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Research Report

MA Research Psychology by Coursework and Research Project

(PSYC – 7022)

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TITLE

A comparative study of ADHD prevalence in 4 Gauteng schools and an exploration of the experiences of adolescents diagnosed with the disorder

PLAGIARISM DECLARATION

"I declare that this research project is my own, unaided work. It has not been submitted before for any other degree or examination at this or any other university."

NAME: _____

STUDENT NUMBER: _____

SIGNATURE: _____

DATE: _____

ACKNOWLEDGEMENTS

A journey such as this is rarely one that is travelled alone, and I have had many people who have been with me every step of the way and would like to thank. Firstly, my supervisor, Professor Jill Bradbury, for her endless wisdom, patience and gentle encouragement throughout this process. My sincere thanks to all the children who participated in this study, for allowing me to share their thoughts and experiences. To my own beautiful children who have been so patient and understanding when I seemed to be 'glued' to my computer. I owe a huge debt of gratitude to my husband Sean, who has always believed in my ability and has been supportive of my work. Without you, the wheels of our household would have definitely stopped turning. Finally, to my God for His favour and grace and through whom all things are possible.

ABSTRACT

ADHD is one of the most prevalent disorders in child psychiatry today. Whilst the phenomenon of ADHD is well researched in Europe and North America, there are limited studies available in South Africa that explore the link between ADHD and different forms of schooling. Furthermore, few studies focus on the children who have been socially positioned in this way. This study focused on the prevalence of ADHD with a particular aim to explore how gender, race and class play out in an unequal schooling system. The secondary aim was to contribute to the knowledge about adolescents' own understandings and experiences of ADHD. The research was conducted in two distinct phases, Phase 1 included the administration of a demographic questionnaire to determine the prevalence of the disorder within four different Gauteng schools. Phase 2 of the project included semi-structured interviews to explore the understandings, perceptions and experiences of children living with this diagnosis. This study explored the prevalence of ADHD across four different schools in Gauteng. Results of the study propose that the diagnosis and prevalence of this phenomena is strongly influenced by gender, race and class, as the majority of children diagnosed are boys (65%), more than half are from upper class families (61%) and most of the children are white (71%). The adolescents who were interviewed indicated that teachers were mostly the initiators of their diagnosis due to deviations from classroom behaviour and academic performance. While the children claimed that the diagnosis and the medication had certain benefits, they also identified distinct disadvantages with the most notable adverse effects on mood and interactions with their peers. The predominant biomedical view of the disorder seemed to be internalised by the children which positioned them in a subordinate relationship with health care professionals. A strong theme of disempowerment emerged, with medical experts and mothers, identified as gatekeepers to their sense of agency.

Keywords: ADHD, prevalence, race, class, gender, schooling, adolescents

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CHAPTER 1: CONTEXT OF THE RESEARCH PROJECT

1.1 Introduction

This project aimed to investigate the prevalence of Attention Deficit Hyperactivity Disorder (ADHD) in four different Gauteng schools and what the patterns of prevalence may tell us about the links between race, gender and class in the constructions of ADHD. In addition, the project aims to contribute to knowledge about adolescents' perceptions and knowledge of ADHD. The project also offers a more in-depth qualitative phenomenological exploration of the perspectives and meanings of a small group of adolescents living with this diagnosis.

ADHD is one of the most prevalent disorders in child psychiatry today. In 2013, 11% of children between the ages of 4 and 17 in the United States, received the diagnosis of ADHD, compared to 5% in the early 1990s (Visser et al., 2013). The prevalence of ADHD varies geographically; in Australia the number of children diagnosed is comparable to the US (Ghosh, Fisher, Preen, D'Arcy & Holman, 2016), yet in Europe it is estimated that only 5% of children of school going age have been diagnosed with the disorder (Wedge, 2015). These differences can be ascribed to the types of diagnostic criteria employed by each country. Countries in Europe use the more restrictive ICD-10 criteria, whereas countries like US and Australia diagnose ADHD according to the Diagnostic and Statistical Manual of Mental Disorders [DSM] (Graf, Miller & Nagel, 2014). There are no official statistics available on the prevalence of ADHD in South Africa. A study by Meyer, Eilertsen, Sundet, Tshifularo & Sagvolden (2004) reported that between 3% and 5% of learners in South African schools may be affected by ADHD. However, more recent data from the Attention Deficit and Hyperactivity Support Group of South Africa (ADHASA),

suggests that between 8 and 10% of South African children have been diagnosed with ADHD (ADHASA, 2015).

Whilst the phenomenon of ADHD has been extensively researched in Europe and North America, few studies are available in Sub-Saharan Africa (Bakare, 2012). Furthermore, previous studies investigating ADHD have focused on the challenges children diagnosed with the disorder pose for educators and teachers as opposed to the experiences of children who have been socially positioned in this way (Brady, 2014; Meyer et al, 2004). There are also very few studies on the issue of ADHD that specifically explore the link between the disorder and social factors such as class, gender and race. Within the school system in the UK, the allocation of special needs services may be race and classed based. Black children (more specifically black boys) are more frequently designated as having "emotional and behavioural difficulties" than white boys who tend to absorb most of the resources associated with reading and other academic difficulties (Timimi, 2005, p. 49). A South African study conducted by Snyman & Truter, (2012) amongst children and adolescents diagnosed with ADHD in the Eastern Cape revealed that just over 78% of children identified with ADHD were white. Similarly, it is argued that, in South Africa, psychostimulant medication like Ritalin may be over-prescribed to children in schools that serve more advantaged and affluent communities (Belsham, 2012).

In South Africa, race, class and gender play out in very particular ways in an unequal schooling system. This study focused on these aspects with respect to the prevalence of ADHD as well as explored the understandings, perceptions and experiences of children living with this diagnosis.

1.2 Education and South African Schools

School is considered one of the principal socialising agents beyond the family, responsible for preparing children and youth for their positions in the economy (Ramey, 2015). It is widely acknowledged in the literature that ADHD is associated with increased risks of poor academic achievement, unruly school behaviour often resulting in suspension or expulsion, poor peer relations, conduct problems and even delinquency (Neufeld & Foy, 2006, Ramey, 2015, Timimi, 2005). Disruptive behaviour of children within the school context are viewed as a deviation from the norm, thus attention is shifted from the school and home environment and focused on the biology of the child. (Neufeld & Foy, 2006). Neufeld and Foy (2006) suggest the possibility that "ADHD could be used wittingly or unwittingly to absolve schools, teachers and caregivers from playing any causal or facilitative role in the troubling behaviours of children and youth" (p.455). In the US, some doctors admit to prescribing ADHD stimulants to children with poor academic performance regardless of whether they meet the diagnostic criteria for ADHD (Esposito &Perez, 2014). As the quality of schooling becomes further compromised by fiscal considerations, stimulant medication is used to accomplish what the schools and its educators can no longer do. American Paediatrician, Dr Anderson explains:

> I don't have a whole lot of choice. We've decided as a society that it is too expensive to modify a kid's environment. So, we have to modify the kid. We might not know the long-term effects, but we do know the short-term costs of school failure, which are real. I am looking to the individual person where they are right now. I am the doctor for the patient, not for society (as cited in Esposito & Perez, 2014, p. 430).

From the perspective of educational outcomes, South Africa has the worst education system of all middle-income countries participating in cross national assessments (Spaull, 2013). Furthermore, South Africa is also one of the worst performers amongst low-income African countries and apart from the wealthy minority, a large proportion of learners are functionally illiterate and innumerate (Spaull, 2013). According to the South African Schools Act of 1996, children from the age of seven (Grade 1) to the age of fifteen (or the completion of Grade 9) are required to be in school (Department of Basic Education [DoBE], 2016). Statistics from the DoBE (2016) indicate that after Grade 9 the school drop-out rate peaks. This is possibly because learners leaving school before Grade 12, don't believe that education will assist them with future employment or that the requirements of general education simply don't suit their needs or their abilities (Stumpf &Niebuhr, 2012). Improving learner success in secondary schools remains one of South Africa's most challenging priorities. The reported National Senior Certificate pass rate for 2016 was 72.5% (DoBE, 2016), however, this number is misleading as it does not take into consideration those learners who never proceed to Grade 12. It is currently estimated that out of 100 learners who begin school in South Africa, only 50 will reach Grade 12, of which only 40 pass and only 12 will qualify to attend tertiary education (Spaull, 2013). Almost one million South Africans between the ages of 18 and 24 who do not complete Grade 12 and proceed to post-secondary education, struggle to find fulltime employment for prolonged periods of time, if not indefinitely (Spaull, 2013).

In South Africa, schooling under apartheid was characterised by deep inequalities in the allocation of resources, the quality of education and educational outcomes (Bray, Gooskens, Kahn, Moses & Seekings, 2010; Harber & Mncube,

2011). During this time, apart from a few independent (private schools), most schools were under government remit. Three separate government departments were responsible for White, Black and Coloured children's schools. These departments were provided with unequal differential funding, had unequal resources available (i.e. teachers, facilities, educational material) to them and were issued with different exams (Ndimande, 2016). White children's schools had good facilities, skilled teachers and enjoyed significant autonomy with regards to their administration (Ndimande, 2016). Schools serving Black and Coloured communities (township schools) were not so privileged and had poor infrastructure and facilities (Ndimande, 2016). In 1994, when South Africa became a democracy, education was an area of focus for the new government. Under the framework of the new constitution, two distinct categories of schooling emerged – government (all apartheid schools collapsed into this category) and private schools (Hofmeyr, 2000). Substantial changes were made with regards to the allocation of funds to schools in poor neighbourhoods (Harber & Mncube, 2011). During 2013/14 the South African government allocated 19.7% of government expenditure to education which is substantially more than other countries like the US (13%) and the UK [12%] (World Bank, 2013). Despite this amount of state expenditure, gross inequalities in schooling provision and outcomes remain (Bray et al, 2010; Hofmeyr, 2010; SA Treasury, 2013). There is still a considerable disparity in resources available to different schools, related to school fees (Harber & Mncube, 2011). Under the South African Schools Act of 1996 (GDE, 1996), governing bodies of former Model C schools may 'top up' government funding with fees payable by parents, however, schools located in poorer neighbourhoods are not permitted to do so (Harber & Mncube, 2011). This not only influences the physical structure of the school, sports facilities and

classroom resources but it has a profound impact on the employment of adequately skilled teachers (Harber & Mncube, 2011). Former Model C schools are a popular choice amongst parents of all races (who can afford these top up fees) as they provide a good alternative to the expensive private school system and a better quality of education than most township schools can offer (Ndimande, 2016). Although school admission based on race may be illegal, school fees seem to have the same effect (Harber & Mncube, 2011). Township schools remain racially homogenous and chronically lacking in educational resources, whilst former Model C schools charge fees that most poor parents are not able to afford (Ndimande, 2106) as the fees are often close to those of private schools and at times more than university fees. Due to these persistent inequalities, schooling for many children in South Africa seems to be an exercise in frustration and perhaps even social control rather than in education and skill development (Bray et al., 2010).

Osman (2015) claims that 80% of the 30 000 state funded schools in South Africa are performing poorly, implying that most of the 11 million children enrolled in school, are attending underperforming institutions. Since 1994, there has been a dramatic increase in the number of private schools and a middle class 'flight' to these institutions, which may be interpreted as confirmation of the declining standards of public education (Hofmeyr, 2000). Government statistics reveal that in 2013, there were approximately 1600 private schools, of which 600 were in Gauteng (DoBE, 2016). Whilst many parents may covet this level of education for their children, annual fees for these private institutions range from R60 000 to R260 000, making them financially prohibitive for most of the country's population (Osman, 2015).

1.3 Education and the myth of meritocracy

The idea of meritocracy derives its "legitimacy from a common-sense assumption" that rewards are earned through hard work (Gale, Molla &Parker, 2017, p. 9). Within the context of the educational system, children are frequently told that by working hard at school they can be anything they want to be (Piketty, 2014). However, for many the concept of meritocracy is a myth and whilst it has a superficial appearance of equality, it masks the real advantages and disadvantages that are perpetuated in an unequal society (Gale et al., 2017; Piketty, 2014) like South Africa (Harber and Mncube, 2011). Education plays a significant role in perpetuating and reproducing inequality, more specifically, there is a direct link between parental education and their children's educational achievement (Harber & Mncube, 2011).

"Intergenerational mobility" or the likelihood of a child receiving a better education than their parents is difficult in most societies and in South Africa, parental education has an overwhelming effect among Black people, who have the lowest intergenerational mobility (Thomas, 1996). The quality and duration of schooling is directly related with employment prospects; inferior education disadvantages poor working class parents into low status, poorly paid jobs or extended periods of unemployment thus entrenching their poverty (Harber & Mncube). Children from poor backgrounds mostly attend under resourced schools whereas children of wealthier parents, who have access to the best schools in desirable neighbourhoods retain the privileged position of their families (Harber & Mncube, 2011). "For many, education cannot compensate for much deeper economic and social inequalities – it is not a ladder out of poverty, it simply confirms one's status in life" (Nelson Mandela Foundation, 2005, p.142)

1.4 Educational demands and the 'Docile Body'

Over the last 15years, the diagnosis and the subsequent consumption of ADHD medication has surged internationally. In the US, the increased prevalence of the disorder coincided with the implementation of 'No Child Left Behind' act of 2002, a federal law that is closely affiliated to standardised testing (Saltman, 2016). According to this act, schools are rewarded or punished according to their standardised test scores. The rates of ADHD diagnosis increased in the US by 22% in the four years following the implementation of the 'No Child Left Behind' policy (Saltman, 2016). A similar phenomenon can be observed amongst South African schools where a school's profitability and success is inextricably linked to its reputation which is predominately determined by the only national benchmark for performance i.e. the matric pass rate. Competition amongst schools (especially in the private sector - most of which are 'for profit' schools) and in ex model C schools to maintain a 100% pass rate amongst their matriculants places greater pressure on both learners and teachers to achieve such results. There is a higher rate of ADHD diagnosis of children from more affluent households (Getahun et al., 2013). This may be attributed to better access to healthcare and medical insurance. However, this trend may also be ascribed to the high expectations that well educated, upper income parents may have of their children (Swingle, 2015). Parental anxiety around academic performance may make it more likely for parents to seek help and possibly a diagnosis for their children (Getahun et al., 2013).

Increased demands are placed on learners to display test based performance outcomes that are not only of benefit to the reputation of the schools they represent, but to allow the learner to compete for the shrinking access to the world of work, income and commodity consumption (Cohen & Morely, 2009; Saltman, 2016, v)

These educational demands are placed on children at an ever-increasing younger age, every moment counts and learners who don't apply themselves from the outset are considered to be jeopardising their future (House, 2002; Wedge, 2015). As House (2002) aptly states, "Conventional education is increasingly coming to resemble the force-feeding of growth hormones to cattle to artificially speed up (for commercial reasons of course) what should be a naturally unfolding and respected developmental process" (p. 5).

Foucault (1980, p. 58) urges us to consider "what type of body does the current society need?" As teachers are increasingly expected to cope with ever-expanding class sizes, the need for 'docile' learners increase (Bray et al., 2010; Burman, 2008). A placid classroom is perceived as the starting point of instruction and teachers expend a considerable amount of effort in managing children's movements like keeping them in class, expecting them to stay in their seats and raising their hands before they speak and disciplining those who don't comply (Christian, 1997). The goal of schools is to produce docile and silent learners and, in this way, they are actively engaged in the process of producing future citizens who are employable, productive members of society (Cohen & Morely, 2009).

Educational studies produce consistent findings indicating that teachers prefer traits such as conformity and unquestioning acceptance of authority (Tabarrok, 2011) and that children who display traits that conflict with conformity may not be highly valued in the classroom. Notwithstanding policies that ostensibly value characteristics like creativity, it is often closely associated with impulsivity, non-conformity and risk-taking. Children's creative energies may conflict with the teacher's goal of maintaining order (Sternberg, 1985) and thus may not only be

misrecognised, but actively punished (Myers & Torrance, 1961; Stone, 1980). A study conducted by Stone (1980) in the US, amongst Grade 2 learners revealed that those who scored highly on tests of creativity were identified as engaging in the most misbehavior, received the most punishment in class and were least liked by the teacher. As a result, some creative children may learn to conform i.e. extinguish their creativity, (Westby & Dawson, 1995), however, children who don't suppress their creativity may be at an increased risk of being identified as a child displaying ADHD symptomology, and may be incorrectly diagnosed as a result.

Internationally, corporal punishment has been prohibited in many schools, and in South Africa, any physical form of punishment has been forbidden since 1997. There has also been a marked decline in the academic streaming of classes where disruptive learners or those who are struggling academically are separated into different classes (Neufeld & Foy, 2006). A recent South African study revealed that teachers prefer medication as an intervention strategy for those identified with symptoms of ADHD, as it is believed to be a quick and effective method to manage a learner with ADHD type symptoms (Kern, Amod, Seabi & Vorster, 2015). The inclusionary approach to education and the lack of alternative forms of managing classroom disruption, may make medication an attractive mode of treatment (Frigerio, Montali, & Fine, 2013).

In an unequal society like South Africa, most children are adversely affected by the grossly inefficient and unfair school system. Only a small minority of children are fortunate enough to have access to good schools and thus better employment prospects. Considering this unequal context, it is anticipated that the prevalence

patterns of ADHD may vary across the different types of schools (i.e. government suburban and township schools, and private), according to the dimensions of race, gender and class.

CHAPTER 2: **LITERATURE REVIEW AND THEORETICAL FRAMEWORK**

2.1 Childhood and Developmental Psychology

French historian, Philippe Ariès (1962) suggests that the category of childhood, a phase of life distinct from adulthood, started to emerge in the seventeenth century (as cited in Timimi, 2005). Subsequently each historical period has created a novel version of the child and childhood (Prout, 1997; Timimi, 2005). Timimi (2005) suggests that the notion of ADHD is "intimately tied up with our modern Western beliefs about childhood and childrearing" (p.112).

Childhood in contemporary post-industrial societies has undergone significant changes, resulting in a polarised view of childhood. On "one pole, we have 'innocent' children in need of rescuing and protection and in the other pole, we have impulsive, aggressive, sexual children who are deemed to be a threat to society" (Timimi, 2005, p. 13). White middle class children have come to embody the model of an innocent, happy, playing, docile child (Burman, 2008). In an attempt to preserve our idealistic perception of childhood, those who violate the image of what a child should be are ejected from the category (Burman, 2001; 2008). In South Africa, children who participate in 'unchildlike' behaviour like engaging in paid work, caring for siblings or ailing family members, or who don't have traditional (nuclear) family structures are often isolated from the category of childhood (Bray et al., 2010; Burman, 2001, 2008) and referred to as 'youth' (Seekings, 2008). Under the apartheid regime in South Africa, the terms 'youth' and 'children', were not based solely on age but typically racialised and politicised (Seekings, 2008). Black children who were fighting social injustices and rebelling against the ruling regime were defined by the authorities as 'youth' and were positioned as violent, anti-social, undisciplined and criminal deviants in society (Morrell, 1998; Seekings, 2008). Conversely white

children (of the same age) were constructed as vulnerable and innocent (Seekings, 2008). Today, these categories of youth and child are still being applied in raced and classed ways. White high school learners living in the suburbs are referred to as 'children', and are treated as such. Areas of play, sporting activities, journeys within and around the neighbourhoods, timing and companions are carefully planned and regulated in the interest of the child's safety and protection (Bray et al., 2010). By contrast, learners in townships are generally referred to as 'youth' who need to be disciplined in highly regulated school classrooms and (particularly boys) are considered both 'at risk' and 'risky' when not under adult control (Haley & Bradbury, 2014).

"The discourses that made childhood and children knowable postulated two mutually reinforcing ideas that would prove critical for the concept of ADHD" (Rafalovich, 2013, p. 347). The first being the types of difficulties a 'normal' child would encounter (e.g., temper tantrums, potty training, authority) and the second, the appropriateness of given behaviours in relation to the child's age (Rafalovich, 2013). Developmental psychology was one of the first branches of psychology to be established because childhood was seen as the ideal location to examine how nurture affected nature (Timimi, 2005).

Professionals like doctors, teachers, psychologists and social workers have collaborated to create "frameworks through which children's bodies are understood" (Prout, 2000, p. 112). These frameworks emphasise assessment and advocate early intervention and when children don't appear to be developing according to a 'typical' biological trajectory, it generates considerable anxiety amongst childcare providers and mental health teams (Brady, 2014). Norms and milestones that structure developmental psychology present a picture of orderly, progressive development of

an “ideal-typical citizen-subject who is knowable, known, docile and productive” (Burman, 2008, p. 26). However, childhood is experienced in multiple ways across different historical periods of time and is a complex and ever-changing category that is influenced by socio-cultural, political, economic and personal contexts. (Burman, 2008; Prout, 1997; Timimi, 2005). For many children living in post-apartheid South Africa, development within childhood and transitions from childhood to adulthood are not neat and orderly moments of change, nor do they follow the sequences prescribed by developmental psychology (Bray et al., 2010). It is argued that developmental psychology does not take into consideration the chaos and complexity of the developmental process and is culture’s way of determining how children should be, as opposed to leading us closer to the understanding of the real, lived experiences of children (Burman, 2008; Timimi, 2005).

2.1.1 Mothers and ADHD

Within the structures of developmental psychology, relationships with mothers feature prominently where they are positioned as objects and sources of their children’s affection (Burman, 2008). For centuries, mothers have been made responsible for the preservation, education and development of their children (Burman, 2008, Malacrida, 2001). Charged with the nation’s health and production of the nation’s moral and constructive citizens, mothers are considered accountable for sourcing and putting into practice the right kind of help for their children (Horton-Salway, 2012; Singh, 2002; 2004). When analysing theories of child development, it becomes evident how the general discourse tends to “blame” and “devalue” women in their roles as mothers (Timimi, 2005, p47). Blum, (2011) argues that Black mothers in particular “have rarely been considered as valorous mothers except when caring for the children of others, instead they are often demonized as careless

breeders, their own children deemed polluting and costly" (p. 946). When it comes to their children, Black mothers need to go further, work harder and be ever "vigilant" for possible racial exclusion or insensitivity (Lareau, 2003, p.181).

Problematic Links between mothers and ADHD go as far back as the 1950's, when psychotherapy was suggested for childhood neuroses and 'mother issues'. This link between a 'problem child' and 'problematic mothers' has lingered throughout the discourse about ADHD, disseminated by the media and expert knowledge over time (Burman, 2008; Malacrida, 2001).

2.1.2 Psychomedical construction of childhood

The psycho-medical construction of childhood supports the treatment of children as physically, mentally immature and subordinate with their only value being their future contribution as productive members of society (Timimi, 2005, 2010). Within health practices, conceptions of children as "human becomings (future focus)" as opposed to "human beings (present focus)" undermines their capacity to negotiate and make sense of their medical diagnosis and treatment (Brady, 2014, p. 221). Children are often excluded from social research, as their contributions are undervalued (Hill & Tisdalle, 1997) or are viewed as unreliable, and this type of research necessitates much ethical deliberation (Strode, Slack & Essack, 2010).

The paucity in the literature on adolescent's own perspectives of ADHD suggests that adults like doctors, psychologists, psychiatrists and parents are the main moderators of children's health. Numerous studies suggest that children can take an active role when making decisions about aspects of their health that directly concern them, provided they are given clear information in age appropriate terms they will

understand (Alderson,1993; 1995 & 2000; Young, Dixon-Woods, Windridge & Heney 2003).

Professional bodies like the British Medical Association (2001) have recognised the importance of the active involvement of children and adolescents in the decision making about their healthcare and that healthcare professionals should facilitate this participatory process. “The very act of diagnosing children with a mental disorder immediately renders them into a position where their own agency is considered lacking or undesirable” (Le François, 2008, p.213). Children have unique and valuable contributions to make regarding medication and treatment regimes, yet, adults hold sole discretionary power in defining children as irrational based on their age and psychiatric diagnosis. As a result, they are stripped of their rights and are given little voice in medical consultations about their diagnosis and subsequent treatment (Alderson, 1993; 1995; Le François, 2008).

2.2 ADHD – A neurobiological condition or social construction?

Since its recognition as a diagnostic category in the mid-twentieth century, ADHD has been surrounded with tremendous controversy over its nature and treatment (Malacrida, 2004). Two contrasting etiological positions have prevailed over time, the neurobiological model and the discourse of social construction. The neurobiological approach reduces ADHD to genetics, malformed neurological structures in the brain, and deficits in the neurotransmitter Dopamine (Mitchell & Read, 2012). Other non-genetic factors like food additives, lead contamination, foetal alcohol syndrome, maternal smoking during pregnancy and prematurity are also believed to play a role (Mitchell & Read, 2012). The most dominant biomedical framework used by psychiatrists and psychologists to understand the behaviour

related to ADHD is the Diagnostic and Statistical Manual of Mental Disorders (DSM), with the most current version being DSM-V (Brady, 2014). Each revision of the DSM has seen a change in the diagnostic criteria for ADHD, which is now included under "neurodevelopmental disorders" as opposed to the previous category of "disruptive behaviour disorders" (American Psychiatric Association [APA], 2013, p. 16). The DSM-V defines ADHD as "a persistent pattern of inattention and/or hyperactivity and impulsivity", with symptoms typically emerging in early childhood (APA, 2013, p. 59). The DSM-V has expanded the maximum age at onset from 7 to 12 years which may increase the risk of confusing normal developmental processes like pubertal restlessness and distractibility with ADHD (APA, 2013; Thomas, 2013). Whilst the term "impaired functioning" has not been altered between the DSM-IV and the DSM-V, symptoms no longer need to be "clinically significant" but merely "interfere with or reduce the quality of social, academic or occupational functioning." (APA, 2013, p.60). Furthermore, the DSM-V has for the first time included criteria for diagnosis of adults (APA, 2013). It is now easier to meet the full diagnostic criteria thus significantly increasing the prevalence of ADHD diagnoses (Rabiner, 2013; Thomas, 2013). Changes between each version of the DSM may result in more individuals obtaining services from which they could benefit (like academic concessions) when it would not previously have been the case.

2.2.1 Psychostimulants

The neurobiological model advocates the primary treatment of ADHD with psychostimulants, which commonly include methylphenidate (Furman, 2008; Rafalovich, 2013). Typically, medication used to treat children with ADHD in South African is either a stimulant i.e. Methylphenidate (commonly known as Ritalin or Concerta) or Atomoxetine (Strattera) which is a non-stimulant medication (Vogel,

2014). While considered to be safe, this medication has multiple side effects and is associated with growth delays, weight loss, mood swings, somnolence and cardiovascular complications (Furman, 2008). Although Strattera is not considered to be as effective as stimulant medication, it is often used in patients who cannot tolerate the side effects of methylphenidate (Vogel, 2014). However, this form of medication is not without adverse side effects and is believed to increase suicide ideation (Cohen & Morely, 2009).

The role of psychostimulants remains controversial and the exact mechanism of this medication is still unknown (Truter & van Kotze, 2005). Several studies found then when children who were diagnosed with ADHD took stimulant medication, parents and teachers rated their academic performance more favourably, although objective measurements of the quality of their work had not improved. However, researchers suggest that what may have occurred was an improvement in classroom manageability as opposed to achievement (Barkley & Cunningham, 1978; Curie, Stabile & Jones, 2013). It is postulated that psychostimulant medication may improve academic performance, although the extent and the longevity of these improvements remain unclear (Cohen & Morely, 2009). Whilst it is argued that medication may improve academic functioning, albeit for a short period of time, it does so in a way that disconnects some of the components of that achievement from the effort of achieving (President's Council on Bioethics, 2003). However, it raises the question that if psychostimulants enhance academic performance albeit to only a small degree, these benefits may prove not only to be important in a competitive society (Smith & Farah, 2011), but may be compounded in an unequal society like South Africa.

Studies indicate that the drugs are not as transformative as their advocates would like parents and teachers (and the children who take it) to believe (Sharpe,

2014). Although it is reported that psychopharmatherapy alone is highly effective for the short-term symptomatic and academic improvement in ADHD, to date, no study has found any long-term benefit of ADHD medication for learning, cognitive ability, peer relationships or behaviour problems (Ghosh et al., 2016; Lakhan & Kirchgessner, 2012; Sharpe, 2014; Sroufe, 2013; Timimi, 2010). There are also suggestions that stimulants can worsen the symptoms it is attempting to 'fix' and when children develop these adverse reactions, it is interpreted as the worsening of the disorder, precipitating further prescription of medication (Breggin & Breggin 1994). Whilst short-term improvements in paying attention are noted, studies that have examined the long-term benefits (beyond a year) indicate that benefits either disappear entirely, or shrink to clinically insignificant proportions (Parker, Wales, Chalhoub, & Harpin, 2013; Sharpe, 2014; Timimi, 2005). Furthermore, the effects of stimulant treatment in childhood does not necessarily extend into adolescence (Ghosh et al, 2016). It is understood that adolescents discontinue stimulant use at high rates and by the age of 18, less than 10% of youth who were prescribed the medication continue to take it (Pelham et al, 2013). There is a rising concern with 'psychotropic polypharmacy' and the shift in child psychiatry toward prescription medication. The use of psychostimulants, anti-depressants and neuroleptics (sometimes in combination with one another) is a common occurrence, often at the outset of the diagnosis (Timimi, 2005). Thus, when children enter the mental health system, it is not uncommon for further diagnoses to ensue. (Brady, 2008; Timimi, 2010).

Supporters of the neurobiological view argue that they are getting more adept at recognising ADHD aided by technologically advanced methods of neuroimaging (Rafalovich, 2013). In addition to this, neurobiological advocates claim children's behavioural responses to stimulant drugs like Ritalin confirm the presence of some

organic condition, although psychostimulant use amongst asymptomatic children produces the same results (Rafalovich, 2013). However, there are still no definitive medical tests, specific cognitive or neurological markers for ADHD (APA, 2013; Leo & Cohen, 2003; Sroufe, 2013; Timimi, 2005; Timimi, 2010). Whilst it is postulated that a wide variety of areas of the brain are implicated in ADHD, functional and structural brain scans have not uncovered a consistent deficit or abnormality (Leo & Cohen, 2003).

2.2.2 Social Construction of ADHD

While biological development and genetic heritage impact on behaviour, and may play a role in mental and emotional distress, "the definition of disease is inevitably culturally mediated and involves relations of power" (Lamperd, 2009, p. 75). Child and adolescent psychiatrist, Sami Timimi (2005, 2010) challenges the notion that ADHD is a biological disorder, suggesting that the expression of the behaviours is a response to modern Western life and its associated "narcissistic value system" (Timimi, 2010, p. 695). Children are socialised into this value system, which is male dominated and focused on the individual. Instead of examining themselves and the society they have created, adults locate the problem within the child and label them with a diagnosis of ADHD and then treat the disorder with medication (Timimi, 2010). Van de Kolk (2005) argues that many children who have been exposed to traumatic events are often misdiagnosed with ADHD due to the similarity in the manifestation of symptoms like talking out of turn, disturbing other learners, aggression and other disruptive behaviours in classrooms. Van de Kolk's hypothesis is particularly relevant in a country like South Africa where many children are repeatedly exposed to potentially traumatic experiences like violence, crime, abuse and neglect (Patterson & Perold, 2013). This overt violence is often intertwined with

and reinforced by more subtle and invisible structural violence that, harms people physically and psychologically through unjust and unequal social, political and economic systems (Farmer, 2004). In South Africa, the structural violence of poverty and associated adverse living conditions expose people to increased health risks like malnutrition, disease, infection and injury (Paterson & Perold, 2013).

It is reported that children who do not have a father present in the home are prone to more emotional and behavioural problems and are at an increased risk of deviant behaviour, attentional and learning problems (Swingle, 2015; Timimi, 2005). Having an involved father who lives at home can make a significant difference in the life of a child, as the household tends to be better off economically and mothers may benefit from the extra emotional support (Richter, Chikovore &Makusha, 2010). South Africa has the second highest rate of father absence on the continent, "low rates of paternal maintenance and shockingly high rates of abuse and neglect of children by men" (Richter et al., 2010, p. 360) but again this phenomenon is raced and classed. Recent statistics estimate that 87% of white children live with both parents and approximately only 33% of Black children have both parents present in the home. (Statistics South Africa, 2013). Patterns of fatherhood have been shaped by the Apartheid era which entrenched migrant labour, produced an unequal education system and a racialised labour market. High levels of unemployment and the inability to generate enough income as uneducated and unskilled labourers, may also influence fathers' decision to leave the family home (Richter, Chikovore &Makusha, 2010).

Prescribing psychostimulant medication to treat ADHD like behaviour, illustrates how human life has come to be understood in terms of a market reality in which "interventions are based on cost effectiveness and become centered on the

individual, irrespective of the social factors responsible for the condition being treated" (Esposito & Perez, 2014, p. 430).

According to Foucault (1977, p. 194.), discourses are bodies of knowledge imbued with power and "power produces; it produces reality, it produces domains of objects and rituals of truth". This study will use a Foucauldian approach to examine how discourses, particularly medical ones, have been able to 'talk' a particular phenomenon like ADHD into being and their implications for the real lived experiences of children. Through his analysis of institutions like asylums and prisons, Foucault suggests that disciplinary power can be exercised in many forms; it can be metered out through spatial separation (placing individuals in controlled spaces like schools where they can be supervised and compared to others) or affected through other means such as the discursive construction of difference (Bâlan, 2010; Foucault, 1980). ADHD behaviour can be conceptualised either as a medical illness or an indicator that the child may be destined to become a criminal (Blum, 2011; Timimi, 2005). Peter Conrad (1975, p. 18-19) asserts that by "defining deviant behaviour as a medical problem, allows certain things to be done that could not otherwise be considered". Philosopher Ian Hacking (1999) suspects that if we medicalize disagreeable behaviour patterns, we can argue that many entries in contemporary diagnostic manuals like the DSM could be considered as a disciplinary device and not a diagnosis. Hacking (1999, p.100) asserts that mental illnesses could be considered as transient, not in the sense that they are a temporary part of the individual's life but that they "show up only at some times and places, for reasons which we can only suppose are connected with the culture of those times and places". Children diagnosed with ADHD are quite possibly not dissimilar to children who were once considered to be merely 'fidgety' (Hacking, 1999). However, today, these

children are viewed as manifesting a different phenomenon mostly due to the way we "think about, classify and deal with their behaviour" (Timimi, 2009, p. 10).

A potential impact of the ADHD diagnosis and medication is that the person can come to embody their diagnostic category (Hawthorne, 2010). Ian Hacking (1995, p. 59) describes this process as part of a "looping effect". When those diagnosed begin to act in accordance with the labels assigned to them and others (like the family, teachers and schools) reconstruct their image of those individuals, changing their attitudes about them and the way they behave towards them (Hacking, 1995). Similarly, studies reveal the effects of labelling a child with ADHD can reduce teacher expectations of academic achievement, which in turn are associated with actual lower achievement scores (Thomas, 2013; Coleman et al 2009, Sayal et al, 2010). Furthermore, the diagnosis of ADHD may have a profound impact on the child's self-perception, as these kinds of labels encourage a focus on the child's deficits as opposed to the things he does well (Newnes & Radcliffe, 2005).

2.2.3 Medicalised and criminalised forms of school discipline

By prescribing medication to control symptoms associated with ADHD, medical professionals assert their position in defining and managing deviant behaviour (Ramey, 2015). Subsequently, institutions like schools can now attempt to manage these behavioural problems using the medical model which means adopting the language and policies of mental health systems to measure, classify and control students, in particular those whose behaviour is deemed a threat to the prevailing order (Ramey, 2015). In the case of ADHD, most of the focus was and often still is on 'unruly' boys (Burman, 2008; Timimi, 2005). The notion of criminalisation is regularly highlighted by research which cautions that undiagnosed and untreated ADHD type behaviour is associated with early substance abuse, road accidents,

traffic violations and difficulties in personal relationships and the workplace (Neufeld & Foy, 2006). Furthermore, ADHD like behaviour problems are associated with criminalised forms of school discipline, like surveillance, punishment, suspension and expulsion (Ramey, 2015). Studies in the US suggest that the behaviour of black and Hispanic school children is subjected to more punitive treatment and consequently encounter more criminalised forms of school discipline in comparison to their white counterparts (Moody, 2016; Ramey, 2015). Frequent involvement with criminalised forms of school discipline creates the impression that these children are "repeat offenders destined for involvement in the criminal justice system" (Ramey, 2015, p. 183). Rudd (2014) suggests that implicit bias is linked to racially disproportionate school discipline. Implicit bias is defined as "a mental process that causes us to have negative feeling and attitudes about people based on characteristics like race, ethnicity, age and appearance" (Rudd, 2014, p. 3). In the general population, implicit racial bias often reinforces the stereotypical caricature of Black youth (especially males) as reckless, deceitful and dangerous (Rudd, 2014). In the US, research shows that African American learners (especially boys) are disciplined more often and receive more out of school suspensions and expulsions for minor transgressions like talking back to teachers or writing on desks than White learners (Rudd, 2014). White boys are typically suspended for concrete and observable offences like smoking or bunking class. Black boys tend to be referred for suspension for more abstract and subjective violations perhaps because their group membership leads them to be perceived as more threatening, disruptive and uncooperative by teachers and administrators (Blum, 2011; American Values Institute, 2016). These racial stereotypes of Black youth, are reinforced by a mental process called 'cultural deficit thinking' (Rudd, 2014; Skiba, Michael, Nardo & Peterson, 2002). This type of

thinking creates the perception amongst teachers and school administrators that Black children and their parents don't value and are not as invested in the education process as their White middle and upper class counterparts (Rudd, 2014). Similarly, in the South African context, young black boys and men tend to be stereotyped as criminal and are associated with aggression, violence and risk-taking behaviour (Haley & Bradbury, 2014; Ratele, 2008). These racial stereotypes are perpetuated in South African media, which portrays black men negatively in news, advertising and entertainment programming (Selekane, 2014).

2.3 Gender, class and race

Although ADHD is recognised as a diagnostic category, there are also studies that indicate that the disorder may play itself out in relation to a variety of psychosocial factors. Historically, boys have been advantaged in schooling and other academic settings. From the late 1970s in the UK, there has been a focus on the academic achievements and ambitions of girls to redress the power imbalance which favoured boys and men. (Education, Audiovisual, and Culture Executive Agency [EACEA], 2010). However, attempts to narrow the gender gap in favour of females has resulted in most of the international literature focusing on the underachievement of boys (EACEA, 2010). Studies indicate that girls are outperforming boys in their school grades, making them a valuable and sought after resource for schools (Timimi, 2005). According to South African education statistics, amongst the learners who wrote the 2014 National Senior Certificate exam, girls outperformed boys in qualifying for Bachelor, Diploma and Higher Certificate programs (DoBE, 2016).

As well as their lesser contribution to the school's performance league, boys absorb the bulk of the resources in additional academic support and special needs education (Timimi, 2005; Daniels et al, 1998). In South Africa, there are a limited number of government and private special needs schools. These schools typically charge higher fees and are designed to accommodate children who are unable to cope in a mainstream academic environment due to their physical, communicative, mental or social difficulties. According to the latest available statistics from the Department of Education, out of 1600 children enrolled in special needs education in Gauteng with an ADHD diagnosis, 1246 are boys (DoBE, 2016). These figures seem to endorse the notion that boys are falling disproportionately outside the norm (Timimi, 2009) and as a result are ejected from mainstream into special needs education.

Gender is entrenched in the symptom classification of ADHD as externalising (conduct) and internalising (emotion) behaviours are the diagnostic building blocks for the disorder (Timimi, 2009). Similarly, as hyperactivity is predominately understood as a masculine problem and depression as a feminine problem, the prescription of psychoactive drugs appears to be gendered. Psychostimulants like Ritalin are more frequently prescribed for boys, whilst antidepressants like Prozac are more commonly prescribed for girls (Blum, 2011).

Earlier studies estimated that during childhood, as many as four to nine times more boys are diagnosed with ADHD than girls (Aase, Meyer, & Sagvolden, 2006; Timimi 2005). The DSM-V asserts that ADHD is more frequently diagnosed in males with a ratio of 2:1 (APA, 2013). However, other research suggests that this gender gap is starting to narrow (Mahone, 2012). The gender ratio may also vary according to the source of the samples, for example clinical samples suggest that boys are diagnosed at a ratio of 10:1 whereas community samples reflect a lower

ratio of 2:1 (Aase et al., 2006). In South Africa, Snyman & Truter's study (2012) revealed that just over 73% of the children and adolescents diagnosed with ADHD were male. Whilst most of the international literature acknowledges the disproportionate male to female diagnostic ratio, the question as to why a disparity exists has evaded much of the research (Timimi, 2005). It has been hypothesised that ADHD related behaviours are more consistent with traditional gender-stereotyped roles for boys than for girls (Horton-Salway, 2012; Timimi, 2005). The literature suggests that girls may be under diagnosed due to gender differences in the expression of ADHD type symptoms (Biederman et al 2002; Timimi, 2005). Girls generally display lower rates of hyperactivity and physical aggression but higher levels of inattentiveness and internalising symptoms in comparison to boys (Biederman et al, 2002; Vogel, 2014). It is argued that girls present with a less severe form of ADHD or that the symptoms associated with the disorder only become more apparent in girls as environmental demands increase (Vogel, 2014). Other studies suggest that many mental health professionals don't always strictly adhere to diagnostic criteria and their clinical judgment is affected by heuristics and biases (Mahone, 2012; Merten, Cwik, Margraf & Schneider, 2017). When presented with male and female versions of diagnostic vignettes, mental health professionals were inclined to diagnose ADHD twice as often amongst boys (Mahone, 2012). On the other hand, the diagnostic label and medication may be used as a form of social control for deviance and the 'unruly' behaviour of boys (Horton-Salway, 2012).

Masculinities are socially constructed and thus influenced by the socio-political context, resulting in not one but multiple masculinities (Connell, 1989). Boys are more likely to be labelled as 'troublemakers' with respect to skipping school, discipline problems, suspensions and expulsions (Timimi, 2005, Connell,

1989). These behavioural 'problems' amongst boys are frequently associated with the expression of hegemonic masculinity, which according to Connell (1989) are expressed by defiance of adult authority, physical dominance, aggression and casual treatment of schoolwork. Masculinity studies in the UK amongst white and black adolescents reveal that social class and race play a pivotal role in how boys develop and interpret their masculine identities (Frosh, Phoenix & Pattman, 2003).

In post-apartheid South Africa, social class intersects with how boys interpret the dominant form of masculinity. Morrell (1998) suggests that different kinds of schools, township, private and former Model C schools, play a significant role in the construction of different masculinities. Black boys who go to former Model C schools are called pejorative names like 'coconuts' by their male counterparts in the townships (Durheim & Mtose, 2006) and are seen as deficient in (African) masculinity (Langa, 2010). It is suggested that race and social class influence the way boys express their masculinity, with middle-class boys viewing academic achievement and working class boys considering being streetwise as expressions of masculinity (Frosh et al., 2003; Langa, 2010). According to Wright, Weeks, McLaughlin, & Webb (1998), academic discussions about the experiences of young black male learners and their expression of masculinity have often "focused on sexism, aggression and violence of black males, not only does this reinforce stereotypes but it also leads to a homogenous image of black masculinity" (p.78). These stereotypes of black masculinity are problematic in that not only do they perpetuate racial stereotypes, but also limit our understanding of the difficulties these young boys encounter (Sewell, 1995). A UK study by Wright et al, (1998) demonstrates that young black men are defined ambivalently, on one hand they are

"exoticised for sporting prowess, musical ability and representations of style, whilst simultaneously criminalising these attributes" (p. 80).

Langa's (2010) study of township masculinities in SA, explores the complex notions of what it means to 'be a boy' in specific contexts, identified two different 'types' of boys in township schools, '*tsotsi'* boys and 'academic' boys. *Tsotsi* boys are viewed as those who misbehave at school, defy teacher's authority, struggle academically and are often involved in gangs. On the other hand, 'academic' boys conform to school authority and perform well academically, although many feel conflicted about their masculine position as they are often looked down upon and mocked about their academic achievements (Langa, 2010). However, Langa (2010, p. 4) observed that the boys were not rigidly bound to one 'type' but rather moved between several positions confirming that masculinity is "fluid, multiple and contradictory".

Epidemiological studies in the UK and US reveal that more White children (4:1) than Black children are diagnosed with ADHD (Evans, 2004; Olfsen et al, 2003). Moody (2016), asserts that one possibility for this disparity is that the evaluating, diagnosing and medicating learners is an expensive process, which may disproportionately affect Black families who tend to have lower incomes levels in comparison to White families. With the absence of bio-medical indicators of the disorder, ADHD remains a subjective diagnosis. The Conners Teachers' Rating Scale (CTRS) is an instrument (usually completed by teachers and parents at the request of the clinician) to screen for ADHD and monitor the treatment of children diagnosed with the disorder (Cohen & Morely, 2009). These instruments are thought to exemplify scientific objectivity; however, there is an over reliance on these scales which are treated as statements of fact, yet are based on value judgments (Evans,

2004; Cohen & Morely, 2009). A study in the US revealed that when using subjective tools like the CTRS, black boys were rated higher on antisocial traits by their teachers. In the UK, Evans (2004) comments on a similar racial discrepancy which he describes as the "mad/bad" paradigm, where behavioural disturbances in white children are classified as an illness (i.e. ADHD), yet black children displaying the same kind of behaviour, are simply classified as "bad" (Evans, 2004, p.932).

Blum (2011) contends that when Black boys in the US are diagnosed with ADHD and medicated as a result, it comes at a cost. Whilst the label may temporarily shield the child from the school employing more punitive disciplinary approaches, it simultaneously reinforces negative stereotypes of Black masculine 'badness' (Blum, 2011). Another intersectional analysis pertaining to race and class, suggests that medicalisation may be more willingly accepted by parents to protect Black boys from more affluent class contexts; perhaps because their connection to these contexts challenges the "lower-class identification of Black masculine badness" (Blum, 2011, p957).

2.4 Peer relationships in adolescence

Children's relationships with peers begin in the first years of life, many children are cared for in formal group settings and others encounter peers during informal family activities (Hay, 2005). As adolescents transition into secondary school, relationships with parents are no longer the primary source of social support; peer networks expand and peer group affiliation, close friendships and romantic relationships become important aspects of social development (La Greca & Moore-Harrison, 2005).

A child's ability to make friends and operate successfully within a peer group are important markers of social skills and are considered as strong predictors of social, academic and psychological wellbeing (Diamantopoulou, Henricsson, & Rydell, 2005). Peer relations seem to be more predictive of later psychological functioning than other variables like teacher ratings, academic achievement and absenteeism and are thus a major concern amongst investigators. (Diamantopoulou et al, 2005; Hoza 2006).

Children and adolescents who experience peer rejection tend to have negative views of themselves and often experience greater feelings of loneliness, psychological maladjustment, academic difficulties and social dissatisfaction compared to non-rejected peers (Hay 2005; Hoza, 2006; Diamantopoulou et al, 2005).

Although social problems are not considered as part of the diagnostic criteria for ADHD, it is proposed that children and adolescents diagnosed with ADHD are approximately four times more likely to be rejected by their peers (Diamantopoulou et al, 2005; Mikami & Normand, 2015). Difficulties with peer relationships may manifest in a variety of ways like high rejection and low acceptance within in their peer group and the tendency to have fewer or no reciprocated friendships (Mikami & Normand, 2015).

A recent study by Coleman (2013) investigating children's attitudes towards peers with mental health problems concludes that the diagnostic label of ADHD is value laden and has the potential to cause harm and paradoxically increase mental health problems. Compared with children diagnosed with asthma, children diagnosed with ADHD have been described by their peer group as "lazier", "less clever" and "less caring" (Coleman, 2013, p. 954). Similarly, a study conducted by O'Driscoll, Hennessy & McKeague, (2012) investigating the explicit and implicit stigma towards

peers with mental health problems found that ADHD is more explicitly sitgmatised than depression, although the extent of the stigmatisation is often dependent on the perceiver's age and gender. Much of the literature focuses on the disruptive and offensive behaviour of the child diagnosed with ADHD, whilst very little attention given is given to peers who reject the diagnosed child. Mikami & Normand (2015) suggest that peer group influences like social devaluation (i.e. peers devalue those who are dissimilar), exclusionary behaviour (e.g. spreading rumours, destroying possessions, saying nasty things within earshot) and reputational bias (i.e. the pervasiveness of negative views) may contribute to peer group dislike. Furthermore, a study in Norway proposes that negative peer relationships may even exacerbate the expression of ADHD symptoms amongst those diagnosed with the disorder (Stenseng, Belsky, Skalicka, & Wichstrøm 2015).

Existing treatments for ADHD typically involve a combination of behavioural management and medication and share a common assumption that behavioural deficits can be attributed to within child explanations. Whilst psychosocial behavioural management and medication claim to ameliorate inappropriate behaviour, these approaches have been found to be largely ineffective for children diagnosed with ADHD (Mikami & Normand, 2015; Stenseng et al., 2015).

2.5 Conclusion

Childhood has come to be understood according to modern Western beliefs, with professionals collaborating to create frameworks through which a child's body and behaviour is understood. However, childhood is a complex and ever changing category which is not always characterised according to the neat, chronological progressions as these frameworks suggest. Over time, two main etiological positions

with regards to ADHD have emerged. The most dominant is the biomedical model which advocates treatment of ADHD with psychostimulant medication. The alternative view of the disorder is that it is a socially constructed phenomenon. What is evident in the literature is that diagnosis of ADHD is applied disparately according to gender, race and class.

3. CHAPTER 3: METHODOLOGY

3.1 Methodological Framework

The primary aim of this project is to identify the prevalence of the disorder amongst Grade 9 learners in different school systems; and what this prevalence may tell us about the links between race, gender and class when thinking about ADHD type behaviour. The first stage of the research is situated predominately in the quantitative research paradigm as questionnaires were administered to obtain a broad quantitative view of ADHD prevalence in different school contexts. The secondary aim of the project is to contribute to knowledge about adolescents' own understandings and experiences of ADHD, exploring the perspectives and meaning they give to living with this diagnosis. Semi-structured interviews were used to explore the experiences and thoughts of 8 adolescents diagnosed with ADHD; this phase of the research is situated in a qualitative research paradigm. In essence, the study utilised a mixed methods design (Cresswell, 2005). Creswell (2005) presents three mixed method designs namely, triangulation, explanatory and exploratory designs. An explanatory mixed methods design (also referred to as a two-phase model) will be used, as the main purpose of this model is to expand and elaborate on the quantitative findings through qualitative data. It is usually completed in two distinct phases, the first being quantitative, followed by the qualitative phase (Creswell, 2005). The qualitative data from the semi-structured interviews will be used to complement the quantitative data from the questionnaires. The advantage of this approach is that unlike triangulation, it is not necessary to, "converge or integrate the two different forms of data" (Cresswell, 2005, p. 516).

3.2 Research Sites and Participants

Four co-educational English medium high schools (one former Model C school in a predominately White middle-class suburb, one former Model C school situated on the outskirts of a city centre, a township school in Soweto and a Private school in a middle to upper class suburb) agreed to participate in the study. The Grade 9 cohort in each school was selected to participate in the survey phase of the study. Most learners were between the age of 14 and 15 years old. Under the South African Schools Act of 1996, children from the age of seven (Grade 1) to the age of fifteen (or the completion of Grade 9) are required to be in school (DoBE, 2016). According to statistics from the GDE, Grade 9 is the year during which the school drop-out rate peaks (GDE, 2010). For most learners, it was their second year in secondary school, providing teachers sufficient time to observe their academic performance and behaviour. The DSM-V indicates that ADHD begins in childhood with the diagnostic requirement that symptoms are present prior to the age of 12 (APA, 2013). A study conducted by Truter and van Kotze (2005) indicates that most children in South African are diagnosed with ADHD between the ages of 10 and 19.

The location and the fee structure of each school provided a useful framework for examining race and class dimensions in ADHD prevalence. The annual school fees of the former Model C school located in a middle-class suburb (Newby High)[1]is R18 700, however, learners may be granted exemption from fees upon application to the Department of Education. The race profile of the school is approximately 75%

[1] All school names (Newby High, Morgan High, Ubunye High and Baxter College) are pseudonyms

White and 25% Black learners[2]. The second former Model C school located in the outskirts of a central business district (Morgan High). Prior to 1994, Morgan High was a Whites only school. Today, approximately 98% of the learners are Black with a small percentage (2%) of White learners. Morgan high charges lower school fees (R10500 per annum) compared to Newby High. The township school (Ubunye High) is situated in Soweto, all learners are Black and is a non-fee paying school. School fees charged by the private school (Baxter College) are approximately R105 500 per annum. The racial profile of the students in Baxter College is 58% White and 42% Black learners.

Newby High is a well-resourced school with respect to staffing as well as academic, sporting and cultural facilities. School fees are supplemented by income generated from additional school fees charged by the governing body. Newby High had a 100% matriculation pass rate until 2016 when the matric pass rate dropped to 98%. Just over 1600 students are enrolled in the school with average class sizes of 28 learners. Newby High does not stream their classes according to academic ability. There are 320 Grade 9 learners who are divided into 12 classes. Learners change classes each period, lessons start promptly and teacher presence is high. A strict disciplinary code is applied with respect to uniform, learner appearance and behaviour. Newby High offers a wide range of sporting, service and cultural activities and participation in at least one after school activity per term is compulsory.

Morgan High is a well-resourced school with respect to staffing and academic facilities but does not enjoy the same level of sporting and cultural facilities as Newby High. The matriculation pass rate for this school was 100% in 2015 and

[2] Black in this research project, refers to the broad definition including the apartheid categories of Black African, Coloured and Indian

99% in 2016. There are 992 learners in the school and classes are streamed according to the academic capabilities of the learners. Grade 9 consists of 210 learners with an average of 30 children per class. At the end of each period, learners move to their respective classrooms. Learners are expected to comply with a firm code of conduct with respect to behaviour, prescribed uniform and appearance. An assortment of sports, service and cultural activities offer the learners varied opportunities.

Ubunye High is situated in Soweto, which serves the township community that consists of many child-headed families. With a pass rate of 88% over the past two years, it is positioned as one of the top township schools in Gauteng and is thus highly sought after by parents. Although the school has a capacity for 1050 learners, more than 1898 learners were enrolled at the school during 2016. There are 399 Grade nine learners who are divided in 7 classes with an average class size of 57 children. The school is under resourced with respect to teaching staff and basic facilities like desks. During data collection at the school, it was observed that many children lacked even the most basic of resources like pens. Classrooms were overcrowded and in some classes, up to three learners had to share a desk. Learners are required to change classrooms after each period, however, the administrators of the school are hoping to change this as many learners tend to wander off and fail to report for their next lesson. On the day of data collection, the learners commenced their school day at 8.30 directly after assembly. They were required to stay in their classes until 1.00pm without any breaks. As it was a Friday, learners were scheduled to write their weekly cycle test after a short break at 1.30. Whilst observing each class it appeared as if a class monitor was tasked with writing information from a textbook onto the board for the learners to copy down. Some classes had a teacher present, whilst in other classes there was no teacher in attendance.

Baxter College is a private school and is registered under the Independent Board of Education. It is a superbly resourced school with respect to both teaching staff and facilities. There are just over 500 children in the school and 98 learners in Grade 9. Class sizes are limited to 27 learners and the school has a 12:1 pupil teacher ratio. The classes are only partially streamed for Mathematics and English and learners move classrooms at the end of each period. Both learners and parents sign a code of conduct to which compliance is expected and closely monitored. Table 1 provides a summary of the schools, the number of Grade 9 learners and the quintile the school is assigned to.

Table 1

Summary of the Profile of the Schools – Phase 1

School	**Type of School**	**Number of Grade 9 Learners in the school**	**Annual Fees**
Newby High School	Former Model C	320	R18 500
Morgan High	Former Model C	220	R10 500
Ubunye High	Township	399	No Fee School
Baxter College	Private	98	R105 500
Total		**1038**	

Although the data from the questionnaire confirmed the findings of international literature that more boys are diagnosed with ADHD than girls, I selected both boys and girls to participate in the second phase. The motive for including girls in the second phase of the project is underpinned by results from studies which indicate that the gender ratio may be starting to narrow (Mahone, 2012). Furthermore, including both boys and girls in the study provides a more in-depth understanding of the experiences of these children. I aimed to ensure a mix of participants by race and from across participating schools. To identify participants for the second phase of the research, each school was asked to provide the researcher

with a list of children whom they knew had been diagnosed with ADHD. Teachers at Ubunye High were not aware of any Grade 9 learners in their school who had been diagnosed with ADHD. The headmistress of Morgan High was only aware of one Grade 9 learner who had been diagnosed with ADHD, as this diagnosis had happened fairly recently. Once permission from parents had been secured by the school to share this information with me, a list of potential participants was drawn up. The details of 11 children were provided by the schools and interviews with 8 learners were secured. Table 2 provides a summary of the race, gender and class of the children participating in phase 2 of the project, as well as their age at the time of diagnosis, current medication and the category of healthcare professional who manages their medication.

Table 2

Summary of Participants in Phase 2 (semi-structured interviews)

Participant	Gender	Race	Class	School	Age when diagnosed	Medication managed by	Current Dosage
Michael[3]	Male	White	Upper Middle	Baxter College	6 years	Neurologist	Concerta 54mg Cipralex10mg
Gregory	Male	White	Upper Middle	Baxter College	5 years	Psychiatrist	Ritalin 30mg
Tanya	Female	White	Upper Middle	Baxter College	4 years	Psychiatrist	Ritalin 10mg Concerta 72mg Cipralex 15mg
Jennifer	Female	White	Middle	Baxter College	5 years	Pediatrician	Ritalin 30mg Tofranil 75mg
Danielle	Female	White	Upper-middle	Newby High	6 years	General Practitioner	Concerta 36mg
Ashika	Female	Black	Middle	Newby High	13 years	General Practitioner	Concerta 36mg
Robert	Male	White	Middle	Newby High	6 years	Psychiatrist	Concerta 72mg Nuzak 20mg Lamictin 200mg
Winston	Male	Black	Middle	Morgan High	13years	General Practitioner	Concerta 54mg

[3] All names of participants are pseudonyms

3.3 Data Collection

The data collection process occurred in two distinct phases. In Phase 1, data were collected in the form of a questionnaire (see Appendix 1) which were completed by all members of the Grade 9 student body of each participating school. Consent was requested from parents for their children to participate in Phase 1 of the project; consent forms were provided in both English and Zulu (see Appendix 2 & 3). This questionnaire provided a demographic profile of the Grade 9 learners. Learners were also asked to provide their own description and understanding of ADHD. The questionnaire required the learners to indicate as to whether they had ever been diagnosed with ADHD and if so, whether they had received medication in the past or currently medicated as a result of the diagnosis. The questionnaire was not used to directly recruit participants for the second phase of the research. I liaised with an appointed member of staff at each school with regards to the most convenient and least disruptive time would be to administer the questionnaire. On the day of data collection, the researcher approached the Grade 9 learners in their individual classes. Learners were verbally informed about the study and invited to participate. As the participants were minors, they were asked to sign assent forms before completing the questionnaire (see Appendix 4). Although the language of instruction for all four schools is English, the questionnaire was translated into Sotho (see Appendix 5). A research assistant who was fluent in Zulu, Sotho and Sepedi was asked to help administer the questionnaires at Ubunye High. This proved to be an invaluable resource when it came to explaining the purpose of the research and answering questions the learners were more comfortable in asking in their home language. As the assistant was a younger student from the University of Witwatersrand, it helped establish a rapport with the learners. In all four schools, either myself or the research

assistant read through the questions prior to the learners completing the questionnaires. The questionnaires were administered during class time and both myself and my assistant remained on hand to answer any questions in plenary or individually. The questionnaires were collected directly by myself as soon as the learner indicated they had completed it. The benefits of conducting the research in this first phase was that it gave me an opportunity to note contextual features and gain insight into their academic worlds that would not necessarily be apparent during the second phase.

During the second phase of the study, data were collected in the form of semi-structured interviews. Each school was asked to recommend Grade 9 children whom they knew had been diagnosed with ADHD and thought would be appropriate to interview. The school then contacted the parents/guardian of the identified children, requesting their consent for the school to provide me with the information about their child's ADHD diagnosis and the parent's contact details. Once permission had been obtained, contact was made with the consenting parents and a letter informing them about the second phase of the study was sent to them (see Appendix 6). After telephonic contact was made and questions pertaining to the research were answered to the satisfaction of the consenting parents, the interviews were arranged at a time that was convenient for the learners and their caregivers. Parents were given the option of conducting the interviews in a private venue at school or at their home; all the parents opted for the interviews to be done with the child in their own home environment. Private, off-site interviews allowed for conversations that may have not been possible on school premises due to time constraints and avoided the participants being observed by their friends and other teachers interacting with me. Prior to the

interviews with each child, I asked the parents to provide general information about their occupation and the age at which their child was diagnosed with ADHD. I also asked them to provide me with the category of the healthcare provider who manages their child's ADHD diagnosis and if they so wished, the current medication.

Interviews were semi-structured in order to facilitate a more focused exploration of the topic at hand but also allowed for me to explore issues and uncover ideas that may have not necessarily been considered at the outset of the project (Creswell, 2005). An interview guide (see Appendix 7) containing a list of open-ended questions was used in order to guide the interview in a focused yet flexible way (Fossey, Harvey, McDermott & Davidson, 2002). The average length of the interviews was about 45 minutes; however, some were either a little shorter or longer depending on the child. The content of the interviews was recorded using a voice-recording device.

3.4 Data Analysis

The epistemology of the method of data analysis is located in the constructionist framework as it examines ways in which realities, meanings and experiences produced by multiple discourses functioning within society (Braun & Clarke, 2006). According to Braun and Clarke (2006, p. 14) "analysis conducted in a constructivist framework cannot and does not seek to focus on motivation or individual psychologies, but instead seeks to theorise the socio-cultural contexts, and structural conditions, that enable the individual accounts that are provided". Fossey et al., (2002, p. 720) posits that this type of methodology focuses on "understanding and accounting for the meaning of human experiences and interactions", which assisted

with the process of understanding of how the participants of this study perceived ADHD and stimulant treatment.

Data generated from both the closed and open ended questions on the questionnaire were ordered and analysed for frequency and patterns. Data from the interviews during Phase 2 were carefully transcribed and analysed using thematic analysis. Braun and Clarke (2006, p. 6) define thematic analysis as "a method for identifying, analysing and reporting patterns (themes) within data. It minimally organises and describes your data set in (rich) detail". Thematic analysis is appropriate for exploring and understanding the individual's experiences and are often multidimensional and complex (Braun & Clarke, 2006). Thematic analysis was done at the latent level "to identify or examine the underlying ideas, assumptions and conceptualisations and ideologies – that are theorised as shaping or informing the semantic content of the data" (Braun & Clarke, 2006).

Braun and Clarke (2006) have outlined six phases of conducting thematic analysis: familiarizing oneself with the data, generating initial codes; searching for themes; reviewing themes; defining and naming the themes and producing the report. The audio recordings of the interviews were transcribed verbatim whereafter the transcriptions were read several times to get an overall understanding of the participants' experiences. During this initial phase, salient words, phrases and sentences from the transcripts were highlighted. Statements from the participants were initially coded to capture their experiences and ideas. Codes were then arranged into potential principal themes and sub-themes which reveals ideas, and patterns, which are considered important to the researcher with respect to answering the research questions (Braun & Clarke, 2006). An inductive approach was used, which means that the themes are closely linked with the data themselves and are coded

without trying to fit it within a pre-existing coding frame (Braun & Clarke, 2006). During the fourth phase, the themes and sub-themes were rechecked against both the coded extracts and the original transcripts. It was sometimes necessary to refine the themes to ensure accurate reflection of the participants' experiences and perceptions; this required a more focused and analytical ordering of the themes and sub-themes. In the fifth phase, names and definitions were produced for each theme to convey the overall story. During the final phase of the analysis, extract examples relating to the literature review and the aims of the research study were selected.

3. 5 Ethical Considerations

Approval for the project was granted by the School of Human and Community Development (see Appendix 8). As this project involved direct interaction with minors, ethical clearance from the School of Human and Community Ethics Committee for Research into Human Subjects (Non-Medical) [see Appendix 9] as well as the Gauteng Department of Education (see Appendix 10) was applied for and granted. Whilst clearance from the relevant bodies was sought, all four schools were preliminarily approached for permission to collect data for the project. Letters explaining the research project and data collection procedures were sent to the principal of each school (see Appendix 11). The schools provided me with a member of staff with whom all logistics were organised. These particular staff members were either the headmistress, vice headmistress or on site educational psychologist. Once clearance had been finalised, active data collection commenced.

For Phase 1 of the data collection a letter was sent to the parents/guardians of all the Grade 9 learners prior to the administration of the demographic questionnaire (see Appendix 2 & 5). It was clearly stated in the letter that the focus of the research

project was not to diagnose children with ADHD, but merely identify the prevalence and perception of the disorder amongst Grade 9 in different school contexts. The letter provided the parent/guardian with an opportunity to object to their child participating in this phase of the study by either completing a reply slip to be handed to the register teacher or to contact an identified member of staff via telephone or email. Only three objections were received, two from Newby High and one from Baxter College. The children in question were not approached by the researcher to complete the questionnaire. On the day of data collection, the Grade 9 learners were verbally informed about the study during school and invited to participate in the first phase of the study. As the participants were minors, they were asked to sign assent forms before completing the questionnaire (see Appendix 4). Questionnaires were administered during class time by myself, except at Ubunye High when a research assistant was used. The research assistant was asked to complete a letter acknowledging his compliance with the same research protocols as I was bound to. Whilst a request was made that teachers were not present during this phase, some teachers remained in the classrooms but remained at their desks either marking or preparing for the next lesson. Although the questionnaire contained no identifying information, the participants were assured that the questionnaire could not be linked to a particular learner. Participants were also given the assurance that only the researcher and her supervisor would have access to the data.

For phase two of the project, the schools were asked to identify Grade 9 learners whom they knew had been diagnosed with ADHD and whom they thought would be suitable to interview. Once the school has secured permission from the parents to disclose their contact details to the researcher, a letter about the study was sent to the parent/guardian (see Appendix 6) and the learner (see Appendix 12). Prior

to the interview, written consent was secured from parents or guardians for those learners participating in the interviews (see Appendix 13). Written assent from the learner was also secured (see Appendix 14). As the interviews were audio-recorded, consent for this process from the parent/guardian and assent from the participant was sought (see Appendix 15 and 16). Pseudonyms were assigned to the learners being interviewed to protect the identity of each participant.

The option of conducting the interviews either in a private setting on school property or in the learner's home environment was provided. All parents elected for their children to be interviewed at the respective homes.

The usual ethical considerations were adhered to, such as informing the participants verbally and in writing about voluntary participation, withdrawal from the research at any stage, only answering questions they were comfortable with as well as maintaining confidentiality.

It was not anticipated that participation in this project would cause any significant psychological distress, however the researcher made arrangements for learners to be provided access to a free counselling service at a convenient location close to the learner's home or school. During both phases of the research project no child was identified nor indicated that they required this service due to their participation in the project.

3.6 Reflexivity

As a registered counsellor, I have an interest in working with children especially adolescents. Within my practice I frequently encounter adolescents who have been diagnosed with ADHD and know that this is an area I would like to investigate more systematically. Conducting this project provoked interesting questions about my own experiences of childhood, race, class and gender. Field notes were made whilst collecting the data and interacting with the learners. In research with young people, it is important to be aware of power dynamics present during interactions between and adult and children. During the interviews, I did my best to establish a rapport with the participants so that they felt they could respond naturally and honestly to my questions and counteract their need to provide answers that 'adults' and authority figures want to hear. On another level being a mother of three young children facilitated my interactions with other mothers whilst arranging the interviews. Motherhood has made me acutely aware of the complicated nature of parenting. I hoped that by sharing an appropriate amount of personal information with the mothers whilst arranging the interviews, reassured them of my non-judgmental and empathic attitude towards parents who have experienced and continue to encounter challenges surrounding their child's ADHD diagnosis.

CHAPTER 4: DISCUSSION OF THE RESULTS – PHASE 1 (Survey of the prevalence, attitudes and knowledge of ADHD)

Questionnaires were administered to establish the prevalence rates of ADHD diagnosis across four different Gauteng schools. The patterns that emerged from the questionnaire provide some insight into links between ADHD, race, gender and class. Furthermore, participants' attitudes towards and knowledge of ADHD are presented.

4.1 Gender and race profile of the learners

Data from the questionnaires were arranged and analysed according to frequencies and patterns. The frequencies provided are of the Grade 9 population at all four schools, with details of the learners who were surveyed in each school. Table 3 provides a summary of the number of Grade 9 learners surveyed at each school.

Table 3

Summary of Grade 9 Learners Surveyed at the Four Schools

Baxter College		***Morgan High***		***Newby High***		***Ubunye High***		***Total***
No. of Learners	*% of all Grade 9s*	*No. of Learners*	*% of all Grade 9s*	*No. of Learners*	*% of all Grade 9s*	*No. of Learners*	*% of all Grade 9s*	
90	91.84%	207	98.57%	166	51.88%	378	94.74%	841

Over 90% of the children were reached in the schools, except for Newby High where only just over 50% of the students were surveyed. During the time of data collection, the school timetable for Newby High had changed to accommodate various events at the school providing me with limited access to all the Grade 9 classes. Table 4 provides further detail of the participants according to their self-identified race and gender. To make the choice of gender on the questionnaire more inclusive an additional category of 'other' was added, only 2 students from Ubunye

High made use of this option. Similarly, a category of ‘other’ for race was provided for on the questionnaire, however, no students made use of this category.

	Baxter College (Private School)						Morgan High (Former Model C School – Outskirts of City Centre)						Newby High (Former Model C School – Middle class suburb)						Ubunye High (Township School)						Total	
	Black	%	White	%	Total	%	Black	%	White	%	Total	%	Black	%	White	%	Total	%	Black	%	White	%	Total	%	Total Gender	Total
Male	17	19%	18	20%	35	39%	86	42%	3	1.5%	89	43%	31	19%	43	26%	74	45%	197	52%	-	-	197	52%	395	46%
Female	26	29%	29	32%	55	61%	117	56%	1	0.5%	118	57%	37	22%	55	33%	92	55%	179	47	-	-	179	47%	444	53%
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1%	-	-	2	1%	2	1%
Total Race	43	48%	47	52%	90	100%	203	98%	4	2%	207	100%	68	41%	98	59%	166	100%	378	100%	-	-	378	100%	841	100%

Table 4: Self-identified race and gender

Females outnumber males across all schools except for Ubunye High which had a higher male to female ratio. Morgan High, the ex-model C school on the outskirts of the CBD had a very different race profile compared to Newby High which is located in the suburbs of the same city. The predominately Black learner profile of Newby High can be ascribed to the location of the school (close to the city centre and a Black township) and that English is the medium of instruction. Higher levels of racial integration are more common in English medium ex-model C as opposed to Afrikaans ex-model C schools, as many parents believe that learning English assists with their children's employment prospects and access to higher education (Hofmeyr, 2000). Whilst Black learner migration to former Whites only government schools is reflected in Table 4, township schools like Ubunye High, which are inadequately funded and under-resourced remain racially homogenous.

4.2 Parental occupation and class profile

The learners were asked to indicate the occupation of both their parents. The 841 learners who completed the questionnaire provided responses for a total of 1682 parents (2 parents per learner). Table 5 summarises these data by broad categories according to whether their parents were employed or unemployed. These learners either indicated that their parents were simply employed or provided details of the establishment that employed them like "Eskom", "City Power', and the 'Government'. Some learners indicated that they had no mom or dad or that their parents were deceased. The meaning of the 'I don't know' category is ambiguous as it is unclear if the child doesn't know what work the parent does, or it may indicate that the parents don't work and the child is too embarrassed to say so.

Table 5

Broad Response Categories to Parental Occupation

	Baxter College			**Morgan High**			**Newby High**			**Ubunye High**			**Total**		
	Mom	Dad	**Total**	Mom	Dad	**Total**	Mom	Dad	**Total**	Mom	Dad	**Total**	**Total Mom**	**Total Dad**	**Total**
Employed	57	69	**126**	130	138	**268**	116	114	**230**	165	180	**345**	468	501	969
%	**31%**	**38%**	**70%**	**31%**	**33%**	**65%**	**35%**	**34%**	**69%**	**22%**	**24%**	**46%**	**28%**	**30%**	**58%**
Unemployed	0	3	**3**	28	7	**35**	4	3	**7**	122	62	**184**	**154**	**75**	**229**
%	**0%**	**3%**	**2%**	**7%**	**2%**	**9%**	**1%**	**1%**	**2%**	**16%**	**8%**	**24%**	**9%**	**4%**	**14%**
Don't Know	29	12	**41**	35	21	**56**	35	24	**59**	54	59	**113**	153	116	269
%	**16%**	**6.%**	**23%**	**8%**	**5%**	**13%**	**11%**	**7%**	**18%**	**7%**	**8%**	**15%**	**9%**	**7%**	**16%**
No Mom / Dad or Deceased	1	3	**4**	10	39	**49**	3	16	**19**	19	64	**83**	33	122	155
%	**1%**	**2%**	**2%**	**2%**	**9%**	**12%**	**1%**	**5%**	**6%**	**3%**	**8%**	**11%**	**2%**	**7%**	**9%**
Unanswered	3	3	**6**	4	2	**6**	8	9	**17**	18	13	**31**	33	29	60
%	**1.5%**	**1.5%**	**3%**	**1%**	**.5%**	**1%**	**2%**	**3%**	**5%**	**2%**	**2%**	**4%**	**2%**	**2%**	**4%**
Total	**90**	**90**	**180**	**207**	**207**	**414**	**166**	**166**	**332**	**378**	**378**	**756**	**841**	**841**	**1682**

The greatest proportion of employed parents were those of the learners from Baxter College, with Ubunye High indicating the highest rate of parental unemployment across the schools. However, with a national unemployment rate of 27%, (Statistics South Africa, 2016) the employment rate seems to be unusually high across all schools. It therefore quite possible that the 'Don't Know" category includes many parents who are unemployed. Furthermore, the data reflects that more mothers are unemployed which is in line with national gender ratios of unemployment (Statistics South Africa, 2016). Both Morgan and Ubunye High had the highest

numbers of children who do not have a father, although these numbers appear to be lower than the national estimate of 67% (Statistics South Africa, 2012).

Table 6 provides further detail of parental occupation which are classified according to the following categories: 'Professional' occupations are those that require formal qualifications like doctors, teachers, nurses, lawyers and accountants. The skilled category includes occupations that fall between the semi-skilled and professional categories, this level includes occupations like firefighters, policemen/women. Occupations in the semi-skilled category include those that require some level of skill like mechanics, plumbers, electricians and drivers. The unskilled category comprises of occupations such as domestic workers, gardeners and labourers. The self-employed category includes responses that specifically stated that their parents were self-employed with no further detail. The small business owner includes parents who own their own small business like a tent hire, hardware or a printing company.

Table 6

Details of Parental Occupation Level

	Baxter College	Morgan High	Newby High	Ubunye High	Total
Employed Parents					
Professional	74	66	85	61	286
%	**58.73%**	**24.63%**	**36.95%**	**17.68%**	**29.51%**
Skilled	31	77	77	43	228
%	**24.60%**	**28.73%**	**33.48%**	**12.46%**	**23.53%**
Semi-skilled	16	97	42	155	310
%	**12.70%**	**36.19%**	**18.26%**	**44.93%**	**32.00%**
Self-Employed	3	5	18	7	33
%	**2.38%**	**1.87%**	**7.83%**	**2.03%**	**3.41%**
Small Business Owner	2	6	8	10	26
%	**1.59%**	**2.24%**	**3.48%**	**2.90%**	**2.68%**
Unskilled	0	17	0	69	86
%	**0%**	**6.34%**	**0%**	**20.00%**	**8.87%**
Total (n)	**126**	**268**	**230**	**345**	**969**

Morgan College and Newby High had the highest number of parents with professional occupations, whilst Ubunye High had the highest number of parents who were employed in semi-skilled and unskilled work. Obstacles to high academic performance are believed to include poverty, family size and parents in unskilled or low skilled employment, while better chances of educational achievement include higher social class level and having educated parents (EACEA, 2009). Due to the "stratified nature of South African society", parents who are at the upper end of the labour market are in the financial position to enroll their children in good schools

(Haber & Mncube, 2011, p.8). Parents in the lower end of the labour market have very little choice but to send their children to under resourced schools thus reproducing existing inequalities (Harber & Mncube, 2011; Spaull, 2012).

To get an idea of SES (socio-economic status), an estimate of family income was made according to the average South African salary scale for the indicated occupations (Payscale, 2016). The Bureau of Market Research (BMR) provides a broad indication of class according to annual income (BMR, 2016), these estimates were used to provide an indication of class categories as set out in Table 7 below:

Table 7

BMR Class System According to Joint Annual Parental Income

Annual Income	Classification – Class
R0 - R109 000	Low
R109 001 – R378 000	Middle
R378 001 – R783 000+	Upper Middle – Affluent

Analysing joint parental income and the living arrangements reflects the varied situations the learners live in at home.

Table 8

Class of Grade 9 Learners According to Estimated Parental Income

	Baxter College		**Morgan High**		**Newby High**		**Ubunye High**		**Total**
Class	No. of Learners	%	No. of Learners	%	No. of Learners	%	No. of Learners	%	
Low	2	2.22%	50	24.15%	10	6.02%	262	69.31%	324
Middle	19	21.11%	116	56.04%	96	57.83%	77	20.37%	308
Upper Middle – Affluent	66	73.33%	29	14.01%	53	31.93%	16	4.23%	164
Unanswered	3	3.33%	12	5.80%	7	4.22%	23	6.08%	45
TOTAL	**90**	**100%**	**207**	**100%**	**166**	**100%**	**378**	**100%**	**841**

As the Table 8 indicates, almost 70% of children from Ubunye High had parents in the lower categories of income and class. Over 80% of parents of children in Newby High and Baxter College were represented in the middle and upper middle categories of income and class. Table 9 provides a summary of the learners' 5 most common living arrangements:

Table 9

Most Common Living Arrangements of Learners Across the Four Schools

	Baxter College		**Morgan High**		**Newby High**		**Ubunye High**		**Total**
Living Arrangements	No. of Learners	%	No. of Learners	%	No. of Learners	%	No. of Learners	%	
Both Parents	62	68.89%	124	59.90%	95	57.23%	139	36.77%	420
Mom	18	20.00%	62	29.95%	42	25.30%	154	40.74%	276
Dad	6	6.67%	3	1.45%	15	9.04%	13	3.44%	37
Granny/ Grandparents	1	1.11%	12	5.80%	3	1.81%	43	11.38%	59
Unanswered	2	2.22%	-	-	10	6.02%	16	4.23%	28

Most learners from Baxter College, Morgan College and Newby High indicated that they lived with both their parents, whilst learners from Ubunye High reflect a more varied pattern of living arrangements, with most learners living with their mothers, closely followed by both parents. In South Africa in particular, the demise of the extended family, increased parental mobility (of mostly fathers) away from home to seek employment means that many children are growing up in homes with no fathers, looked after by mothers who have limited support networks (Bray et al, 2010). Children who come from homes who do not have a father present are believed to be at an increased risk of deviant behaviour, attentional and learning problems (Swingle, 2015; Timimi, 2005). Ubunye High had the highest number of children living with their grandparents. Factors like HIV, migrant labour, domestic violence impact on the structure of the household, leaving many young children in the care of relatives, mainly grandparents (Bray et al., 2010).

4.3 What is ADHD, and how accurate were the descriptions?

Learners were asked to explain in their own words what they thought ADHD was. Responses were compared to broad DSM-V criteria and then gauged as to whether they were accurate or not. As Table 10 reflects, learners in Baxter College and Newby High were the most knowledgeable about ADHD and provided the most accurate descriptions of the disorder. Less than half the learners in Morgan High could describe the disorder accurately, whilst most of the learners in Ubunye High provided an incorrect description of ADHD.

Table 10

Accuracy of the Learners' Descriptions of ADHD

	Baxter College	Morgan High	Newby High	Ubunye High	Total
Accurate	77	95	133	15	320
%	**85.56%**	**45.89%**	**80.12%**	**3.97%**	**38.05%**
Inaccurate	10	22	20	244	296
%	**11.11%**	**10.63%**	**12.05%**	**64.55%**	**35.20%**
Not Attempted	3	90	13	119	225
%	**3.33%**	**43.48%**	**7.83%**	**31.48%**	**26.75%**
Total	**90**	**207**	**166**	**378**	**841**

Learners provided varied responses to what they thought ADHD was, which are summarised in Table 11. Once off responses that didn't fit in a particular category were classified as 'other', for example 'poor diet', 'hearing impairment' and 'homeless child'. Ubunye High learners yielded the most diverse explanations of the disorder with many of the students describing it as a "disease". Some learners merely repeated the meaning of the acronym or used the acronym according to a different interpretation such as "All Doctors Hide Details" or "A Drug High Disorder" which are probably more 'tongue in cheek' responses but a lovely example of their playfulness and sense of humour. A few children at Ubunye High felt ADHD had something to do with aggressive behaviour or that the acronym represented a company that was visiting their school for reasons such as subject choices, academic support or education about infectious diseases. Some of the learners felt that ADHD was like Bipolar Personality Disorder or Schizophrenia; most of these learners were from Ubunye High. The majority of the explanations of the disorder from learners at Baxter College, Morgan and Newby High clustered around the hyperactive and

inattentive features of ADHD. It is interesting to note that most of the learners interpreted ADHD from the behavioural aspect of the disorder, very few learners attributed it to a deficit in academic performance aspect or learning disorder.

Table 11

Learners' Interpretation of ADHD

	Baxter College	**Morgan High**	**Newby High**	**Ubunye High**
	% of Learners	% of Learners	% of Learners	% of Learners
Brain based condition	2.22%	2.42%	0%	0%
Disease	3.33%	0.97%	0%	20.37%
Mental Illness	0%	0.97%	0%	4.23%
Hyperactive	14.44%	24.64%	24.10%	8.47%
Hyperactive and the Inability to Concentrate	44.44%	9.18%	24.30%	0.26%
Inability to Concentrate / Easily distracted	27.78%	12.56%	31.93%	1.59%
Aggression	0%	0%	0%	1.06%
Attention Seeker	0%	2.90%	2.41%	4.76%
Learning Disability or Struggles academically	0%	0.97%	1.20%	0.26%
Bad Behaviour	0%	0.48%	1.20%	1.32%
Similar to Bipolar / Schizophrenia	0%	0%	0.60%	2.38%
Needs Medication to treat it	3.33%	1.45%	5.42%	2.91%
Acronym representing a company	0%	0%	0%	5.02%
Repeated the Acronym	1.11%	0.%	0%	10.85%
Other	0%	0%	0%	5.03%
Unanswered	3.33%	43.48%	7.83%	31.48%

4.4 Comparison of ADHD Diagnosis across schools

Learners were asked to indicate if a doctor or other medical professional like a psychologist had ever diagnosed them with ADHD. Table 12 provides a summary of the learners who disclosed their diagnosis of ADHD in the questionnaire.

Table 12

Number of Children Diagnosed with ADHD Across the Four Schools

	Baxter College	Morgan High	Newby High	Ubunye High	Total
Learners Diagnosed with ADHD	10	3	18	0	31
%	**11.11%**	**1.45%**	**10.84%**	**0%**	**3.69%**
Learners not diagnosed with ADHD	80	203	148	378	809
%	**88.89%**	**98.07%**	**89.16%**	**100%**	**96.20%**
Unanswered	0	1	0	0	1
%	**0%**	**0.48%**	**0%**	**100%**	**0.12%**
Total	**90**	**207**	**166**	**378**	**841**

Whilst ADHD is a global phenomenon, prevalence rates vary geographically. These disparities can be partially explained by the differences in the DSM and the ICD-10 diagnostic systems (Graf et al, 2014). It is estimated that in the UK and Europe, 5% of children have been diagnosed with ADHD, however the prevalence of the disorder is substantially higher in Australia (11,2%) and in America [11%] (Graf et al., 2014). Whilst there is a scarcity of information regarding the prevalence of the disorder in Africa, it is believed that approximately 8-10% of children are diagnosed with ADHD (ADHASA, 2015). Although the overall diagnosis rate (3.69%) in this study appears to be lower than the literature about prevalence suggests, the picture changes when we compare the number of learners diagnosed with ADHD across

different school settings. Only 3 children from Morgan High and no children from Ubunye high were diagnosed with ADHD. However, the percentage of children who had received a diagnosis in the private school (Baxter College 11.11%) and ex Model C school (Newby High 10.84%) are above ADHASA's estimated 8 – 10% incidence rate. These results may support the notion that ADHD is more frequently diagnosed in the more affluent (predominately white) schools in South Africa (Belsham, 2012).

In the US, the surge in ADHD prevalence could be correlated to the 'No Child Left' behind policy (Saltman, 2016). In South African a similar phenomenon can be observed amongst many private and ex-Model C schools serving more privileged communities who demand high standards of test based performance from their learners (from an ever-increasing younger age) to remain competitive in a rather small market of high-income earning parents. It is within this context that we should attempt to understand the rapid increase in children's challenging behaviour, however, the disturbing trend seems to be the conferring of diagnostic labels and the administration of psychostimulants (House, 2002).

4.5 ADHD Diagnosis according to Gender, Race and Class

Table 13

Summary of Number of Children Diagnosed with ADHD According to Race, Gender and Class

	Black						**White**						**Total Males**	**%**	**Total Females**	**%**	**Total Class**	**%**
Class	Male	%	Female	%	Total Race	%	Male	%	Female	%	Total Race	%						
Low	0	0%	1	11%	1	3%	0	0%	0	0%	0	0%	0	0%	1	3%	1	3%
Middle	4	45%	1	11%	5	16%	3	14%	3	14%	6	19%	7	23%	4	13%	11	35%
Upper Middle-Affluent	1	11%	2	22%	3	10%	12	54%	4	18%	16	52%	13	42%	6	19%	19	61%
Total no. diagnosed Race	**5**	**16%**	**4**	**13%**	**9**	**29%**	**15**	**48%**	**7**	**23%**	**22**	**71%**	**20**	**65%**	**11**	**35%**	**31**	**100%**

As Table 13 reflects, the majority of children diagnosed with ADHD are boys (65%), more than half (61%) are from upper middle to affluent classes and most are white (71%). These unevenly distributed results support existing research proposing that ADHD is very much a white, male, upper class diagnosis.

The data supports the disproportionate gender ratio of ADHD diagnoses suggested in international studies (Horton-Salway, 2012; Timimi, 2005).
As the literature suggests, these differences could be attributed to the difference in the expression of the disorder between boys and girls, the disparity of teacher referral patterns and developmental immaturity (Horton Salway, 2012; Mahone, 2012; Merten et al., 2017; Timimi, 2005).

With regards to class, 35% of the children diagnosed were from the middle class, however, more than half (61%) of the children were from the upper middle to

affluent class category. It can be argued that low socioeconomic status is associated with reduced access to healthcare. It can be further contended that the process of evaluating, diagnosing (and medicating) learners is an expensive process which would disproportionally affect Black families who tend to have lower income levels and less access to private medical insurance compared to their white counterparts (Moody, 2016).

It is widely recognised that ADHD type behaviour in the classroom, is considered to be the kind of behaviour that warrants punishment (Moody, 2016). As several studies on racial bias in the classroom suggest, white children who present with disruptive behaviour tend to be diagnosed with ADHD whilst black children are underdiagnosed and punished with suspensions and exclusion (Moody, 2016; Ramey, 2015, Timimi 2005). Although no personal information was divulged, Newby High provided me with information on the race and gender of children who had been subjected to a disciplinary procedure during the 2015 academic year. Transgressions ranged from bunking, frequent disruption of class, frustrating the teacher, failing to comply with punishment, bringing the school into disrepute, to more serious offences like theft of cellphone (1 incident – Black male), assault (3 incidences involving 2 White males and 1 Black male) manufacturing and distributing pornographic material (1 incident – White male) and the possession of drugs (1 incident – Black male). By November 2015, Newby High had submitted letters of application to the GDE for suspension of seven boys, (6 of which were Black boys) and 2 letters of application for expulsion, both for Black males. Whilst Baxter College were reluctant to provide details of their disciplinary records, they confirmed that most children who were subject to the school's disciplinary procedures were Black males. As Rudd (2104) argues, 'implicit bias' and cultural deficit thinking may perpetuate the stereotype that

Black learners are disrespectful, aggressive and violent. Childhood is a mapping of what we expect people to achieve in the world. Black boys who are physically active yet perform poorly academically may not provoke the same anxiety amongst school administrators as the academic failings of white learners. Perhaps the ingrained bias of South Africa's apartheid legacy mitigates some of tendency to remediate ADHD type symptoms amongst black boys with a diagnostic label and medication; as historically, black boys were destined to become labourers and were in little need of academic achievement. Today, these same patterns are evident with White children being groomed for profitable careers and professions, whilst most Black children are left with little prospect of accessing higher education and thus destined to join the ranks of the unemployed or low income manual labourer.

A study amongst primary school children in the US investigating the effect of a learner's race on teacher expectations revealed statistically significant evidence that teachers have lower expectations of Black and Hispanic children than they do of White children (Rudd, 2014). Consequently, lower expectations of students in a classroom may result in less positive interactions and a more punitive approach from teachers (Rudd, 2014). Researchers have found that when paired with the same-race teachers, Black learner's behaviour in the classroom is rated more favourably compared to their White counterparts (Rudd, 2014). This may be one of the reasons why we see a racial disparity in the diagnosis across the different school settings. Both Newby High and Baxter College have predominately White teachers, whilst most of the teachers at Morgan High and all the teachers at Ubunye High are Black.

4.6 ADHD diagnosis and medication

Learners who had indicated that they had received a diagnosis of ADHD, were asked to specify if they had been medicated as a result and if so, whether they were still taking their medication. Table 14 provides a summary of the results of self-reported diagnosis and subsequent medication across the schools:

Table 14

Number of Children Diagnosed with ADHD and Medicated Across the Four Schools

	Baxter College		**Morgan High**		**Newby High**		**Ubunye High**		**Total**
	No. of Learners	% of Grade 9 Learners	No. of Learners	% of Grade 9 Learners	No. of Learners	% of Grade 9 Learners	No. of Learners	% of Grade 9 Learners	
Diagnosed with ADHD	10	11.11%	3	1.45%	18	10.84%	0	0%	31
Medicated as result of diagnosis	10	11.11%	3	1.45%	16	9.64%	0	0%	29
Still Medicated	9	10%	3	1.45%	10	6.02%	0	0%	22

Most of the children who received the diagnosis were medicated as a result. Only 2 children from Newby High indicated that despite their diagnosis of ADHD, they had never taken medication for it. Learners at Newby High demonstrated the highest rate of discontinuation of ADHD medication. This may support the literature which suggests that the use of stimulants starts to taper off toward the end of adolescence (Pelham et al., 2013).

Although there is a lack of certainty of the biomedical aetiology and treatment of ADHD, the biomedical framework continues to dominate the discourse which retains a strong link to the pharmacological treatment of behaviour (Visser,

2009). Few medical practitioners attempt to treat ADHD without stimulant medication, the choice of medication is anecdotal and often selected according the physician's preference. Critics of this unitary approach argue that ADHD should be viewed through a more holistic and multimodal lense which considers biological, psychological and sociological factors affecting the origin and treatment of the disorder. Whilst stimulant medication is believed to augment academic performance in the short term and reduce specific behavioural problems, it is not curative. There is a uniform lack of evidence for long-term benefits of psychostimulants, besides, the child's apparent improvement can conceal the need for treatment of an underlying problem (Cohen & Morely, 2009; Furman, 2008). To improve the quality of care, a combined approach of medication and behavioural therapy is advocated, however, behavioural intervention alongside medication can be financially prohibitive for most parents and is therefore drastically underutilised (Cohen and Morely, 2009; Furman, 2008). Exclusive use of pharmacological interventions may reduce incentives for parents and teachers to work on alternative strategies and play a more supportive role in the child's life (Furman, 2008).

4.7 Conclusion

Whilst there is evidence of racial integration in private and former whites only schools, the extent of the integration is determined by the location of the school and therefore the community it serves and residential spaces are still highly segregated by race. Schools in poorer township communities (i.e. Ubunye High) or inner city schools (Morgan High) remain racially homogenous. The marked difference in the knowledge about ADHD within the different schools reflects that children are exposed to different types of discourses surrounding children's performance and

behaviour at school. Whilst the overall prevalence of ADHD is lower than the literature suggests, closer inspection of prevalence rates in the more privileged schools are more closely aligned with ADHASA's estimates and comparable to current prevalence rates in the US. Further analysis of the children who were diagnosed with ADHD reveal that gender, race and class disparities surround the diagnosis and prevalence of the disorder. No children were diagnosed with ADHD in the township school and less than 2% of children from the inner-city school were diagnosed. Very few children diagnosed with ADHD, remained unmedicated as a result which supports a strong pharmacological link to the diagnosis.

CHAPTER 5: DISCUSSION OF THE RESULTS: PHASE 2 (SEMI – STRUCTURED INTERVIEWS)

Semi structured interviews were conducted with adolescents who had been diagnosed with ADHD and medicated as a result. Much of the literature investigates the disorder from the perspective of teachers and parents; these interviews allowed me to explore the children's world, along with their experiences, opinions and perceptions of ADHD and the medication. As previously described, participants for this phase of the research were sourced from Baxter College, Morgan High and Newby High. No participants from Ubunye High were interviewed as the teachers were not aware of any children who had been diagnosed ADHD from this school. This is supported by the information obtained in Phase 1 of the research, during which no child form Ubunye High indicated they had been diagnosed with the disorder. The absence of an ADHD diagnosis amongst the Grade 9 learners at Ubunye High provides a strong indication that the diagnosis and prevalence of ADHD is particularly influenced by class and race.

Prior to each interview, I asked the participant's caregiver to complete a short form to provide me with their occupational status and the age at which their child was diagnosed with ADHD. I also asked them to indicate the category of healthcare practitioner who oversees their child and if they so wished, the current ADHD medication prescribed. A summary of the information provided by the parents is provided in the profile of participants presented in Table 2 above on page 39. All the participants who were interviewed were taking stimulant medication in the form of either Ritalin or Concerta and some were also prescribed anti-anxiolytics (Cipralex), anti-depressants (Tofranil and Nuzak) or anti-convulsants like Lamicton which can also be used as mood stabilisers.

Data from the interviews were analysed using thematic analysis across participants. The following key themes were identified: 1) School troubles which include academic performance, behavioural difficulties and the gendering of symptoms in the classroom. 2)Untangling who benefits from an ADHD diagnosis and medication, identifies the benefits to the children, teachers and parents, more especially mothers. 3)The impact of the diagnostic label on social functioning which incorporates the stigma of the diagnostic label and the silencing effects of the medication. 4) Medicalisation and the loss of agency within the mental health system, which included mothers as gatekeepers to agency and the undetected impact of trauma.

5.1 School troubles and the pathway to the diagnosis

There are two types of school troubles: academic difficulties and the inability to demonstrate competence in the classroom, and social issues which are often characterised by conflict with teachers and peers. Academic and social troubles embody the symptomology of ADHD with inattention manifesting in academic failure and hyperactivity revealed in the child's behaviour (Rafalovich, 2005). During the interviews, the participants were asked who they thought may have initiated their diagnosis of ADHD, 4 of the participants believed that their teachers were instrumental in the process for 2 main reasons, academic performance and classroom behaviour.

5.1.2 Academic performance

When asked about who he thought may have played a role in the diagnosis of his ADHD, Robert was quite clear on his thoughts that his teacher was the initiator of the process:

I: Do you remember how old you were when they diagnosed you with ADHD?
R: Um Grade 1, ja…[4]it was Grade1.
I: Do you remember who was the first one involved in the process of diagnosing you?
R: Um, I am pretty sure it was my teacher cos I couldn't do anything at school, ja um I guess I was pretty useless, so I am sure it was her, then I can't remember her name, but I went to see a lady, and then I went to Dr. B.

Robert seemed to be quite certain that his abilities (or lack thereof) in Grade 1 were related to his ADHD diagnosis and how he considered himself as *"useless"* for not meeting the criteria at the outset of his schooling career. In an increasingly competitive world, children no longer have the luxury of daydreaming, dawdling and learning at their own pace. Children like Robert are not immune to the pressure to perform at a young age and that underachievement may warrant a diagnosis. Labelling children with ADHD during these early years can be considered an attempt to 'speed them up' toward a "productive adulthood and away from a societally counterproductive" childhood (Cohen & Morley, 2009, p. 164). As Robert's narrative demonstrates, such premature diagnoses can have a profound impact on the child's self-perception, as these diagnostic labels encourage a focus on the child's deficits as opposed to what they are good at (Newnes, 2005). Children change as they mature and grow, diagnosing and medicating children at such a young age makes it hard to tell the difference between permanent and temporary 'deviant' behaviour that will resolve later in life (The President's Council for Bioethics, 2003).

Even in the absence of academic failure, the pressure to perform and produce unrealistically high academic results may be the reason behind an ADHD diagnosis as Ashika's diagnostic pathway may suggest:

I: Do you remember when you were diagnosed with ADHD?
A: Uh… last year, Grade 8…I had always been doing well academically and then when I got into Grade 8 things became a little more difficult, there was

[4] …indicates a pause whilst speaking

just a lot of work to get through and I couldn't seem to concentrate like I used to.
I: Did your marks drop?
A: Yes, they went from 80s and 90s to the 70s, so it was a big drop.
I: What are your marks like now?
A: My marks have come up a lot, like back to normal, I am back in the 80's now, so now… everyone is happy

It is expected that academic performance may take a temporary decline during the transition from primary school to high school. Although Ashika was still achieving well academically, she believed that her slight drop in marks signified a deviance from an almost perfect academic performance, which produced enough anxiety to chemically enhance her concentration to cope with an increased workload. Other than her marks slipping a little in the transition to high school, Ashika considers herself to be a model student who has never experienced any significant behaviour or academic challenges at school. This perhaps speaks to the fact that even when there is no 'pathology' simply failing to adhere to the unrealistic demands of exceptional performance can warrant pharmacological intervention (Esposito and Perez, 2014).

Consistent findings in educational studies suggest that characteristics like being logical and practical are well suited to the classroom. Skills that are taught in school requires difference to be put aside, which often includes different ways to thinking. During an activity in Grade 0, Gregory produced what sounds like a very creative and interesting piece of artwork. Gregory links his creative interpretation of his Grade 0 teacher's instructions to behaviour that was contrary to the intended outcome of conformity as he explains below:

I: Do you remember who first diagnosed you with ADHD?
G: Mmmm …Lindsay! My old grade R teacher. Ja, she identified that I couldn't sit still and that I wasn't concentrating when she was talking about instructions. Cos she told us to paint or draw starry night and this was in Grade R and I drew some random flooded city, I dunno, and a turtle shot out of a crack in the wall with the water, I don't know what I was doing, I only remember certain moments like that.
I: And that's when they thought you had a problem paying attention?

G: Paying attention to what the teacher was telling me and that I wouldn't stop moving, like moving my leg and fidgeting in class. That's when they kept me back a year cos they said I wasn't ready to go into grade 1.

It appears that Gregory believes that his creativity in this context to be somewhat deviant, a trait that he considers partly responsible for him being held back a year. Tabarrok (2011) highlights that many teachers prefer conformity and unquestioning acceptance of authority and learners who display characteristics like creativity may be interpreted as impulsive, overactive and disruptive. While it may be somewhat demanding for teachers to guide and accommodate the behavioural styles of all the children in the classroom, it is not a space that is designed for impulsive expression (Tabarrok, 2011). The classroom is about conforming to instructions, group dynamics, focused attention. (Westby & Dawson, 1995) and thinking in a conventional way. Gregory also refers to his behaviour like constantly moving and fidgeting in class as another possible reason for his diagnosis.

5.1.3 Behavioural Difficulties

As Christian (1997) suggests, ADHD is a category that distinguishes those learners whose bodies "are out of control in the classroom" and deviate from the instructions, "expectations and routines of that environment" (p 32).

Michael provides his perspective on the reasons behind his diagnosis:

I: Do you remember who might have suggested you go a see a neurologist?
M: My teacher at nursery school…I think it was like in Grade 0 or something. I do remember not being able to sit still during ring time…urgh I hated ring time! I used to get into a lot of trouble for that…oh… and also not wanting to colour, it was so dumb… I think I wanted to get it over and done with just so I could get to the outside and the bikes.

Michael considers that the combination of his inability to sit still during structured time in nursery school and not complying to the norms of the classroom may have been the stimulus for his diagnosis. Michael's description reveals how behaviour,

especially within the educational system may be judged according to feminized conventions like compliance, subservience and docility, and how behaviour that is in contrast with these norms may not be actively encouraged.

Tanya believes that some of her behaviour in nursery school which prompted her teacher to interrupt and refocus her activity was the start of her diagnostic process:

> ***I: Do you remember how old you were when you were diagnosed with ADHD?***
> *T: Yes, I remember…well part of it…I don't remember everything, I am sure it was because I would go to the windows in nursery school and wash the windows with a stupid toy…ja, I don't remember whole of my nursery school just certain times.*
> ***I: And do you think that's when you were diagnosed you with ADHD?***
> *T: Yes, cos I know my teacher would keep on having to tell me to do something else…but I was like at the window…just washing and washing… so I think that and umm… never shutting up.*

Tanya's vivid recollection reveals her perception of her behaviour as being challenging and even quite unreasonable from a very young age, and reveals expectations that she should have been able to self-regulate, not be too noisy and make varied choices around her play activities in pre-school.

The theme of being docile and compliant in the school environment emerges again in Tanya's narrative when speaking about a friend at school who had also been diagnosed with ADHD but is no longer medicated. Tanya provides her opinion about her friend's behaviour and suggests how it can be remediated:

> ***I: Do any of the kids you socialise with at school, do you think they have ADHD?***
> *T: I know one person does, but she said she has gone off her medication, (whisper) but I don't believe…. I think she needs to go back on.*
> ***I: Why do you think that?***
> *T: She is very naughty, she's the one that always gets in trouble, she um um backtalks the teachers and …she um…rolls her eyes at them…she um swears at them she um actually purposely makes them angry...doesn't do her homework, she makes the person, if she is in the group do all the work and then say… 'I did everything and you didn't.' She's just dreadful, she's just addicted to her phone, she keeps on not bringing her work…and she is just…I*

think she needs help focusing because she can't stop going to her phone…she can't focus on like the teacher.

Most of the behaviour like eye rolling, back-chatting a teacher, constantly being on her phone can be understood within the framework of normal appropriate teenage behaviour. The behaviour of children and adolescents is often transitory, instead of viewing ADHD type behaviours as part of the normal range of childhood behaviours (that mostly disappear with maturity), these behaviours are bundled into a diagnosis of a discrete mental illness or condition (Timimi, 2005; Wedge 2015). This tendency is not limited to the experts and the adults, teenagers like Tanya who are exposed to discourses about what is considered as deviant within this medical discourse, come to perceive normal behaviour as abnormal which needs to be corrected medically. It is interesting to note that although ADHD is typically diagnosed at the age of 6, Tanya, Gregory and Michael believed that their behaviour in nursery school marked the starting point of their ADHD diagnosis. As the literature suggests, the frameworks through which children's bodies are understood, advocate the early intervention and remediation of children who are considered not developing according to a 'typical' biological trajectory (Brady 2014), however these frameworks may fail to bring us closer to the understanding of the real, lived experiences of children (Burman, 2008; Timimi, 2005).

Winston (the only Black African boy to be interviewed) also believes that his behaviour was a reason for his diagnosis, however, unlike the accounts of most of the participants who believed their teacher was the initiator of their diagnosis, Winston believes that his mother played an active role in the pursuit of his ADHD diagnosis:

I: Do you remember who first diagnosed you with ADHD?
W: Ja… it was last year so it wasn't long ago, Dr L…he was the one that said it was ADHD.
I: Do you know who may have suggested you see Dr L?

> *W: My mom, she was worried about me cos…I was…you see…getting into trouble at school…like in class…not listening to my teachers… not doing my homework…like ja…*

It is interesting that Winston perceived his mother to be the driver of his diagnosis as opposed to the school. Following the interview, Winston's mother provided me with some insights around her son's diagnosis. After receiving several complaints about his behaviour (e.g. constantly talking in class and not submitting his homework assignments) from his teachers, Winston's mother decided to consult a medical practitioner specialising in ADHD, who subsequently diagnosed him with the disorder. Winston's mother recounts how she struggled to get the school to view Winston as a child with ADHD, as opposed to a black boy with a behavioural disorder whom the school believed needed more discipline. In fact, the school was quite reluctant to fill in the Conners Teacher's Rating Scale Assessment as per Winston's clinician's request. The teacher's hesitance in supporting Winston's mother may indicate how the school may have defined him according to the stereotypes of Black masculinity. In the hope of providing them with a better understanding of her son's 'condition,' Winston's mom sent an article to his teacher and headmistress. She gave me a copy of this article which is entitled "ADHD - In service training for teachers". The document highlights how children with ADHD don't act impulsively through conscious choice and how teachers should deal with such children so as not to compromise their self-esteem.

The obstacles that Winston's mother encountered with his school pertaining to his behaviour and diagnosis, supports literature from the US and UK highlighting the racial disparity surrounding the diagnosis of ADHD. It is this discrepancy that Evans (2004) describes as the "mad/bad paradigm" where White children are more likely to be diagnosed with ADHD, thus considered mentally ill (i.e. mad) in

comparison to Black children displaying the same kind of behaviour (i.e. bad). The pursuit of an ADHD diagnosis for her child was possibly an attempt to shield her son from the punitive disciplinary procedures the school was threatening to employ as a means of dealing with his behaviour. Winston's diagnostic pathway may also be analysed according to Blum's (2011) view on the intersection of class and race. Winston's family is a middle-class family; perhaps his mother would not have embraced the diagnosis of ADHD so readily if they were from a less privileged class context, in which case the label of ADHD may just reinforce the stereotype of his Black masculine 'badness' (Blum, 2011). The absence of any children at Ubunye High school and the insignificant number of children at Morgan High diagnosed with ADHD strongly suggests that the behaviour of Black boys is interpreted in a raced and classed way, which may provoke more punitive methods of discipline as opposed to being diagnosed with a mental health condition.

5.1.4 Gendering of the symptoms displayed in the classroom

As Timimi (2009) suggests, gender is embedded in the symptom classification of the disorder according to traditional stereotyped roles for boys and girls. Most of the boys believed that the externalising hyperactive symptoms of the disorder in the classroom were some of the reasons behind their ADHD diagnosis.

Gregory provides an explanation which seem to center around more noticeable behaviours in the classroom (like hyperactivity) as to why he thinks he was diagnosed with ADHD:

> ***I: Other than the 'turtle incident' is there any other reason why you think you were diagnosed with ADHD?***
> *G: It is probably because I can't sit still, if I sit down I have to move my body…like constantly…even if I try and stay still.*

Similarly, Michael reported that his 'hyperactivity' was the likely catalyst for his diagnosis:

> ***I: Why do you think you were diagnosed with ADHD?***
> *M: Cos I get quite hyper and so it is hard to sit still and do my work.*
> ***I: You have a lot of energy?***
> *M: Ja…like when I have to sit still I like to tap, like tapping on the table and stuff, it's just good to move.*

Furthermore, Michael believes that by simply being a boy makes it more likely for him to be diagnosed with ADHD as he explains below:

> ***I: Do you think ADHD runs in your family, like would there be a family member that you would be able to say has ADHD?***
> *M: Not really, there is my one uncle…everyone says he has ADHD.*
> ***I: What do you think?***
> *M: Yes, definitely, cos I also think it is kind of a boy thing.*
> ***I: Ok…why do you think it is a boy thing?***
> *M: Umm I dunno, it just seems like more boys have it than girls, like I said most of my friends have it and like my sisters and their friends they don't seem to have it, they are not as hyper and stuff.*

Robert associates his diagnosis with the memory of his repeated involvement in physical fights with his peers during grade 1:

> ***I: Why do you think you were diagnosed with ADHD?***
> *R: Probably because I was always fighting…especially in Grade 1, I used to get into lots of fights…because the kids…they used to bully me…ja so I would fight.*

Moreover, Robert seems to believe that ADHD is a diagnosis reserved exclusively for boys, "*To be honest I have never met a girl with ADHD – do they also get it?"*

Conversely, most of the girls reported that less obvious internalising behaviours were the reason for their diagnosis. Daniella maintains that she was diagnosed because she constantly *"spaced out in class"* and *"couldn't concentrate for long".*

Jennifer relates her diagnosis to her feelings of anxiety when starting school:

> ***I: Why do you think you were diagnosed with ADHD?***

J: I remember being very anxious back when I started school, in school, I was very quiet and didn't say a word in class, mmm…I think it was because of that.

Ashika was diagnosed with ADHD when she was in Grade 8, when her marks started to drop, she explains, *"I couldn't seem to concentrate like I used to."*

This data supports the literature which indicates the gender disparity in the kinds of behaviour that may initiate an ADHD diagnosis, for example, ADHD in boys is associated with more externalising symptoms (hyperactivity and aggression) as opposed to the subtler internalising symptoms like anxiety and inattentiveness (Timimi, 2009; Biederman et al., (2002).

5.2 Untangling who benefits from an ADHD diagnosis and medication

5.2.1 Benefits to the children

During the interviews the participants were asked if their diagnosis of ADHD or medication for the disorder provided any kind of benefit to them. Their responses reflect the complexity of the situation with the benefits of the diagnosis and medication needing to be untangled from one another. The exploration of these children's world view indicates that the diagnosis and the medication can simultaneously be beneficial and problematic.

The diagnosis of ADHD seems to have worked to the advantage of some boys within the schooling system.

Michael explains that leniency applied by school disciplinary system is possibly one of the benefits of being viewed as a child diagnosed with ADHD:

I: Are there any advantages of having ADHD?
M: You can use it as an excuse (laughs) um… I am not sure what else
I: Have you ever used it as an excuse?
M: Ja, for sure…sometimes when you get into trouble at school you can say you did something without thinking because of ADHD. Or like if I haven't done my homework …ja…sometimes I use it like that.

I: And does your excuse work?
M: (Laughing)… most of the time.
I: So it can get you out of some tricky situations?
M: Ja..sometimes hey.
I: Other than not doing your homework, do you remember any other time you used ADHD as an excuse?
M: Ja…it was a bit silly, I umm sprayed my initials on the carpet in History class with a can of deodorant and set it alight. So, I got into a bit of trouble, but nothing hectic though (laughing.)
I: Did it lead to a disciplinary hearing?
M: Nah… I just had to do a bit of community service … oh and pay for the carpet…that's pretty much all.

The medical diagnosis of ADHD defends children like Michael from being labelled naughty, badly behaved, or even quite wicked as the child is viewed as suffering from an illness beyond his control (Timimi, 2005; Wedge, 2015). It seems as if Michael escaped fairly lightly from an act that may have got another learner into serious trouble.

When asked if he had ever used his ADHD diagnosis as an excuse, Robert has the following response:

I: Have you ever used the fact that you have ADHD as an excuse?
R: No…I have never used it as an excuse…like I said I don't talk about it, so I wouldn't use it like that.
I: Have you ever been in big trouble at school?
R: Ja, many times actually, the other day I called a teacher an effing cow… it just slipped out…but, she was getting on my nerves, so I was sent straight to the deputy principal's office, oh and fighting, I have been in the principal's office a lot for that.
I: Have you ever had a disciplinary hearing?
R: No, they have never given me one, I know that Dr. B has spoken to the school about my fighting but that's pretty much it.
I: Do you know why Dr B got involved?
R: I know the school said they wanted a letter from him, something like that I am not too sure.

Although, Robert claims that he has never used ADHD as an excuse, the fact that he is medically managed for his ADHD seems to provide a buffer between him and the school disciplinary system when his doctor intervened in the incidents. The increased use of medical explanations for behavioural problems has an impact on our thoughts

about free will, choice and responsibility for behaviour (Timimi, 2010). Treating impulsive or aggressive behaviour as a medical challenge and suggesting a biological cause beyond his control, deprives a child of an essential opportunity to learn self-discipline and accountability. The child may even consider it unnecessary if the 'answer' is externally located in a bottle of pills (President's Council on Bioethics, 2003; Timimi, 2005).

Both Michael and Robert are White boys, whose behaviour resulted in relatively lenient punishment considering their misdemenours. Reflecting on the results of studies focusing on the disproportionate punishment of Black boys compared to their White counterparts in schools, and data produced in this project, it provokes the question as to whether Robert or Michael would have escaped so lightly if they were Black. In comparison, Winston's relatively minor transgressions like chatting in class and not handing in homework, seemed to elicit a more punitive response from the school authorities, supporting Rudd's (2014) claim of racial disparity surrounding school discipline.

Whilst discussing the amount of medication Robert explains that since his diagnosis of ADHD, he has never experienced himself as 'unmedicated':

> *R: I don't really know cos um I um I don't actually, I haven't really thought about it, I don't really know that there is a difference cos I am never off the medication.*

Robert reveals that although he perceives a personal benefit, there may be other beneficiaries of his diagnosis and medication:

> ***I: What makes you afraid of not being on medication?***
> *R: I guess that I might be worse in getting into more fights, like I fight now but I think it might be super bad. Also, I won't concentrate in class and I don't want to fail another year.*

After living with the diagnosis and medication for the past eleven years, Robert is understandably invested in the identity associated with the medication, one which may be "super bad" without it. Whilst he fears that his ability to concentrate in class will be compromised, Robert considers that his 'badness' is perhaps a core characteristic that, although it's not as pronounced on medication, his badness continues to be a part of who he is. Hacking (1995) suggests the diagnostic label and subsequent medication may be viewed as a disciplinary device and may be understood as an attempt to correct deviant behaviour and promote social conformity.

Jennifer believes that the concessions she is afforded is the advantage of being diagnosed with ADHD:

> ***I: Would you say there are any advantages of having ADHD?***
> *J: I wouldn't say they are direct advantages…the only thing that helps me is for concessions… I get 5 minutes per hour extra when I write exams and I can write in a private venue…I normally write in Mrs. X's office.*
> ***I: Do you think these concessions help you?***
> *J: My marks have always been quite good…like above average on most subjects…I think they help with my anxiety as I am always stressed I won't finish my paper on time…so it helps when I am not distracted by all the hundreds of kids in the hall who are moving about and coughing and such*

Jennifer's academic track record has been consistently favorable and her ADHD diagnosis allows her privileges that other undiagnosed students who experience similar anxiety around exam performance and conditions. Although, concessions are not intended to provide learners with any advantages, if the diagnosis of ADHD and subsequent medication provides some form of benefit, even to a small degree, it raises the questions of how valuable these small effects may be in the world of education where even a small competitive edge (i.e. when applying for scholarships and acceptance into prestigious universities) can be incredibly valuable (Smith & Farah, 2011). Similarly, Ashika believes that her ADHD medication assisted her in

improving her already above average academic performance and as Esposito and Perez (2014) contend, the purpose behind psychostimulants is not to improve health, but designed "to make one more competitive, attractive and marketable" (Esposito & Perez, 2014, (p. 430). This may put us on the "slippery slope in defining who is medically impaired and who has access to an enhancement of the normal" (Cohen & Morely, 2009, p. 167). Undoubtedly, any kind of advantage will be enjoyed disproportionately by those with greater access to resources, which may contribute to the already existing disparity between those who are well off and poor in the education system (Cohen & Morely, 2009). In an unequal society like South Africa, any advantage gained via a diagnostic label or stimulant medication is compounded.

5.2.2 Benefits for teachers

As Christian (1997) suggests, the placid classroom is often perceived as the starting point of instruction, other literature suggests that in the absence of other classroom management tools, psychostimulants may be an effective way of creating such an environment (Kern et al., 2015).

Tanya acknowledges that she benefits from her ADHD medication, however, she recognises that her teachers may also benefit:

> ***I: Do you think your teachers would notice if you hadn't taken your medication***
> *T: (unwavering) yes…very obvious.*
> *I: What would they notice?*
> *T: They probably um…would not be able to manage me in the class…like I would be all over the place and disrupting everything.*
> ***I: How do you think the medication helps you, the good things about having the medication?***
> *T: Um…It keeps me calm, that I actually sit still and keep quiet…makes me think things through, um…help me focus…that's about it.*

Tanya believes that her teachers would not be able to "manage" her without the intervention of her medication. In the absence of effective classroom management

techniques, the noisy, hyperactive and disruptive child has come to be managed with far subtler approach, thus psychostimulants may help to create the 'docile body' (Cohen & Morely, 2004). However, as previous studies on the perceptions of parents and teachers of stimulant medication and its effect on academic performance reveal, improved academic performance was really improved classroom manageability (Barkley & Cunningham, 1978; Currie et al., 2013). This is perhaps due to an erroneous belief that a learner who is quiet, sitting still, and paying attention is one who is learning. This poses the risk that struggling learners like Tanya needing additional help in the classroom may be overlooked by teachers who misinterpret the improved docility as improved ability (Curie et al, 2013).

Whilst teachers may be able to fulfill their mandate when there are fewer disruptive learners in the classroom, those who are medicated may not share the same perspective. Winston doesn't like his 'new personality' that comes with the medication, he prefers being the joker amongst his friends and explains the social costs of his medically managed body:

> ***I: So, you only started taking your medication last year, do you think people at school noticed any difference in you?***
> *W: My friends for sure…they kept on asking me what was wrong…like from being funny and always having like a comment…and joking around…they said I got quiet…um…ja…it was like that…so…ja…they found me boring I guess*
> ***I: Do you think you have become boring since taking the medication?***
> *W: Ja…I think I have…like I like to make my friends laugh and such…but…mmm…not so much anymore… like I am quieter in class*

Although Winston acknowledges that the medication makes him "quieter" in class, which may be more pleasing for his teachers, it comes at a cost. He perceives his once exuberant personality as a contribution to his friendship group, and now classifies himself as someone very ordinary and *"boring".* Although the application

of psychostimulants may benefit the teacher to maintain order in the classroom, it may suppress the very qualities (like Gregory's creativity and Winston's exuberance) that make children unique and interesting.

5.2.3 Benefits for parents (particularly mothers)

Whilst Tanya acknowledges the benefits within the context of school, she reflects that the benefits may also extend to her parents whom she considers would not be able to tolerate nor survive the effects of her behaviour:

> ***I: Do you take your medication over holidays and weekends?***
> *T: I take it everyday…otherwise they would die!....Ja, I get on their nerves very easily.*
> ***I: How so?***
> *T: From never shutting up and being quiet, they will always have this* ***thing*** *screaming in their ear.*
> ***I: How does it make you feel when you take the medication?***
> *P: Um.. calm…um it makes me keep focus, it makes me feel not very talkative, just normal….just chilled… is that a word?*
> ***I: And if you were not to take it what kind of different Tanya would I see?***
> *P: I wouldn't stop talking, I would be jumping up and down, breaking mostly everything and just screaming*

Raising children is quite possibly one of the most important yet difficult and complicated tasks and parenting active children presents a special challenge that requires particular skills. Dealing with behaviour like constant chatter, noise and destruction of items can undoubtedly put strain on the family (Wedge, 2015). Tanya perceives the real gains of the medication as managing her disruptive behaviour and thus shaping her personality into a more convenient and tolerable form for both her parents and teachers. However, in doing so may not only obscure her true identity and impact on her self-worth, but also fails to resolve the real struggles that she may be facing. Viewing Tanya's thoughts from a Foucauldian (1980) perspective, illustrates how the process of normalization plays out; the subject is acted upon by powerful adults in her life (i.e. doctors, teachers, parents) in accord to social order,

but simultaneously internalizes the discourse and becomes an endorser of this view (Cohen & Morley, 2009; Foucault, 1980). As Tanya reminds us "[…][5]*they would die"*

When answering the questions about the pathway to their diagnosis, medication and doctor's appointments, fathers and their role were absent from all the participant's narratives. Discourses that construct women as a natural primary caregiver with the natural ability to 'mother' can generate expectations according to which mothers are evaluated and aspire to (Singh, 2004). Winston identified his mother as the initiator of his diagnosis and noticed how she had been familiarising herself with ADHD literature, claiming, *"She has been reading up on it quite a bit..., ja she has also sent things to school for the teacher to read about it."* There is no doubt that Winston's mother was trying to be a 'good' mother, who is characterised by qualities like understanding and protection, ever vigilant to the needs and idiosyncrasies of her child. When mothers hear negative judgments about their children they may experience a profound sense of guilt, self-blame and helplessness. However, when mothers are told that her child's difficulties are due to a biological disorder, they may be relieved from the blame and are now seen as a mother struggling with a disabled child (Singh, 2002, Timimi, 2005).

Whether the decision to seek or endorse a diagnosis and medication for behavioural issues to correct bad behaviour or transfer the blame for it, the needs of the child become intertwined the with needs of the adult (Cohen & Morely, 2009). Just as schools use their pass rates as indicators of their success, mothers may use their child's school based performance as evidence of their own competence as well as indictors for the child's prospects as a productive citizen (Cohen & Morely, 2009).

[5] […] indicates missing text

5.3 The impact of the diagnostic label and medication on social functioning

5.3.1 The stigmatising effect of the diagnostic label

Compared with children who have been diagnosed with asthma, children who have been diagnosed with ADHD are more likely to be described negatively and considered by their peers to be responsible for their condition (Coleman et al, 2009). The label of ADHD was considered by some of the participants who were not faring well academically and who felt disconnected from their peer groups, simply added to the feeling of being 'other'.

Already on the periphery of her peer group, Danielle believes that her classmates will treat her differently if she reveals her diagnosis to them as she explains in the following extract:

> ***I: Ok, do you think children in your class would treat you differently if they knew you have ADHD?***
> D: They will pick on you, and leave you out of stuff
> ***I: Why do you think they would do that?***
> D: I dunno, I think kids are just mean, like if you are not perfect like look perfect and have perfect marks and act cool, then they don't give you their time…you have no chance

Acceptance and popularity within female peer groups during early adolescence is often based on external, demonstrative attributes and abilities like good looks, impeccable fashion sense 'cool factor' and high academic achievement. Danielle is struggling academically but she is also battling with her weight which from her perspective positions her as having *"no chance"* of being accepted by her peers. She fears that revealing her ADHD diagnosis to her peers would make her more vulnerable and isolated. Danielle's concerns are not unfounded, as compared to children, adolescents are less accepting and more prejudiced towards peers with diagnoses like ADHD (Coleman, 2008; O' Driscoll et al., 2012). This intolerance can be explained by adolescents' preference for "social order within the peer group and

their tendency to advocate exclusion of peers who might impinge on successful group functioning" (O'Driscoll et al, 2012, p. 1058).

Similarly, Robert has already felt the effects of being bullied due to his weight and stutter, and is hesitant to add anything else to the bullies' arsenal as he explains below:

> ***I: You say that you are bullied quite a lot?***
> *R: Yes…Um I stutter, um because I am a bit over weight, mostly that and um ja… I think that's mostly it…like they don't know my school marks, they never know that.*
> ***I: Does anyone at school know you have ADHD?***
> *R: I guess that would just be something else they would tease me about…Ja…I keep that to myself.*

Although Winston reports that he has a close group of friends, he is unsure about revealing his diagnosis to them as he is not quite sure how they will respond to his diagnosis, his reticence is clear in the following extract:

> ***I: Do you know of any other kids in your class or Grade with ADHD?***
> *W: No, I am not sure, like I don't know cos we don't really talk about things like that…like I keep that to myself…so you see when Dr L asked the teachers to fill in the forms and stuff, my teacher gave it back to me in class and like my friends all wanted to know what it was*
> ***I: So what did you tell them?***
> *W: I made up some random stuff…like I wasn't going to tell them*
> ***I: Do you think they may treat you differently if they knew you had ADHD?***
> *W: Me?*
> ***I: Uhu***
> *W: Eish, I am not sure, I just don't think they need to know like about stuff like that*

As Morrell (1998) suggests, masculinities are socially constructed; perhaps Winston's fear about his friends finding out about his ADHD may be related to how masculinity is perceived within his circle of friends, i.e. masculinity that is perhaps associated with the casual treatment of schoolwork and resistance of adult authority.

The stigmatising effect of an ADHD label extends beyond peer groups and into the classroom. Although Danielle's mother has informed her teachers of her diagnosis and medication, she doesn't seem to be aware of this and provides some insight as to why she would be reluctant to reveal her diagnosis to her teachers:

> ***I: Would your teachers notice if you didn't take your medication?***
> *D: No*
> ***I: Do they know you are on medication?***
> *D: No, I don't go up to them and tell them I have medication*
> ***I: Is there a reason why you wouldn't tell them?***
> *D: I dunno…maybe they would treat me differently*
> ***I: Why do you think they would treat you differently?***
> *D: mmm…I dunno, maybe like I am different to other kids and they would pick on me?*

Whilst justifying why she would not be comfortable with teachers being aware of her diagnosis, Danielle uses the same kind of reasoning she applied for keeping this information away from her peer group.

Robert shares his insight on the effects of his ADHD diagnosis and his interaction with his Grade1 teacher:

> ***I: Do you think teachers treated you differently because of ADHD?***
> *R: I know my Grade 1 teacher treated me differently, but that's in my eyes, cos I still remember what happened in grade 1,2,3,4, I remember lots of years I don't know why, but ja she would help the other kids, she would mark my work but never explain anything to me like what went wrong, she never explained anything.*
> ***I: Why do you think she did that?***
> *R: I think she just gave up on me cos I wasn't learning anything.*
> ***I: Do you think that was how other teachers treat you in general?***
> *R: Ja, most of them, I sit in the back of class and they don't worry me if I don't worry them.*

Robert's experience with his Grade 1 teacher, is an event that he remembers clearly. He attributes his teacher's lack of interest in his academic development to his perceived inability to perform. As the study by Sayal et al. (2010) demonstrates, labelling a child with ADHD may lower teacher expectations which in turn are associated with lower achievement. Furthermore, Robert's experience with his

teachers may demonstrate Hacking's (1995) looping effect, where labelling a child may lead to a change in behaviour not only in the child, but also how his teachers have come to view him, which in turn has an impact on his attitude toward school. From an early age, Robert has faced a steady stream of academic and social difficulties, perhaps his disconnection from the academic process shows some defiance toward the system that is causing him harm. As Timimi (2005) explains, embracing a 'hyper-masculine' solution of rejecting the school process and engaging in aggressive behaviour may be Robert's attempt to rebuild his self-worth and personal power.

Some participants (only the boys) explained how most of their peers within their friendship group had also been diagnosed with ADHD, perhaps using their association with those who are 'similar' as a buffer against stigmatisation. Michael is unaware of any differential treatment from his peer group as he describes in the following excerpt:

> ***I: Do you think people treat / treated you differently because you were diagnosed with ADHD?***
> *M: No, no one really treated me differently?*
> ***I: So parents, teachers and friends didn't treat you any differently?***
> *M: Mmm no, most of my friends do have ADHD, well a lot of them.*

Similarly, Gregory shares how befriending boys with the same diagnosis can have protective qualities:

> ***I: Do you think people treat you differently because you have ADHD?***
> *G: When I was first diagnosed or now?*
> ***I: Anytime***
> *G: Mmm… not really cos I have grown up with friends that are ADD and stuff like that as well.*
> ***I: So you feel pretty similar to one another?***
> *G: Ja…like we are all the same, we have each other's backs.*

O'Driscoll et al (2012) claims that boys tend to be more positive toward peers diagnosed with ADHD, in comparison to the attitudes of girls toward their female

peers with ADHD, as some of the symptoms associated with the disorder may be considered 'regular boy' behaviour.

5.3.2 The silencing effects of medication

Multiple studies confirm that peer relationships are an essential component of the holistic development of the child and the adolescent, fulfilling the needs of belonging and attachment. (Diamantopoulou et al, 2005; Hoza 2006; Hay, 2005). A child's ability to function effectively within a peer group are key determinants of social competence and are considered to be markers of adjustment and functioning later in life. (Diamantopoulou et al, 2005).

While medication is prescribed to facilitate more positive peer interactions, many teenagers reported a sense that the medication made them quieter and more withdrawn and therefore less prone to seek out social situations. Although no participants rejected their medication outright, most of the teenagers acknowledge the side effects. Robert claims that his medication *"makes me feel quiet, but I am also quite snappy on it"* and Danielle believes she is *"less friendly"* when taking her medication.

Michael gives his opinion about medication in the following extract:

> ***I: Are you still taking the medication?***
> *M: Yes*
> ***I: How does the medication make you feel?***
> *M: I don't really enjoy taking it, I know it does help me but…there a lot of bad side effects.*
> ***I: Tell me about the side effects***
> *M: It makes me very quiet, its um…I don't eat, like I don't get hungry…like it's not really depression but it's just that I feel down on it.*
> ***I; So, it has an effect on your mood?***
> *M: Ja…umm, it's just like, ja, I don't interact as much when I am on it.*

Michael briefly acknowledges the physiological side effects of the medication, but also highlights the impact it has on his mood and ability to socialise.

Tanya highlights her continued difficulties with her peer group. When considering the effects of her medication, Tanya's story takes on a somewhat somber tone. In the following extract, Tanya provides a rich account of her social experiences and her perceived impact of the medication on her relationships with her peers:

> ***I: Did you feel like you were the only one they did that to?***
> *T: Yes…I feel like also no one actually um took my advice in team challenges, they would just do what they wanted to do….I'm invisible…..I am always invisible*
> ***I: What do you think makes you invisible?***
> *T: I think it has partially maybe also the medication I feel like maybe it makes me very quiet…I'm not sure*
> ***I: So during break who do you sit with?***
> *P: I sit by myself, I like to read, I like to draw, I like to play games, I am not a really talkative person…. Like I think…do you know Harry Potter?*
> ***I: Yes***
> *P: It's like my medication becomes my invisibility cloak, I become invisible when I take it, umm…Ja…that's what I think.*
> ***I: Uhu, so staying with the theme of magicians, if you were to wave a magic wand what would you wish for?***
> *T: Um...to be able to be social….um to have people that understand me, who are like me and people who don't mind actually listening to my point of view*
> ***I: If kids were to see who the real Tanya is – so let's say the cloak was lifted off for a little while, what would you think they would see?***
> *T: A crazy person….um it's just how I am without my medication, but if I was still on it and they start to see me and what I like and everything then I feel like maybe they will like me or sometimes they will think I am a little weird that I like boys stuff.*

She verbalizes the wish for her peers to see beyond the effects of the medication, while she briefly entertains the ideas that they may recognise that she has valuable contributions to make and perhaps even be likeable, she quickly dismisses this notion by claiming that they would probably find something else to justify why they would consider her to be unlike them. The rejection that Tanya experiences from her peers may be partly due to her behaviour that does not fit the stereotypical feminine behaviour i.e. that she is hyperactive and noisy when not on medication and

interested in *"boys stuff"* (Diamantopoulou et al., 2005). Advocates of the neurobiological model warn of the risks of peer rejection as one of the adverse effects of untreated (i.e. unmedicated) ADHD on the child's self-esteem, yet as Tanya's account reveals, medication seems to be exacerbating her social struggles. This is perhaps because peer relationships are bi-directional. The tendency to focus on the social deficits of the rejected ADHD child, does little to understand why this rejection persists despite subjecting children with ADHD to behavioural management programs and medication. The biomedical model's focus on 'within child' explanations for difficulties experienced by children diagnosed ADHD, which averts our attention from the child's context and how it may be perpetuating difficulties for all children, whether they have been diagnosed with ADHD or not.

Tanya continues to describe the impact of her medication:

> ***I: What changes when you don't take your medicine?***
> *T: Most people don't know or that…it's just that…I had it before they seen me without it…um but if they do see me without it they are shocked about how I am…and that I actually talk…mmm…and…um.*
> ***I: Are you talking about when you are off the medication?***
> *T: Ja…Also the people how they react when they see me, they think I am a totally different person…they don't really think badly of me, they are just shocked, that's all.*
> ***I: What do you think shocks them?***
> *T: Umm…that I can actually talk and be fun to be around…ja, I think they would be…is this the same person?*

Tanya reflects on the effect of her medication on her personality. On the rare occasions she is off her medication, Tanya believes that she undergoes such a considerable transformation the she would probably not be recognisable to those who know her. Side effects of the medication like the loss of spontaneity can be misinterpreted as 'improvements' and may be detrimental to the child's self-esteem. Although psychostimulants may make children more 'socially acceptable', they also

tend to reshape their personalities with aspects of their authentic self being lost in the process (Wedge, 2015).

When asked what she does for fun, Tanya provides me with some insight as to how she spends her free time:

> *T: I read, I play games….there's an example(pointing to the TV and games console) XBOX play station 2, my computer….I like games that you get to play a character, so like I would like be funny and have lots of powers also games like this where like you get to choose the storylines of some games…I like those.*

In a world where the storyline can be created and manipulated, Tanya's chooses a character who is powerful and entertaining. Tanya provides further detail of her fantasy:

> *T: Like to have powers to change things like people, time…like you know worm holes and time travel and you are the biggest hero in everyone's eyes… like they idolize you.. not everyone…like the bad people are scared of you…you are just free to choose.*

Perhaps her wish to transform into the person who is simultaneously accepted, adored and feared, provides some respite from her current social reality.

5.4 Medicalisation and the loss of agency within the mental health system

Although there are no definitive medical tests, cognitive or neurological markers, the dominant discourse that surrounds ADHD is biomedical (APA, 2013; Sroufe, 2013). When asked to describe what they thought ADHD was, most of the children described it from the dominant biomedical framework.

Winston provides an explanation that focuses on the structures of the brain:

> *W: Yes…it's when the left part of your brain does not work well…like it doesn't talk to the right side of the brain…I know it's like that*

Tanya has this to say when asked what she thought ADHD was:

T: I am not exactly sure…but I do know that it has something to do with the chemicals in your brain, I can't remember if you have too much of some chemicals or too little…umm…but it is about chemicals…I would explain it like that.

Michael portrays how his diagnosis may set him apart from others and describes ADHD as follows:

M: It's when your brain just works differently to others, I don't know how to explain it cos I think it's very complicated so ja…it is just different to other brains.

Conversely, when asked what he thought ADHD was, Robert was unable to provide an answer:

I: If you were to explain ADHD to someone, how would you explain it?
R: But I am not too sure cos we don't talk about this diagnosed stuff really, in fact we never talk about it.
I: If you were to describe ADHD to someone who had never heard of it how would you describe it?
R: I don't know actually, I usually put it in the back of my mind and forget about it usually, I don't know what ADHD means cos I don't want to learn about it cos I think it is a problem, I think it's something bad so I put it at the back of my head.
I: You would rather not think about what it means?
R: Ja, I have put it out of my mind...I guess, it's like I am broken and the tablets fix the part that is broken, I guess, I dunno really.

Robert has internalized his diagnosis of ADHD as something so dreadful that it defies thinking about. Whilst the intention behind the diagnosis of ADHD and the medication thereof is to 'provide relief' and make children 'more normal,' in some instances it makes them acutely aware of their difference, moreover, this difference is about being *"broken"* and needing to be 'fixed'.

As the above extracts reveal, most of the children have internalised this predominant biomedical view of ADHD which is rooted in the assumption that one's biology is faulty; which transfers problematic behaviours out of the social realm and into the individual brain. (Hawthorne, 2013, Timimi. 2005), and as a result, children are inserted into the medical system under the authority of professionals and experts.

Participatory research indicates that children are capable of assuming an active role in expressing their life problems as well as identifying their own solutions (Brady, 2014). However, in the field of health, children's involvement in making decisions which have a bearing on their lives can be limited (Brady, 2014).

When asking Gregory about the role he plays during his follow up appointments with his psychiatrist, he provides the following insight into the private conversations his mom has with the doctor and his contribution during the appointment:

> *G: […] I am not sure what they talk about but she often comes out looking quite upset, like I think she cries a lot when she talks about me. Ja...like sometimes I wish I could hear what they are saying about me, after all …like, it is my life.*
> ***I: Do you chat with Dr. X after your mum has seen her?***
> *G: It depends...ja, like sometimes I tell her how things are going but… even though I tell her that I don't think it makes a difference I don't think she listens cos she tells me I must stay on...just keep on taking them*

Gregory shows mature insight by recognising his mother's emotions and that he is the probable source of her distress. Within the context of the Western world, children are expected to behave in a mature and responsible way, particularly in the school environment. Furthermore, the Neoliberal market push to 'adultify' children through media, advertising and computer games is impinging on their lives at an increasingly younger age (Timimi, 2005). However, when it comes to their involvement in the management of their 'medical condition' and medication, teenagers like Gregory are viewed as being too immature to participate and feel ostracised from the process. This practice of under-involvement may be linked to the ADHD diagnosis itself, which underscores deficit and difficulty and any attempt the child makes to demonstrate agency is misinterpreted as 'faulty thinking' (Brady, 2014). Whilst the management of information between parent and doctor may be a well-meaning

attempt to protect their child's wellbeing, treating children as passive recipients of knowledge can make the child feel marginalized and disempowered (Young, 2003).

Interestingly, Gregory exclaimed mid-sentence that he hadn't taken his medication on the day of our interview. Probing his need to tell me that he was doing the interview 'unmedicated' Gregory provides an interesting insight in his motivation behind his decision:

> *G: Like, I wanted to show you that the medication makes no difference to me at all…it's not like I act like a spaz…or anything when I don't take it…so ja…I just wanted you to see.*

Gregory's decision was perhaps an effort to co-opt me onto his 'side' about how he feels that the medication makes no difference to his behaviour. Despite him telling his mother and physician that he gains no noticeable benefits of the medication, his requests are ignored, in fact after his last visit Gregory reports that the dosage of his medication was increased. This endorses the sentiment that young people often feel that their view is only taken seriously when it corresponds to the plans and decisions made by parents and practitioners (Le François, 2008).

Michael has adopted a rather insightful approach when it comes to suggesting a solution to his dilemma surrounding his medication, a strategy which he hopes will appease both his doctor and his mother which he explains as follows:

> ***I: Do you think when you get older you will still have ADHD?***
> *M: uhh, I don't think I will cos I have grown out of it a lot…like I am not as hyper when I am not on it…um ya…um I can control myself more*

When asked about his medication, Michael adds:

> *M: Ja,……I mean I don't mind taking it as long as it is not such a high dose, at the moment I am on quite a high dose….and if we can just lower it so….the side effects are not that big then I don't mind taking it.*
> ***I: Have you discussed this with your neurologist?***
> *M: Mmm…she says that I should probably stay on the dose that I am on…so I don't know…I guess I can't argue cos she is supposed to know about these things…like mom probably wouldn't want me to change it in case I start becoming too hyper and not do my work.*

Michael is concerned about the side effects of his medication and states he is *"not as hyper"* and that he is *"growing out of it"* to motivate the possibility of reducing his dosage. However, Michael fails to convince his neurologist and he doubts whether his mother will approve of his suggestion.

The power and control of the 'experts' namely parents, doctors, psychiatrists and other professionals emerges in the narratives of participants like Gregory and Michael. Children feel the pressure to submit to and obey the instructions of medical professionals and their parents, however, it is important that they feel that these directives are relevant (Brady, 2014). It appears that the voices of adolescents are unheard by the professionals that interact with them. Gregory and Michael's responses suggest that medical culture does not seem to indulge the questioning of decisions by those in authority and that children are too irrational and incompetent to be involved in the process. Young people diagnosed with ADHD are often considered within diagnostic encounters as straddling the interface of discourses of threat to the prevailing social order and victim in need of protection from their own biology (Brady, 2014). Alderson asserts that "Giving children a voice" is a popular catchphrase, but children already have a voice, it is the adults who need to listen" (Alderson, 2000, p. 133).

As a means of justifying a reduction in medication, Michael tells me about his recent ability to control his facial tics, a strategy that is considered to require a considerable amount of effort for adults, let alone a young adolescent:

> *M: I used to have tics, like blinking and lots of different things that I have controlled that very well, I have stopped a lot of it*
> ***I: How have you managed to stop the tics, what have you been doing that has been so effective?***
> *M: I don't know just a mind thing…I just say to myself stop and concentrate on not doing it…then I won't*
> ***I: Have you tried to use the similar strategies to control your ADHD?***

M: Ja…sometimes…I don't always get it right though so that's when I need my medication…like for my academics and stuff.

It is interesting that Michael ascribes his success to managing his tics to the power of his mind, yet, yet he doubts the same ability when it comes to managing his ADHD independently from his medication. This supports the concern that the use of psychostimulants may rob the edifying features of effort and teach young people like Michael that their performance is attributed to artificial (i.e. medicinal) interventions (President's Council on Bioethics, 2003).

Robert can effortlessly remember the details of the cocktail of medication providing careful detail of the dosage for each one:

I: Ok, do you know what medication you are currently taking?
R: Um ja, I am on Concerta 72mg, Nuzak 20mg and Lamictin 200mg…the Concerta is new…I only changed to it this year and the Nuzak is new too.

Although Robert does not have epilepsy, he tells me that the Lamictin (used to treat epilepsy in children and Bi polar disorder in adults) helps him keep *"balanced"* and refers to the Nuzak (anti-depressant) as his *"anger pills".* This 'polypharmacy' is not an unusual approach to ADHD treatment as clinicians either prescribe a variety of medication from the outset or further drugs are added to combat the side effects of the original stimulant medication (Timimi, 2005). Whilst he is very familiar with the details of his medication, and their purpose, Robert seems to have very limited understanding as to *why* he takes them as he explains in the following extract:

I: Has Dr. B spoken to you about your medication?
R: I remember he explained the medication to me but not why I take it.
I: So, tell me what happens when you go for a check up with Dr. B?
R: Um he sees me first for a bit like 10 minutes or so,[…] he basically asks me about my medication and I don't really have much to say, I still get anger a lot and still get lack of sleep…I'm not sure why… then I go onto a scale and he do's my height and then that's it… Like I trust him 100% cos he has studied all about medication

Most of the interaction between Robert and his psychiatrist centers around his medication and his reluctance to participate may be due to him feeling somewhat overwhelmed by this authority figure and perhaps even a little intimidated to question or provide an opinion that may be contrary to his doctor's. Whilst a brief time is allocated to discussing his medication, Robert feels he has little to add to the conversation which may prevent him from questioning the efficacy of his medication. By being assigned a medical diagnosis, Robert surrenders to a somewhat subordinate relationship with his doctor. Robert's experience may suggest that 10 minute visits with his psychiatrist every four months is insufficient time to build a rapport. Furthermore, the quality of their interaction may be affected by the power imbalance inherent in the doctor-patient relationship (Le François, 2012). As Timimi (2005, p.175) argues, this traditional relationship can create "unnecessary dependence" on the expertise of the doctor, as Robert expands upon:

> ***I: Have you ever thought about not taking the medication?***
> *R: I would rather stop it when the doctor says I have to stop it, or he thinks I am good enough without the tablets. I would trust Dr. B if he told me to stop taking them.*

Studies suggest that children can play a central role when it comes to decisions about their health that concerns them, as long as they are provided with accurate and age appropriate information (Alderson, 1993; 1995; Young et al., 2003). Robert demonstrates unquestioning submission to the authority of his doctor, which supports the notion that once diagnosed, children and adolescents are often expected to conform and comply. This expectation makes it less likely for young people to develop or sustain an interrogative approach to any further diagnoses and treatment (Brady, 2014, Le François, 2008).

Many of the adolescents who were interviewed did not overtly object to taking their medication, however, many believed they had little choice in the matter. Whilst Tanya has resigned herself to the process of taking the medication and expresses her ambivalence about the process:

> ***I: What is the part about the medication you don't love?***
> *T: It's just like sometimes I feel like I am forced to have them and when I don't… then it is a drama!*

Jennifer believes that the medication is a necessary evil to facilitate her ability to get through her school work and claims she would have it because of the effect on her academics as she rationalizes in the following extract:

> ***I: So in a perfect world in a school that took in all kinds of learners, do you think it would still be necessary to take medication***
> *J: I still think it necessary so I can actually get the work done…I don't love the medication, but I would have it*

Jennifer neither fully rejects nor accepts her experience with the medication, but rather acknowledges the benefits and the disadvantages of her treatment in an attempt to try and understand it. Brady (2014) considers Jennifer's actions of meaning making to be an attempt to maintain some form of control over her life.

Whilst children have agency, the way it is interpreted "rests on assumptions about lack of competence and understanding, relating to the intersection of being a child and having a mental health condition" (Brady, 2014, p.226). Although most of the narratives about their medication were linked to a perceived lack of agency, Robert provides an account of his non-compliance when he was first given the medication:

> ***I: When you first went onto medication, do you remember how it made you feel?***
> *R: I remember I really used to struggle to take the tablets*
> ***I: Can you remember why it was so difficult for you?***

R: (Sighs) …Cos they made me feel bad… the Ritalin when I was on that it took my appetite away, then I didn't eat I used to go to the bathroom and puke because of it, I was on Ritalin forever, I only changed this year to Concerta. It was hard to take them
I: Uhu
R: Like when I was young I used to be very naughty, I would just take them out and throw it outside, ja […]

Robert remembers not taking his medication due to the adverse side effects and his difficulty in swallowing the tablets. Although his initial resistance to taking the medication was due to some very valid reasons, Robert considers himself as being *"naughty"* for doing so. Whilst Robert demonstrated some form of agency by pretending to take his medication, it was short lived as his actions were noticed by his mother who now enforces his compliance by checking he has taken them. To understand why children resist taking their medication their behaviour should be considered within the context of their lives (Brady, 2014). There is a fascinating combination of medical, scientific and common-sense that mediate a person's experience of their diagnosis and medication. (Brady 2014). Williams (2001) maintains that, "Lay people, in short, are not passive or active, dependent or autonomous, believers or sceptics. Rather they are a complex mixture of all these things" (as cited in Brady, 2014, p.225).

5.4.1 Mothers as the gatekeepers to agency

What became apparent during the research project and interviews with the participants is the significant role that mothers played throughout the whole process. After the administration of the questionnaire, the schools were asked to provide me with the parent contact details of the children they knew had been diagnosed with ADHD. Once parental consent was granted, the school provided me with the parent's telephone numbers and email addresses, more specifically, that of the child's mother.

For each participant, it was their mother who assisted me with the arrangement of the interviews despite many of them having busy careers and full time jobs. Although I did not interview mothers, they provided me with the information about their children's diagnosis and medication regime, most of them recounting the facts effortlessly.

Both Gregory and Robert mention that their mothers have discussions with their respective doctors behind closed doors during their follow-up appointments. Gregory tells me *" Well…my mum usually spends most of my appointment with Dr. X,[…]"* Similarly, Robert explains that after his brief consultation with his doctor, *"He sees my mom afterwards, I don't know what he speaks about when he speaks to my mom,[…]."* Although Robert claims not to be aware of what is being discussed behind closed doors, he is astute enough to know that he is the central focus of the conversation.

Three of the participants describe how their mothers ensure that they take their medication daily, Robert explains how he struggled taking the medication and his mom's reaction when she found out that he was throwing it out:

> *R: […]my mom thought I had drank it. One day she saw me do it and ja…she was not happy…*
> ***I: Uhu, what happened?***
> *R: I told her it was hard for me to swallow the tablets…so then they changed it to capsules.*

When Robert had trouble swallowing his stimulant medication in tablet form, his mother made arrangements for it to be changed to capsule form, and although Robert is almost 16, he tells me, "*She checks I swallow them…my mom…she always checks."* When asked if she had ever forgotten to take her medication, Tanya states that this would be unlikely, *" Mmmm, no, my mom puts it in front of me and watches*

me take it." Similarly, Michael provides the detail of his medication regime in the morning, *"My mom has a container…you know like the ones with the days of the week on it…ja…she puts my tablets in that so I take them with breakfast."* When asked if he had ever forgotten to take his medication, Michael replies, "*Ja, I have but not often…my mom always reminds me, like one day I forgot to take them and we had to come back home, so I got a late slip…so I try not forget."*

Once the advice from the 'experts' has been solicited, the children highlighted that the responsibility to ensure compliance rests with their mothers. By refusing to accept expert authority and demonstrating non-compliant behaviour, mothers are at risk of being positioned as being irresponsible, her actions jeopardising her child's future. However, a mother's compliance not only removes her agency by transferring the authority of her child's wellbeing and behaviour to the experts; this compliance simultaneously seems to limit her child's sense of involvement and control over his or her medical diagnosis and treatment.

5.4.2 The undetected impact of trauma

Behaviours labelled as ADHD are often normal childhood responses to stressful or traumatic situations. Although none of the children actively linked their diagnosis to a traumatic event, four of the participants (all the boys) commented on some of the challenges that they had dealt with or were currently facing. Two of the boys mentioned that their parents were divorced and looking at the age of their diagnosis provided by their mothers prior to the interview, these events seemed to coincide with the time they were diagnosed with ADHD. Gregory's parents divorced whilst he was in preschool and since then has had limited contact with his father.

I: Do you know if your mom or dad has ever been diagnosed with ADHD?

G: I don't think my mom has, and I really don't know if my dad has ever been diagnosed, …like he doesn't live with us…since their divorce… so it's hard to say…if he does or doesn't.
I: How old were you when mom and dad divorced?
G: I was…um..in Grade…I know I was 5, so is that Grade 0…yes Grade 0.

Similarly, during the same year of Robert's diagnosis, his mom and dad divorced and since then has had no further contact with his father and a difficult relationship with his stepfather as he explains below:

I: What about your mom or dad, do you know if they have ever been diagnosed with ADHD?
R: I'm not too sure, my dad left us when I was 5, so I didn't really have a dad growing up, then my stepdad came in and we used to argue a lot in the beginning, so basically my mom and my brother raised me.

The absence of Robert's father and a difficult relationship with his stepfather suggests the importance of the presence of a father or alternate male role in a boy's life. It may offer support for the argument that most so-called ADHD children (who are mostly boys) lack the attention of their fathers who are either impaired in their ability or too preoccupied with other pursuits to parent their children (Swingle, 2015; Timimi, 2005). Children of absent fathers often miss out on the benefits of this archetypal relationship and just like Robert and Gregory, experience a sense of loss and sadness (Richter et al., 2010).

Not long after his parents' divorce, Robert suffered another trauma which he explains:

I: Are there things about school that stands out for you?
R: My first best friend in Grade 1 was Sipho, he died in a car crash just after we started in Grade 1 together, we had been mates since pre-primary, so I took it very badly.
I: Do you remember anyone helping you with the way you felt when you lost Sipho?
R: Nah, I don't think so, I went to see a lady though, but she was just talking to me about school and stuff not really that stuff with Sipho.

Robert remembers this incident well, he also remembers that his consultation with a therapist seemed to focus on his academic challenges as opposed to other very relevant events that may have had an impact on his functioning. Robert's experience highlights the importance of viewing the child in context and not through a single lense i.e. his academic performance (Timimi, 2005).

Michael recalls an event (also corresponding with the time of his diagnosis) that indicated a significant loss of a family member he was particularly close to:

> ***I: Do you know of anyone in your family who may have been diagnosed with ADHD?***
> *M: I don't know if my uncle was actually diagnosed with it…but my mom seems to think he also had ADHD…ja…but unfortunately, he is dead…he was a game-ranger and was killed in a helicopter crash*
> ***I: That's terrible, how old were you when it happened?***
> *M: I was in Grade 0… ja…I don't remember a lot of stuff from early school…but that I remember.*
> ***I: Were you close to your uncle?***
> *M: Very…um…like we would spend weekends at his farm… and he taught me how to shoot…ja…he was just really cool…*
> *I: Did he inspire you to become a game-ranger?*
> *M: Ja…very much…he taught me a lot*

Although Winston maintained that school had been fairly uneventful, he speaks about the unexpected retrenchment of his father and the anxiety it provoked within his family:

> ***I: Is there anything about school that stands out for you?***
> *W: No…not really school…like last year my dad was retrenched…ja… so it's been a bit stressful for us…just like hard you know …but he starts a new job next month…so…ja…hopefully the problems will be over now.*

Events like the retrenchment of a parent, divorce or loss of a friend or family member have a direct impact on the developing child, potentially affecting classroom behaviour, academic performance, physical and emotional wellbeing (Paterson, 2013). Multiple studies confirm that stress in early childhood is linked to learning

and behavioural difficulties and extreme stress can change the wiring of children's brains (Van der Kolk, 2005). Trauma responses can take the form of inattention, impulsivity and impaired executive function, all of which are symptoms of ADHD. With the publication of the DSM and the administering of behavioural checklists like the Conners assessment, doctors often go through a predetermined list of behaviours, pair it with a diagnosis and prescribe the appropriate drug (Wedge, 2015). This time efficient approach along with the assumption that biology as opposed to the child's experiences may overlook traumatic events and contextual issues that may be the underlying cause of the behaviour (Timimi, 2005; van der Kolk; Wedge, 2015). Furthermore, this approach prevents the child from receiving the help and support they need to successfully navigate through these experiences.

5.5 Conclusion

The context of school and deviations from its prescribed parameters of academic performance and classroom behaviour seem to be the 'golden thread' that runs through the narrative of most participants. Consequently, teachers were identified as the most frequent initiator of the diagnosis, however, some parents were also recognised as the driver behind the diagnosis. Behaviour associated with stereotypical gender roles also appear to retain links to the pathway of diagnosis. Furthermore, the experiences of the only Black boy interviewed, along with his mother also suggest that the interpretation of children's behaviour is both raced and classed. Whilst it is argued that diagnosing and medicating children and teenagers for ADHD type symptoms is to the benefit of the child, other beneficiaries like teachers, parents (more especially mothers) of this practice became apparent. Although some children acknowledged the benefits of their diagnosis and medication, it seemed to

incur a considerable cost to their sense of uniqueness, self-esteem and functioning within the peer group. The themes provide an understanding of how children view their ADHD diagnosis according to the dominant biomedical framework. Difficulties children experience are ascribed to 'within child explanations' thus, environmental and structural considerations are overlooked as possible sources of their difficulties. By being categorized not only as a child, but a child with a mental illness, positions them to be passive participants in the process, where much of the agency is retained by the medical experts and parents.

CHAPTER 6: CONCLUSION

This study explored the prevalence of ADHD across four different schools in Gauteng. Results of the study propose that the diagnosis and prevalence of this phenomena is strongly influenced by gender, race and class, as the majority of children diagnosed are boys (65%), more than half are from upper class families (61%) and most of the children are white (71%).

The overall prevalence rate (3.7%) across all four schools is lower than the international and South African literature suggests. The racial, class and gender disparities of this prevalence rate became evident when the number of children diagnosed with ADHD was analysed according to the type of school (i.e. former model C, township and private) and the communities they serve. There was a complete absence of the diagnosis in the township school, where most children are from low income impoverished families. Similarly, in the ex-model C school located on the outskirts of a city centre, comprising of mostly Black learners, a small minority of learners were diagnosed (1.4%). Furthermore, the children in both these schools were unaware of the phenomenon of ADHD, and to most the disorder was somewhat of an enigma. The non-existent or exceedingly low prevalence rates in these schools emphasise that race and class have a direct bearing on the diagnosis of ADHD. Conversely, the prevalence rates within the private (11%) and ex-model C school (10.8%) serving the more affluent, predominately white communities were markedly higher. Prevalence rates in these schools exceed the estimates of the disorder proposed by ADHASA (8-10%) and are similar to those of countries like the US and Australia.

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In South Africa, privileged educational institutions compete for the same small slice of the market namely that of high-income earning parents. To remain competitive, unblemished track records of high achievements become a necessity and teachers may be under increasing pressure to secure these results. Classroom performance (academic and behavior) embody the symptomology of ADHD, and as the results of this study indicate, teachers are perceived to be the main initiators of the diagnosis. The kinds of behaviour that the children believed were the catalyst to their ADHD diagnosis were associated with the stereotypical externalised behaviour in boys (i.e. the hyperactivity) and the internalised behaviour (i.e. anxiety and inattentiveness) associated with girls. In the absence of definitive medical tests, clinicians tend to rely heavily on teachers' assessments, who may decipher learners' behaviour according to gendered and racialised norms. The study reveals that the behaviour of Black boys in more advantaged schools may be associated with criminality, rather than an 'illness' and perhaps interpreted as warranting more punitive disciplinary measures. In comparison, White boys who commit more serious offences tend to be positioned as having a biomedical condition beyond their control and are thus diagnosed and medicated. In order to investigate this disparity, an exploration of schools' disciplinary systems is a possible direction for future research.

The benefits of an ADHD diagnosis appeared to vary from academic concessions to the tempering of school disciplinary procedures. In an unequal society like South Africa, any form of advantage is compounded, creating further distance between those who are privileged and those who are not as fortunate.

Results show that many children are positioned as having something biomedically 'wrong' with them, and have come to internalise this diagnosis. This 'within child' biological explanation of behaviour is problematic on several fronts. Firstly, viewing a child through this lense may not take into consideration the impact of the underlying causes of the behaviour. It may serve to absolve the institutions and adults who have wittingly or unwittingly created the conditions that gave rise to the behaviour in the first place. Although scrutiny is directed at children who are not developing according to the norm or those who are disrupting the instruction of other learners, very little focus is aimed at the schools, despite their role in the creation and perpetuation of the disorder.

Secondly, whilst the risks of untreated (i.e. unmedicated) ADHD like traffic violations, substance abuse and driving accidents are frequently emphasised by the proponents of the biomedical model, the side effects of the medication reported by the children cannot go unrecognised. The most notable side effect of the medication was that many children felt subdued and less likely to seek out social interactions, which can have a profound effect in the interactions with their peers. What seemed to emerge from the narratives around medication was an either or dynamic; with perceived benefits of academic performance pitted against compromised social functioning. Whilst many of the children did not overtly reject their ADHD medication, a strong theme of disempowerment emerged, with medical experts and mothers identified as the gatekeepers to their sense of agency. Developing a sense of autonomy around their diagnosis and treatment becomes increasingly relevant as teenagers develop the capacity for mature insights and decision making skills.

The data in this study may suggest that ADHD is a construct that is associated with gendered stereotypes and the pressure to perform amongst wealthy children, as well as the notion that children's struggles can be remediated through medication. However, it is also quite possible that if greater attention and resources were directed towards the behaviour of children in poorer communities, there is a chance that these children may fulfill the diagnostic criteria of the disorder. The absence of this kind of attention perhaps confirms that there is a much-repeated hierarchy of children whom we care about and those who simply remain outside of our concern.

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APPENDIX 1: QUESTIONNAIRE

Number:	**Grade 9 _____**

Gender:

Male ☐ Female ☐ Other ☐

Race:

Black ☐ White ☐ Coloured ☐ Indian ☐ Asian ☐ Other ☐

What language/s do you speak at home?

What work does your father do?:

What work does your mother do?:

Do you have any brothers or sisters?

Yes ☐ No ☐ How many brothers and sisters? ☐

If yes, what grade are they in or what work do they do?

Grade _____ University _____ Work _____

Who do you live with at the moment?

Do you know what Attention Deficit Hyperactivity Disorder (ADHD) is?

Yes ☐ No ☐

If you were to describe ADHD in your own words, how would you describe it?

Do any of your friends have ADHD?

Yes ☐ No ☐ I don't know ☐

Does anyone in your family have ADHD?

Yes ☐ No ☐ I don't know ☐

Have you ever been told you have ADHD by a doctor?

Yes ☐ No ☐

If you have been diagnosed with ADHD, have you taken any medicine for ADHD?

Yes ☐ No ☐

Are you still taking the medication?

Yes ☐ No ☐ Sometimes ☐

APPENDIX 2: CONSENT LETTER SENT TO THE PARENTS ON BEHALF OF THE SCHOOL FOR PHASE 1 OF THE RESEARCH

Dear Parent

A student of the University of the Witwatersrand who is completing her Masters in Psychology will be conducting her research project at our school. The project will focus on the prevalence of Attention Deficit Hyperactivity Disorder (ADHD). The purpose of this project is **not** to diagnose children with ADHD, but merely identify the prevalence and perception of the disorder amongst Grade 9 learners within different school systems. Your child will be asked to complete an assent form to participate and a short questionnaire during the school day. This questionnaire will not contain any identifying information that can be linked to any particular child. Only the researcher and her supervisor will have access to the data collected from the questionnaire.

Should you wish for your child **NOT** to be a part of this research, please indicate this by contacting _____ (contact person) on the following telephone number _____ or via email _____, by _____(date), who will ensure that your child will not be approached by the researcher to complete the questionnaire.

Thank you in advance for your co-operation.

Yours Sincerely

APPENDIX 3: CONSENT LETTER SENT TO THE PARENTS ON BEHALF OF THE SCHOOL FOR PHASE 1 OF THE RESEARCH – TRANSLATED VERSION

Ku bazali

Kuzo fika umfundi wase Wits University, owenza iMasters degree yakhe kwi Psychology.

Uzobe esenza ucwaningo (iresearch) la esikoleni sethu.
Lolu cwaningo luzobe lubhekhane nama experience olutsha, kanye nezinto ulutsha lubhekane nako ezikoleni ezahlukene.

Ingane yakho izobuzwa imibuzo (iquestionnaire) embalwa. Konke loku kuzo kwenziwa ngesikhathi sesikole. Lemibuzo ngekhe ikhombise igama noma imininingwane enokwenza omunye umuntu ukuthi azi ukuthi ibiphendulwe yingane yakho. Yonke into ezotholwa kulolucwaningo izofundwa ngumcwaningi nesupervisor yakhe kuphela.

Uma ungafisi ukuba ingane yakho ibe yingxhenye yalolu cwaningo, sicela uxhumane no _____ (**name of contact person at the school**) ngaphambili komhla ka (**date**) _____ , noma uthumele ingane yakho ne ncwadi ukuze umcwaningi angafikeli kwingane yakho.

_____ (gama lomuntu ozoxhumana naye esikoleni)
_____ ucingo (tel/cell)

Ucwaningo olufana nalolu lunethemba loku thola imininingwane ebalulekile ngezindlela ulutsha lucabanga ngalo nokuthi izingane zibhekane nani ezikoleni zethu.

APPENDIX 4: ASSENT FORM – PHASE 1, COMPLETION OF QUESTIONNAIRE

Psychology
School of Human & Community Development

University of the Witwatersrand
Private Bag 3, WITS, 2050
Tel: (011) 717 4500 Fax: (011) 717 4559

ASSENT FROM LEARNER TO PARTICIPATE IN PHASE 1 OF RESEARCH PROJECT – COMPLETION OF QUESTIONNAIRE

If you feel that the researcher has provided a good explanation of the research, she has answered all your questions and you would like to participate by filling in the questionnaire, please print your name and sign in the space at the bottom of this page.

I understand that:

☐ Taking part in this study is completely voluntary. This means it is my choice as to whether I participate or not.

☐ The questionnaires will be numbered and my name or any other information that may identify me will not be put on the questionnaire.

☐I do not have to answer any questions that I would prefer not to answer.
.

☐ I will not be paid for filling in the questionnaire.

_____

Name of Learner

_____ _____

Signature of Learner Date

APPENDIX 5: QUESTIONNAIRE – TRANSLATED VERSION

Number:	**Grade (Kreiti) 9 _____ Forte High School**

Gender *(Bong):*

Male *(Musimane)* ☐ Female *(Ngwanyana)* ☐ Other ☐

Race *(Morafe):*

Black *(Motho o montso)*☐ White *(Lekgowa)* ☐ Coloured *(Le Coloured)* ☐ Indian *(LeIndia)* ☐

What language/s do you speak at home? *(Ubuwa sikae lapeng?)*

What work does your father do? *(Ntate wahao obereka oyetsa eng?):*

What work does your mother do? *(Mme wahao obereka oyetsa eng?):*

Do you have any brothers or sisters *(O nale banab'engo? – bo abuti le bo ousie?)*

Yes (Êe) ☐ No (Tjhee) ☐ How many brothers and sisters? (Bae kae?) ☐

If yes, what grade are they in or what work do they do? *(Haeba ho joalo, ba sehlopheng sefe kappa moo etsa ba sebentsa?)*

Grade *(Kreiti)*_____ University _____ Work *(msebentsi)*_____

Who do you live with at the moment? (O dula kae?)

Do you know what Attention Deficit Hyperactivity Disorder (ADHD) is? *(Watsiba gore Attention Deficit Hyperactivity Disorder [ADHD] ke eng?)*

Yes *(Êe)* ☐ No *(Tjhee)* ☐

If you were to describe ADHD in your own words, how would you describe it? *(Ka mantsoe ao kare ADHD ke eng?)*

Do any of your friends have ADHD? *(Unale di chomi tse naleng ADHD?)*

Yes *(Êe)* ☐ No *(Tjhee)* ☐ I don't know *(A ke tsi)* ☐

Does anyone in your family have ADHD? *(O nale motho onaleng ADHD ko lapheng lao?)*

Yes *(Êe)* ☐ No *(Tjhee)* ☐ I don't know (*A ke tsi)* ☐

Have you ever been told you have ADHD by a doctor? *(Sale waya ngakeng ya go botsa gore unale ADHD?)*

Yes *(Êe)* ☐ No *(Tjhee)* ☐

If you have been diagnosed with ADHD, have you taken any medicine for ADHD? *(Haebe ho joala o go file di hlare tse jwang?)*

Yes *(Êe)* ☐ No *(Tjhee)* ☐

Are you still taking the medication? *(O sa dinka di hlare tsewu?)*

Yes *(Êe)* ☐ No *(Tjhee)* ☐ Sometimes *(Ka nako ye nngwe)* ☐

APPENDIX 6: RESEARCH INFORMATION LETTER TO THE PARENT / GUARDIAN FOR PHASE 2 OF THE STUDY (SEMI-STRUCTURED INTERVIEW)

Psychology
School of Human & Community Development

University of the Witwatersrand
Private Bag 3, WITS, 2050
Tel: (011) 717 4500 Fax: (011) 717 4559

RESEARCH INFORMATION

A prevalence study of ADHD within different school systems in South Africa and the experiences of adolescents diagnosed with the disorder

My name is Linda Moss and I would like to invite your child to participate in a research study that I will be conducting as part of my Masters degree in Psychology under the supervision of Prof. Jill Bradbury.

What is the purpose of this study?
I am conducting a study on adolescents who have been diagnosed with ADHD. The primary aim of this project is to determine the prevalence of ADHD in different South African school contexts and explore what these patterns of prevalence may tell us about the links between race, gender and class when thinking about ADHD type behaviour. The secondary aim is to contribute to the knowledge about adolescents' own understandings and experiences of ADHD, exploring the perspectives and meaning they give to living with this diagnosis.

What will my child be asked to do?
If you would like your child to take part in this study, I will ask your child to participate in an interview, which will last approximately 45 minutes and will be conducted in a private setting at school. If you would prefer for your child not to be interviewed at school, we can arrange for the interview to take place in the privacy of your home. The interviews will be recorded using an audio recording device.

Will my child's participation in this study put him/her at risk or cause him/her any inconvenience?
The interviews will be arranged and conducted in a discrete manner. It is not anticipated that your child's participation will cause him/her any significant distress or inconvenience and it will not interfere with his/her school work. Participating in this study is completely voluntary. Your child does not have to answer any questions that he/she would prefer not to answer. If you choose for your child to participate in the study and he/she feels any discomfort as a result of participating, you can change

your mind and withdraw your child from the study at any time. If you want the data in which your child appears to be withdrawn from the study, even after the interviewing and recording is complete, you can request withdrawal at any time by contacting me directly.

What will the recordings be used for?
The recordings will serve as the dataset for my Masters research project and may subsequently be prepared for presentation at professional research conferences and or publication in scholarly journals or books.

Will the information my child gives be confidential?
Whilst your child will be provided with a pseudonym, you may be concerned that the things your child says during the interview might be made public and used against him/her in some way. I want to reassure you that his/her identity will be kept private and your child will not be personally identified in any research reports or presentations that are made available to public audiences. The researcher will personally transcribe the tapes and all identifying information will be excluded from the transcript. Your child will not be identifiable from the transcriptions.

The recordings will not be destroyed following the completion of the study, as they will remain potentially useful for an indefinite period of time. However, they will be kept in a locked storage area and / or on a password protected computer. Only approved research personnel will have access to them and only for research or educational purposes.

What are the potential benefits to me, my child and society?
The study has the potential to inform education policies as well as school and community based interventions for children who have been diagnosed with ADHD.

Will my child be paid to participate?
Your child will not receive any payment for participating in the study. Light refreshments will be provided for your child during the interview.

Access to free counselling services
It is not anticipated that your child's participation in the interview will cause him/her any significant distress. Should the need arise, the researcher will provide access to a counsellor (free of charge) who works close to your child's home or school.

How can I get in contact with the investigators?

Linda Moss
Phone: 0829909760
E Mail: traumatreater7@gmail.com

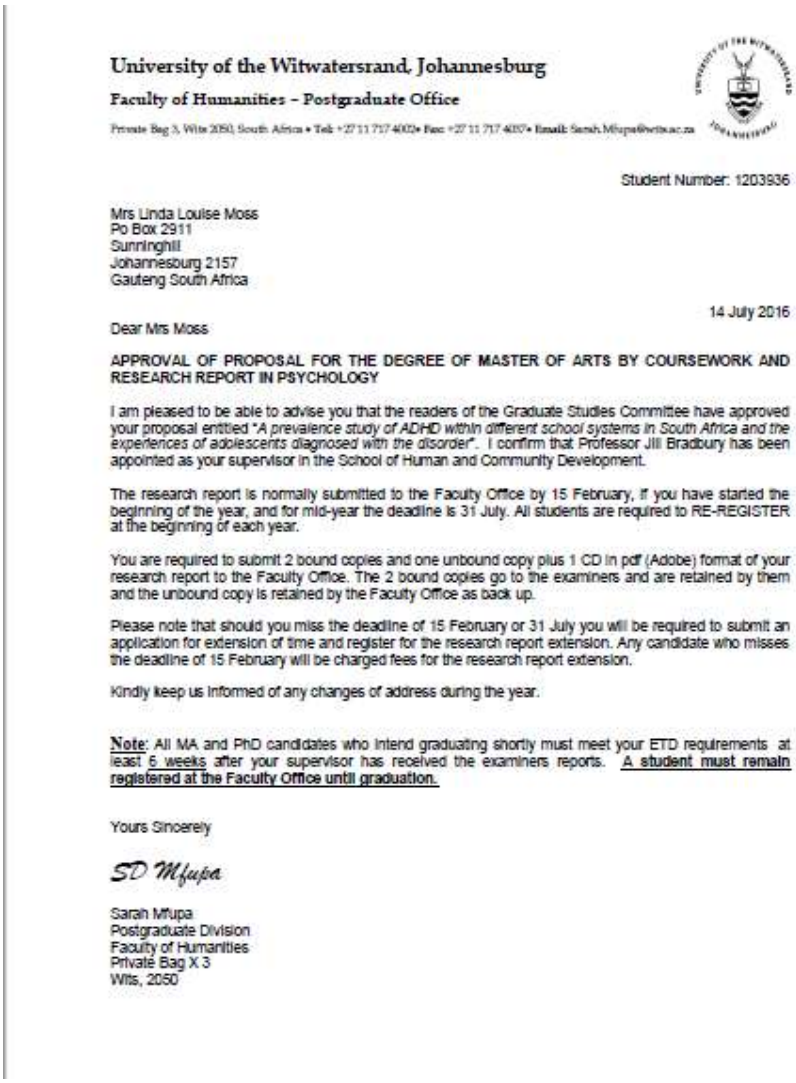
Supervisor: Prof: Jill Bradbury
Phone: (011) 717 4515
E Mail: jill.bradbury@wits.ac.za

Rights of research participants
You may withdraw your consent at any time and discontinue your child's participation without penalty. You are not waiving any legal claims or rights because of your child's participation in this research study.

APPENDIX 7: INTERVIEW SCHEDULE

Tell me about school, what is it like being at this school being at this school?
How do you think you are doing at school?
Tell me about your favourite subjects and what you like about them.
What would you like to be when you grow up?
Tell me about how you were diagnosed with ADHD. Do you remember who was involved in diagnosing you with ADHD?
What grade were you in / how old were you when you were diagnosed with ADHD?
If you were to explain ADHD to someone who doesn't know what it is, how would you explain it?
Do you think people treat you differently if you have been labelled with ADHD?
Do you think there are any advantages / good things about having ADHD?
Do you think there are any disadvantages or bad things about having ADHD?
Why do you think you were diagnosed with ADHD?
Have you ever been in big trouble at school? For example have you ever been part of a disciplinary hearing, or been suspended from school?
Have you ever taken medication for your ADHD?
Are you still taking medication?
If are not taking medication, what made you stop taking it?
If you are still taking medication, when do you take it? (During the week, on weekends, during the holidays)
Do you think the medication helps you?

APPENDIX 8: CLEARANCE FROM THE SCHOOL OF HUMAN AND COMMUNITY DEVELOPMENT



University of the Witwatersrand, Johannesburg

Faculty of Humanities – Postgraduate Office

Private Bag 3, Wits 2050, South Africa • Tel: +27 11 717 4002• Fax: +27 11 717 4037• Email: Sarah.Mfupa@wits.ac.za

Student Number: 1203936

Mrs Linda Louise Moss
Po Box 2911
Sunninghill
Johannesburg 2157
Gauteng South Africa

14 July 2016

Dear Mrs Moss

APPROVAL OF PROPOSAL FOR THE DEGREE OF MASTER OF ARTS BY COURSEWORK AND RESEARCH REPORT IN PSYCHOLOGY

I am pleased to be able to advise you that the readers of the Graduate Studies Committee have approved your proposal entitled "*A prevalence study of ADHD within different school systems in South Africa and the experiences of adolescents diagnosed with the disorder*". I confirm that Professor Jill Bradbury has been appointed as your supervisor in the School of Human and Community Development.

The research report is normally submitted to the Faculty Office by 15 February, if you have started the beginning of the year, and for mid-year the deadline is 31 July. All students are required to RE-REGISTER at the beginning of each year.

You are required to submit 2 bound copies and one unbound copy plus 1 CD in pdf (Adobe) format of your research report to the Faculty Office. The 2 bound copies go to the examiners and are retained by them and the unbound copy is retained by the Faculty Office as back up.

Please note that should you miss the deadline of 15 February or 31 July you will be required to submit an application for extension of time and register for the research report extension. Any candidate who misses the deadline of 15 February will be charged fees for the research report extension.

Kindly keep us informed of any changes of address during the year.

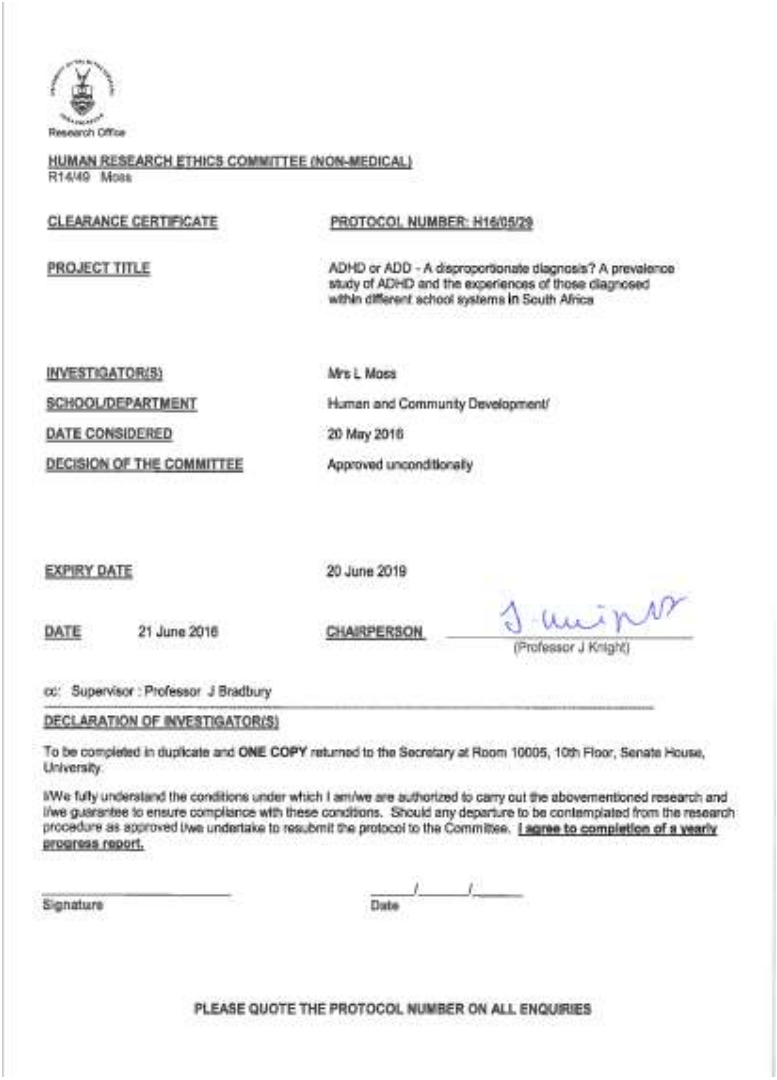
Note: All MA and PhD candidates who intend graduating shortly must meet your ETD requirements at least 6 weeks after your supervisor has received the examiners reports. **A student must remain registered at the Faculty Office until graduation.**

Yours Sincerely

SD Mfupa

Sarah Mfupa
Postgraduate Division
Faculty of Humanities
Private Bag X 3
Wits, 2050

APPENDIX 9: ETHICAL CLEARANCE FROM THE ETHICS COMMITTEE FOR RESEARCH INTO HUMAN SUBJECTS



Research Office

HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)
R14/49 Moss

CLEARANCE CERTIFICATE	PROTOCOL NUMBER: H16/05/29
PROJECT TITLE	ADHD or ADD - A disproportionate diagnosis? A prevalence study of ADHD and the experiences of those diagnosed within different school systems in South Africa
INVESTIGATOR(S)	Mrs L Moss
SCHOOL/DEPARTMENT	Human and Community Development/
DATE CONSIDERED	20 May 2016
DECISION OF THE COMMITTEE	Approved unconditionally
EXPIRY DATE	20 June 2019

DATE 21 June 2016 CHAIRPERSON _____ (Professor J Knight)

cc: Supervisor : Professor J Bradbury

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10005, 10th Floor, Senate House, University.

I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. **I agree to completion of a yearly progress report.**

_____ Signature

____/____/____ Date

PLEASE QUOTE THE PROTOCOL NUMBER ON ALL ENQUIRIES

APPENDIX 10: RESEARCH APPROVAL LETTER FROM THE GDE

For administrative use only:
Reference no: D2017 / 056
enquiries: Diane Buntting 011 843 6503

GAUTENG PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

GDE RESEARCH APPROVAL LETTER

Date:	**6 May 2016**
Validity of Research Approval:	**6 May 2016 to 30 September 2016**
Name of Researcher:	**Moss L.L.**
Address of Researcher:	**P.O. Box 2911; Sunninghill; 2157**
Telephone / Fax Number/s:	**011 803 9474; 082 990 9760**
Email address:	**traumatreater7@gmail.com**
Research Topic:	**ADHD or ADD - A disproportionate diagnosis? - A prevalence study of ADHD and the experiences of adolescents diagnosed in different school systems in South Africa**
Number and type of schools:	**THREE Secondary schools**
District/s/HO	**Ekurhuleni North and Johannesburg North**

Re: Approval in Respect of Request to Conduct Research

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

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

CONDITIONS FOR CONDUCTING RESEARCH IN GDE

1. *The District/Head Office Senior Manager/s concerned, the Principal/s and the chairperson/s of the School Governing Body (SGB.) must be presented with a copy of this letter.*
2. *The Researcher will make every effort to obtain the goodwill and co-operation of the GDE District officials, principals, SGBs, teachers, parents and learners involved. Participation is voluntary and additional remuneration will not be paid;*

dated
26/05/17

Office of the Director: Education Research and Knowledge Management ER&KM)
9th Floor, 111 Commissioner Street, Johannesburg, 2001
P.O. Box 7710, Johannesburg, 2000 Tel: (011) 355 0506

3. *Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal and/or Director must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.*
4. *Research may only commence from the second week of February and must be concluded by the end of the THIRD quarter of the academic year. If incomplete, an amended Research Approval letter may be requested to conduct research in the following year.*
5. *Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.*
6. *It is the researcher's responsibility to obtain written consent from the SGB/s; principal/s, educator/s, parents and learners, as applicable, before commencing with research.*
7. *The researcher is responsible for supplying and utilizing his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institution/s, staff and/or the office/s visited for supplying such resources.*
8. *The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research title, report or summary.*
9. *On completion of the study the researcher must supply the Director: Education Research and Knowledge Management, with electronic copies of the Research Report, Thesis, Dissertation as well as a Research Summary (on the GDE Summary template). Failure to submit your Research Report, Thesis, Dissertation and Research Summary on completion of your studies / project – a month after graduation or project completion - may result in permission being withheld from you and your Supervisor in future.*
10. *The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned;*
11. *Should the researcher have been involved with research at a school and/or a district/head office level, the Director/s and school/s concerned must also be supplied with a brief summary of the purpose, findings and recommendations of the research study.*

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

Kind regards

.....

Dr David Makhado

Director: Education Research and Knowledge Management

DATE: 2016/05/09

Office of the Director: Education Research and Knowledge Management ER&KM)
9th Floor, 111 Commissioner Street, Johannesburg, 2001

APPENDIX 11: RESEARCH INFORMATION LETTER TO THE PRINCIPALS

Psychology
School of Human & Community Development

University of the Witwatersrand
Private Bag 3, WITS, 2050
Tel: (011) 717 4500 Fax: (011) 717 4559

To the Principal

My name is Linda Moss and I would like to invite your school to participate in a research study that I will be conducting as part of my Masters degree in Psychology, under the supervision of Prof. Jill Bradbury. I am conducting a study on the prevalence of Attention Deficit Hyperactivity Disorder (ADHD) across different school settings with a special focus on the experiences and perceptions of adolescents who have been diagnosed with the disorder. I have requested permission from the GDE to conduct this research and they have subsequently approved my application (please see attached document).

I would like to request permission to work with the children in your school, in particular the Grade 9 learners. My research project consists of two phases; the first phase requires the administration of a questionnaire to all the Grade 9 learners and during the second phase of the research project, six of the learners who have been diagnosed with ADHD will be asked to participate in an interview.

During the first phase of the research, a letter to the parents will be sent to all Grade 9 learners, informing them about the research study about to be conducted at the school. It will be clearly stated in the letter that their children will be asked to complete a questionnaire, which will be completely anonymous. The letter will provide the parent/guardian with an opportunity to object to their child participating in the first phase of the study. Should any objection from a parent/guardian be

received, the child will not be approached to participate in the research. The Grade 9 learners will be informed about the study and invited to participate in the first phase of the research. Thereafter, those learners who agree to participate will be required to fill in an assent form and then asked to complete the questionnaire. This questionnaire will contain no identifying information, which can be linked to a particular learner. The questionnaire will serve to compile a demographic profile of the Grade 9 learners, whether they have been diagnosed with ADHD, are currently medicated or have ever been medicated as a result of the diagnosis, as well as their general understanding of what ADHD is.

During phase 2 of the research, I would ask the Grade 9 teachers to recommend six children who have been diagnosed with ADHD, whom they think would be appropriate to interview. I would request that the school obtains consent from the identified learner's parent/guardian to disclose their contact details to me. Information letters will be sent to the parents/guardians of these learners, asking them to consider their child being interviewed for this phase of the project. Once satisfied with the information provided to them about the project, both the parents/guardians and their children will be asked to complete consent and assent forms respectively. After both the learners and parent/guardian sign the appropriate forms, the interviews will be scheduled at a time convenient for the school and the learner. As the interviews will be audio-recorded, consent for this process from the parent/guardian and assent from the participant will be sought Interview participants will be asked questions about their experiences with their diagnosis and (where applicable) the medication process of ADHD.

The questionnaire and interview process will be conducted on school property, requiring no more than fifteen minutes for the completion of the questionnaire and at least forty-five minutes for the interviews. I would request that the first phase of this research be conducted during free periods or Life Orientation periods and the interviews to take place either before or after school in a private setting on school property.

I would be grateful if I was permitted to collect this data from your school and its learners.

My contact details are as follows:

Linda Moss

Phone: 0829909760

Email address: traumatreater@gmail.co.za

Supervisor details:

Prof. Jill Bradbury

Phone (011) 717 4515 (office)

Email Address: Jill.bradbury@wits.ac.za

Thank you for your consideration.

Yours Sincerely

Linda Moss

APPENDIX 12: RESEARCH INFORMATION LETTER TO THE PARTICIPANT FOR PHASE 2 OF THE STUDY (SEMI-STRUCTURED INTERVIEW)

Psychology

School of Human & Community Development

University of the Witwatersrand
Private Bag 3, WITS, 2050
Tel: (011) 717 4500 Fax: (011) 717 4559

A prevalence study of ADHD within different school systems in South Africa and the experiences of adolescents diagnosed with the disorder

My name is Linda Moss and I would like to invite you to take part in a research study that I will be doing as part of my Masters degree in Psychology under the supervision of Prof. Jill Bradbury.

What is the purpose of this study?
I am doing a study on teenagers who have been diagnosed with ADHD. I would like to know how many teenagers have been diagnosed with ADHD in different types of schools. I would also like to know what it is like for teenagers to be diagnosed with ADHD.

What will I be asked to do?
If you would like to take part in this study, I will ask you to participate in an interview. It will last about 45 minutes and will be done in a private place at school. The interviews will take place either before or after school. If you would prefer not to be interviewed at school, we can arrange for the interview to take place in your home. The interviews will be recorded using an audio recording device.

Will being part of this study put me at risk or cause me any inconvenience?
The interviews will be organised in a way that no other children at school will know that you are taking part in this study. The questions you will be asked will not cause you to be uncomfortable or upset. The interview will be planned in a way that it will not interfere with your schoolwork. It is your choice as to whether you take part in this study. If you decide to take part, you do not have to answer any questions that you would prefer not to answer. If at any time you feel uncomfortable, you can change your mind and leave the study. If you decide to leave the study, you can ask for what we spoke about during the interview to be deleted, even after the interviewing and recording is finished. You can ask to be taken out of the study by phoning or emailing me, or asking your parent/guardian to contact me.

What will the recordings be used for?
The recordings will be used for my Masters research project and may be used in a presentation to other professionals or it might appear in academic magazines (journals) or books.

Will the information I give be kept private?
You may be worried that what you say or do during the interview might be used against you. I want to tell you that your identity will be kept completely private. I (the researcher) will personally write down the information from the tapes. You will be given a pseudonym, which is a false name so no one can identify you. Even so, you may feel that some things you have said in the interview may make your identity known to others. Please be sure that none of this information will be included in my project.

The recordings will not be deleted after the study. However, they will be kept on a password-protected computer. Only my supervisor and myself will be able to listen to them and only for research or educational purposes.

What are the potential benefits to me and society?
The study will hopefully help us to create educational plans and guidelines for schools with learners who have been diagnosed with ADHD.

Will I be paid to participate?
You will not be paid for taking part in the study. You will be given juice, water and a light snack during the interview.

Access to free counselling services
If you feel that by taking part in the interview has made you feel very upset, you can tell the researcher and she will make a plan for you to talk to a counsellor who works close to your school or home. This will not cost you or your family any money.

How can I get in contact with the investigators?

Linda Moss
Phone: 0829909760
E Mail: traumatreater7@gmail.com

Supervisor: Prof: Jill Bradbury
Phone: (011) 717 4515
E Mail: jill.bradbury@wits.ac.za

Rights of research participants
You may decide not to be part of this study at any time. You will not be punished in any way if you decide you no longer want to participate. You are not giving up any of your legal rights by being part of this study.

APPENDIX 13: CONSENT FORM – PARENT / GUARDIAN FOR CHILD TO PARTICIPATE IN THE SEMI STRUCTURED INTERVIEW

Psychology
School of Human & Community Development

University of the Witwatersrand
Private Bag 3, WITS, 2050
Tel: (011) 717 4500 Fax: (011) 717 4559

CONSENT OF LEARNER'S PARENT / GUARDIAN TO PARTICIPATE IN RESEARCH

If any questions you have about this research have been answered to you satisfaction and you would like your child to participate in the research, please print your name and sign in the space below.

I understand that:

☐ The interviews will be arranged in a discrete manner and will be conducted on the school premises or in my child's home environment.

☐ My child's participation will not cause him/her any significant distress or inconvenience.

☐ If my child feels that by taking part in the interview has caused him/her any significant distress, the researcher will arrange for free counselling close to my child's school or home.

☐ My child's participation in this study is completely voluntary.

☐My child does not have to answer any questions that he/she would prefer not to answer.

☐ If I choose for my child to participate in the study and he/she feels any discomfort as a result of participating, I can change my mind and withdraw my child from the study at any time.

☐ If I want the data in which my child appears to be withdrawn from the study, even after the interviewing and recording is complete, I can request withdrawal at any time by contacting the researcher directly.

☐ My child's identity will be kept private and will not be identified in any research reports or presentations that are made available to public audiences.

☐ My child will not be paid for participating in this research.

_____	_____
Name of Parent	Telephone Number
_____	_____
Signature of Parent	Date

APPENDIX 14: ASSENT FORM – RESEARCH PARTICIPANT TO PARTICIPATE IN SEMI-STRUCTURED INTERVIEWS

Psychology
School of Human & Community Development

University of the Witwatersrand
Private Bag 3, WITS, 2050
Tel: (011) 717 4500 Fax: (011) 717 4559

ASSENT OF LEARNER TO PARTICIPATE IN RESEARCH

If your questions about this research have been answered and you would like to be part of this research, please print your name and sign at the bottom of this page.

I _____ (name) understand that:

☐ The interviews will be carefully arranged and will take place on the school property or at my home.

☐ Taking part in the interview will not cause me to become very upset or interfere with me attending my classes and doing my schoolwork.

☐If I feel that by taking part in the interview has made me feel very upset, the researcher will plan for me to talk to a counsellor (for free) who works close to my school or home.

☐ It is up to me to decide if I would like to take part in this study.

☐ I do not have to answer any questions that I would prefer not to answer.

☐ If I choose to be a part of this study and I feel any discomfort as a result of participating, I can change my mind and leave the study at any time.

☐ If I want my information to be taken out of the study, even after the interview and the recording is done, I can ask to be removed from the study at time by contacting the researcher directly or asking my parent/guardian to contact her for me.

☐ My identity will be kept private and I will not be identified in any research reports or presentations to public audiences.

☐ I will not be paid for taking part in this research.

_____	_____
Name of Participant	Telephone Number
_____	_____
Signature of Participant	Date

APPENDIX 15: PARENTAL CONSENT FORM FOR THE USE OF RECORDING DEVICES (PHASE 2: SEMI STRUCTURED INTERVIEW)

Psychology
School of Human & Community Development

University of the Witwatersrand
Private Bag 3, WITS, 2050
Tel: (011) 717 4500 Fax: (011) 717 4559

PARENTAL CONSENT FOR THE USE OF RECORDING DEVICES

I, _____, provide my consent for my child to be interviewed by Linda Moss for her study titled: ***A prevalence study of ADHD within different school systems in South Africa and the experiences of adolescents diagnosed with the disorder*** and agree for the interview to be audio-recorded.

I understand that:

☐ The audio recordings and transcripts will only be seen or heard by the researcher and her supervisor.

☐ My child's real name will not be used in the transcripts or the research report, but will be replaced by a pseudonym.

☐ Audio recordings of the interviews will not be destroyed, unless my child or I request that the tape of his/her recordings be destroyed.

☐ Recordings will be securely stored in a lock up facility or on a password protected computer.

_____ _____

Signed Date

APPENDIX 16: PARTICIPANT ASSENT FORM FOR THE USE OF RECORDING DEVICES (PHASE 2: SEMI-STRUCTURED INTERVIEW)



Psychology
School of Human & Community Development

University of the Witwatersrand
Private Bag 3, WITS, 2050
Tel: (011) 717 4500 Fax: (011) 717 4559



PARTICIPANT ASSENT FOR THE USE OF RECORDING DEVICES

I, _____, provide my assent (I agree) to be interviewed by Linda Moss for her study titled: ***A prevalence study of ADHD within different school systems in South Africa and the experiences of adolescents diagnosed with the disorder*** and also agree for the interview to be audio- recorded.

I understand that:

☐ The audio recordings and transcripts (what is said during the interview is written down) will only be seen or heard by the researcher and her supervisor.

☐ My real name will not be used in the transcripts or the research report, but will be replaced by a pseudonym (a false name).

☐ Audio recordings of the interviews will not be destroyed, unless I ask that these recordings be destroyed.

☐ Recordings will be safely stored on a password-protected computer.

_____ _____

Signed Date