICIPANT 2F: Because the, the previous teacher will come to you and explain to you, "this one is just like this." But the new one that are from outside, no one will tell you about them ...
1934	RESEARCHER: Oh yes.
1935	PARTICIPANT 2F: How are you going to deal? And maybe you just, you just find yourself how they behave and then you are just to learn them, and then you don't understand them because usually if you understand them, say, "how did you work with this one?" And then the, the teacher will explain, "no, this one is like this, and they will be able to do this and this, but this one is ..." ... because even the homework, it won't be done.
1936	RESEARCHER: Yes.
1937	PARTICIPANT 2F: Then other, the books will be lost ...
1938	RESEARCHER: Yes.
1939	PARTICIPANT 2F: Every time books are lost. You say, "you must keep your books in the shelf, but theirs will be lost ...
1940	RESEARCHER: Yes.



1941	PARTICIPANT 2F: No matter what.
1942	RESEARCHER: I'm sure.
1943	PARTICIPANT 2F: Every time they're starting a new book, with no concentration at all ...
1944	RESEARCHER: Okay.
1945	PARTICIPANT 2F: Yes, but otherwise you are to just as a teacher, because they will say it's inclusive, you just have to tend them somehow. But sometimes you'll be like, maybe if you are used to them, you'll be able to give them extra work, not even the, the normal work that you used to give others ...
1946	RESEARCHER: Okay.
1947	PARTICIPANT 2F: Yes, just take a page, write 1 up to 100 ...
1948	RESEARCHER: Okay.
1949	PARTICIPANT 2F: Then you just to keep them busy ...
1950	RESEARCHER: Busy.
1951	PARTICIPANT 2F: Because their concentration is not that much, that if you give them the correct job, they're not doing it ...
1952	RESEARCHER: Mmm.
1953	PARTICIPANT 2F: They (indistinct) the write 1 up to this, and then those will just copy all those words ...
1954	RESEARCHER: Okay.
1955	PARTICIPANT 2F: Then he just trying to ...
1956	RESEARCHER: Okay.
1957	PARTICIPANT 2F: And then later on, if ever maybe they're ... they are not the same ...
1958	RESEARCHER: Yes, no.
1959	PARTICIPANT 2F: Some, after giving them that, that work, they will be, every day will be like, "Madam, what must I do?" Then it's better that we be able to control them ...
1960	RESEARCHER: Uhm.
1961	PARTICIPANT 2F: But there are others that you can't ...
1962	RESEARCHER: Yes.
1963	PARTICIPANT 2F: No matter what.
1964	RESEARCHER: Okay.
1965	PARTICIPANT 2F: Mmm.
1966	RESEARCHER: All right. I was ... that brings me to the next question – how difficult, or how has it been for you to include all the learners then who ... those even with ADHD in your classroom – how, in the teacher/learning, how have you included them in your teaching and learning in your classroom?
1967	PARTICIPANT 2F: The, the best is just to, not them in one group – keep them with some of the top one that you know this one can behave, because they will help you sometimes, even to let him come to order and do all those things ...
1968	RESEARCHER: Okay.
1969	PARTICIPANT 2F: Because if you keep them in one group, they'll do ... be doing all the things that are not in order and then you'll be in trouble. But if ever they're in, in different groups, and then those one will be trying to call her to order time and again ...
1970	RESEARCHER: Okay.
1971	PARTICIPANT 2F: So therefore it's easy for you, even to understand how does he behave with other learners, because when you ... whatever ... later on they'll be reporting "Sepoa was doing this, Sepoa was doing this, Sepoa didn't do this ..." ... even if in group work ...
1972	RESEARCHER: Mmm.
1973	PARTICIPANT 2F: Then therefore, "Sepoa didn't add anything, Sepoa was playing ..." ...
1974	RESEARCHER: Yes.
1975	PARTICIPANT 2F: "Sepoa did all those things ..." ...
1976	RESEARCHER: Yes, okay.
1977	PARTICIPANT 2F: Yes. That's the best to include him or her in a group that is working.
1978	RESEARCHER: Okay. Okay. All right. And do you find that these learners then, the learners who have ... who may have ADHD, do they require more work or less work?
1979	PARTICIPANT 2F: They require more work. Even if sometimes it's not the work that you wanted to give the, the whole class ...
1980	RESEARCHER: Mmm.
1981	PARTICIPANT 2F: But if you give them something that will just keep them busy and try to concentrate, because if ever you say you want 1 up to 10, you just write something, maybe even if it's not correct ...
1982	RESEARCHER: Yes.
1983	PARTICIPANT 2F: But if it's 1 up to 100, then later on you come, come to him or her, just try to count, whether it was (indistinct) or correct, because sometimes it will be 1 up to a 100, you'll find that in, in between, there will be 60s



	before 50s, or whatever, the 60s have been jumped and all those things ...
1984	RESEARCHER: Yes.
1985	PARTICIPANT 2F: That they (indistinct) ..
1986	RESEARCHER: Yes, yes.
1987	PARTICIPANT 2F: Mmm.
1988	RESEARCHER: Okay. And with homework, do they require less or more homework?
1989	PARTICIPANT 2F: Less.
1990	RESEARCHER: Less homework
1991	PARTICIPANT 2F: Yes, because if you give them more, they will be no product.
1992	RESEARCHER: Okay. All right. How was the experience of being a teacher to learners who may have ADHD – how was the experience of being a teacher to these learners for you?
1993	PARTICIPANT 2F: Mmm, especially the small one ...
1994	RESEARCHER: Mmm.
1995	PARTICIPANT 2F: because usually I, I used to teach before big ones, and it was easy for me for big ones ...
1996	RESEARCHER: Yes.
1997	PARTICIPANT 2F: Because big ones, you can call them and then try to call them to order and, and state the rules – rule number this and this until they become used to the rules.
1998	RESEARCHER: Yes.
1999	PARTICIPANT 2F: And then you'll give them less. But the small ones, you'll be saying the one thing I, I don't know how many times. It's difficult for the smaller ones (laughter). For me it was difficult ...
2000	RESEARCHER: Yes.
2001	PARTICIPANT 2F: Because even now you know, I'm, I'm afraid to even teach the, the Grade 1s ...
2002	RESEARCHER: Really.
2003	PARTICIPANT 2F: Yes.
2004	RESEARCHER: Yes. Okay. Shame. How could you use this experience maybe in your future – how can you use this experience of teaching these learners who may have ADHD in your future?
2005	PARTICIPANT 2F: Especially if ever we can have some learning equipment, just to keep them busy. Even if, if I'm teaching this ...
2006	RESEARCHER: Mmm.
2007	PARTICIPANT 2F: You keep them busy with something else. And then if the other class are busy, then you come to him ...
2008	RESEARCHER: Okay.
2009	PARTICIPANT 2F: Concentrate on him ...
2010	RESEARCHER: Yes.
2011	PARTICIPANT 2F: Try to give him something that you've given others because once you give him something that really concern ... he concentrate on that, no, that's no problem because maybe you have some box ... blocks...
2012	RESEARCHER: Oh okay.
2013	PARTICIPANT 2F: You give that one to build some blocks and all, all those things ...
2014	RESEARCHER: Yes.
2015	PARTICIPANT 2F: And, and then, then you are busy with others ...
2016	RESEARCHER: Okay.
2017	PARTICIPANT 2F: And then after that you concentrate, especially if there are not more ...
2018	RESEARCHER: Yes.
2019	PARTICIPANT 2F: You concentrate on him, try to ... I think that will help me.
2020	RESEARCHER: Okay.
2021	PARTICIPANT 2F: If we do have some equipment, that's the main thing.
2022	RESEARCHER: Okay.
2023	PARTICIPANT 2F: Yes.
2023	RESEARCHER: How has including these learners who may have ADHD been for you – how has it been like for you as a person?
2024	PARTICIPANT 2F: I, I was against it because I thought that maybe during that time when they say if you have a, a child who's this, you keep them to the relevant school ...
2025	RESEARCHER: Yes.
2026	PARTICIPANT 2F: Where they concentrate on that. But nowadays, you can't do otherwise ...
2027	RESEARCHER: Mmm.
2028	PARTICIPANT 2F: You just have to learn how to deal with them.
2029	RESEARCHER: Okay. And how has this challenged you as an educator?





2030	PARTICIPANT 2F: Eish, it was tough, it's tough, but it needs preparation ...
2031	RESEARCHER: Okay.
2032	PARTICIPANT 2F: You need to prepare ...
2033	RESEARCHER: All right.
2034	PARTICIPANT 2F: But once you prepare yourself for them, they're not so much of a challenge.
2035	RESEARCHER: Okay.
2036	PARTICIPANT 2F: Yes.
2037	RESEARCHER: All right.
2038	PARTICIPANT 2F: Because I, I ... mostly in my class because we are not the same, and then the Grade 1s, they took ... especially my class, they took those ones that are a problem to my class ...
2039	RESEARCHER: (Laughter)
2040	PARTICIPANT 2F: Because they say at least maybe you might ...
2041	RESEARCHER: Get them right.
2042	PARTICIPANT 2F: Yes, but eish, if there are more, eish, it's a problem.
2043	RESEARCHER: Okay.
2044	PARTICIPANT 2F: Yes. Because I have the one that were in my school, and then I'll be able to tell this one is like this, and then I had two that are not from my class ... from my school ...
2045	RESEARCHER: Okay.
2046	PARTICIPANT 2F: They're from outside.
2047	RESEARCHER: All right.
2048	PARTICIPANT 2F: Mmm.
2049	RESEARCHER: And do you use learner profiles in your ...
2050	PARTICIPANT 2F: Yes, I do.
2051	RESEARCHER: All right. Does it help?
2052	PARTICIPANT 2F: Yes.
2053	RESEARCHER: Yes.
2054	PARTICIPANT 2F: But if usually they are from outside you don't get them.
2055	RESEARCHER: You don't get them?
2056	PARTICIPANT 2F: Yes, you try to phone and they always say .... we don't get them.
2057	RESEARCHER: Okay.
2058	PARTICIPANT 2F: Then you have to just discover yourself.
2059	RESEARCHER: (Laughter)
2060	PARTICIPANT 2F: (Laughter)
2061	RESEARCHER: Yes. Okay. I don't know if you have got maybe questions for me maybe?
2062	PARTICIPANT 2F: Yes, I just wanted to know otherwise, how can we deal with them, just like we, we have said with ...
2063	RESEARCHER: Yes.
2064	PARTICIPANT 2F: These type of children – do you have any idea how can we ...
2065	RESEARCHER: Yes, I do have lots of ideas ...
2067	PARTICIPANT 2F: Yes, just later, we should just give them ... because usually we do have some learners which are, you know you should pity for them, as teachers you know ...
2068	RESEARCHER: Mmm.
2069	PARTICIPANT 2F: Sometimes they keep ... we keep them for a, for a longer time in a, in a phase ...
2070	RESEARCHER: Mmm.
2071	PARTICIPANT 2F: You're going to find that when they are growing up, and then after growing up, they are a problem when they ... especially when, when they are grown ups because maybe the child keeps more than ... keep ... take more than 4 years in a phase – like a foundation phase is a 3 year phase ...
2072	RESEARCHER: Mmm.
2073	PARTICIPANT 2F: You find that you don't understand ... he is from outside, he come to our school, and then they say no, this is the first time that he's in Grade 1 ...
2074	RESEARCHER: Okay.
2075	PARTICIPANT 2F: Then we keep him in Grade 1, we only find it's the second year ...
2076	RESEARCHER: The second time, yes ...
2077	PARTICIPANT 2F: And then from our discovery, we find that he is not ready ...
2078	RESEARCHER: Yes.
2079	PARTICIPANT 2F: You see? We keep him in Grade 1 ...
2080	RESEARCHER: Mmm.



2089	<u>PARTICIPANT 2F</u> : And then the age do say no, you should push her, her, but we say, no, we can't , because the basics are not there ...
2090	<u>RESEARCHER</u> : Mmm.
2091	<u>PARTICIPANT 2F</u> : And then the nest, the next year now, she had already repeated Grade 1, she's supposed to be in Grade 2, no matter ... they say the child should not be in Grade 1 more than 4 years and all those things. Now we are pushing, we'll be pushing that child until she's in the next phase ...
2092	<u>RESEARCHER</u> : Yes.
2093	<u>PARTICIPANT 2F</u> : And then in that phase maybe he fails once ...
2094	<u>RESEARCHER</u> : Mmm.
2095	<u>PARTICIPANT 2F</u> : Or whatever. And then the age do add ...
2096	<u>RESEARCHER</u> : Oh okay.
2097	<u>PARTICIPANT 2F</u> : And then when they come Grade 7s, they're a problem, now they are grown up mind you, age wise and everything, whatever. I gather they're 15 ...
2098	<u>RESEARCHER</u> : Yes.
2099	<u>PARTICIPANT 2F</u> : And maybe they're 16, no matter what. Now they are a problem. We have a group that's like that Then last time I was telling them that next time we should just study the age of the child and then just needs some help because it's a problem. If we keep them, they become big ...
2100	<u>RESEARCHER</u> : Mmm.
2101	<u>PARTICIPANT 2F</u> : And then when they are big, just like I used to maybe in lower grades ...
2102	<u>RESEARCHER</u> : Mmm.
2103	<u>PARTICIPANT 2F</u> : I was able to handle them.
2104	<u>RESEARCHER</u> : Yes.
2105	<u>PARTICIPANT 2F</u> : And then now they're in Grade 7 ...
2106	<u>RESEARCHER</u> : It's, it's a problem.
2107	<u>PARTICIPANT 2F</u> : It's tougher for that teacher because she, she is even new in our school you know...
2108	<u>RESEARCHER</u> : Oh yes.
2109	<u>PARTICIPANT 2F</u> : She just see problem ...
2110	<u>RESEARCHER</u> : Yes.
2111	<u>PARTICIPANT 2F</u> : And then when we come just like now, I know them, maybe I know them from foundation phase, and then I know him, I say, "uh huh, Andrea here ..." then the child ... it's then that you'll be able to discipline them ...
2112	<u>RESEARCHER</u> : Yes.
2113	<u>PARTICIPANT 2F</u> : But the ... for the new teacher, it's a problem ...
2114	<u>RESEARCHER</u> : Okay.
2115	<u>PARTICIPANT 2F</u> : She carries her bag every time when she moves up and down, she cannot leave her bag there.
2116	<u>RESEARCHER</u> : Yes, I'm sure.
2117	<u>PARTICIPANT 2F</u> : Mmm.
2118	<u>RESEARCHER</u> : (Laughter)
2119	<u>PARTICIPANT 2F</u> : It's a problem.
2120	<u>RESEARCHER</u> : (Laughter), or she locks the classroom hey?
2121	<u>PARTICIPANT 2F</u> : (Laughter), eish, and it's a problem because sometimes it's our problem.
2122	<u>RESEARCHER</u> : Mmm.
2123	<u>PARTICIPANT 2F</u> : Then it's because if we don't know where to take them ...
2124	<u>RESEARCHER</u> : Okay.
2125	<u>PARTICIPANT 2F</u> : Where to take them.
2126	<u>RESEARCHER</u> : All right ...
2127	<u>PARTICIPANT 2F</u> : So ...
2128	<u>RESEARCHER</u> : So if I understand you correctly, a lot of the behavioural problems and maybe you don't get the cooperation from the parents as well ...
2129	<u>PARTICIPANT 2F</u> : Mmm. Especially the parents are not involved in their children's education. They should be involved ...
2130	<u>RESEARCHER</u> : Yes.
2131	<u>PARTICIPANT 2F</u> : And then usually if the parents is, in involved, no matter a, a learner has a problem in learning ...
2132	<u>RESEARCHER</u> : Mmm.
2133	<u>PARTICIPANT 2F</u> : You'll be, be able to help because, we are, we are two ...
2134	<u>RESEARCHER</u> : Yes.
2135	<u>PARTICIPANT 2F</u> : We're a tripod now.
2136	<u>RESEARCHER</u> : Yes.



2137	<u>PARTICIPANT 2F</u> : And then if ever a parent is here, you can say your child is like that. When he reaches home, he try to help the child and then when he comes to school, you see there's, there's an improvement ...
2138	<u>RESEARCHER</u> : Yes.
2139	<u>PARTICIPANT 2F</u> : But if ever the parents are not involved ...
2140	<u>RESEARCHER</u> : Yes.
2141	<u>PARTICIPANT 2F</u> : You'll call a parent, a parent don't come, and they report ... or collect their report ... the child just comes to school and go back, the child come to school and go back without any intervention from the parents.
2142	<u>RESEARCHER</u> : Mmm, mmm, yes, it sounds very difficult ...
2143	<u>PARTICIPANT 2F</u> : It's very difficult.
2144	<u>RESEARCHER</u> : Yes. Do you find that most of the parents work very late, or they just ...(intervenes)
2145	<u>PARTICIPANT 2F</u> : They're just not interested.
2146	<u>RESEARCHER</u> : They're just not interested.
2147	<u>PARTICIPANT 2F</u> : Uh huh, because some are not working ...
2148	<u>RESEARCHER</u> : Yes, okay.
2149	<u>PARTICIPANT 2F</u> : Because usually we have ... most of them they don't pay school fees ...
2150	<u>RESEARCHER</u> : Uhm, I'm sure ...
2151	<u>PARTICIPANT 2F</u> : Because they don't have money ...
2152	<u>RESEARCHER</u> : But ...(intervenes)
2153	<u>PARTICIPANT 2F</u> : Even if our school fees is ttdde8[ c per year, but now they won't pay ...
2154	<u>RESEARCHER</u> : Yes.
2155	<u>PARTICIPANT 2F</u> : Yes, but when you call them ... because we usually say if a parent is not working, then he can come to school, we have many things ...maybe he want to provide the tablecloth and all this ...
2156	<u>RESEARCHER</u> : Yes, yes.
2157	<u>PARTICIPANT 2F</u> : He can do it for us ...
2158	<u>RESEARCHER</u> : Yes.
2159	<u>PARTICIPANT 2F</u> : In order not to go ... to take the tablecloth and give somebody to wash, (indistinct) pay.
2160	<u>RESEARCHER</u> : Yes.
2161	<u>PARTICIPANT 2F</u> : You see? But they won't...
2162	<u>RESEARCHER</u> : Mmm.
2163	<u>PARTICIPANT 2F</u> : They just come when you say ... they say, "no, we are not working ..." – they say all those things. Yes, but now they are not ...
2164	<u>RESEARCHER</u> : They're not interested.
2165	<u>PARTICIPANT 2F</u> : Yes, they not ...
2166	<u>RESEARCHER</u> : Yes, that sounds very difficult.
2167	<u>PARTICIPANT 2F</u> : Yes. And then when they reach Grade 7, when they are big, it's then when it's a problem, but it's not our problem only, it's there problem too now.
2168	<u>RESEARCHER</u> : Yes, it's also the parent's, yes.
2169	<u>PARTICIPANT 2F</u> : Mmm. (Laughter)
2170	<u>RESEARCHER</u> : Okay. All right. Well Mrs Modiba, I'd like to come back to the school, maybe, maybe, I don't know, but I'll keep in contact – there's two things – I'd like to maybe do classroom observations ...
2171	<u>PARTICIPANT 2F</u> : Yes.
2172	<u>RESEARCHER</u> : And then I also said to Mr Mpunjane yesterday that I'd like to come back, also do a workshop with the teachers as well ...
2173	<u>PARTICIPANT 2F</u> : Yes.
2174	<u>RESEARCHER</u> : But once I'm finished all my research.
2175	<u>PARTICIPANT 2F</u> : All right.
2176	<u>RESEARCHER</u> : So maybe October, November – towards the end of the year, I'd like just to do, because my specialty or my interests are in children who have behavioural and emotional problems. Specifically children who have ADHD, but not only those children...
2177	<u>PARTICIPANT 2F</u> : Mmm.
2178	<u>RESEARCHER</u> : So this kind of workshop I'd like to be able to offer your teachers as well. Would that be okay?
2179	<u>PARTICIPANT 2F</u> : Yes, yes, it will be ...
2180	<u>RESEARCHER</u> : Yes, yes. And maybe if you feel confident, then maybe it would be an idea to maybe give a workshop to the parents on behavioural and emotional problems as well ...
2181	<u>PARTICIPANT 2F</u> : Yes.
2182	<u>RESEARCHER</u> : Because that's one way of getting the parents involved you know?
2183	<u>PARTICIPANT 2F</u> : Yes, yes, just like last time when ...on the 4 <sup>th</sup> , we had workshop in reading ...



2184	RESEARCHER: Oh yes.
2185	PARTICIPANT 2F: It was family literacy.
2186	RESEARCHER: Okay.
2187	PARTICIPANT 2F: And then most of the parent ... there, there were few ...
2188	RESEARCHER: Yes.
2189	PARTICIPANT 2F: That were, that were interested.
2190	RESEARCHER: Okay.
2191	PARTICIPANT 2F: And then whatever ... they gave me a lot because one of the, one of the parents said, no ... he was ... he's, he's also a student at Unisa ...
2192	RESEARCHER: Mmm.
2193	PARTICIPANT 2F: But usually he just used to read for examination ...
2194	RESEARCHER: (Laughter)
2195	PARTICIPANT 2F: Now from that day, after reading workshop, and then he's able now ... he'll ... he's going to be able to help his child ...
2196	RESEARCHER: Yes.
2197	PARTICIPANT 2F: And then also himself ... and the ... and then it's, it's ... and then they are also frequently they're at school ...
2198	RESEARCHER: Yes.
2199	PARTICIPANT 2F: Because they have gained a lot ...
2200	RESEARCHER: Yes.
2201	PARTICIPANT 2F: And then you say, "they should come to school ..." ...
2202	RESEARCHER: That's wonderful.
2203	PARTICIPANT 2F: Uh.
2204	RESEARCHER: Yes.
2205	PARTICIPANT 2F: And then if you ... later on if you gauge it, assess – you assess the child, you see that there's a difference.
2206	RESEARCHER: Yes.
2207	PARTICIPANT 2F: Uh.
2208	RESEARCHER: Because the parents are involved ...
2209	PARTICIPANT 2F: They're involved, yes.
2210	RESEARCHER: And you wanted to help the child.
2211	PARTICIPANT 2F: Yes.
2212	RESEARCHER: Yes, okay. Okay. Good. I hope that if I can offer the workshops to the teachers, and then they go and tell the parents, "look, we're also offering this workshop", maybe we can do it together ...
2213	PARTICIPANT 2F: Mmm.
2214	RESEARCHER: Because the idea is that you learn and you teach others as well ...
2215	PARTICIPANT 2F: Others, yes, that's the thing.
2216	RESEARCHER: Yes, so then maybe that's one way of doing it ...
2217	PARTICIPANT 2F: Of doing, yes, because ...
2218	RESEARCHER: So then we can get the parents involved ...
2219	PARTICIPANT 2F: Even some of our educators you know, they say no, we are going for interviewing, but what about, what ... how are we going to handle those things ...
2220	RESEARCHER: Yes, no, they all ask me.
2221	PARTICIPANT 2F: Yes, uh ...
2222	RESEARCHER: So ... and remember we ... we wanted to do intervention ...
2223	PARTICIPANT 2F:.
2224	RESEARCHER: Because what I wanted to do was to do an intervention with the reading and the numeracy ...
2225	PARTICIPANT 2F: Yes.
2226	RESEARCHER: And then behavioural, that was the three thing ... remember ...
2227	PARTICIPANT 2F: Yes.
2228	RESEARCHER: With the assessments and everything.
2229	PARTICIPANT 2F: Yes, the assessment, assessment, yes.
2230	RESEARCHER: And when I came to doing ... planning it, my supervisor said, no, you'll never have enough time to do it, you can't, so I had to change my topic.
2231	PARTICIPANT 2F: Yes.
2232	RESEARCHER: So now I have to do this – it wasn't what I originally wanted to do ...
2233	PARTICIPANT 2F: Yes.



2234	RESEARCHER: It wasn't my intention – my intention was to do a proper intervention ...
2235	PARTICIPANT 2F: intervention, yes.
2236	RESEARCHER: You know, I had to change my topic, but I'd still like to come back and maybe do workshops with the ... because my ... that's my interest – is to do behavioural ...
2237	PARTICIPANT 2F: Behavioural, yes ...
2238	RESEARCHER: And emotional problems with children, yes, to intervene with that.
2239	PARTICIPANT 2F: Yes.
2240	RESEARCHER: So we can still do that. Unfortunately I just had to do those workshops when I'm finished all my workshops ...
2241	PARTICIPANT 2F: Yes, no, no, do your job, and then ...
2242	RESEARCHER: Yes.
2243	PARTICIPANT 2F: We'll get the report.
2244	RESEARCHER: But that was always my intention, you know that ...
2245	PARTICIPANT 2F: Yes.
2246	RESEARCHER: You know that ...
2247	PARTICIPANT 2F: Yes, yes, for a long time, yes, uh huh.
2248	RESEARCHER: Yes. So we'll do that for sure.
2249	PARTICIPANT 2F: All right, thank you.
2250	RESEARCHER: Yes, okay.
2251	PARTICIPANT 2F: Okay.
2252	RESEARCHER: Thank you for your time Mrs Modiba, thank you so much ...
2253	PARTICIPANT 2F: All right.
2254	RESEARCHER: And I'll keep in contact, so you'll hear from me, if I fax or I phone you, but we'll keep in contact. I might have to come back just for observations ...
2255	PARTICIPANT 2F: Yes.
2256	RESEARCHER: And that's another thing – I brought my camera today, can I take photographs – not of the teachers, just of the learners and the school itself – the buildings you know.
2257	PARTICIPANT 2F: All right.
	END OF INTERVIEW.