ATTENTION DEFICIT HYPERACTIVITY DISORDER AS A RESPONSE TO TRAUMATIC STRESS

by

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KEY CONCEPTS

Attention Deficit Hyperactivity Disorder (ADHD)

Traumatic Stress

Post-traumatic Stress Disorder (PTSD)

Response

Biological responses to trauma

Inattention

Attachment

Safety and security

Gestalt play therapy

Middle childhood

SUMMARY

The subject of Attention Deficit Hyperactivity Disorder (ADHD), and Ritalin as a method of treatment, has received a lot of media attention in recent years as it appears to be the most “popular” diagnosis for children who are difficult, who struggle to pay attention and who are impulsive and hyperactive. Some medical professionals are of the opinion that incidences of the disorder are increasing, while others believe that the disorder is being misdiagnosed.

There is a significant overlap in the symptoms of ADHD and those of Post-traumatic Stress Disorder (PTSD). In South Africa, where many children are exposed to traumatic stimuli on a regular and ongoing basis, health care professionals cannot afford to overlook the possibility that children exhibiting symptoms of ADHD may, in fact, be traumatised. However, when examining the criteria for PTSD we find that the DSM-IV (Diagnostic and Statistical Manual IV) does not adequately describe the differences between adult and childhood PTSD and also does not adequately account for children who may be in an almost continuous state of traumatic stress.

Since there is increasing evidence of the interaction between mind/emotions and body, it is plausible that the emotions of children with ADHD play an important role in their condition, particularly if the child has suffered traumatic stress. The researcher believes that children who experience continuous traumatic stress may develop maladaptive responses which may eventually become traits, and that ADHD may be one such response.

The goal of this exploratory study was to gain insight into the thoughts and feelings of a few children (case studies) who have been diagnosed with ADHD and who are in the middle childhood phase of development. The first objective was to gather knowledge regarding ADHD, traumatic stress, biological responses to trauma and to describe middle childhood and gestalt play therapy. In the empirical study, gestalt play therapy techniques were used to assess whether children with ADHD had suffered traumatic stress (particularly the loss of safety and security) prior to the diagnosis and whether they are able to express their thoughts and emotions appropriately.

Since the study was qualitative, the researcher made use of observation and unstructured interviews (including play therapy sessions) to obtain background information from the parents and to explore the thoughts, feelings and behaviours of children with ADHD from their perspective.

This study falls under applied research, undertaken with a view to creating preventative measures and improving interventions for children with ADHD and children who have suffered traumatic stress. The final objective of the study was to draw conclusions and make recommendations in order to promote awareness of the likelihood of traumatic stress in children with ADHD in South Africa.

The researcher concluded that the respondents in this study have indeed suffered traumatic stress in the form of loss of safety and security, related to an inadequate bond with a responsive, nurturing caregiver. In addition, they have difficulty expressing their thoughts and emotions.

CHAPTER ONE

GENERAL INTRODUCTION

1.1 INTRODUCTION

> We claim to be a child-centred society, but in reality there is little evidence that we are. In many ways we are a ruthlessly adult-centred society where children are defined almost exclusively in terms of their impact on adult lives. Our adult-centred society has tried to contain and limit the impact of children on adult life by either excluding them from much of it, or blaming them for disturbing it (Cattanach, 2003:121).

The topic of Attention Deficit Hyperactivity Disorder (ADHD) is a controversial one. Almost everyone has an opinion on the condition and on the use of Ritalin as a treatment. ADHD is the most common neurobehavioural disorder affecting children (Venter, Benn & Aucamp, 2003:2). ADHD describes children who are impulsive, inattentive, hyperactive (not in all cases) and distractible (Venter, 2003). A diagnosis of ADHD is currently made according to the criteria specified in the DSM-IV (Diagnostic Criteria from DSM-IV, 1994). According to Venter (Saaled Congress, 2003) as well as White and Rouge (2003:289), the exact cause is unknown, but it is thought to be hereditary and the result of an imbalance of neurotransmitters. A more detailed description of ADHD can be found in chapter two.

When left untreated, ADHD has serious psychological and social consequences. ADHD is associated with many behavioural and academic problems (Davison, Neale & Kring, 2004:479). Children with this disorder who are untreated are more likely to need to attend special classes or schools, drop out of school, become delinquent and have problems with the law. Because they display coercive and critical styles, they are disliked by their peers. Adolescents with ADHD are more likely to become involved in substance abuse, risky sexual behaviour and other self-destructive behaviour (Venter, 2003). Untreated ADHD is likely to result in serious psychiatric disorders in adulthood (White & Rouge, 2003:290).

Treatment models should include psycho-education, parent counselling, psychotherapy (including play therapy), social skills training, school involvement and biological treatments including medication (Brink, 2003:43). The child with ADHD is a challenge to parents and to educators, and is often viewed as a troublemaker (Venter, 2003; Green & Chee, 1997:5-7).

It is the researcher's experience, however, that medical professionals are quick to diagnose ADHD and prescribe medication without paying much attention to the necessity of other forms of therapy. The researcher is disturbed by the fact that the diagnostic Conner's Rating Scale (Online Psychological and Personality Tests, 2006), which is supposed to be an objective indicator of ADHD (Brink, 2003), is completed by educators who are often not objective, but who already have negative perceptions of the child. The child's behaviour is regarded as an illness and is then "treated" with medication, and the root cause of such behaviour is not always investigated. In fact, the researcher is of the opinion that the behaviours constituting ADHD may, in fact, be goal-directed efforts to cope with

emotional trauma. For example, hyperactivity may be a means of avoiding quiet moments when painful thoughts and emotions can emerge. The problem, according to the researcher, is that these "coping skills" tend to cause problems of their own, and this possibly results in a cycle of trauma/stress leading to ADHD behaviours, which lead to further difficulties and more stress, and so on.

There are people who question the very existence of attention deficit disorders, believing them to be a "hoax" created by psychiatrists for their own gain, or a label that merely benefits teachers by sedating feisty children whom they struggle to control. The researcher would like to state from the outset that this paper is not questioning the existence of the condition of ADHD. The researcher points out, however, that while studies clearly support the efficacy of psychostimulants (such as Ritalin) in improving focus and impulse control, they underscore the importance of psychosocial and behavioural interventions in the reduction of hyperactivity (Austin, 2003:289). Researchers (in Austin, 2003) recommend a thorough screening process before the use of such medication, which includes a comprehensive medical examination. The researcher wonders whether certain psychosocial and behavioural *preventions* can also reduce the likelihood of an ADHD diagnosis.

Since working in a primary school as a social worker, the researcher has been involved with many children diagnosed with ADHD, and has become aware of the increased number and frequency of ADHD diagnoses. The researcher has also become aware of the fact that many children with this diagnosis suffered emotional trauma/stress before the manifestation of symptoms. Many South African children are affected by trauma because of

the high levels of violence, both within the home and in the wider community (Lewis, 1999:2). Some children are exposed to a single traumatic incident while others live in a situation of continuous trauma. Children can be direct or indirect victims of violence. Children of different ages and developmental levels experience, understand and respond to, trauma differently.

After a single trauma, children will experience symptoms that are normal responses to a traumatic event. These are called post-traumatic stress symptoms (Lewis, 1999:13). After multiple or complex traumas, the child may show any of the post-traumatic stress symptoms, but may also have symptoms of complex post-traumatic stress where the effects are more severe and may result in longstanding psychological difficulties. In Chapter Three of this paper, the reader will see that many, if not all, of the responses to trauma are also features of ADHD. (Compare Barkley, 2000; Brink, 2003; Coleman, 2002; Davison *et al.,* 2004; Lewis, 1999.)

Not all people require professional help after suffering trauma. Some recover with the help of family, friends and other support. The researcher is of the opinion that a strong relationship between a child and at least one nurturing protector is essential for the "survival" of trauma, and that the *absence* of a nurturing protector can be a trauma in itself. As stated in Thomas (2000:421), "the mere knowledge that an attachment figure is available and responsive provides a strong and pervasive feeling of security." The researcher is of the opinion that ADHD could develop following the loss of security (trauma) at any stage of childhood, especially if there is an absence of an attachment figure. This view is corroborated by Abraham Maslow's theory of a hierarchy of needs (in Meyer, Moore & Viljoen, 1997:439). According to Maslow, the need for safety, security,

stability, structure, limits and freedom from fear is second only to physiological needs. Maslow also states that children "*react uninhibitedly when they feel unsafe*" (Meyer *et al.,* 1997:439).

Children who are faced with continuous trauma "try to cope by suppressing their thoughts and feelings, which may lead to disturbances in the child's sense of *time, memory and concentration***"** (Lewis, 1999:17*).* A child who is unwilling or unable to express feelings may certainly have trouble sitting still, paying attention, focusing - and *not* have any neurologically-based perceptual or motor difficulties (Oaklander, 1988:223). Such children earn the "hyperactive" label with all its implications, even though they are rarely hyperactive in the therapist's office or in a one-to-one situation.

Possible indicators that a child has been traumatised include: change in behaviour or personality, drop in school performance, change in classroom behaviour: *naughtiness, disruptiveness, quietness or withdrawal* (Lewis, 1999:20). Primary school children may feel anxious and fearful. Often anxious children are afraid of getting involved in any activity, and will constantly move from one activity to another (Oaklander, 1988:223). Previously well-behaved children may become "difficult" and oppositional, rude, irritable and argumentative, have temper outbursts, or become passive and withdrawn (Lewis, 1999:29). This disrupts their friendships and causes fights. They may test rules, become aggressive, disruptive, have trouble concentrating, have difficulty following instructions and neglect their school work. They may have sleep problems and be reluctant to sleep alone. They often hide their feelings to protect caregivers (Lewis, 1999:20).

To the reader, it should be clear that the symptoms of ADHD and those of traumatised children are remarkably similar. It seems possible to the researcher that, instead of clearing within three months, symptoms of traumatic stress can become chronic (due to *ongoing or prolonged* trauma) until they become a pattern, a state of being, a permanent condition such as ADHD.

The researcher therefore asks the question: “Could ADHD be a maladaptive response to traumatic stress?”

1.2 RESEARCH PROBLEM FORMULATION

This phase of research is aimed at creating a formal, written problem formulation with a view to finalising a research proposal (Fouché, 2002a:104). A research problem is expressed as a general question about the relationship between two or more variables (Bless & Higson-Smith, 2000:25). The researcher now has a focus that enables him to assess whether to use a quantitative, qualitative or combined approach. A research problem must be researchable and must lend itself for scientific study (Williams, Tutty & Grinnell, 1995:57).

From the researcher’s own perspective and experience, children are too often diagnosed with ADHD without the proper procedures being followed. In addition, ADHD is often diagnosed on the basis of a Conner’s Rating Scale, which is completed by subjective teachers who often have their own motives for wanting the child on medication. Slater (2004), Rossouw (2004) and Kelly (2004) agree that we seem to be seeing more and more of the condition, but the reasons for this are not clear. It seems clear to the researcher that either

the condition *is* becoming more prevalent (and if so, why?), or the condition is being misdiagnosed.

The exact cause of ADHD is unknown, but it seems certain that it is hereditary and that it stems from an imbalance in neurotransmitters in the brain (Green & Chee, 1997:3; Venter, 2003). The researcher speculates about the possibility (and nature) of a relationship between traumatic stress and ADHD. It is interesting to note that Australia, a country with almost no "social trauma" such as violent crime, has the lowest prevalence rates (Chu, 2003:221). One can speculate about the impact of prolonged *emotional* trauma (especially in more "troubled" societies) on the functioning of the brain. The researcher wonders whether unresolved traumatic stress can *become* ADHD. Picton (2002:xi) believes that ADHD can be divided into four categories of origins: Type 1 due to heredity; Type 2 due to cerebral trauma; Type 3 due to dietary causes and Type 4 due to heavy metal intoxication. The researcher suggests the possibility of a fifth type – ADHD due to emotional trauma.

The researcher is of the opinion that ADHD and unresolved traumatic stress in early and middle childhood can lead to a lifetime of difficulties. Because people (and children) function holistically, these difficulties would impact on the individual's ability to reach his potential in all areas of functioning – cognitively, emotionally, physically and socially. The researcher is of the opinion that contributing environmental factors are being ignored in the diagnosis and treatment of ADHD, leaving children and their parents to navigate the primary school years with a psychiatric label and very little support in coping with it. In addition, unresolved traumatic stress remains unaddressed.

The researcher believes that if traumatic stress can be identified early, intervention (such as play therapy) can be effected expediently and long-term damage can be avoided. This is especially important in a country such as South Africa, where many children are victims of traumatic stress, be it directly or indirectly. Children assessed for ADHD should also be assessed for traumatic stress and they and their families need to be equipped to deal with this, as well as with the added stresses that accompany such a diagnosis. Play therapy helps children to address painful experiences, to express underlying emotions and to learn healthier ways of coping with future traumas. The researcher believes that once such measures are in place, children will no longer need to "cry out loud", but be able to quieten down, focus, and develop their potential. The researcher plans to set this wheel in motion with this research project.

1.3 PURPOSE, GOAL/AIM AND OBJECTIVES OF THE STUDY

1.3.1 Purpose of research

People conduct social research for a number of reasons. Some want to answer practical questions. Others want to make informed decisions. Still others want to change society. Finally, those in the scientific community seek to build basic knowledge about society (Neumann, 1997:15).

The purpose of research is to expand knowledge, to find out things and to get information on a topic. The purpose is also to verify knowledge and to compare variables (Fouché, 2002a:107). The purpose of this research study was to investigate events and experiences in the lives of children with ADHD, and whether they suffered ongoing emotional stress, especially

related to loss of safety and security, before the symptoms of ADHD surfaced.

Certain authors discuss the objectives of research as explanatory, exploratory and descriptive (Fouché, 2002a:108). Confusion exists as to whether exploration, explanation and description are the purposes, goals or objectives of research or types of research. According to Fouché, (2002a:109), these are the *objectives* of research. Any fully scientific endeavour in social work should have at least one of three primary objectives: to explore, to describe or to explain. The broad objective of this study was then *exploratory.* The aim of exploratory research is to gain insight into a situation, phenomenon, community or individual (Bless & Higson-Smith, 2000:44).

1.3.2 Goal of the study

The goal of social work research can be to expand or elaborate on theory, to develop theory or to develop solutions to problems. The words “aim” and “goal” can be used interchangeably to refer to the “end towards which effort or ambition is directed” (Fouché, 2002a:107).

The goal of this study was to explore ADHD as a response to traumatic stress.

1.3.3 Objectives of the study

“Objective” denotes a more concrete, measureable and more speedily attainable conception of the “end” (Fouché, 2002a:107). It is the steps one has to take, one by one, realistically and within a time-span, in order to attain the “dream” of the aim.

The objectives of this study were:

- To describe “ADHD”, “response”, “traumatic stress” and “gestalt play therapy”.
- To use gestalt play therapy techniques to investigate whether children diagnosed with ADHD suffered ongoing traumatic stress (in particular loss of safety and security) before the emergence of symptoms and receiving the diagnosis.
- To investigate whether children with ADHD have trouble expressing thoughts and feelings in socially acceptable ways.
- To draw conclusions and make recommendations in order to promote awareness of the likelihood of traumatic stress in children, amongst professionals who work with children in South Africa.

1.4 RESEARCH QUESTION

An hypothesis is a tentative, concrete statement about the nature of the relationship between two or more variables (De Vos, 2002a:35). A hypothesis, which is a suggested answer to a problem, has to be tested empirically before it can be accepted into theory (Bless & Higson-Smith, 2000:33). Hypotheses should have empirical referents, be specific, be testable and be conceptually clear. According to Williams *et al.* (1995:52), hypotheses are explanatory statements. Since this study was not explanatory, a hypothesis was not used.

Research questions are based on the research problem and reduce the problem so that it can be handled in a single study (Bless & Higson-Smith, 2000:17). Research questions should be specific, precise and well-delimited.

They must be relevant, researchable, feasible and ethically acceptable (Williams *et al.,* 1995:88).

This study posed the following question: “What is the possibility that ADHD could be a response to traumatic stress?”

1.5 RESEARCH APPROACH

There are three different research approaches – qualitative, quantitative and a combination of the two, as described by Cresswell (in De Vos, 2002b:366). Qualitative methods are inductive, idiographic and use an emic perspective of inquiry (Fouché & Delport, 2002:79, 80, 81). The research process is flexible and unique, evolving throughout the process. The research discovers and captures meanings and themes, seeking to understand phenomena. Data is presented in the form of words, quotes and transcripts.

Quantitative methods are deductive, nomothetic and seek to control data. It is an etic perspective in which meaning is determined by the researcher, who begins with hypotheses. Observations are systematically undertaken in a standardized manner and data is presented by figures from precise measurement (Fouché & Delport, 2002:79-82).

This study was a qualitative study focusing on the feelings, behaviours, thoughts and experiences of children diagnosed with ADHD. Because traumatic stress is a subjective concept, which has different meanings to different people, one cannot decide for another whether something has been traumatic or stressful for them.

Interviews were conducted with parents to gather background information such as when and by whom the child was diagnosed, and whether they know of any traumatic experiences the children might have had, for example the death of a parent or caregiver. The interviews also aimed to establish whether there is ongoing trauma in the child's life; what the child's support systems are; whether the child was screened for trauma by the medical professional concerned and whether the child received any therapy at that stage. The researcher also asked about the child's ability to describe and express emotions accurately and freely within the family.

1.6 TYPE OF RESEARCH

A distinction is made between *basic (advancement of knowledge)* and *applied (solution of problems)* research (Fouché, 2002a:108). This study falls under *applied* research, with a view to creating preventative measures and improving interventions regarding children with ADHD and children who have suffered traumatic stress, and to increase understanding of the relationship between the two. Applied research studies are designed to directly benefit a specific client system, whether it is an organisation or an individual (Williams *et al.,* 1995:52). If there is a link between ongoing traumatic stress and the development of ADHD, this would have important implications (for prevention as well as intervention) for all professionals who work and deal with children, especially in South Africa, not to mention for the children themselves.

1.7 RESEARCH DESIGN AND METHODOLOGY

1.7.1 Research Design

The research design is a blueprint, plan or strategy that will be followed by which questions are answered or hypotheses tested (Fouché, 2002b:272). It

specifies the units of analysis (in this case, children), the sampling procedure, the variables on which information is to be obtained (ADHD, traumatic stress), data collection and measurement procedures and the plan for analysis of the data. There are quantitative designs and qualitative designs. Quantitative designs include pre-experimental designs, quantitative-descriptive designs, quasi-experimental designs and true experimental designs. Qualitative strategies include biography, phenomenology, grounded theory, ethnography and the case study (Fouché, 2002b:272).

This study is described as exploratory research, which is used to gain "a broad understanding of a situation, phenomenon, community or person" (Bless & Higson-Smith, 2000:41). According to these authors, there are two alternatives for the design of exploratory and descriptive research. These are the case study and the survey. The one chosen by the researcher was the *case study,* "a detailed and thorough investigation of a few cases".

Fouché (2002b:275) describes the case study as "an exploration or in-depth analysis of a bounded system over a period of time". In this study, eight children (each one a bounded system) with ADHD were assessed for traumatic stress (loss) over a period of weeks. It is an *instrumental case study* aimed at acquiring a better understanding of a social issue (Fouché, 2002b:276).

1.7.2 Research Methodology

1.7.2.1 Data collection

The method used to collect information in this study was *unstructured interviews* and *observation* (gestalt play therapy sessions with the children)

and semi-structured interviews with the parents. An unstructured interview is "a conversation with a purpose", the purpose being to understand the experiences of the respondent (Greeff, 2002:298). Process notes were written after every play therapy session.

The interview with parents provided background information as described under "Research Approach" (1.5).

1.7.2.2 Data analysis

Cresswell (in De Vos, 2002b:340) believes that the process of data analysis and interpretation can best be described as a data analysis spiral. The researcher moves in analytic circles rather than in a linear method. The steps (which move in circles) are as follows:

1. Collecting and recording data: The researcher should plan for recording data in a systematic manner (De Vos, 2002b:340). Data should be kept intact, organized and accessible. Process notes were written after each play therapy session and observations recorded.
2. Managing data: This is the first step in data analysis away from the site and involves organizing the data into files, index cards or computer files (De Vos, 2002b:343). The researcher's transcription, done with the literature review of previous data is a useful part of data analysis. The researcher kept each child's records in a separate file.
3. Reading, memoing: The transcripts are read in their entirety several times in order to get a sense of the interview as a whole before breaking it into parts (De Vos, 2002b:343). Memos written in margins are short phrases or key concepts that occur to the reader. The researcher reflected on what had transpired in every play therapy session, and wrote notes to remind herself of issues to revisit in future sessions.

4. Describing, classifying, interpreting: This stage represents the heart of qualitative data analysis and demands a heightened awareness of the data (De Vos, 2002b:344). This is where themes, sub-themes, contexts, underlying meanings, patterns and recurring ideas are identified. This is also an essential part of the play therapy process. Interpretation involves making sense of the data and may be based on hunches, insights and intuition. In the play therapy process, the therapist always "tests" these insights with the child, and this fits with the researcher needing to "search for other plausible explanations for these data and the linkages between them" (De Vos, 2002b:344).
5. Representing, visualising: The data is presented in text, tabular or figure form (De Vos, 2002b:344). Decisions regarding the best way to represent the data were made once the data had been received.

The researcher, in her play therapy sessions with children, followed this model, looking for themes and patterns relating to subjective experiences of traumatic stress, loss of safety and security and ADHD. The researcher also assessed the child's ability to express thoughts and feelings.

1.8 PILOT STUDY

The pilot study is a prerequisite for the successful execution and completion of a research project (Strydom, 2002a:210), whether it is a qualitative or a quantitative study (Strydom & Delport, 2002:337). It is defined as a small-scale trial run of all the aspects planned for use in the main inquiry as well as an investigation of the feasibility of the project (Strydom, 2002a:211). Researchers must be confident that the chosen procedures are suitable, valid, reliable, effective and free from problems and errors. Aspects of a pilot study include study of the literature, the experience of experts, preliminary

exploratory studies and intensive study of strategic units (Strydom, 2002a:211-213).

In a qualitative study, the pilot study allows the researcher to focus on specific areas that may have been unclear previously; contributes to the establishment of relationships with the respondents and assists in estimating time and costs involved (Strydom & Delport, 2002:337).

1.8.1 Pilot test of the interview schedule.

A pilot test involves testing the actual instrument on a small sample prior to the larger piece of research, assessing the practical possibilities of carrying it out, the clarity of some concepts and the adequacy of the method (Bless & Higson-Smith, 2000:52).

The play therapy sessions with children were not pilot-tested, since this would have been tantamount to repeating the main investigation (Strydom & Delport, 2002:338). The play therapy techniques form part of existing theory and the gestalt play therapy approach.

1.8.2 Feasibility

A study is feasible if all the necessary data can be collected and analyzed by the particular researcher, given her own skills, resources and situation, and if the ethical concerns can be managed (Williams *et al.,*1995:57,58). Time and cost are also factors to be considered. Another hindrance to feasibility is that the questions the researcher needs to ask may be too personal or too emotionally loaded to be answered honestly (Bless & Higson-Smith, 2000:19).

The researcher believes that she has (or has access to) the necessary knowledge, skills and values to assess children for traumatic stress using gestalt play therapy techniques. Being a school social worker, she has "access" to children diagnosed with ADHD and their parents. The researcher receives weekly supervision and has access to assistance from other professionals.

The researcher received written permission from the Gauteng Department of Education to conduct research in two of its schools (see Addendum A). The principals of the two schools granted permission for the research to continue (see Addendums B and C respectively). It was, however, not necessary to make use of the second school's offer.

The researcher's bursary covered the costs of the research project.

1.9 DESCRIPTION OF THE POPULATION, SAMPLING AND SAMPLING METHOD

1.9.1 Research population

The *universe* refers to all potential subjects who possess the attributes in which the researcher is interested (Strydom & Venter, 2002:198). The universe in this study was all children who have been diagnosed with ADHD.

The *population* sets boundaries on the universe, and consists of a select group, which has the possibility of being the focus of the research (Strydom & Venter, 2002:198). In this study the population was all primary school children at the two Johannesburg schools who have been diagnosed with ADHD.

1.9.2 Sampling

If one wants to collect accurate information about a group of persons, the best strategy is to examine every single member, but it is also possible to reach accurate conclusions by examining only a portion of the group (Bless & Higson-Smith, 2000:83). A sample comprises elements of the population considered for actual inclusion in the study (Strydom & Venter, 2002:199). Advantages of sampling include increasing feasibility, saving time and reducing expenses. Good sampling implies a well-defined population, an adequately chosen sample and an estimate of how representative the sample is.

In this study, the sample was eight primary school children, between the ages of seven and eleven years, from a primary school in Johannesburg, who have been diagnosed with ADHD. None of the children had previously been referred to the researcher for counselling. The researcher was of the opinion that the sample would be more representative if not limited to either boys or girls.

1.9.3 Sampling method

Sampling techniques are divided into *probability* and *non-probability* methods. Probability sampling refers to samples where each unit has an equal chance of being selected. Non-probability sampling refers to samples where the units do not have an equal chance of being selected. Probability techniques such as simple random sampling, stratified sampling, cluster sampling and systematic sampling are usually used in quantitative studies (Strydom & Venter, 2002:203). Qualitative research studies usually use non-probability methods such as accidental, purposive, target, snowball, quota and spatial sampling (Strydom & Delport, 2002:333-336).

The researcher selected children according to a non-probability sampling technique, namely *purposive sampling.* This method is based on the judgement of the researcher regarding the characteristics of a representative sample and the sample is chosen on the basis of what the researcher considers to be typical (Bless & Higson-Smith, 2000:92). In this case, children were chosen according to the following characteristics:

- Four boys and four girls,
- Between the ages of 7 and 11 years (middle childhood phase of development),
- In a primary school in Johannesburg,
- Diagnosed with ADHD by a medical professional.

The first eight children identified, who matched the above criteria, became the sample.

1.10 ETHICAL ISSUES

"Ethics" refers to a set of moral principles, suggested by an individual or group and subsequently widely accepted, which offers rules and behaviour expectations about the most correct conduct towards subjects, employers, respondents, sponsors, students, researchers and assistants (Strydom, 2002b:63). Ethical considerations include:

1.10.1 Harm

Respondents should not be psychologically or physically harmed by the study (Strydom, 2002b:64). The responsibility to protect respondents

against harm reaches further than efforts to repair harm afterwards. The researcher was aware that if the children had suffered traumatic stress and were not coping, they would have to receive therapy from another professional. The researcher was careful not to give parents the impression that their child's diagnosis could be wrong, or that they have caused any trauma, for example by getting divorced. The researcher was also careful not to offend the relevant medical practitioners.

1.10.2 Informed Consent

Obtaining informed consent implies that all possible information on the goal, the procedures, advantages, disadvantages and dangers of the study be rendered to respondents (Strydom, 2002b:65). They must fully comprehend the process and be able to make a voluntary, informed decision about their participation. The goals, objectives and methodology of this study were discussed with the respondents. They had the right to withdraw from the study at any time, as one child did. Parents signed a letter of assent (see Addendum D) and children signed a simplified letter of consent (see Addendum E).

1.10.3 Deception of Subjects

Deception involves withholding information or offering incorrect information in order to ensure participation in the study (Strydom, 2002b:66). It includes misleading subjects and lying about research purposes. No deception was employed in this study. The respondents were fully aware of the goals, objectives and procedures.

1.10.4 Violation of privacy, confidentiality and anonymity

For the purposes of this study, these three terms are used synonymously. The right to privacy is the respondent's right to decide when, where and to whom his thoughts, behaviours and attitudes will be revealed (Strydom, 2002b:67). Neumann (1997:452) warns that

researchers can also invade privacy by probing into beliefs and behaviours in a way that exposes intimate details. As a qualified, registered social worker, the researcher is automatically bound by rules of self-determination and confidentiality. The researcher is also trained in play therapy techniques. To ensure privacy, children and parents remained anonymous (to everyone other than the researcher) throughout the study and in the research report.

1.10.5 Co-operation with contributors

Sometimes researchers need financial assistance and a sponsor may be required. This relationship can raise ethical issues, such as when the sponsor becomes prescriptive or when the real goal of the study is concealed (Strydom, 2002b:70). Respondents should know what everyone's role in the study comprises, and ethical issues need to be clarified beforehand. There were no sponsors involved in this study. Permission for the research to be conducted at the school was received (see Addendums A, B and C).

1.10.6 Release of information

The findings of the study must be introduced to the public in written form (Strydom, 2002b:71). The report must be clear, accurate, unbiased and objective. Plagiarism is a serious offence. The information gleaned from this study is factual and true, and will be released in a report to the University of Pretoria with the knowledge of the respondents. A copy of the report will also be supplied to the Gauteng Department of Education.

1.10.7 Debriefing of respondents

The expected outcome of this study was that most of the respondents will have suffered or will be suffering emotional trauma. There was the possibility that subjects might benefit and get involved in the therapy, or

project, to such an extent that they suffer harm on completion of the project (Strydom, 2002b:73). Debriefing sessions were not necessary and termination was handled sensitively. The parents of all of the children were advised that their children would benefit from further therapy/counselling with another professional. One of these professionals is currently employed at the school and is prepared to take referrals free of charge.

1.11 LIMITATIONS OF THE STUDY

- Because of the small sample size, the results of this study cannot be generalized to larger populations.
- One boy excused himself from the study, and therefore only seven children completed the process.
- All the children are white, English speaking and live in the "middle class" suburbs of Johannesburg.
- The researcher, aware that the play therapy sessions were being conducted for research purposes and not for therapeutic purposes, was careful not to delve as deeply into the children's emotional issues and their resolution as she would otherwise have done. Ethical judgement prevented her from "opening wounds" which may not have received the necessary attention following the research process.

1.12 DEFINITION OF KEY CONCEPTS

1.12.1 Attention Deficit Hyperactivity Disorder (ADHD)

ADHD is a neurobehavioural disorder that affects 3 to 5% of children (some say up to 10%), is often present in infancy, and can continue into adulthood (Green & Chee, 1997:3; Venter *et al.*, 2003:2). Three times as many boys as girls are affected. Approximately half the children presenting with ADHD will

also have an associated learning problem. All population groups and economic classes are affected.

When the term ADHD is used, it refers to a child who has a small, but definite difference in normal brain function, which causes the child to underachieve academically and to behave poorly (Green & Chee, 1997:1). This was once referred to as Hyperactivity, then Attention Deficit Disorder, and now Attention Deficit Hyperactivity Disorder. The extent of the problem depends on how early it is diagnosed and treated.

According to Venter (2003) and the DSM-IV (*Diagnostic Criteria from DSM-IV,* 1994), two major types of ADHD exist. One is characterised primarily by attention problems (ADD) and the other involves hyperactivity (ADHD). Both can occur in the same child. The most prevalent type of activity disorder is characterised by behaviours such as heightened motor activity, short attention span, distractibility, impulsiveness and lack of self-control.

The second type is characterised by problems such as distractibility, inattention to detail, difficulty with sustained attention and difficulty completing tasks. This is usually referred to as ADD - Attention Deficit Disorder. Such children are described as sluggish, day-dreamers, anxious and shy.
For the purposes of this research study, the term ADHD is used to refer to both Attention Deficit Disorder as well as Attention Deficit Hyperactivity Disorder.

1.12.2 Response

In the *World Book Dictionary* (1994:1781), "response" is defined as "the reaction of body or mind to a stimulus." According to Reber's *Penguin Dictionary of Psychology* (1995:666), "response" is defined as "any muscular or glandular reaction or behaviour or process made to, or in the presence of, a stimulus."

The researcher is suggesting that ADHD may be a physical and psychological response to the stimulus of emotional trauma (traumatic stress).

1.12.3 Traumatic Stress

As stated in the introduction, many South African children are affected by trauma because of the high levels of violence, both within the home and in the wider community (Lewis, 1999:2). Some children are exposed to a single traumatic incident while others live in a situation of continuous trauma. Children can be direct or indirect victims of violence. Children of different ages and developmental levels understand, and respond to, trauma differently. All children experience difficulties while growing up and these differ according to severity. Stress, crisis and trauma are terms often used to describe these difficulties (Lewis, 1999:5). What is stressful for one child may not be experienced as such by another child.

A traumatic experience differs from stress or crises. The event is not part of normal experience. It is intense and frightening, and overwhelms the child's ability to cope (Lewis, 1999:6). It is always negative and damaging to the mental health of the child. Different kinds of trauma include man-made disasters, natural disasters, unintentional and intentional violence. For the

purposes of this study, the researcher focused on the prolonged loss of safety and security as a specific kind of trauma.

Continuous traumatic stress is the term used to describe situations where people are exposed to ongoing trauma (Lewis, 1999:10). Many South African children (particularly children in townships) live with high levels of violence or the constant threat of danger and violence.

Complex trauma constitutes a prolonged, repeated traumatic event. In these cases there is usually a relationship between the victim and the person who inflicts the trauma. Examples include abused children, marital conflict and domestic violence. The person is held captive by physical, emotional, economic, social and psychological forces (Lewis, 1999:10).

The researcher has used the term "*traumatic stress*" to refer to a combination of the two types of trauma described above as both refer to *prolonged or ongoing* stress/trauma.

1.13 DIVISION OF THE RESEARCH REPORT

The research report was divided into the following sections:

Chapter 1: Introduction, context of the study and research methodology.

Chapter 2 and 3: Literature review: ADHD; traumatic stress; biological responses to trauma; middle childhood and gestalt play therapy.

Chapter 4: Empirical findings and interpretations.

Chapter 5: Conclusions and recommendations.

CHAPTER TWO

ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD)

2.1 INTRODUCTION

Before we can consider the possibility of ADHD as a response to traumatic stress, a good understanding of the condition is necessary. In this chapter ADHD will be described in terms of definition, symptoms, diagnosis, treatment methods, comorbid disorders and controversies surrounding the condition. The various opinions on the etiology of ADHD will be discussed, and the possible connection to emotional trauma is touched upon. The aspect of "inattention" will be examined more closely, since this is the core feature of children with ADHD. To understand the damaging effects of ADHD on the development of the school-going child, this developmental phase will be presented in detail.

2.2 DEFINING ADHD

ADHD is the most common neurobehavioural disorder affecting children. It affects 3 to 5% of children (maybe more), is present in infancy, and can continue into adulthood (Green & Chee, 1997:2; Venter *et al.*, 2003:2; Trueit, 2004:50). Three times as many boys as girls are affected. Approximately half the children presenting with ADHD will also have an associated learning problem. All population groups and economic classes are affected. The behavioural characteristics of ADHD include short attention span, trouble concentrating, distractibility and poor impulse control (Coleman, 2002:1). Hyperactivity may be present, more often in boys (Green & Chee, 1997:4;

Coleman, 2002:5). The prognosis in children with only attentional problems (ADD) is more promising, and depends on the presence or absence of other disruptive disorders.

ADHD is not new; it was first detected in 1902 by Dr George Still who witnessed excitable, defiant and inattentive behaviour in children (Trueit, 2004:25). In the 1930s, when the association between trauma to the brain and behavioural disorders was noticed, it became known as Brain Damage Syndrome. In the 1950s, the term Minimal Brain Dysfunction was coined, and was used as late as the 1960s (Trueit, 2004:32; Green & Chee, 1997:11; Venter *et al.*, 2003:1). In the 1970s Virginia Douglas promoted the view that attention deficit was a more important symptom than hyperactivity and in 1980 the term "Attention Deficit Disorder" was used in the diagnostic and statistical manual (DSM-III).

Today when the term ADHD is used, it refers to a child who has a small, but definite difference in normal brain function, which causes the child to underachieve academically, and to behave poorly (Green & Chee, 1997:1). The extent of the problem depends on how early it is diagnosed and treated. Early intervention can help to prevent the devastating effects of underachievement, poor self-image and possible delinquent behaviour (Venter, 2003).

2.3 DIAGNOSING ADHD

Diagnosing children with ADHD can be difficult and there are often differences in the opinions of experts (Coleman, 2002:7; Levin, 2002:338). Individual differences and coexisting problems (such as problems with speech, language and mood) can complicate the diagnosis. Medical

problems such as frequent ear infections, asthma and neurological problems can make it more difficult to assess attention problems (Coleman, 2002:8).

Problems with impulsiveness, distractibility and compliance are not unique to children with ADHD, and there is no clear line that separates children who have the condition and those who do not (Coleman, 2002:8). There seems to be a continuum of symptoms, ranging from “normal” through a “grey zone” to “ADHD”. Confusion also arises when children with ADHD behave “normally” at times. Typically, fathers have less trouble managing ADHD children than mothers do, and babysitters and grandparents seem to cope better (Coleman, 2002:9; Green & Chee, 1997:6).

A thorough and comprehensive evaluation is the most effective way to identify the many factors that contribute to a child’s attention, behaviour, learning or affective problems (Coleman, 2002:6-9). Information should be obtained from as many sources as possible about the child’s current problems; past history; development; physical condition; daily habits; temperament; clinical observations; experiences at home, school and in the community.

According to Venter (2003) and the Diagnostic Criteria from DSM-IV (1994), two major subtypes of ADHD exist. One is characterized primarily by attention problems (ADD) and the other involves hyperactivity and impulsivity (ADHD). The combined subtype contains all three characteristics (Venter, 2003; Cooper & Bilton, 1999:3; Diagnostic Criteria from DSM-IV, 1994). The most prevalent type of activity disorder is characterized by behaviours such as heightened motor activity, short attention span,

distractibility, impulsiveness and lack of self-control. Whether a child is overactive or has ADHD is difficult to determine.

The second type is characterized by problems such as distractibility, inattention to detail, difficulty with sustained attention and difficulty completing tasks. This is usually referred to as ADD - Attention Deficit Disorder. Such children are described as sluggish, day-dreamers, anxious and shy. It is a much less common form of ADHD.

Through a diagnostic process using nuclear brain imaging, Amen (2002) has come to the conclusion that there are *six* types of Attention Deficit Disorder, each with its own distinctive brain dysfunction and each requiring its own treatment protocol (Brink, 2003:35). These six include the two mentioned above:

- Type 1: Classic ADD
- Type 2: Inattentive ADD
- Type 3: Overfocused ADD
- Type 4: Temporal lobe ADD
- Type 5: Limbic ADD
- Type 6: “Ring of Fire” ADD

Knowing which type of ADD a child is suffering from is crucial in the planning of an effective treatment programme. For example, in “Ring of Fire” ADD, there is *over* activity in the brain, which will be worsened by a stimulant such as Ritalin because there is too much activity across the whole cerebral cortex (Brink, 2003:38) This is the most extreme type of ADD which renders the sufferer most dysfunctional.

A confusing aspect of attention deficit hyperactive disorders is their inconsistency. Attention deficits or excessive motor activity are not always evident, nor are they displayed in all situations. To receive a diagnosis, a child must display at least six of these characteristics in two or more situations over a period of at least six months, to a degree that is maladaptive and inconsistent with developmental level (Cooper & Bilton, 1999:44; Diagnostic Criteria from DSM-IV, 1994). Symptoms must have emerged before the age of seven (Diller, 1999:56; Diagnostic Criteria from DSM-IV, 1994). The diagnosis is usually made in the year or two before formal schooling begins, although some children are diagnosed much later (Green & Chee, 1997:6).

Venter (2003) states that before diagnosing ADHD, the medical professional will follow the following steps:

- Take a detailed history and look for indicators of ADHD.
- Exclude ADHD look-alikes by conducting a physical and neurological examination. The doctor will look at gross and fine motor co-ordination and look for minor congenital abnormalities such as webbed toes. Other lookalikes which must be ruled out are hearing impairments; epilepsy; brain injury; depression; severe dysfunction in the family; illness; intellectual disability.
- Use some objective pointers towards diagnosis such as asking the parents and teachers to observe and report on the child's behaviour using a rating scale such as the Conners Rating Scale.
- Make use of special investigations such as EEGs and brain scans (PET and MRI).

- Amen (2002) makes use of questionnaires and, as part of the biological assessment, makes use of SPECT (Single Photon Emission Computed Tomography), a nuclear medical investigation which evaluates blood flow and activity patterns in the brain (Green & Chee, 1997:19; Brink, 2003:39). This is very new in South Africa.
- The child would also be assessed by members of a multi-disciplinary team consisting of the occupational therapist (motor co-ordination; visual perception); the remedial therapist (academic skills); the speech therapist (language difficulties); the psychologist (for scholastic and IQ tests) and the social worker (disruption in family).

While not every child with ADHD will need to see all these professionals, most will at some time be seen by two or more of them, if only to exclude other disorders. The diagnostic process should include the child, his perceptions and experiences. It is the researcher's opinion that the social and cultural context of the information should be given more attention when diagnosing ADHD.

There are four main features of ADHD (Venter, 2003; Venter *et al.*, 2003:5; Diller, 1999:57):

2.3.1 Hyperactivity (common but not necessarily present):

- cannot sit still, always fidgeting
- struggles to stay at a desk
- talks incessantly
- "driven by a motor"
- tries to do several things at once

- has difficulty waiting his turn.

2.3.2 Inattention

- gets bored with a task after a few minutes
- unable to focus on one thing for a sustained period of time
- fails to complete tasks
- fails to pay attention to detail, or paying excessive attention to detail
- makes careless mistakes
- inability to follow instructions carefully and completely
- loses objects necessary for daily activities.

2.3.3 Impulsivity

- doesn't think before speaking or acting
- hits others when upset
- shouts out answers before hearing the question
- takes action before understanding the situation clearly
- inability to wait his turn
- interrupts and intrudes on others
- engages in dangerous activities without considering the consequences
- has a low frustration level
- poor ability to plan ahead
- often lies impulsively.

2.3.4 Distractibility

- focus of attention flits from one stimulus to another
- not sustaining attention on a given task

- not listening when spoken to
- not completing tasks
- not being able to work independently
- inclined to daydream
- disorganized.

Other characteristics:

- poor co-ordination
- moods swing from one extreme to the other
- never satisfied
- overstimulation may lead to aggression
- seeks immediate self-gratification
- has a high awareness of praise or awards
- severely distressed if doesn't receive a promised reward
- unresponsive to social demands (obstinate, stubborn, negative) which leads to isolation, feelings of rejection and depression
- poor self-image often concealed by bravado and clowning.

Diagnosis of ADHD is currently made according to the criteria specified in the DSM-IV. Brink (2003:27) also warns that all the features of ADHD can be seen in mood disorders at times, so ADHD should be diagnosed only after ruling out a mood disorder, although children can meet full criteria for both. Psychological factors (such as early abuse/neglect) and social background must be explored in depth (Brink, 2003:38).

Much emphasis has been placed on the most visible manifestation of ADHD - hyperactivity. This, together with distractibility and impulsivity, is

responsible for most of the behaviour problems, and therefore becomes the focus of treatment (Venter *et al.*, 2003:3).

The concentration difficulty (inattention) is often less apparent, but perhaps more disabling. The child is not aware of his inability to concentrate, as he has always had the problem. Very few of these children are *totally* unable to concentrate. They may concentrate in a quiet environment, and on topics that really interest them, for example computer games (Venter, 2003).

Distractibility is one of the less understood aspects of ADHD. Most children with ADHD have difficulty separating the foreground stimuli from the background stimuli. In the classroom, the teacher's instructions are interpreted as having equal value to the conversation around him. The child reacts to all of these stimuli and becomes distracted (Venter *et al.*, 2003:4).

Levin (2002:342) points out that the core problems of ADHD naturally interact with each other, complicating things considerably.

Because inattention is a core feature of ADHD, this aspect of ADHD will be explored in more depth in the following section.

2.4 ATTENTION DEFICIT

Coleman (2002:1) states that the ability to sustain attention is dependent on how interesting the material is and how it is presented. Another component has to do with the child's motivation. Some children do not have much motivation for learning and can be described as "burned out". Jensen (1998:53) refers to this as "learned helplessness". A third component of attending is the child's ability to discriminate between important and less

important information (Coleman, 2002:2). A final component of attention is vigilance or the ability to sustain attention and ignore external or internal distractions. Children with ADHD find this difficult or impossible to do. Their attention continually shifts from one thing to another, although situations that provide immediate feedback such as video games and television seem to hold their attention for longer periods of time (Coleman, 2002:9).

Green and Chee (1997:42) explain that attention deficit is much more complicated than the inability to concentrate and that the inattentive part of ADHD is not simply a matter of flitting and lack of focus (Green & Chee, 1997:42). Attention can be divided into overlapping parts, such as selectivity, self-monitoring, maintaining effort and executive control (a function of areas around the frontal lobes of the brain which control learning and behaviour). These parts are closely associated with memory (Green & Chee, 1997:204). Attention problems manifest in the following areas: underfocus/overfocus; getting started and keeping going; a restless, circling brain; drifting and "spacing"; retaining and remembering (Green & Chee, 1997:42-44).

In this noisy world, most of the unimportant messages that come into the brain are screened out at a low level without ever reaching the attention of "middle management" of the brain (Green & Chee, 1997:17). Important information is screened by the specialist parts of the brain which interact together to give a properly coordinated response. Finally the frontal lobe approves or disapproves on the grounds of appropriateness, priorities, future implications and effect on others. In the brain of the child with ADHD it seems that information rushes in without much filtering.

Levine (2003:57) describes three complex forms of attention control: control over mental energy (including alertness, sleep-arousal and consistency); control over intake (of information and other stimuli) and control over output (of work and behaviour). They have to work closely together if a child is to succeed as a learner and make a reasonable behavioural and social adjustment during his school years. Each of the three forms has within it a small team of neurodevelopmental functions that take on specific roles. Although Levine resists “applying the stigmatising letters ADHD”, his descriptions of deficits in the forms of attention control closely resemble those of ADHD.

Jensen (1998:42) states that the purpose of attention seems to be 1) to promote survival and 2) to extend pleasurable states. Research has revealed that attentional systems are located throughout the brain; that contrasts of movements, sounds and emotions (like threat) consume most of our attention, and that neurotransmitters, hormones, peptides and genes play a role in attention. Researchers suspect that the neurotransmitter norepinephrine is the most involved in attention (Jensen, 1998:44). When we are “out of it”, levels are low and when we are “hyper”, levels are too high.

Jensen (1998:42) describes the attention process as consisting of alarm, orientation, identification and decision. How does the brain decide what to pay attention to in the moment? The secret is that our visual system (which sends more than 80% of information to the brain in non-impaired children) is not a one-way street. Information flows both ways from our eyes, to the thalamus, to the visual cortex (Jensen, 1998:43). This feedback stimulates certain neurons and also suppresses unimportant information. What we see and attend to is a two-way balancing act of construction and feedback-

maintenance of stimuli. Neuroimaging methods have shown increased neuronal firing in the frontal lobes and anterior cingulate when someone is working hard to pay attention. Selective attention depends on suppression of irrelevant data and the amplification of relevant data. The ability to focus attention and restrain inappropriate motor acts demonstrates not that children with ADHD can't pay attention; *they are paying attention to everything* (Jensen, 1998:49). They continually disengage from one signal in favour of the next irrelevant signal. Their system is low on norepinephrine.

The researcher is of the opinion that it is impossible to have an "attention deficit" – if one is not able to pay attention to the task at hand, it is because one is attending to something else. Jensen (1998:42) agrees, stating that "the brain is always paying attention to something". Diller (1999:73) states that Barkley (the leading theoretician on ADHD) has described the condition as a deficit not in attention, but in "behavioural inhibition". Hallowell and Ratey (1995:176), who describe themselves as adults with ADHD, discuss the "creative elements of the ADHD mind" (1995:176). One of these is the greater tolerance of chaos, and another is the ability to intensely focus or hyperfocus at times. These authors disagree with the term "attention deficit", changing it to "attention inconsistency" instead (Hallowell & Ratey, 1995:177). They also prefer the term "hyperreactivity" to "hyperactivity", because "even when people with ADD look calm and sedate, they are churning inside" (Hallowell & Ratey, 1995:178).

Levin (2002:338) is one of the few authors who speculate as to what might be going on in the *minds* (emotionally and cognitively) as well as in the *brains* (chemically, anatomically or neurophysiologically) of people with ADHD. He has noted that his ADHD patients crave stimulation and motoric

activity, sometimes to a level that becomes dangerous, apparently to avoid boredom. Levine (2003:53,75) also notes this trait of insatiability - the quest for stimulation, entertainment, new playthings and opportunities to provoke excitement and appease restlessness.

Levin (2002:344) summarizes Posner's work on the neuropsychology of selective attention. Posner, like Green and Chee (1997:204), describes an executive control network (ECN) within the brain. The anterior system, composed of the anterior cingulate (cortex) and basal ganglia, provides for selective attention and control of the ECN itself. The posterior system is composed of the superior parietal cortex, pulvinar and superior colliculus, and it provides for attending to and detaching from objects of interest. Some of the other distributed areas of the ECN include the corpos callosum, the amygdala and the hippocampal systems (which access critical memories and allow for such things as learning aversive responses), the orbital frontal cortex (which contributes to working memory) and the cerebellum (which anticipates incoming information and influences the accuracy and speed of changes in attention).

The anterior cingulate is required for the experience of consciousness, just as DNA is required for reproduction (Levin, 2002:345). For example, it is activated when subjects become suddenly aware of having made a mistake. *Children who are in distress also activate their anterior cingulate (which receives major input from the limbic system), whereas this activation ceases when these same children are distracted by attention to new objects, which temporarily eliminate their evidencing distress* (Levin, 2002:345).

Posner and Raichle (in Levin, 2002:345) explain the role of the neurotransmitters norepinephrine and dopamine in regulating attention, in the reticular activating system, in maintaining arousal and in the mental state that accompanies dreaming. These researchers have developed a sense of exactly what mental operations determine what we call attention: identifying an object of interest; homing in on that object; disengaging from the object and moving on to a new object. They have also identified the anatomical structures (and their chemical systems) associated with these functions by identifying the anterior and posterior attentional parts of the ECN and their roles. Levin (2002:346) speculates regarding the disorganisation at the core of ADHD and states that one can assume that the internal mental disorganisation in many ADHD patients is a distracting disorganisation that they are driven to. But then what drives this disorganizing distraction? One possibility is that the distracting organisation follows from a failure of part of the ECN (a primary driveness), or it could result from a *need to avoid boredom* (a secondary driveness). Levin asks “What could create a need to avoid boredom?” The researcher suggests an answer to this question in Chapter Three.

Another speculation concerns the role of attaching a tag to memories so they can later become retrievable for information processing. Many children with ADHD have difficulties with working memory and memory retrieval (Green & Chee, 1997:204; Trueit, 2004:41). There is evidence that in the face of early and repeated trauma such tags are not created, and that this creates a cognitive dilemma until the presence and meaning of such gaps are recognised and addressed (Levin, 2002:348). It is possible that some of those with ADHD have difficulty attaching memory tags to memories, and using these tags to solve problems.

2.5 ETIOLOGY OF ADHD

The exact cause is unknown (Cooper & Bilton, 1999:4; Saaled Congress, 2003), but according to Venter (2003) two certainties exist:

- ADHD is a hereditary condition (approximately 80% of cases have a parent or close relative with ADHD). It is, however, difficult to control for environmental factors that family members share and that may influence the development of ADHD-type behaviours (Cooper & Bilton, 1999:7). Diller (1999:109) states that studies of twins support the likelihood that an "ADHD personality" is inherited. Levin (2002:339) mentions new evidence that shows that ADHD can also be *acquired,* for example, as a consequence of brain infections. As far as genetics are concerned, specific gene sites are implicated, for example HLA on chromosome 6, the dopamine transporter gene on 5, the D4 receptor gene on 5, the D4 receptor gene on chromosome 11 (Brink, 2003:38). There is more than 50% chance that a child will inherit ADHD from a parent who has it, and there is an 80% chance that when one twin has it, the other will too (Trueit, 2004:30). Thyroid hypofunction has also been found to be a common denominator linking toxic insults with ADHD symptoms (White & Rouge, 2003:289). ADHD has also been linked to Foetal Alcohol Syndrome (FAS) caused by heavy alcohol consumption by the mother during pregnancy (Trueit, 2004:33). The researcher suggests that a lack of coping mechanisms (including support systems) can also be "inherited" or handed down within families, making children more vulnerable to traumatic stress.
- The problems of ADHD result from an imbalance of neurotransmitters (such as dopamine and norepinephrine) in the brain. The genetic

> factors may predispose a child to ADHD by interfering with brain development during pregnancy. Events such as traumatic birth or severe illness close to birth may be responsible (Venter *et al.*, 2003:5) Abnormalities in the brain circuitry and possible hypofunctioning of the dopamine pathways are apparent in ADHD (White & Rouge, 2003:289). The researcher suggests the possibility that ongoing *emotional* trauma could also lead to an abnormality in brain circuitry and an imbalance in neurotransmitters.

Cooper and Bilton (1999:4-6) identify three major areas of research on the causes of ADHD: *cognitive research* (focusing on impulsiveness as the central feature and the dysfunction of the inhibitory control system), *neurobiological research* (focusing on neurological problems underpinning cognitive dysfunction) and *genetic research* (studies of biological relatives, twins and adopted children). The researcher questions the lack of research into the psychological and emotional dimensions of ADHD. For example, according to Venter (2003) there is evidence that a lack of bonding/attachment at birth can be linked with the early development of ADHD. Over 75% of adopted children and children in long-term foster placement suffer from ADHD (Coleman, 2002:8; Saaled Congress, 2003). Green and Chee (1997:228) put this down to genetic risk factors. Although there are experts such as Green and Chee (1997:3) who discount environmental factors as a cause for ADHD, the researcher is of the opinion that to merely dismiss external factors (which may contribute to internal states) is an oversimplification of a complex matter.

According to Coleman (2002:1), ADHD can also be acquired in infancy from a variety of severe illnesses or injuries. Coleman (2002:2) distinguishes

between primary (inherited) and secondary attention deficit disorders. Secondary disorders occur as a result of any of the following:

- Disorders of mood or affect such as depression or bipolar disorder.
- Primary neurological disorders such as epilepsy or Tourette's syndrome.
- Chromosomal disorders such as Fragile X syndrome.
- Exposure of a baby to drugs, alcohol, infection, toxins or brain injury.
- Prematurity.

The following are, according to Coleman (2002:3), causes of inattention, distractibility and impulsiveness but are not ADHD:

- Learning disabilities
- Unrecognised seizure disorders
- Lack of motivation
- Boredom and the unrecognised gifted child
- Physical and sexual abuse
- Lack of sleep or inadequate nutrition
- Family stress or violence
- Hyperthyroidism.

According to Trueit (2004:33), Venter *et al.* (2003:5) and Green and Chee (1997:3), ADHD is *not* caused by:

- poor parenting
- poor home or school life
- excess sugar
- food allergies
- too much television.

However, all of the above can make the behaviour worse, and improvements in each area can have a positive effect on the child.

As the above account illustrates, ADHD is likely to involve an intricate interplay between complex human systems. It also shows that one of the limitations of the dominant research approaches to ADHD is their tendency to search for explanations *within* the person (Cooper & Bilton, 1999:8). Critiques from different disciplines and cultures have argued that explanations for emotional and behavioural problems such as ADHD, which place a strong emphasis on biological factors, are merely convenient labels that are used to cover up the true, social causes of these problems (Cooper & Bilton, 1999:9). The researcher is disturbed by the fact that almost all the symptoms and diagnostic criteria of ADHD are behavioural and there seems to be very little investigation into the motives, purpose and needs underlying such behaviour. Also, it seems that the child with ADHD is rarely consulted about what he/she feels and thinks about himself and his world.

The DSM-IV does not directly take note of “systemic” issues such as family dynamics, and the demands and responses of environment are not perceived as critical to the diagnosis, even though children are especially vulnerable to environmental influences (Diller, 1999:63,64). Unfortunately, there is also a tendency which encourages the polarization of views on ADHD, to see ADHD as a set of problems induced by biological factors *or* as problems generated by the environment. This nature-versus-nurture argument does nothing other than highlight the tribalism of competing professions and disciplines. It seems best to adopt a holistic approach, and strive towards understanding how biological, psychological *and* social factors

interact in children with ADHD (Cooper & Bilton, 1999:11). It is the researcher's opinion that chronic environmental stressors can have a profound emotional and/or psychological impact on a child, possibly resulting in changes in brain chemistry and leading to the behavioural symptoms of ADHD.

2.6 OTHER DISORDERS ASSOCIATED WITH ADHD

ADHD is clearly a very complex condition, and adding to the complexity is the fact that many disorders may occur with ADHD (Venter *et al.*, 2003:8). Each of these is different and requires a different approach. Treatment for one is seldom effective for the other.

2.6.1 Specific Learning Disabilities

The term specific learning disability (SLD) refers to problems children have with learning and processing information (Coleman, 2002:9). They may have difficulty listening, speaking, remembering, reading, writing, reasoning or problem-solving. SLDs create a discrepancy between children's potential ability and their actual performance. Some professionals feel that ADHD is a learning disability because it interferes with a child's ability to learn or demonstrate knowledge. Other professionals choose to separate attention problems from learning problems.

About 50% of children with ADHD also suffer some specific weakness in learning. These children often have normal or above average IQs. Included here are visual perception problems, auditory perceptual problems and delays in fine motor development (Venter *et al.,* 2003:8). Children with learning difficulties may also experience poor self-esteem, anger, frustration, depression and social immaturity (Coleman, 2002:3).

2.6.2 Other Disruptive Behaviour Disorders

Other behavioural disorders commonly associated with ADHD are:

- Oppositional Defiant Disorder (ODD)*:* defiant, hostile, anti-authority.
- Conduct Disorder (CD)*:* plan hurtful deeds, lack of remorse, cruelty to people and animals, blame others, lying, cheating, stealing, destruction of property.
- Obsessive Compulsive Disorder and Tourette's Disorder can also occur in conjunction with ADHD.

2.6.3 Emotional Difficulties

These are, understandably, very commonly associated with ADHD. Children with ADHD struggle continuously with their environment (Venter *et al.*, 2003:10). They are often in trouble, and consequently develop poor self-esteem. The end result may be a psychiatric disorder such as depression or generalized anxiety disorder.

Other children may have emotional disorders that look like ADHD, such as severe anxiety. Most of us, when anxious, become restless and fidgety, and do not concentrate well. If anxiety and depression are treated with the drugs recommended for ADHD, they can be aggravated (Venter, 2003). More about the emotional dimension of children with ADHD will be discussed under 2.9.5.

2.6.4 Disorders of Mood and Affect

Affective disorders are caused by chemical imbalances in the nervous system (Coleman, 2002:7). These chemicals (neurotransmitters) send messages from one cell to another. Mood disorders can be inherited, although this is not clearly understood.

Symptoms of mood disorders in children include anxiety, irritability, insecurity, extremes of anger or sadness (Brink, 2003:39). School performance may drop because of lack of interest, restlessness or poor concentration. Some children become school phobic and complain of headaches and abdominal pain. A thorough and careful evaluation by various health professionals is required in order to diagnose a mood disorder (Coleman, 2002:4). Two different classes of medication are used in the medical treatment of children: trycyclics and selective seratonin reuptake inhibitors (SSRIs). Psychotherapy, education and support are also necessary.

Some children fit the criteria for both affective disorders and ADHD. These children are irritable, angry, distractible, inattentive, impulsive, unpredictable and unmanageable (Coleman, 2002:6). Mood disorders can worsen with medication used to treat ADHD.

2.7 TREATMENT OF ADHD

It is important to realise that ADHD is a progressive condition and the longer it remains undiagnosed, the more the problems will have compounded, often becoming severe (Cooper & Bilton, 1999:65). When left untreated, ADHD has serious psychological and social consequences. ADHD is associated with many behavioural and academic problems (Cooper & Bilton, 1999:4,60). Children with this disorder who are untreated are more likely to need to attend special classes or schools, drop out of school, become

delinquent and have problems with the law (Diller, 1999:214). Because they display coercive and critical styles, they are disliked by their peers. Adolescents with ADHD are more likely to become involved in substance abuse, risky sexual behaviour and other self-destructive behaviour (Diller, 1999:215; Venter, 2003). Untreated ADHD is likely to result in serious psychiatric disorders in adulthood (White & Rouge, 2003:290).

The treatment plan for children with ADHD should be individualised for each child and family (Coleman, 2002:7-9). Co-ordination between family, school and caregivers is important. Treatment is an ongoing process, providing support for the child and family while continuing to explore additional options if problems arise.

Treatment models should include psycho-education, parent counselling, psychotherapy, social skills training, school involvement and biological treatments including medication (Brink, 2003:43). Treatment should be both aggressive and conservative (Coleman, 2002:7-9). The goal is to reach the child's full potential without the creation of new problems and concerns.

Most children with ADHD have been treated with drug therapy. Stimulants in particular increase attention span and improve academic performance. However, only 70% of children with ADHD respond positively to stimulant medication - 30% do not respond or become worse when taking medication (Venter, 2003; Trueit, 2004:58). Diller (1999:215) states that studies that have followed children into adulthood indicate that medication alone neither improved nor worsened outcomes in adolescence and adulthood. Drugs seem to treat the symptoms rather than the cause, so that drug therapy alone does not produce long-term benefits. Venter (2003), however,

disagrees with this view, stating that drugs *do* address the biological causes of ADHD (for example, inactive areas of the brain). Barkley (2000:272) states that critics of medication assume that ADHD symptoms stem from purely social causes, such as poor discipline, when in fact we "now know that ADHD is a genetic disorder associated with deficiencies in the functioning of the brain".

Two main types of drugs are prescribed for ADHD (Trueit, 2004:54):

- *Stimulants* such as methylphenidate (Ritalin: intermediate, slow-release and long-acting; Concerta); amphetamines (Adderall, Dexedrine) and pemoline (Cylert).
- *Non-stimulants* including antidepressants, anti-hypertensives (for example Tofranil, Aurorix) and others such as the new atomoxetine (Strattera).

2.7.1 Stimulants:

- are extremely safe (if used correctly); have been studied for 40 years.
- are not addictive in children
- do not sedate the child
- improve attention span
- improve behaviour management
- can improve aggressiveness
- decrease restlessness, fidgetiness, overactivity, inappropriate behaviour
- improve concentration

- improve ability to relate socially and therefore increase self-esteem and confidence.

Ritalin is a central nervous system stimulant that inhibits the reuptake of dopamine and norepinephrine (Jensen, 1998:50). It is an extremely controversial drug in the media. Those who are anti-Ritalin believe it to be an addictive substance similar to cocaine, used by teachers to sedate creative, energetic children who do not conform to the norms of society. Parents also complain of side-effects such as weight loss, sleep problems and stunted growth, but most of these can be reduced or eliminated with an adjustment in dosage. Others believe that Ritalin causes panic, psychosis, hallucinations and even cancer. None of these is true (Trueit, 2004:56; Barkley, 2000:275; Venter, 2003; Cooper & Bilton, 1999:67; Green & Chee, 1997:226-235; Hallowell & Ratey, 1995:237).

Those who are pro-Ritalin see it as a miracle drug, which has helped their children to have normal lives in the face of tremendous odds. Ritalin is not a sedative, and is not as potent as an amphetamine. Its use *reduces,* by 85%, the likelihood of later substance abuse, and there is little evidence that its use affects weight or growth (Green & Chee, 1997:132; White & Rouge, 2003:292 & Barkley, 2000:273). Medication should, however, not be seen as a magical cure but must always be used in conjunction with other strategies (Cooper & Bilton, 1999:69; Diller, 1999:217).

2.7.2 Non-stimulants:

- are generally only considered once stimulants have been tried and failed, as is the case in about 20 to 30% of children (Diller, 1999:270; Venter, 2003; Trueit, 2004:58).

- offer many of the same benefits as stimulants (Venter, 2003).

2.7.3 Alternative treatments of ADHD

The following are some of the alternative treatments of ADHD as mentioned by Venter (2003), unless otherwise stipulated:

- Diets free of sugar, additives, colourants, preservatives
- Amino and essential fatty acids supplements, and vitamins
- Homeopathy
- Acupuncture (Cooper & Bilton, 1999:112)
- Aromatherapy
- Reflexology (Cooper & Bilton, 1999:134)
- "Brain gym" and other mental and physical exercises
- Cognitive behavioural therapies including individual and family therapy and parental guidance (Venter, 2003; Diller, 1999:220)
- Classroom management and educational programmes
- Social skills training
- EEG Biofeedback therapy.

2.8 CONTROVERSIES SURROUNDING ADHD

Many myths and misunderstandings surround both the existence and the nature of ADHD, and in particular the use of medication (Venter, 2003; Green & Chee, 1997:159,226). There are people who question the very existence of learning and behaviour disorders, believing them to be normal childhood behaviour or a "hoax" created by psychiatrists for their own gain (Eastgate, 2001; Armstrong, 1995). According to Eastgate, many of the characteristics of ADHD are indicators of normal childhood behaviour and that they also include symptoms which may be caused by numerous

physical conditions for example allergies, epilepsy, viral infections, head injuries and malnutrition; the treatment of which does not require the use of “mind-altering drugs”. The risks and inconsistencies associated with these drugs “for so-called ADHD” include increased heart rate and blood pressure; suicide accompanying withdrawal; cocaine addiction; lack of academic improvement and stigmatising labels. Armstrong (1995:6) states that ADHD “is a construct that was invented in the psychology laboratories of our universities, then given life by the American Psychiatric Association, the Department of Education and the chemical laboratories of the world’s pharmaceutical corporations.” He suggests many other variables are suspect, including a mismatch of teaching and learning styles, poor nutrition and poor parenting.

Dr Mary Ann Block, author of *No More Ritalin*, points out that psychiatrists listen to a brief history and then prescribe a drug. Parents have a natural reluctance to put their children on psychotropic medication. In the early 1970s such misgivings were reinforced by confusing, contradictory or sensationalised media coverage (Diller, 1999:30). Unconventional and inaccurate ideas about psychiatry also added to the hype. By the 1980s much of the negativity had subsided. In 1991, the production of Ritalin rose sharply and by 1993, newspapers were reporting a shortage of the drug (Diller, 1999:33).

Whereas studies clearly support the efficacy of psychostimulants (such as Ritalin) in improving focus and impulse control, they underscore the importance of psychosocial and behavioural interventions in the reduction of hyperactivity (Austin, 2003:289). Diller (1999:218) states that effective parenting and appropriate education can reduce a child’s symptoms and

allow the frequency and dosage of Ritalin to be lowered, and believes that psychosocial interventions should be tried first.

2.9 ADHD AND THE MIDDLE CHILDHOOD PHASE OF DEVELOPMENT

The period from about the sixth to about the twelfth year of life is generally known as the middle childhood years (Louw, Schoeman, Van Ede & Wait, 1996:311; Collins, Harris & Susman, 1995:65). Sigmund Freud referred to this period as psychosexual latency, while Erik Erikson calls it the period of industry versus inferiority. Although a relatively calm period, it is a critical period for the child's cognitive, social, emotional and self-concept development (Louw *et al.*, 1996:311). Balanced development during middle childhood prepares a solid foundation for later development. During this phase, the child needs to master the following tasks (Louw *et al.*, 1996:312):

- further refining of motor skills
- the consolidation of sex-role identity
- the development of concrete operational thought
- the extension of knowledge and the development of scholastic skills
- the acquisition of greater self-knowledge
- the development of preconventional morality.

2.9.1 Physical development

Physical development in children in middle childhood takes place in proportion to body rather than in height or mass (Blom, 2004:242). Bone and ligament growth are still incomplete. The learning and refinement of various psychomotor skills is a prominent developmental characteristic of middle childhood (Louw *et al.*, 1996:314). Such skills develop because of an increase in strength, co-ordination and muscular control. Children's motor

development facilitates the development of facets of their personality. The acquisition of skills such as writing, drawing, painting and playing a musical instrument becomes possible. Children's social development is furthered by their participation in sport. They learn to obey rules and to co-operate with team members. The self-esteem of children increases because they can run fast or play soccer well, hence they are usually popular among their friends (Louw *et al.*, 1996:315).

In children with ADHD, problems with fine and gross motor co-ordination result in them feeling incompetent and incapable, especially as their weaknesses are highlighted at school. They struggle with untidy handwriting which often detracts from talent in the content of work (Green & Chee, 1997:32). They tend to be clumsy and struggle with coordinating their movements. When children have difficulty throwing and catching a ball, they feel unwelcome in break play activities. This is a critical area where inability to match their peers can have far-reaching negative implications for the child with ADHD.

2.9.2 Cognitive development

The child spends a large portion of the day in school, hence it is to be expected that his cognitive skills will develop greatly. His thinking becomes more orderly, more structured and more logical (Hughes, 1999:105). Three characteristic changes occur: a growing ability to reason in terms of abstract representations of objects and events; a tendency to organize tasks more maturely and independently, and an increase in the capacity for acquiring new information and using new knowledge in reasoning, thinking, problem-solving and action (Collins *et al.*, 1995:67). According to Jean Piaget's theory (Louw *et al.*, 1996:316), the period from seven to eleven or twelve is

the concrete operational period because the child still thinks concretely and not abstractly. The operations he carries out are based on objects and not on hypotheses. Most shortcomings of the previous pre-operational stage, such as egocentrism, centring, finalism, realism, animism, the inability to understand numbers and transductive reasoning have been overcome, but abstract thought is still a limitation (Louw *et al.*, 1996:316). The clearest indication that a child has reached this period is when he understands conservation - that the quantitative relationship between things stays the same even though perceptual changes take place (Louw *et al.*, 1996:321).

ADHD has a negative impact on the school-age child's cognitive development. Problems with concentration, distractibility and short-term memory make the completion and memorising of work difficult (Green & Chee, 1997:5). Poor organisational skills and poor self-monitoring behaviours result in the child rushing through work and making mistakes. Cognitive limitations and perceptual deficits may result in fear, anxiety and withdrawal (Blom, 2004:245). Difficulties with reading, writing, mathematics and language need to be addressed early to avoid developmental delays.

2.9.3 The influence of school

Although home is still a primary influence, the school exerts a powerful influence on the child's development (Louw *et al.*, 1996:336). Parents can greatly influence their children's ability to adjust to the school environment by, for example, showing an interest in scholastic and related activities. When starting school, children have to make major adjustments. The teacher is a new authority figure who applies new rules and makes demands different from the parents (Louw *et al.*, 1996:337). New behaviour patterns must be learnt and children are expected to achieve academic success. The

child's personality plays an important role and children who are emotionally secure and controlled will adapt to the school environment better than those who are unsure of themselves and who have had little social experience outside the home (Louw *et al.*, 1996:338). The acquisition of skills such as reading, writing and arithmetic contributes towards being a productive member of society. Erikson wrote that children come to realise there is no future for them "within the womb of the family" so they begin to apply themselves to a variety of skills and tasks that are necessary for success in the larger world (Hughes, 1999:108). Teachers facilitate the learning of such skills, but also exert an influence on virtually every aspect of the child's development (Louw *et al.*, 1996:338). Teachers also help the child to acquire social skills, stimulate self-examination and expand the child's world. Teachers often also become "psychologists" for children who have personal problems, and an admired teacher can positively influence the course of a child's life.

Erikson regards the primary school period as the one during which children develop feelings of industry or inferiority, depending on their experiences (Louw *et al.*, 1996:341). When children receive encouragement and support from parents and teachers, they develop social and academic competencies and a zest for work (Brink, 2005:5). If these are absent, however, children may develop feelings of inferiority. If a child encounters more success than failures at school, he will have a greater sense of industry than inferiority, but if he faces excessive competition, personal limitations and continuous failure, this results in a pervasive feeling of inferiority (Brink, 2005:5). The experiences children go through during their early school career can have a direct effect on the development of a positive or negative self-concept (Louw *et al.*, 1996:341). Successful adjustment to the school environment also

depends on the child's attitude to school. This attitude is largely determined by the way in which parents and teachers behave towards the child and by their assessment of the child's activities. The nature of the learning material and the way in which it is presented also influences attitude to school.

It is clear that the child with ADHD is at great risk of developing feelings of inferiority and a negative self-concept. School is stressful for the child with ADHD – it takes twice the effort for them to achieve the same results as anyone else (Green & Chee, 1997:27; Levin, 2002:343). Teachers often describe such children as disruptive, disobedient, careless and naughty. Jensen (1998:41) states that teachers quickly divide children into two groups: those that pay attention and those who don't. Translated, this means "good kids" and "problem kids". A lot of time and energy is invested in getting children "to be good". The inattentive child quickly loses focus and becomes bored, flitting from task to task without achieving anything (Green & Chee, 1997:26) Schoolwork takes a long time to complete or never gets finished. Inattention to verbal instructions and poor short-term memory are particular problems. There is an interesting subgroup of inattentive children who are distracted by their own thoughts and "drift into space" when the teacher begins to talk (Green & Chee, 1997:26). They become the "quiet unachievers".

Hyperactive behaviour is usually punished, even though the use of hostility and force leads to defiance and resentment. Teachers become frustrated by poor impulse control, and can't understand how someone so intelligent can behave so stupidly (Green & Chee, 1997:26). Behaviours such as calling out in class, interrupting, disorganisation, making careless mistakes, excessive talking, touching and tapping are also frustrating for educators who often

then react inappropriately, and the self-esteem of the child is further eroded. It is therefore understandable that the child with ADHD soon develops a negative attitude to school, and a sad fact that the positive qualities of ADHD such as unusual creativity are not recognised or sufficiently appreciated because of an overall context of negatively judged behaviour (Levin, 2002:342; Levine, 2003:57).

2.9.4 Moral development

This is the important process by which children learn the principles that enable them to judge behaviour patterns as “good” or “bad” and to direct their own behaviour in accordance with these principles (Louw *et al.*, 1996:341). Jean Piaget and Lawrence Kohlberg are regarded as having made the greatest contribution to understanding the child’s moral development. According to Piaget, moral development occurs in a particular order and is closely related to cognitive development (Louw *et al.*, 1996:342). Piaget describes the *premoral phase* (up to five years), the phase of *heteronomous morality* (between five and ten) and the phase of *autonomous morality* (by about ten years of age). Children in middle childhood therefore progress from regarding rules as unchangeable and sacred, and believing they will be imminently punished for being “bad”, to thinking less egocentrically and displaying greater flexibility. Critics of Piaget believe that children’s morality is not fully formed by the end of middle childhood but that the process continues into adulthood (Louw *et al.*, 1996:343).

Kohlberg believed that as children’s cognitive skills develop, they go through different stages of moral development (Thomas, 2000:478). The main difference between Piaget and Kohlberg is that Kohlberg believed, like

Piaget's critics, that children of this age are still far from autonomous morality (Louw *et al.*, 1996:343). According to Kohlberg's stages (Thomas, 2000:479), the preconventional level (Level 1) is characteristic of middle childhood particularly. This is comprised of the *punishment and obedience orientation stage* (child behaves in order to avoid punishment) and the *naïve hedonistic and instrumental orientation stage,* during which the child is more able to acknowledge different viewpoints about moral dilemmas. Although obedience is still aimed at gaining reward, the principle of "scratch-my-back-and-I'll-scratch-yours" is very prominent (Louw *et al.*, 1996:345). According to critics, Kohlberg's scheme may miss higher levels of reasoning in certain cultural groups (Louw *et al.*, 1996:346; Thomas, 2000:489, 490).

Although children with ADHD are quite aware of what is right and wrong, they "shoot straight from the hip without considering consequences" (Green & Chee, 1997:27). They are genuinely upset at what they've done but will be just as unthinking the next time. These "short fuse" children are difficult to discipline as their reactions are so reflex-bound.

2.9.5 Emotional development

In middle childhood, a change takes place from helplessness to independence and self-sufficiency (Louw *et al.*, 1996:346). It also implies greater emotional flexibility and greater emotional differentiation, which enables children to express, control, suppress or hide a variety of emotions (Blom, 2004:245). Expression of a full range of emotions can be prevented by sex-role stereotyping, for example, boys are often taught not to cry or show fear, while girls are often criticised if they become aggressive.

Children's understanding of their emotional experiences changes noticeably between the ages of six and eleven, when they increasingly attribute emotions to internal causes. They become aware of the social rules governing the expression of emotion; they learn to "read" facial expressions with greater accuracy; they begin to understand that emotional states can be changed psychologically and they realise that people can experience different emotions simultaneously (Louw *et al.*, 1996:346). As children become older, they can identify emotional labels and understand how others are feeling and why they feel as they do.

- *Fear:* During middle childhood, children become less fearful about their physical well-being, for example they become less afraid of disease, injury, noises and dogs. There is, however, no noticeable change in their fear of supernatural powers such as ghosts and monsters (Louw *et al.*, 1996:346; Blom, 2004:245). New fears regarding school, teachers and friends emerge. Many children fear their parents' death, and many children fear their fathers (Louw *et al.*, 1996:347). Today's children also fear AIDS and nuclear war. Most children's fears can be traced back to an unpleasant experience which they, or someone they know, had or read about or saw on television.
- *Love:* Children are only able to understand the various abstract qualities of love when they are cognitively fairly mature. They do, however, learn about love from the moment they are born, and particularly when they become attached to their parents (Louw *et al.*, 1996:347). Attachment will be discussed further in Chapter Three.
- *Aggression:* During middle childhood, children begin to show aggression openly against others, primarily in order to hurt them. The fact that boys at this age are more aggressive than girls is attributed

to a variety of factors, from biological to cultural variables (Louw *et al.,* 1996:347).

As described earlier in this chapter, children with ADHD often struggle emotionally. “Normal” childhood fears related to school, teachers and friends are exaggerated in the child with ADHD. Teachers as well as parents struggle to find the balance between assisting the child without contributing to a feeling of incompetence. Most children with ADHD are exceptionally sensitive and have low self-esteem (Green & Chee, 1997:35). They put much effort into schoolwork yet achieve so little. They want to be popular but are treated like outcasts. The combination of sensitivity, vulnerability and inadequate esteem must be taken seriously as any ongoing weakness in socialisation and self-esteem has lifelong implications. It is accepted that interaction between the child and the environment is critical and if the world is perceived to be cruel and threatening, the psychological development of the child is restricted (Blom, 2004:245; Venter *et al.*, 2003:10).

2.9.6 The influence of the family

Even though children in middle childhood spend more time away from home and less time with their parents, the home is still the place that offers the most security and the family is still the pivot on which life hinges (Louw *et al.*, 1996:348). Children make large demands on their parents and question their parents’ decisions, for example, regarding bedtime and pocket money. Parents often have to protect the child and serve as a buffer between the child and the community (Louw *et al.*, 1996:350). They are also responsible for teaching the child moral and cultural values, how to behave towards authoritarian figures, how to handle relationships and how to solve conflicts.

Determinants of parenthood, parenting styles and composition of the family are all influences within the family (Louw *et al.*, 1996:350-354).

Parents of extremely difficult young children become bewildered (Green & Chee, 1997:177). Behaviour techniques that work so well for others are ineffective with ADHD children. They feel criticised by onlookers, friends and family. They tend to adopt one of three approaches: accepting the temperamental differences and make allowances; become overwhelmed and lose direction, or they try to drive the bad behaviour out and force the child to comply. The firm, confronting approach greatly increases the risk of ADHD children becoming oppositional and defiant, some even displaying the severe behaviours of Conduct Disorder (Green & Chee, 1997:178). Those who are successful in managing ADHD eventually discover the importance of the first approach, then nurture and parent from the heart.

Children with ADHD are often compared to their "good" siblings, cousins and classmates (Green & Chee, 1997:184). When human beings of any age try to live up to other people's ideals, they experience stress and lose confidence. Exasperated family members can cause much damage by saying hurtful things. Siblings often learn how to adapt and to steer around explosions, but tension arises from issues such as different rules for the sibling with ADHD; invasion of space; taunts and teasing, and uneven distribution of time with parents (Green & Chee, 1997:78).

2.9.7 Social development

It has already been mentioned that the horizons of the child expand dramatically during middle childhood. Social networks expand significantly, incorporating extrafamilial adults and peers (Collins *et al.*, 1995:67). Family

support, community structures, school and friendships are important sources of opportunity for children in middle childhood (Blom, 2004:244). According to Louw *et al.* (1996:360), the most important social development facets are the following:

2.9.7.1 *From egocentrism to sensitivity towards others*

Children in early childhood years behave in a predominantly idiosyncratic way. They live in their own world and have little awareness of other people's inner feelings. Between the ages of six and eight, a gradual change takes place in children's perceptions of others and they realise that others feel and behave differently (Louw *et al.*, 1996:360). Children thus develop sensitivity towards others in middle childhood and take their needs and feelings into account. They also become more altruistic. From about eight years, children become aware that they are also being perceived by others, who act on these perceptions, and that they (the children) can cause people to react in certain ways.

2.9.7.2 *The influence of the peer group*

During middle childhood, children interact with other children of the same age and sex for the sake of friendship, affection and fellowship (Louw *et al.*, 1996:361). They also terminate a relationship with another child when they are no longer satisfied with the interaction. During these years greater solidarity and cohesion develop within the peer group, which is a stable collection of two or more children who interact, share common norms and goals and who have achieved a certain degree of role and status distribution on which the interactions are based. This can be attributed to, amongst other things, the increasing conformity of school children (Louw *et al.*, 1996:362). The group formulate their own rules and code of behaviour, and admission

to the group is often controlled through the use of initiation rituals and passwords (Louw *et al.*, 1996:363).

The peer group plays an extremely important role in the child's development. According to Louw *et al.* (1996:364,365), the most important functions a peer group fulfils may be summarised as follows:

Firstly, the peer group provides comradeship - the child has friends with whom he can talk, play and spend time. This is especially important for children who do not find this at home. Secondly, the peer group provides opportunities to try out new behaviours that adults generally forbid, based on standards that are different from those of parents. It also provides opportunities for learning positive social skills such as co-operation. Thirdly, the peer group facilitates the transference of knowledge, including sexual information. Fourthly, the group teaches its members obedience to rules and that violation of rules has negative consequences. Fifthly, the group helps to reinforce sex roles by expecting boys to behave like boys and girls like girls. Sixthly, the peer group contributes towards independence by weakening the emotional bond between child and parents. The peer group also provides support that formerly was offered only within the family (Hughes, 1999:105; Collins *et al.,* 1995:67). Lastly, the peer group provides children with experiences of relationships in which they can compete with others on an equal footing. Acceptance by the peer group is of great importance, but excessive conformity and attachment to the peer group can, however, be detrimental, for example, by luring the child into undesirable activities or preventing the child from achieving the necessary degree of self-reliance (Louw *et al.*, 1996:364,365).

Once again the child with ADHD finds himself at a disadvantage. Children with ADHD tend to act before they think, so they often trip, fall, act stupid and put their "feet in their mouth" (Green & Chee, 1997:6). They are often demanding, coercive and "bossy", which does not endear them to other children and therefore they struggle to build relationships. They struggle to read social cues, say inappropriate things and appear to be insensitive towards the feelings of others. The more they try to make friends, the more they become isolated (Green & Chee, 1997:31). They are easily led and "over the top". Some have such poor playground skills that they spend every break outside the principal's office. Others are often sought out by bullies at school because they overreact to taunting. Children with ADHD often state that they feel "different" from their peers, and their inability to regulate their own behaviour causes them distress. Teachers and parents often intervene clumsily and situations escalate into blow-ups, reinforcing the child's sense of failure and shame, and contributing towards social insecurities.

2.9.8 Personality development

Current literature pays much attention to the self-concept as a facet of personality development. During middle childhood the self-concept develops rapidly (Louw *et al.,* 1996:370). Self-evaluation intensifies as exposure to more varied persons and social contexts stimulates comparisons between self and others and provides feedback about skills and abilities (Collins *et al.,* 1995:69). At the age of six or seven, children begin to define themselves in psychological terms; they develop a concept of who they are (real self) and of how they would like to be (ideal self). The child no longer describes himself in terms of activities but in terms of how well he can do something. A major challenge is to demonstrate to himself and others that he is competent, that he has talents, skills and abilities of which he can be proud

(Hughes, 1999:105). Erik Erikson called this the sense of industry (Hughes, 1999:108). The child develops the ability to assess himself accurately. His knowledge of himself is not based only on his achievements, but also on his needs and on what others expect of him (Louw *et al.*, 1996:371). His self-concept is also influenced by the degree to which he can regulate his own behaviour. It is therefore important that the child should develop faith in his ability to meet personal and social requirements. The way in which children are treated by adults plays an important role in the development of self-esteem (Louw *et al.*, 1996:371).

2.10 SUMMARY

Although this chapter attempts to clarify the condition of ADHD to the uninitiated reader, it is obvious that such an attempt can often raise more questions than provide answers. The exact cause is unknown, the diagnostic process is largely subjective and various experts have differing opinions on aspects of the condition, such as when and how to prescribe stimulants and whether external or environmental factors influence the development and nature of ADHD. Even in their own writings, authors seem to contradict themselves by, for example, stating that bonding and attachment have nothing to do with ADHD, but then emphasising the vital importance of nurturance in the management thereof (Green & Chee, 1997:228, 58).

In the section on “Attention Deficit” the researcher delves deeper into the workings of the brain and the problems of “inattention”, touching on the possible emotional factors contributing to this core feature of ADHD. She also highlights the lack of attention given to both the neurobiological *and* psychological factors in ADHD, believing that a more balanced approach is needed when treating children with ADHD.

Looking at the middle childhood phase of development, we see that children go through major developmental transitions in the years between six and twelve, and it is exactly in these areas that ADHD can seriously inhibit the developmental process and cause damage that may have lifelong implications.

CHAPTER THREE

TRAUMATIC STRESS IN CHILDHOOD

3.1 INTRODUCTION

Children who have been traumatised develop habitual stress responses such as explosive temper, sexualised behaviour, flashbacks, nightmares, addictions, bed-wetting and a host of other problems (Brohl, 1996:9). Understanding and treating these "wounds" requires an understanding of how traumatic experiences create defensive reactions in children and therefore the biological and psychological features of Post-Traumatic Stress Disorder (PTSD) and the Human Stress Response will be discussed in this chapter.

There is a high degree of symptom overlap between the features of ADHD and traumatic stress, as will be explained in this chapter. For this reason, traumatised children are often misunderstood and "misdiagnosed" with ADHD. Current diagnostic criteria do not include PTSD as a differential diagnosis for ADHD, nor do existing assessment guidelines address the similarities (Weinstein, Staffelbach & Biaggio, 2000:359). The researcher is of the opinion that instead of the two conditions being viewed in an "either/or" manner, they should be viewed as existing together.

This chapter also explores the lack of safety and security not only as a *result* of trauma, but as a *traumatising experience* in itself. The researcher believes that ADHD can develop as a defensive reaction in a child who has suffered a traumatic experience, in particular the emotionally traumatic experience of a

loss/lack of emotional connection with a nurturing caregiver. In this regard, Bowlby's theory of attachment will be presented.

Lastly, a brief account of the main concepts of gestalt therapy is presented, since gestalt play therapy processes and techniques were used in the study.

3.2 UNDERSTANDING POST-TRAUMATIC STRESS DISORDER

Post-Traumatic Stress Disorder (PTSD) is a relatively new medical diagnosis and was, before 1970, considered to be a psychological rather than a physiological problem (Brohl, 1996:7). Recent advances in research confirm that PTSD is traced to a disruption in normal brain functioning. According to the American Psychiatric Association's DSM-IV (1994), a person will be diagnosed with PTSD if he has been exposed to a traumatic event in which both of the following were present: 1) the person experienced, witnessed or was confronted with an event/s that involved actual or threatened death or serious injury, or threat to the physical integrity of self or others; and 2) the person's response involved intense fear, helplessness and horror. Note: *Children who lack an adult's capacity for abstract thinking or linguistic expression may instead express this by disorganized or agitated behaviour, or regress to an earlier developmental state* (Friedman, 2003:11; Brohl, 1996:13). The person also displays symptoms of increased arousal (including irritability, difficulty concentrating and hypervigilance), re-experiencing the event and avoidance of stimuli associated with the trauma. Symptoms must have been present for at least one month and if the duration of symptoms is three months or more, it is described as chronic. Symptoms emerging at least six months after the stressor are specified as "delayed onset" (Diagnostic Criteria from DSM-IV, 1994:209; Friedman, 2003:9-15).

All children experience difficulties while growing up and these differ according to severity. Stress, crisis and trauma are terms often used to describe these difficulties (Lewis, 1999:5). People feel stressed when they do not have the ability to cope with the physical or emotional demands of a situation. A child may feel stressed by too much homework or when their parents fight. Children can perceive starting school as a crisis, or the birth of a sibling, or entering adolescence, or their parents' divorce (Lewis, 1999:6). Some crises pass quickly while others linger for a few weeks. If resolved constructively, crises can be opportunities for growth.

A trauma (as described in the DSM-IV) is an experience that is sudden, horrifying and unexpected. During a trauma the person believes that they or others around them will be seriously injured or killed. The person feels fear, and is helpless and out of control. The event is not part of normal experience. It is intense and frightening, and overwhelms the child's ability to cope (Lewis, 1999:8). It is always negative and damaging to the mental health of the child. Different kinds of trauma include man-made disasters, natural disasters, unintentional and intentional violence. A child who witnesses a trauma, or has other contact with the trauma, is at risk of becoming traumatised. A trauma can consist of a single event, or trauma may involve multiple incidents over time (Lewis, 1999:8).

Continuous traumatic stress is the term used to describe situations where people are exposed to ongoing trauma (Lewis, 1999:10). Many South African children (particularly children in townships) live with high levels of violence or the constant threat of danger and violence.
Complex trauma constitutes a prolonged, repeated traumatic event. In these cases there is usually a relationship between the victim and the person who

inflicts the trauma. Examples include hostage situations, concentration camps, battered women, abused children, marital conflict and domestic violence. The person is held captive by physical, emotional, economic, social and psychological forces (Lewis, 1999:10).

The DSM-IV's diagnostic criteria for PTSD describe specific, discrete events that are terrifying and horrific, causing intense psychological distress and therefore traumatising. They do not account for sustained, emotional trauma that may be diffuse and possibly experienced on an unconscious level for an indefinite period of time, especially in the case of children. Many South African children are affected by trauma because of high levels of violence, both within the home and in the wider community (Lewis, 1999:2). Some children are exposed to a single traumatic incident of the kind described in the DSM-IV, while others live in a situation of continuous trauma. Children of different ages and developmental levels understand, and respond to, trauma differently. What is stressful for one child may not be experienced as such by another child. Whether the child feels stress depends on the situation, the environment and on the child's personality and ability to cope with the event.

For want of a better term, the researcher uses the term "traumatic stress" to refer to a combination of the two types of trauma described above as both refer to prolonged or ongoing trauma. As Van der Kolk (2005:376) states: "The label of PTSD is often applied to children, however, the majority of traumatised children do not meet the criteria for PTSD. In addition, the PTSD diagnosis does not capture the many developmental effects of childhood trauma." Van der Kolk (2005:376) suggests a new diagnosis provisionally called "developmental trauma disorder", which is predicated on the notion that multiple exposures to interpersonal trauma, such as abandonment, betrayal, physical or sexual

assaults, or witnessing domestic violence, have consistent and predictable consequences that affect many areas of functioning. The researcher believes that another type of trauma exists – when children suffer continuous traumatic stress not because they witnessed a terrifying event; or are exposed to multiple, repeated, discrete incidents of trauma; or because they are exposed to ongoing trauma in the environment (although these possibilities should not be excluded), but because they suffer from a pervasive, unconscious lack of emotional safety and security. This type of traumatic stress differs from PTSD in a number of ways, one of which is the absence of a single, specific traumatic "event", and therefore there would be no "re-experiencing the event" symptoms. In fact, the traumatically stressed child's whole life *is* the experience of the event. There may be fears, worries and sadness without any known cause – the trauma is hidden from the child's awareness. There may be no threat of death, but the child's survival is threatened on a daily basis.

3.3 THE EFFECTS OF TRAUMA

After a single trauma, children will experience symptoms that are normal responses to a traumatic event. These are called post-traumatic stress symptoms (Lewis, 1999:13). After multiple or complex traumas, the child may show any of the post-traumatic stress symptoms, but may also have symptoms of complex post-traumatic stress where the effects are more severe and may result in longstanding psychological difficulties.

According to Lewis (1999:14), there are three kinds of post-traumatic stress responses:

- *Intrusive symptoms:* re-experiencing the trauma - memories, flashbacks, nightmares, sudden feelings of sadness, grief, loss, anger, fear.

- *Avoidance:* numbness, trying to block out memories, avoiding reminders, emotional distance, fear of “bad things” recurring.
- *Hyperarousal:* feeling and acting as though faced with more danger - sweating, jumpy, rapid heartbeat, startled by noise. Mood swings, irritability, explosiveness, trouble concentrating, poor memory, insomnia, loss of confidence and self-esteem, loss of energy, headaches, stomach-aches, guilt, self-blame.

Symptoms usually pass with time - within six weeks to three months, but in some cases the traumatised person may be affected by many symptoms for months or years (Lewis, 1999:15). Post-traumatic stress responses usually appear within three months of the trauma, but sometimes only emerge months or years later. Complex PTSD features (resulting from prolonged trauma) consist of impulsivity, dissociation and somatisation (the expression of emotional distress through physical symptoms (Friedman, 2003:25).

Children who are faced with continuous trauma try to cope by suppressing their thoughts and feelings, which may lead to disturbances in the child’s sense of time, memory and concentration (Lewis, 1999:17*).* They often hide their feelings to protect caregivers. Other indicators that a child has been traumatised include: change in behaviour or personality; drop in school performance; change in classroom behaviour - naughtiness, disruptiveness, quietness or withdrawal (Lewis, 1999:20). Primary school children may feel anxious and fearful. They often develop physical complaints such as stomach-aches. Previously well-behaved children may become “difficult” and oppositional, rude, irritable and argumentative, have temper outbursts, or become passive and withdrawn (Lewis, 1999:29). This disrupts their friendships and causes fights. They may test rules, become aggressive, disruptive, have trouble concentrating, have

difficulty following instructions and neglect their schoolwork. They may have sleep problems and be reluctant to sleep alone.

The researcher points out that many, if not all, of the above indicators of trauma are also features of ADHD. (Compare Barkley, 2000; Brink, 2003; Coleman, 2002; Green & Chee, 1997; Davison *et al.,* 2004*;* Lewis, 1999.)

3.4 PTSD AND THE HUMAN STRESS RESPONSE

Through evolution, humans have acquired biological mechanisms for coping with a variety of stressors normally encountered. The two major components of the human stress response are the Fight/Flight Reaction and the General Adaptation Syndrome, although many other neurobiological systems participate in the human stress response including the immunological system, the thyroid system and other neurotransmitter and hormonal systems (Friedman, 2003:66,67).

3.4.1 The Fight/Flight Reaction

This reaction refers to the mobilization of brain and sympathetic nervous system mechanisms in response to a threat (Friedman, 2003:66). The heart pumps more blood to the muscles, which enables them to perform defensive (“fight”) or escape (“flight”) movements necessary for survival.

The moment a threat is detected, the brain jumps into “high gear” (Jensen, 1998:55). The limbic system is at the centre of all our fear and threat responses. The limbic system does not understand language - it is the site for behaviours relating to parental assistance of young for survival, food, physical contact, environmental protection and play. It is also the site for nurturance, affection, love, emotions, care of others, attachment and imprinting (Cossa, 2005:2). The

amygdala (part of the limbic system) focuses our attention and receives immediate direct inputs from the thalamus, sensory cortex, hippocampus and frontal lobes (Jensen, 1998:55**).** It assigns meaning to sensory information and guides emotional behaviour by projections to the hypothalamus, hippocampus and basal forebrain (Van der Kolk, 1999:317). Neural projections from the amygdala activate the entire sympathetic system, getting the body into a state of hyperarousal. Normally it triggers the release of adrenalin (norepinephrine) and cortisol (hydrocortisone). These immediately change the way we think, feel and act. Adrenalin release is a graded response dependent on the level of threat to the system, and elicits the survival response of fight or flight (Hannaford, 1995:94). This triggers a string of physical reactions including depression of the immune system (and susceptibility to illness), increased blood pressure and tensing of the large muscles. Chronically high levels of cortisol and adrenalin lead to death of brain cells, which is critical to thinking and explicit memory formation (Hannaford, 1995:94; Jensen, 1998:54). The amygdala also holds/processes memories as they travel to the cortex and determines their emotional significance (Cossa, 2005:3). The amygdala *"cannot differentiate between what it is experiencing in the moment and what it is remembering from the past".* Too much or too little stimulus from the amygdala prevents the hippocampus, the brain's "memory warehouse", from creating coherent memory traces**.** This relationship between the amygdala and the hippocampus is described by Van der Kolk (in Cossa, 2005:3) as a "Window of Tolerance".

3.4.2 The General Adaptive Syndrome

The second major system that responds to stress is a hormone rather than a neurotransmitter response and focuses on the hypothalamic-pituitary-adrenocortical (HPA) axis. It is in this process the "stress hormone" cortisol is released. The body responds with cortisol whether it faces physical,

environmental or emotional danger. The neurotransmitter serotonin is also involved in the functioning of the human stress response (Friedman, 2003:67).

Infants and children are much less likely to use a classic fight or flight response to threat (Perry, Pollard, Blakley, Baker & Vigilante, 1996:7). They are more likely to utilize a *combination* of adaptive responses which are designed to bring caregivers to defend them (an initial hyperarousal/fight or flight response) and if the threat continues, to move through a dissociative "surrender" continuum. One of these response systems is numbing – psychological or physical pain associated with the trauma can be blunted, and memories can become distorted or completely forgotten. Friedman (2003:9) describes avoidant/numbing symptoms as "behavioural, cognitive or emotional strategies to ward off terror and distress". Other types of dissociation, or protective distancing, are expressed through daydreaming; inability to concentrate; compliance; assuming persona of animals or heroes; staring "off into space" and in severe cases, loss of consciousness (Perry *et al.,* 1996:8). The neurobiology of the dissociative continuum responses is distinct from the neurobiology of hyperarousal, for example, there appears to be an increased relative importance of the dopaminergic systems in dissociation responses. Interestingly, females utilize dissociative adaptations more than males, while hyperarousal/fight or flight responses are used more by males. Either or both responses may be indelibly, neurophysiologically inscribed into the developing personality structures of the traumatised child (Thomas, 1995:315).

Research shows that those with PTSD have abnormalities in certain brain structures as well as abnormalities in adrenergic, HPA, serotonergic and other mechanisms (Friedman, 2003:68). Studies prove that rather than showing the classic profile of increased adrenocortical activity and resultant dysregulation of

this system described in studies of stress, PTSD sufferers show evidence of a highly sensitised HPA axis characterised by decreased basal cortisol levels and increased negative feedback regulation (Yehuda & McFarlane, 1999:51). Other similar abnormalities of the sympathetic nervous system and other systems show that PTSD sufferers have exaggerated and more finely tuned biological responses to stimuli, leaving the individual highly responsive. Hyperreactive or hyperarousal symptoms include insomnia, irritability, startle reactions and hypervigilance which make it very difficult for traumatised people to concentrate and perform cognitive tasks (Friedman, 2003:9).

Intense affect may inhibit proper evaluation and categorization of experiences. Studies evidence that one-time intense stimulation of the amygdala in mature animals will produce lasting changes in the neuronal excitability and enduring behavioural changes in the direction of either fight or flight, for example, defensive animals show behaviour inhibition while others that are temperamentally insensitive to threat show aggression (Van der Kolk, 1999:317). Human beings and animals have a lot in common, including shared survival responses. Humans are also compelled to survive, and people with PTSD become hypersensitive to danger long after they have been traumatised. In a series of experiments, scientists found that, once formed, the subcortical traces of the conditioned fear response are indelible and that “emotional memory may be forever” (Van der Kolk, 1999:317).

Thomas (1995:314) states that the central issue for the traumatised child is safety. For this reason the treatment of PTSD must provide safety in the ongoing environment and a sense of safety and support during the inevitable, hyperaroused behaviours associated with re-experiencing the trauma (Thomas, 1995:314; Friedman, 2003:19). Other authors also emphasize the importance of

structure, predictability and nurturance in helping a child overcome traumatic experiences (Perry *et al.,* 1996:19).

3.5 LACK OF EMOTIONAL SAFETY AND SECURITY AS A TYPE OF TRAUMA

Loss is usually described as a condition of losing someone or something that is to the disadvantage of the child because the person or thing lost has played an important role in the healthy functioning and existence of the child (Blom, 2004:215). Built into the loss situation is the element of separation which leads to the child experiencing separation anxiety. Fear concerning personal survival is one of the first reactions of children to loss (Blom, 2004:216). Some of the losses children suffer come in the form of death, divorce, natural disasters, violence and crime, emotional and physical abuse, rejection and neglect. In situations where the elements of both trauma and loss exist, this can be referred to as traumatic loss (Blom, 2004:217). The losses sustained by traumatised children are enormous but are sometimes overlooked by the clinician who focuses on the more dramatic components of trauma (James, 1996:25). Loss of safety and security is an inherent feature of trauma, but *trauma also occurs when one loses the sense of having a safe place to retreat within or outside oneself to deal with frightening emotions or experiences* (Van der Kolk, 1987**:**31). For example, betrayal and the child's subsequent loss of trust disturbs the very foundation of his development (James, 1996:25). This translates into "I am no good. The world is threatening." If a child cannot trust a primary caregiver, for whatever reason, he cannot help feeling that literally nobody in the world can be trusted. Loss (physical or emotional) and betrayal are characterised by numbing of emotions, denial, suppressed longing, guilt, rage and distrust. Behaviourally, children may display somatic reactions, recurrent anxiety dreams; regressive behaviours; withdrawal; inability to attend,

leading to learning difficulties; emotional disconnecting; avoidance of intimacy; elective mutism; apathy; indiscriminate clinging; hoarding and explosive aggression (James, 1996:26). Unlike adults, children do not have the option to report, move away, or otherwise protect themselves – they depend on their caregivers for their very survival, and *essential for survival is emotional attachment* (Van der Kolk, 1987:31; 2005:376).

3.5.1 Attachment

Attachment during infancy, when the baby is utterly dependent on his caregiver for survival on all levels, is critical in the development of life-long coping capacities, on an emotional, social and cognitive level (Brink, 2006:3).

Current attachment theory is largely based on the early theoretical work of the British psychoanalyst John Bowlby and the empirical work of the developmental psychologist Mary Ainsworth (Pervin & John, 2001:148). Attachment may be defined as the tendency of a child to repeatedly seek the proximity of a specific person for tension reduction (James, 1996:34). Bowlby describes attachment as an enduring affectional (emotional) bond with a vital biological function, indispensable for survival. The relationship between a child and his attachment figure (parent or caregiver) can provide a secure base from which he can explore and master his world. Bowlby was interested in the effects of early separation from parents on personality development and formulated a theory of the development of the *attachment behavioural system* (ABS). According to this theory the infant goes through a series of phases in the development of an attachment to a major caregiver, generally the mother, and the use of this attachment as a “secure base” for explorations and separations (Pervin & John, 2001:149). The ABS is viewed as something programmed within infants, part of our heritage that has an adaptive value. In terms of empirical work, Ainsworth

developed the Strange Situation procedure, which involved observing infants' response to the departure and return of the mother or other caregiver, and placing them in three categories (Pervin & John, 2001:150). Briefly, *secure* infants (about 70%) are sensitive to the mother's departure but greet her upon being reunited, are readily comforted and then able to return to exploration and play. *Anxious-avoidant* infants (about 20%) register little protest over the separation but, upon the mother's return, show avoidance in terms of turning, looking or moving away. Finally, the *anxious-ambivalent* (also called preoccupied or resistant) infants (about 10%) have difficulty separating from the mother and have difficulty reuniting with her upon return (Pervin & John, 2001:150).

The recently discovered attachment pattern of *disorganized/disoriented* attachment characterises infants who are most stressed by the Strange Situation and who may be the most insecure. It appears to be a curious combination of the resistant and avoidant patterns that reflects confusion about whether to approach or avoid the caregiver (Shaffer, 2002:397). When reunited with their mothers these infants may act dazed and freeze; or they may move closer but then abruptly move away as the mother draws near; or they may show both patterns at different times.

Brink (2006:7) describes the newly-identified "ligand-receptor" system in the brain and the rest of the body, which contributes greatly to a better understanding of the importance of early attachment. Ligands are much smaller molecules than the receptors they bind to and are divided into three chemical types: neurotransmitters (such as dopamine and serotonin); steroids (hormones) and peptides (including neuropeptides) which make up more than 90% of all ligands and play a role in regulating virtually all life processes,

including mood and behaviour. It was an exciting find that neuropeptides and their receptors do not only exist in the limbic system (the seat of emotion), but also in the frontal cortex, the location for all higher cognitive functions. The frontal cortex is just as dependent on the free flow of the peptides of emotion through the psychosomatic network as any other part of the "bodymind". In fact, neuropeptides and their receptors are found in every bodily system and organ. Emotions and bodily sensations are intricately intertwined in a bidirectional network in which each can alter the other (Brink, 2006:8).

Studies of attachment show that the intimate contact between infant and mother is regulated by the reciprocal activation of their opiate systems (Brink, 2006:8). The relative quantities and qualities of receptors in the brain and body are largely determined by attachment experiences. During attachment interactions, the mother induces increased amounts of dopamine and endorphins in the child, which produce energy and support the growth of brain interconnections. In her soothing and calming functions, the mother also regulates the child's oxytocin levels, which has an anti-stress effect. In these ways, the mother influences the ongoing development of the infant's maturing parasympathetic nervous system and conversely, negative attachment experiences can have a toxic effect on the child's nervous system and biochemistry. Chronic stress, lack of attunement and soothing, and absence of positive stimulation cause permanent alterations to occur in, for example, opiate, dopamine, noradrenaline and serotonin receptors (Brink, 2006:9).

Research has repeatedly shown that infants whose relationships with their parents are characterised as secure, as opposed to insecure, are generally more competent, have high self-esteem, are resilient and exhibit better adaptive functioning as toddlers and pre-schoolers (Granot & Mayseless, 2001:530;

Weiten, 2001:443). Granot and Mayseless (2001:539) questioned whether these associations between attachment security and better adjustment are also apparent in middle childhood. Their findings substantiate the assumption that the attachment relationship affects functioning in middle childhood in various realms not necessarily linked directly to attachment systems (Granot & Mayseless, 2001:540). Secure children demonstrated better adjustment to the school system and the intellectual, social, emotional and behavioural demands associated with it than insecure children. This advantage in adjustment was reflected in teachers' higher evaluations of the secure children on different dimensions, in their showing the lowest prevalence of behaviour problems, both externalising and internalising, and in children's peer-rated social status (Granot & Mayseless, 2001:538). In this study, there was also a greater tendency for boys to be classified as insecure than girls.

Attachment disorders in children can result from repeated traumatising events which keep secure attachment from forming, such as may happen with neglectful or abusive parenting or war. Alternatively, the traumatising event can be a single event that threatens a child's attachment relationship, for example, abandonment (James, 1996:37). Attachment-impaired children behave in driven, negative ways - behaviour which is perceived by others as volitional and manipulative. Adults respond to such children with anger and frustration. The children become further convinced that nobody can meet their needs, and the cycle continues. The researcher is of the opinion that this cycle is particularly evident in children with ADHD in the middle-childhood years, where negative reactions from parents, teachers and peers reinforce feelings of abandonment, rejection and isolation.

When the child-caregiver relationship is the source of trauma or is affected by other traumatic exposure, many critical developmental competencies may be severely disrupted (Van der Kolk, 2005:376). An insecure attachment relationship occurs when the primary caregiver is too preoccupied, distant, unpredictable, punitive or distressed to be reliably responsive and nurturing. Key features of disorganized attachment (inconsistent or rejecting caregiving) include increased susceptibility to stress (for example, difficulty focusing attention and modulating arousal) and inability to regulate emotions without external assistance. Van der Kolk (2005:376) states that manifestations of chronic dysregulation may be triggered by genuine environmental threats, perceived threats resulting from the child's misinterpretation of actual events, or the child's extreme response to seemingly innocuous stimuli.

Children can be influenced by the quality of their attachments for many years to come (Shaffer, 2002:405). This is due in part, to the fact that attachments are often stable over time. In middle-class samples most children experienced the same kind of attachment relationships with their parents during the grade-school years that they did in infancy. The researcher notes that even though attachment styles are thought to impact greatly on early childhood development, and also on adult relationships, there seems to be an obvious lack of research on attachment in middle childhood and adolescence, particularly on the effects of insecure attachment relationships.

In an interesting variation on the attachment theme, Arluke (2001:70) found that children who come from dysfunctional families tend to take more responsibility for the care of companion animals to replace the affection and nurturing that they have missed from their parents or, in more extreme cases, to cope with abuse that they themselves may have experienced. Arluke speculates that

supernurturing animals may have less to do with its outcome for animals and more to do with some children's need to distract themselves from their troubles (Arluke, 2001:70).

3.5.2 The role of the father

While attachment theories tend to focus on the importance of the bond between mother and child, the way in which a child perceives the father-element can be crucial for that child to achieve an orderly structure to his experience and the capacity for verbal thought (Brink, 2005:8). A father provides a child with a source of strength that will permit him to grow up as a separate individual. An emotionally present father has a tremendously positive effect in a child's life, while an emotionally distant or abusive father can have a deeply negative impact. At a time when a large number of children grow up in mothers-only households, the significance of a father's presence cannot be overlooked. Besides being an important attachment figure in his own right, a father's support and encouragement of the child's mother benefits a child indirectly.

Recent research has shown that children who are secure with *both* parents are less anxious and withdrawn and make better adjustments to the challenges of school, while also displaying better emotional self-regulation, greater social competencies and lower levels of problem behaviours and delinquency throughout childhood and adolescence (Shaffer, 2002:403). Not only are fathers potentially important contributors to many (perhaps all) aspects of child development, it seems that a secure attachment to the father may help compensate for the potentially negative effects of an insecure mother-child relationship.

3.5.3 "Good enough" parenting

How parents treat their children, whether with harsh discipline, with a dismissive attitude or with empathic understanding, has deep and lasting consequences for the child's total personality development (Brink, 2005:6).

To be a good parent requires much more than intelligence. It touches on a dimension of the personality that has been previously ignored in much of the advice given over the past decades. Good parenting involves emotion on the part of the parent as well as receptivity and response to the child's needs and emotions (Brink, 2005:6). Such a parent does not inflict his own needs at the expense of the child's. The parent responds positively to the child's needs in the various developmental stages, and does not object to the child's expressions of anger, fear, jealousy or sadness. Neither does the parent ignore or dismiss these.

Competence on the part of parents consists of good communication skills, patience and the ability to delay one's own responses, the ability to moderate goalsetting, the ability to allow the development of the child's sense of self, and the tendency to respond positively to socially desirable behaviour in the child (Brink, 2005:7).

One of the major tasks of parenthood is to provide a sense of containment (Brink, 2005:8). Neuropsychological research confirms that the regulation of affect; the ability to differentiate between feelings and to recover after an experience of intense emotion such as rage or shame, can only take place where there is a strong, positive attachment bond between caregiver and child. The chaotic fluster of painful feelings and sensations experienced by the baby as totally overwhelming need to be responded to and made bearable by a containing caregiver. The process of the child taking into himself the experience

of having a space in somebody's mind, and being understood, enables him to develop his own capacity to make feelings tolerable and to think by developing a similar space in his mind. This involves an actual, demonstrable process of neurological development in the baby's brain - certain circuits are established between the amygdala and the prefrontal lobes, which would otherwise not develop. While a healthy baby is born with a digestive system to process food intake, there is no such equivalent asset in mental development. The mental, neurologically based "equipment" and its capacity to metabolise psychological input develops only gradually within the context of the continuous bond between baby and a "good enough" parent (Brink, 2005:8).

If the emotions expressed by a child are listened to seriously, in a safe, supportive environment, the child learns to express them responsibly. By the age of five, the child is able to connect reason (from the neocortex) with emotions, and by age eight, adds insight (from the frontal lobes) to refine emotions. Over time, the responsible expression of emotion becomes a valuable tool, essential to a healthy person and a healthy society (Hannaford, 1995:101). Erik Erikson believed that a mother's overall responsiveness to her child's needs fosters a child's sense of trust whereas *unresponsive or inconsistent caregiving breeds mistrust* (Shaffer, 2002:390).

3.6 TRAUMATIC STRESS AND THE LINK WITH ADHD

The researcher is of the opinion that these two conditions have far too much in common and that there is a connection that cannot be ignored. Earlier in this chapter it was pointed out that many, if not all, of the symptoms of ADHD are also symptoms of trauma (for example disturbances in time and memory; inattention; trouble concentrating; hyperactivity and impulsiveness). For ADHD

to be diagnosed, symptoms must have been present for at least six months (Diagnostic Criteria from DSM-IV, 1994).

Differential diagnosis can be confusing and current diagnostic criteria do not include PTSD as a differential diagnosis for ADHD, nor do existing assessment guidelines address these diagnostic similarities (Weinstein *et al.,* 2000:359). This may have serious implications for children who have suffered trauma, for example, one study cited by Weinstein *et al.* (2000:366) found that the most frequent diagnosis of sexually abused children is ADHD (46%), followed by PTSD (42.3%). Treatment methods for the behavioural problems of ADHD will not heal the traumatised child, and may in fact be harmful.

At least one investigator, Thomas Hartmann, has suggested that ADHD traits are the vestigal characteristics of a “hunter” type, suited for survival in the wild but less well adapted for modern life (Diller, 1999:51). For example, distractibility can be seen as the constant monitoring of one’s environment. Someone who acts impulsively can be considered decisive and willing to take risks. A person who has trouble staying on task might be called flexible, able to quickly change strategy. The researcher is of the opinion that these characteristics are not only those of a hunter, but also those of the *hunted,* as in the case of children who are in “survival mode” and who monitor their environment constantly for signs of threat.

Hallowell and Ratey (1995:183) compiled a partial list of causes of distractibility that includes ADHD; depression; anxiety states; drug use; stress; seizures; sleep deprivation and dissociative disorders. Dissociation refers to the dis-association of a feeling with the cause of that feeling. Victims of trauma often dissociate to escape the pain associated with the memory of the trauma or even

during the trauma itself they dissociate as a means of defending themselves against the unendurable. The trauma can be abuse of some kind or any event that was of such enormous emotional and/or physical pain as to be psychically unbearable. The dissociated state that trauma may produce can closely resemble the distracted state caused by ADHD (Hallowell & Ratey, 1995:184). As more and more accounts appear of childhood abuse (especially in South Africa), we are finding more and more children who have suffered emotional trauma but have been unable to speak of it. A research question still to be answered is how much of an overlap exists between the population of people who have suffered trauma and have developed dissociative states, and those with ADHD (Hallowell & Ratey, 1995:184).

The researcher is of the opinion that ADHD represents a combination of the defensive responses outlined in 3.4. Either or both responses may be indelibly, neurophysiologically inscribed into the developing personality structures of the traumatised child (Thomas, 1995:315). Thomas also states that hyperaroused, fight or flight responses (including trouble concentrating, disruptiveness, aggression and impulsivity) are often “misdiagnosed as ADHD”. The researcher questions whether this is indeed a misdiagnosis or whether a prolonged period of being in a hyperaroused state can *become* ADHD – Attention Deficit Disorder with or without hyperactivity. The dissociative spectrum or “surrender” responses (such as numbing, daydreaming, “tuning out”) may be identified as internalizing disorders, but the researcher believes these are also a behavioural manifestation of psychological stress, and may be labelled Attention Deficit Disorder. The researcher reminds the reader that females utilize dissociative adaptations more than males, and more girls are diagnosed with ADD than boys. Similarly, hyperarousal (hyperactive) responses are more common in males, as is the case with ADHD and boys (see 2.2).

Children who have had early and constant childhood exposure to threat and high stress are often the ones for whom it is most difficult to gain attention (Jensen, 1998:56). Their vision and voice shift constantly, searching the room for potential "predators" and they often swing or swat at others. This territorialism is the source of comments such as "Don't look at me that way!" What they are doing is fending off potential problems. Their brains' receptor sites have adapted to a survival-oriented behaviour, which makes perfect sense to the child whose life seems to depend on it. When we are alert, geared up to fight or flee, the entire system is very sensitive to any and all external stimuli – a flash of movement, a pencil dropping, someone whispering (Jensen, 1998:56).

Brink (2006:4)) states that our *emotions* decide what is worth paying attention to. Our nervous system cannot take in everything, but can only scan the outer world for material that is prepared by its own internal patterns, based on past experiences. The decision about what sensory information travels to the brain and what is filtered out depends on signals we receive on a biochemical level. Emotions are the informational content that is exchanged via the psychosomatic network in our bodies. Emotions travel between the realms of mind and body, as the feelings we experience are registered biochemically.

In response to Levin's question in Chapter Two: "What could create a need to avoid boredom?" the researcher suggests that, in order to suppress overwhelming traumatic experiences (such as feeling alone, insecure and unsafe in the world), the ADHD brain seeks constant stimulation and is driven to pay attention to everything in a quest for distraction, which temporarily alleviates distress (see 2.4). The brain (in "survival mode") may also be monitoring the environment for possible threat. The researcher believes this is why children

with ADHD are able to be calm and concentrate while engaged in busy activity such as playing video games. It is at these times that they *are* distracted, and painful thoughts and emotions are safely maintained within the unconscious.

Although the intricacies of neurobiology and biochemistry are beyond the scope of this study, the researcher points out that the neurotransmitters (in particular dopamine, serotonin, norepinephrine and noradrenaline), peptides and other brain chemicals which are identified as being unbalanced in ADHD, are the same ones which play a role in trauma responses and in the neurobiology of attachment. As Green and Chee (1997:21) state, we still need to know much more about how these chemicals work together and how they are switched from one part of the brain to another. Also, brain structures such as the limbic system (especially the amygdala) and the frontal lobes seem to be the ones most involved in ADHD, memory, traumatic stress, emotions and attachment. The researcher believes there is far more evidence connecting these than not.

A study by Ford (1999:786) concludes that ADHD alone is *not* associated with an increased likelihood of a history of trauma exposure. However, the researcher points out that the *type* of traumatic events referred to in the study are those categorized in the DSM-IV, which we have already deemed inadequate. Moreover, parent-child relationship quality was assessed by a parent report in the study, which would not lend insight into the true nature of the parent-child relationship or the meanings children themselves attach to their experiences.

If one looks back at the etiology of ADHD in Chapter Two, we are reminded of the following facts: There is a higher incidence of ADHD in twins and in children of ADHD parents; over 75% of adopted children and children in long-term foster

care suffer from ADHD; ADHD has been linked to Foetal Alcohol Syndrome (caused by heavy alcohol consumption by the pregnant mother); ADHD is a hereditary condition; ADHD results from an imbalance in neurotransmitters. The researcher argues that traumatic stress related to inadequate (as opposed to "good enough") parental attachment and having to be self-reliant too early (and the neurobiology involved in both of these conditions) is a likely factor in all of the above scenarios. James (1996:37) states that treatment objectives for attachment-impaired children are "complex but necessary, for without intervention attachment-impaired children grow up to parent another generation of attachment-impaired children" (James, 1996:37). The researcher believes it is this "passing down" through generations that explains the "hereditary certainty" of ADHD.

The central issue in the recovery of the traumatised child is safety. For this reason the treatment of PTSD must provide safety in the ongoing environment and a sense of safety and support during the inevitable, hyperaroused behaviours associated with the trauma (Thomas, 1995:314; Friedman, 2003:19). The observant reader will recall that nurturance, structure, limits, routine and predictability are all necessary for the successful management of ADHD. What function do these serve other than to create a sense of safety and security?

3.7 SAFETY AND SECURITY IN THE SOUTH AFRICAN CONTEXT

Most people consider South Africa to be a country lacking in safety and security due to the high levels of crime and poverty, resulting in many people living in a constant state of fear. Some thought must be given to the impact this state of affairs may have on children's sense of safety and security.

In the history of the country there were many decades during which families were torn apart and fathers were separated from their children. In many cases, mothers were also forced to leave their children behind in their search for an income. This is still the case in many homes today, and the children of the past are the parents of the present. How does this influence *their* ability to bond with and provide emotional security for their children now?

The large numbers of street children remind us of a generation of children having to fend for themselves without caregivers. What is the emotional state of these children? The AIDS pandemic has resulted in thousands of orphans, and child-parented families are an increasing phenomenon. Children in townships and informal settlements are often left to their own devices, running wild and exposed to experiences that children should not have to endure. Many of them grow up too quickly, craving love and acceptance, and become teenagers having children, repeating the cycle. Parents living on the breadline are struggling to provide the next meal, let alone managing to provide nurturance of an emotional kind.

But it is not only children living in poverty who suffer a lack of safety and security. At the other end of the spectrum are children on their own because both parents are working to support their standard of living. For them there is no longer a loving mother waiting at home at the end of the school day to hear about their troubles, or to say “well done” when an achievement is shared. Many of them are given money and dropped-off at shopping malls on weekends. Cell phones and e-mails have replaced the warmth of eye-contact and physical touch. The high divorce rate has resulted in many single-parent families and all that they entail. Violence and crime in all forms create an atmosphere of fear and uncertainty, added to the stresses of modern life. Many parents have been

victims of muggings, burglaries, hijackings and worse, and many children have themselves been victims or witnesses to awful crimes. Parents who are distressed or traumatised cannot nurture or care for their children effectively when they themselves are in “survival” mode and need help.

In the following section, gestalt play therapy (arising from gestalt therapy) is described as a means of explaining features of ADHD and of exploring the thoughts and feelings of children with ADHD.

3.8 GESTALT PLAY THERAPY

3.8.1 Origins of gestalt therapy

Gestalt therapy is a holistic, humanistic and process-orientated form of therapy (Blom, 2004:2). It is also an existential and phenomenological approach with the emphasis on awareness of the here-and-now (present). Gestalt therapy encompasses the cognitive and emotional totality of each person, each moment and during each event. The concept gestalt can be considered an entity or whole of which the total is more than its component parts (Blom, 2004:3). The aim of gestalt therapy is to help the client to improve the perceptions of his experiences in their totality.

Frederick (Fritz) Perls was the originator of Gestalt Therapy (Thompson & Rudolph, 2000:162; Blom, 2004:2). Born in a Jewish ghetto near Berlin in July 1893, Friedrich Salomon Perls was the third child in the family. From his late teens through his university schooling, Perls studied and performed drama, and earned an MD in 1921. After a difficult time in Europe, he found success as a training analyst in South Africa, where he founded the S.A. Institute for Psychoanalysis in 1934. In 1936 he met with his hero, Freud, but was disappointed when his paper did not receive the reception he had wanted. From

then on, Perls challenged Freud's assumptions and directions, for example, he believed the focus should be on the client's current experience rather than on the past, and that the client should take responsibility.

Perls spent 12 years in S.A. where he formulated the basic ideas underlying what he would later name "Gestalt therapy" in New York. There is no exact English translation, but the meaning of the concept can be explained as *a form, a configuration or a totality that has, as a unified whole, properties which cannot be derived by summation of the parts and their relationships. It may refer to physical structures, to physiological and psychological functions, or to symbolic units* (Thompson & Rudolph, 2000:163).

In 1951 Perls' book "Gestalt Therapy: Excitement and Growth in Human Personality" was published. At first, the new theory had no impact and Perls travelled widely to promote interest, eventually leaving New York for Miami (Thompson & Rudolph, 2000:164). Here he met Marty Fromm. After moving again, he established his own Gestalt Institute in Canada. Nine months later, Perls died from pancreatic cancer. His last words were: "Nobody tells Fritz Perls what to do."

At the time of his death, Perls considered gestalt theory as being in a process of becoming, like human development, which he constantly revised. Although he worked with adults, gestalt therapy can be a very useful tool when working with children, as demonstrated by Violet Oaklander (Geldard & Geldard, 2002:35).

3.8.2 View of Humankind

According to gestalt therapy, the most important areas are the thoughts and feelings people are experiencing at the moment. Normal, healthy behaviour

occurs when people act and react as total organisms. Many people fragment their lives, the results of this evident in an ineffective living style. People are capable of becoming self-regulating beings who can achieve a sense of integration in their lives.

Perls's statement that "people would be better off losing their minds and coming to their senses" meant that he felt our bodies and feelings are better indicators of the truth than our words, which we use to hide truth from ourselves. Perls believed that awareness alone can be curative. With full awareness, self-regulation develops, and the total person takes control, able to solve his conflicts and problems without fantasy elaborations (Thompson & Rudolph, 2000:165). The key to successful adjustment is personal responsibility.

The healthy person focuses on one need (the figure) while relegating other needs to the background. When the need is met, or the gestalt is completed, a new (dominant) need comes into focus. To satisfy needs, the person must know how to determine their needs and manipulate themselves and the environment.

"Neurotic" people are those trying to attend to too many needs at one time, and as a result never fulfil any one need fully. This is characterised by:

- Lacking contact with the environment.
- Confluence - incorporating too much of themselves into others or too much of the environment into themselves.
- Unfinished business (unresolved issues, which may manifest in dreams)
- Fragmentation - trying to discover or deny a need.
- Topdog/underdog - a split between what people "should" do and what they "want" to do.

- Polarities - floundering between dichotomies, for example body-mind, love-hate, infantile-mature, good-evil. There are five types of polarities: physical, emotional, mental, spiritual and interindividual (Thompson & Rudolph, 2000:166).

3.8.3 Theory of the therapeutic process

Perls concentrated on raising the client's awareness of current bodily sensations, emotional feelings and related thoughts (Geldard & Geldard, 2002:35). By encouraging clients to become fully in contact with their experience in the "here and now", he believed he could help them work through "unfinished business" (unexpressed feelings, unsatisfied needs), sort out their confusion, achieve a gestalt or "ah ha" experience and feel more integrated. The gestalt therapist is an aggressive therapist who frustrates the client's attempts to break out of the awareness of here and now (Thompson & Rudolph, 2000:167).

Perls used, but modified, some of Freud's concepts such as redefining defence mechanisms as "neuroses". He used sarcasm, humour and shock to rouse people from neurosis. Perls directly confronted resistance by raising the client's awareness of it by encouraging the client to explore the resistance. Perls used a number of techniques which are useful when working with children:

- He gave the client immediate feedback regarding non-verbal behaviour as it was observed. This draws awareness to suppressed feelings or to resistance.
- He invited the client to get in touch with bodily sensations, relating them to thoughts and feelings.
- He encouraged clients to make "I" statements and to take responsibility.

- He challenged what he saw as neurotic behaviour, for example, deflection, projection and introjection.
- He explored polarities of the self so that neither polarity was excluded.
- He encouraged clients to role-play parts of themselves and have a dialogue between parts.
- He encouraged clients to role-play themselves and a significant other, and to create a dialogue between the two.
- He introduced "topdog-underdog" and encouraged dialogue between these parts, for example, by using the empty-chair technique.
- He helped clients explore dreams (Thompson & Rudolph, 2000:167).

3.8.4 Gestalt play therapy

According to Violet Oaklander, considered to be the founder of gestalt play therapy, the philosophy, theory and practice of gestalt therapy can also be used in therapy with children (Blom, 2004:2). Theoretical concepts from gestalt theory, which also apply to gestalt play therapy, include holism, homeostasis and organismic self-regulation, figure-ground, process of gestalt formation and destruction, contact and countact boundary disturbances, polarities and the structure of the personality (Blom, 2004:9).

Play therapy is defined as a psychotherapeutic technique whereby the therapist attempts to give the child the means to express his feelings verbally and non-verbally (Blom, 2004:5). It is assumed that the child will play out his problems in a symbolic manner, will learn to know and channel his emotions more effectively, will learn to enter into a relationship of trust with another person and that inappropriate behaviour will consequently be normalised. Oaklander describes a therapeutic process which begins with the building of a safe and trusting therapeutic relationship as a prerequisite, followed by making contact,

confirming the child's sense of self, allowing emotional expression, encouraging self-nurturance and concluding with termination. Various forms of play such as creative, expressive, projective and dramatised play are used to facilitate the process (Blom, 2004:5). Techniques such as games, incomplete sentences, sandtrays, drawing, sensory awareness activities, clay work, puppet shows, music and storytelling are used during the different stages of the process.

If one applies the theoretical concepts of gestalt play therapy (briefly described) to some of the "neurotic" behaviours of the child with ADHD, we find that they can be matched as follows:

- *Holism:* This concept is at the heart of gestalt therapy and emphasises the inseparable entity of the body; emotional and spiritual aspects; language; thought and behaviour (Blom, 2004:10). We have seen clear evidence of this principle in the chapters on ADHD and trauma, that mind and body are interwoven. Holism is the ultimate goal of the traumatised child trying to fulfil or deny a need, of the "distracted, fragmented self of the person with ADHD" (Hallowell & Ratey, 1995:185). Being "fragmented" includes suppressing or blocking off painful memories, experiences and emotions. Gestalt therapy strives towards integration of all parts of the self.
- *Homeostasis/organismic self-regulation*: All behaviour is regulated by homeostasis or organismic self-regulation. Homeostasis refers to the process by which the organism maintains its equilibrium under different circumstances (Blom, 2004:11). Organismic self-regulation requires identifying what one senses, feels, observes, needs and believes before one can fulfil needs. The "figure" is that which is most significant or pressing for the child at that moment, that which draws a child's attention

the most. The “ground” refers to the background of the child’s experience at that moment. Once the present need is satisfied, the figure disappears into ground, and a new need appears. Children thus organize their emotions, thoughts and behaviour around a specific need until it is satisfied (Blom, 2004:13). Psychologically healthy persons are able to maintain their awareness without being distracted by environmental stimuli. Young children are only able to identify and fulfil their needs in a limited way, and rely on their caregivers for need satisfaction. Discomfort is experienced until a specific need is satisfied and balance is restored. ADHD describes children who struggle to inhibit their own needs for the sake of others, and to regulate their internal and external processes, such as emotions and behaviour. They are in constant state of discomfort, “out of balance” with themselves and their environment - sometimes even literally. Inattention is a problem of not being able to separate the foreground from the background.

- *Contact and contact boundary disturbances* are evident in the child with ADHD who, amongst other things, jeopardises relationships; “tunes out”; suffers from sensory defensiveness (and other perceptual difficulties) and makes use of high stimulation to avoid painful feelings. Contact refers to being in touch with what is emerging here and now, and takes place as soon as the organism uses the environment to satisfy needs (Blom, 2004:19). Both intrapersonal contact (between a child and aspects of himself) and interpersonal contact (between child and environment) are important. A boundary disturbance occurs when a child is not capable of forming a balance between himself and the world. Such children are not capable of awareness and cannot respond to their real needs. The child, in his quest for survival, will inhibit, repress and restrict

various aspects of himself: the senses, the body, the emotions, the intellect (Blom, 2004:21).

- *Polarities* are “parts that are the opposites that complement or explicate each other” (Blom, 2004:32). People move between current natural divisions in themselves such as emotional-rational, bad-good. Polarization takes place when children identify mainly with one set of opposite traits and spend much energy to maintain the pole with which they have identified, denying experiences that do not conform. This causes fragmentation. Children with ADHD display polarities in extremes of emotion and behaviour, and in struggling to accept conflicting parts of themselves and their lives, especially parts of themselves that parents and teachers criticize.
- *Structure of the personality:* According to Perls (in Blom, 2004:35-40), the personality consists of five layers: Synthetic/false layer consists of learnt strategies for survival (defenses; wearing a mask; unaware of own states of being and unresolved conflicts. The researcher places children with ADHD in this phase); Phobic layer (aware of issues but afraid of being exposed or vulnerable to others; hides behind roles such as being the “class clown”; anxious; a child who has PTSD may be in this phase); Impasse layer (aware that change is needed but unsure what to do to change; no external support; needs empowerment; fear of pain results in resistance); Implosive layer (emerges from the impasse in therapy; rehearses new behaviours such as learning to trust); Explosive layer (coming to life and wholeness; integration and balance; new repertoire of behaviours such as appropriately expressing emotions like anger and frustration when needs are not met).

According to Oaklander (1988:222), the hyperactive child often has learning difficulties caused by impairment of perceptual abilities - visual, auditory and sometimes tactile. He is confused and irritated, not liked by his peers, shouted at by adults. He does not like himself, but fights for survival in a world that appears to him to be harsh and unjust. Oaklander believes that simply giving such a child a pill does not give him strength of his own to deal with his world. He may use it as a crutch or a manipulative tool. Children who show any of the various hyperactive symptoms are sometimes simply avoiding feelings that are painful (Oaklander, 1988:223). Often anxious children are afraid of getting involved in any activity, and will constantly move from one thing to another. Such children earn the "hyperactive" label with all its implications, even though they are rarely hyperactive in the therapist's office or in a one-to-one situation.

In using gestalt play therapy techniques for the purposes of this study, the purpose of the sessions was not therapeutic, and therefore the process was slightly different. The researcher utilized play therapy techniques to reveal and assess patterns that may be indicative of the child's cognitive and emotional state and how these may relate to their behaviour. The process was not intended to facilitate the full expression and exploration of emotions, or the resolution of issues.

3.9 SUMMARY

The organizing, sensitive brain of an infant or young child is more malleable to experience than a mature brain (Perry *et al.*, 1996:5). While experience may alter the behaviour of an adult, experience literally provides the organizing framework for an infant or child. Because the brain is more plastic (receptive to

environmental input) in early childhood, the child is most vulnerable to variance of experience during this time.

A very narrow window – a critical period – exists during which sensory experience is required for optimal organization and development of the part of the brain mediating a specific function. Some of the most powerful clinical examples of this phenomenon are related to lack of attachment experiences early in life. The researcher postulates that when there is an inadequate (not “good enough”) or non-existent attachment bond between parents and child, resulting in the child not having a sense of being psychically “held” and contained, the child experiences a deeply ingrained, unconscious lack of safety and security. This experience leaves the child feeling “alone in the world”, which is continuously traumatic and therefore pervasively detrimental to his development. It manifests in the physiological (neurobiological), psychological, emotional, social, and behavioural symptoms of dysregulation in attention, impulsivity, hyperactivity and distractibility - the “syndrome” of ADHD. Within the features of ADHD are elements of complex PTSD as well as (mal)adaptive, defensive, “coping” strategies. The question that follows is: Can ADHD be “undone” or reversed if a secure attachment bond with a nurturing, protective caregiver is established and if he experiences a long enough period of safety and security?

CHAPTER FOUR
THE EMPIRICAL STUDY

4.1 INTRODUCTION

The previous two chapters define and describe the key concepts of ADHD and traumatic stress, and elaborate on how the two may be connected. Gestalt theory was considered as an explanation for some of the features of ADHD, and gestalt play therapy was briefly presented as a means of exploring the thoughts and feelings of children with ADHD. It is also a means of assessing whether they have experienced traumatic stress. The researcher asks the question: "What is the possibility that ADHD could be a response to traumatic stress?" The research methods and empirical findings are discussed in this chapter.

The study was a qualitative study focusing on the feelings, behaviours, thoughts and experiences of children diagnosed with ADHD. Because traumatic stress is a subjective concept, which has different meanings to different people, one cannot decide for another whether something has been traumatic or stressful for them.

This study is described as exploratory research, which is used to gain "a broad understanding of a situation, phenomenon, community or person" (Bless & Higson-Smith, 2000:41). The goal was to explore ADHD as a response to traumatic stress. The design chosen by the researcher was the *case study,* "a

detailed and thorough investigation of a few cases". Fouché (2002b:275) describes the case study as "an exploration or in-depth analysis of a bounded system over a period of time". In this study, eight children (each one a bounded system) with ADHD were assessed for traumatic stress (loss of safety and security) over a period of seven weeks. It is an *instrumental case study* aimed at acquiring a better understanding of a social issue (Fouché, 2002b:276).

The research methods and empirical findings are discussed in this chapter.

4.2 RESEARCH METHODOLOGY

4.2.1 The respondents

The *population* consists of a select group, which has the possibility of being the focus of the research (Strydom & Venter, 2002:198). In this study the population was all primary school children at two schools in Johannesburg. The sample was eight primary school children (four boys and four girls), between the ages of seven and eleven years, who have been diagnosed with ADHD.

The researcher selected children according to a non-probability sampling technique, namely *purposive sampling.* This method is based on the judgement of the researcher regarding the characteristics of a representative sample and the sample is chosen on the basis of what the researcher considers to be typical (Bless & Higson-Smith, 2000:92). In this case, children were chosen according to the following characteristics:

- Four boys and four girls (named Boy A, B, C and D; Girl A, B, C and D),
- Between the ages of 7 and 11 years (middle childhood phase),
- In a primary school in Johannesburg,
- Diagnosed with ADHD by a medical professional.

The researcher obtained a list, compiled by the school, of children diagnosed with ADHD and sent a letter to their parents asking for volunteers for the research project. The first eight children identified, who matched the above criteria, became the sample. None of the children had previously been referred to the researcher for counselling. The researcher was of the opinion that the sample would be more representative if not limited to either boys or girls.

4.2.2 Data collection method

The methods used to collect information in this study were *unstructured interviews* and *observation* (gestalt play therapy sessions with the children) and semi-structured interviews with the parents (see Addendum F). An unstructured interview is "a conversation with a purpose", the purpose being to understand the experiences of the respondent (Greeff, 2002:298).

The researcher conducted semi-structured interviews with a biological parent of each of the respondents. The aim of the interviews was to gather background information on each of the respondents. The researcher also asked teachers of the respondents for their opinions on the children. These interviews were unstructured.

Seven weekly play therapy sessions were conducted with each of the respondents, except for one, who exercised his right to withdraw from the research project after two sessions. The sessions were on average 45 minutes long and took place in the researcher's playroom.

The goal of the **first session** was to make contact with the child, develop a rapport and establish a relationship. The researcher confirmed that the child

wanted to be a respondent and also explained the research process and her role as a researcher. In order to get to know the child and his/her family, the researcher made use of the graphic family portrayal as described by Blom (2004:75). With this technique, the child drew a circle for each member of his/her family (including pets and domestic workers) and then, with the help of a feelings chart, was asked to fill in how that person looks and feels most of the time. This technique breaks the ice and facilitates discussion about what family members' favourite things are, what they do with their time and who spends time together. It also assesses the child's level of emotional awareness and introduces polarities of feelings, especially when children present only the positive.

The **second session** was aimed at increasing emotional awareness and the researcher used a game called "Feelings Fiddlesticks" to assess the child's emotional knowledge and vocabulary. The game also helps to assess the child's ability to recognise triggers for emotions, and to name and describe various feelings such as happiness, sadness, fear and anger, as well as non-verbal expression of these emotions. The game involved throwing 36 coloured sticks into a pile on a table. Each colour was matched with a feeling: red=angry; green=happy; blue=sad; yellow=scared). The child was given the opportunity to choose any other feeling for the brown sticks. The aim of the game is to pick up as many sticks as possible, one at a time, without moving the surrounding sticks. For each colour, the child was initially asked "What would make somebody happy/sad/scared/sad?" Further on into the game, questions progressed from the third-person to the personal. The researcher also explored how the child feels these emotions in his body, and how the child expresses his/her feelings, for example, "What is the best way to get rid of angry feelings? What helps to make a sad feeling better? What do you do when you're scared?"

The **third session** was aimed at enhancing sensory awareness while continuing with emotional awareness by linking emotions and memories with the sensory activities. The development of sensory and bodily awareness has specific value as it contributes to the child functioning holistically (Blom, 2004:98). This is especially important for children who have experienced trauma and who have shut themselves off sensorially as a protection against pain (Blom, 2004:99). The researcher took each child on a walk and concentrated on what was being seen (such as a row of ants walking up a tree trunk), heard (birds flapping their wings) and felt (warmth from the sun on skin). A "Lucky Packet" game was then played which involved the child (with eyes closed) taking objects out of a bag and using his/her senses (taste, hearing, touch and smell) to guess what the objects were (Blom, 2004:102). Later, the objects were edible and were either bitter, sweet, sour or salty (Blom, 2004:106). The sixth sense of intuition was also explored by asking the child whether he sometimes "just knows something" and for examples of when this happened.

Session four continued with the enhancement of the child's awareness of self, and "Incomplete Sentences" (see Addendum G) were used to assess the child's knowledge of his/her own processes, for example, his/her likes and dislikes. The technique also gives an indication of themes present on the child's foreground. A list of incomplete sentences was given to the child with the instruction to finish each sentence with the first thought that comes to mind (Blom, 2004:231). Some children preferred to do this orally. Children's sense of self is central to their development, and the way a child feels about himself is largely determined by early messages he gets from his parents although children also incorporate messages from the environment (Blom, 2004:113,114).

Session five was devoted to the projection technique. The sandtray technique was used because it is a form of non-verbal, non-rational projective play "that reaches a profound pre-verbal level of the psyche", and for its success in tapping into the unconscious, bringing to awareness any unfinished business, memories and early childhood experiences (Blom, 2004:152-155). The child was asked to choose around ten items from a selection of miniatures and to use them to "make a picture or scene" in wet or dry sand. The child was encouraged to use the sand in any way and was given the option of adding water. The child was then asked to describe the scene, to tell a story or to say what happens. He/she was allowed to move the miniatures around, thus "changing" things. An important step in awareness and integration is taken once the child "owns" the scene by relating it to his/her own life. This technique also enhances the sense of self.

During the **sixth session** a board game called "The Magical Maze Journey" was played. It was designed by Hospice, and facilitates the exploration of feelings and experiences related to loss. The child addresses various aspects of grief by means of prompt cards that facilitate discussion. Care was taken to ensure that all the children drew the same cards, and cards focusing particularly on death were removed. Card categories include fantasy cards; safe cards; feeling cards; family cards; fear cards; school cards and escape cards. Examples of statements are "I feel safest with…"; "I feel responsible for…" and "If I could bring anything back…"

The **seventh session** was devoted to evaluation of previous sessions, of the process as a whole and termination. The children were asked what they liked and did not like about the sessions and whether they had learnt anything new

about themselves. A discussion with each child was had about what would be relayed back to their parents. A certificate of appreciation for their contribution to the research study was presented to each child. The remainder of the final session was spent doing an activity of their choice.

4.2.3 Presentation of Empirical Data

4.2.3.1 Boy A: Parent interview

Boy A is a bright, articulate eleven year old who is small for his age. He lives with his father, step-mother, younger sister and older step-sister. The siblings are emotionally close. Boy A's father said the pregnancy was planned and there were no complications, although detailed information could not be obtained from Boy A's mother in this regard. In May 2003, Boy A's biological parents were divorced due to his biological mother's mental illness – she suffers from Bipolar Mood Disorder, has attempted suicide and abuses alcohol when depressed. His father states that she does not often see her children and does not care for them. Boy A's developmental history appears to be normal. He was diagnosed with ADHD (inattentive type) in September 2003 (aged nine) by a psychologist and was put on Ritalin. He is aware of his diagnosis and was not screened for trauma during the diagnostic assessment. He had not received any counselling or therapy before family therapy began last year to address problems between Boy A and his step-mother. This was initiated by a school psychologist who was informed that the step-mother was verbally and physically abusing the children. The psychologist states that discipline at home is punitive and autocratic, and life is "tough" for the children. In managing Boy A's ADD, his father has found that reducing sugar intake, removing privileges and adhering to a "strict schedule" is beneficial. According to his dad, Boy A does not express his needs, emotions and thoughts verbally and "is always up and down". He deals with challenges by crying. The family as a whole are not usually able to express

themselves freely. Boy A's teachers describe him as "a weird little boy, but very intelligent. He doesn't really fit in with his peers". They say he is often emotional, sometimes a victim of bullying and tends to spend his free time in the library.

- Play therapy sessions

In the graphic family portrayal, Boy A described himself as "lonely and lost". All other family members, besides his little sister, were portrayed as "stressed" or "tense" or "a bit sad". His step-mother is "hard to impress" and she punishes him by "not communicating". He became tearful when discussing his biological mother – he misses her terribly but she "hasn't got time to see us". He feels that she is also not happy and misses her children. Boy A was very upset by the death of his beloved cat a few weeks previously, and believes that his father rode over the animal with his car. He could not discuss the matter with his dad because his dad would get angry and he does not trust dad to give him a truthful answer anyway. Boy A spends a lot of time playing with and caring for his three dogs and playing with his younger sister. He feels that Ritalin helps him a lot and that it is necessary for him to do well at school. When on it, he feels "ahead of time" and does everything much quicker. When asked what he thinks about ADHD, he replied "it means there is something wrong in my brain". When daydreaming, he is "thinking about my mom" or "planning what I need to do next so I don't get surprised".

Boy A has a good vocabulary and was able to identify and describe different feelings easily, but his experiences of emotions tend to be defined in terms of how *others* are feeling. For example, when describing anger, he stated "when you don't do what someone says, they get angry". This is indicative of a poor sense of self (Blom, 2004:115). Boy A said it is best to keep anger inside, because expressing anger "gets you in trouble", although it may help to "punch

a tree" or scream into a pillow. Fear was described in great detail, including what it feels like inside his body – "shaky, wobbly knees, an empty feeling in your tummy, funny taste in your mouth, lips go dry". It is best to run and hide when you feel fear. Boy A feels very sad when he doesn't see his mother, and feels excited when he thinks he might see her. When sad, it helps to talk and cry, but only sometimes. It is possible to start crying and "never be able to stop". Boy A chose to name the brown stick "confusion – like when people tell you one thing, then a different thing, and you never know what to do". He believes it is the feeling he feels most often after sadness. He finds it difficult to understand adults, to predict their behaviour and to trust them. When asked who he can talk to about his feelings, Boy A thought for a while and said "a psychologist?" Boy A believes the road to personal happiness is to "do exactly what people say" - in other words, to keep *them* happy.

Boy A was sensorially not very aware. He was not very observant of his surroundings and did not pick up sounds easily. He could not recognise or identify a piece of chalk and thought a ball of play dough smelled like chocolate. Boy A described popcorn as tasting sour and could not identify that a grape-flavoured sweet tasted like a fruit. Again, this is an indication of a disconnection with the physical self (Blom, 2004:115). When describing hand cream, it did not remind him of his mother (as most children say) but said it reminds him of suntan lotion.

The following three sessions with Boy A confirmed that the theme of his separation from his mother, and his need for her, is dominant in his thoughts and emotions. When describing a mother, Boy A stated that "a mother is someone who gives birth to a baby". His wishes, needs and happy feelings

revolve around seeing his mother and living with her, his sadness and disappointments relate to him not being with her. His greatest worry is that he'll never see her again. There is also a theme of punishment and lack of nurturance, especially at the hands of his step-mother. A father is "someone who made you" and whom one has to be careful not to upset. Home is related to the completion of chores.

In Boy A's sandtray, a baby elephant "dying and with needs" came to a magical lake for sustenance. The beach surrounding the lake was covered with coins. A little mouse, "searching for his family", also came to the lake. A "quiet owl" and a police van watched over the animals at the lake from a distance, "waiting for them to do something wrong". A bunch of keys in the lake - "keys to your needs" - unlock a bottle of tiny shells which, when sprinkled on the dying creatures, fulfil their needs and save them. The answers to the little elephant's needs were "just out of his reach". Boy A owned the projection by comparing himself to the little animals. He feels a desperate, crippling need for his mother. He "needs to communicate with the bottle of shells, which will open up and bring my mother to me". According to Boy A, the police van represented his punitive step-mother and the quiet owl his dad, who does nothing to protect or save him.

During evaluation and termination of the process, Boy A said that he did not enjoy the sandtray session because "I realised it is a sad story, and it is my life." He was not aware of how much he misses his mother, but he continues to hope that she will once again become part of his life. Boy A also realised that there were things he could do to "unlock the bottle of shells" and increase contact with his mother, for example, writing letters to her and phoning her.

Boy A was referred to a psychologist for further therapy to cope with his losses. He is on medication for anxiety. His father and step-mother are receiving parental guidance regarding disciplinary techniques.

4.2.3.2 Boy B: Parent interview

Boy B is a quiet, reserved eleven year old who is very small for his age. He lives with his mother, his younger sister (to whom he is very close) and his mother's boyfriend. An uncle lives with them, and Boy B is close to him too. His parents were divorced and his father died in a car accident six months ago. His mother planned this pregnancy but it did not run smoothly. She suffered emotional stress during the pregnancy due to her husband's physical abuse. Boy B was delivered by Caesarian and his developmental history includes asthma between the ages of one and six. His father continued to be physically abusive during the marriage and his parents divorced when Boy B was four years old. Boy B was diagnosed with ADHD (inattentive type) a year later at age five and is not currently on medication for financial reasons. His mother cannot recall the name or qualification of the medical professional who made the diagnosis, of which Boy B is aware. He was not screened for trauma at the time of the diagnosis and had not received counselling or therapy. Boy B's mother stated that he is easily able to express his needs, emotions and thoughts verbally (this proved to be inaccurate), and other family members are too. However, she stated that Boy B "lashes out in anger" when faced with challenges. Boy B's behaviour at school has deteriorated in recent months. He is often sent to detention for being disruptive in class and not doing his work. In dealing with Boy B's difficulties, his mother says Ritalin is beneficial. Boy B's mother appears to be detached from her son and was unable to remember important information regarding his childhood. When asked to provide details of previous years of schooling, she stated that everything was "fine, no problem". This is unlikely, since children

who are diagnosed with ADHD have a history of difficulties at school and Boy B's current teachers differ with her.

- Play therapy sessions

In the graphic family portrayal, Boy B continuously contradicted himself. For example, when discussing his deceased father, Boy B said that he "wasn't so sad" when he died and that "I don't really miss him that much" even though he had spent weekends with his dad. However, he became noticeably anxious and fidgety during the discussion and tried to change the topic. He believes his father is "happy in heaven". Boy B drew himself with a "half happy, half sad" expression on his face. He drew his uncle next (happy) and his mother third. All other family members were described as "happy" and drawn with "half-smiles" on their faces, except for his mother who is "only a little happy". Boy B is very attached to his "nanny", the domestic worker, and spends much of his time with her. He recalls clearly that she saved his life when he almost drowned at the age of three. At the time of the accident "my mom was too far to reach me".

Boy B's description of emotions in the second session was basic and superficial. He feels scared when left alone and also feels sad when left alone. He struggled to describe how different emotions feel inside one's body and had difficulty with labelling a range of emotions. He named the brown stick "disappointed" and said he feels this when "my mom says she'll come home early and take me out and then she doesn't". Boy B believes it is good to "let some feelings out" but he tends to keep them inside. When asked who one might tell feelings to, he said "someone like you" but thinks that upsetting feelings will "go away if you keep them in". When angry, it helps to "rip up something" or "squeeze something" even though he feels like hitting someone sometimes. It is clear that Boy B's emotional vocabulary is limited.

During the sensory awareness walk, Boy B kept his eyes on the ground, but pointed out the wind, sun, birds chirping, a door slamming and footsteps. He did not seem to want to look around. He appeared uncomfortable and resistant, and when the researcher explored this further he said that he thought his friends would tease him for being with “a psychologist”. The researcher suggested he tell them he is helping her with a project. During the Lucky Packet game, Boy B guessed most of the objects quickly and correctly and the only one which evoked a memory was the hand cream, which he said is “like my mother’s”. Boy B confused salty with sour, and said he likes sweet things.

When asked about his opinion about ADHD, Boy B shrugged his shoulders and said “I don’t mind who knows. It’s just something kids have.” He said Ritalin “helps a bit” but he isn’t taking it now. Boy B does not know what he thinks about when he is daydreaming, and feels that teachers always catch him out even “when others are the ones talking”.

During the “Incomplete Sentences” activity, Boy B left out a number of sentences relating to emotions, for example: “I suffer because…” and “The only trouble is…” This indicates a disconnection from his emotional world, and a resistance towards expressing emotions (Blom, 2004:95). He did, however, state that he feels terrible when people look sad. Other sentences reflect a low self-esteem (including concern about his small stature) and a need for validation, for example: “In future I want to be a nice person” and “People don’t understand me when I am sad”. Boy B wrote: “A mom is…the best” and completed “A dad is…” with the same words. He tapped his foot throughout the session.

In the sandtray, a king was placed in the centre of a “desert island” facing the sea with a pot of stew beside him and a kettle for coffee. Behind him was a lake of fresh water, and his pet dog. A black elephant, whom “nobody really likes”, was drinking at the lake. A small bird sat on an owl’s head “because they are friends, they help each other.” At the king’s feet was a message in a bottle, which the king was planning to throw into the sea, hoping that somebody would find it and “come to his rescue”. He was stranded on the island after a shipwreck and wanted to be reunited with his family in the city. The black elephant was stranded with him. The king was “lonely, but not too unhappy” and “longing for his family”. He had been on the island for “a very long time, about a year”. Once, he saw a ship on the horizon and started a fire to attract attention, but the animals didn’t realise he was calling for help and they stamped the fire out. The king was very disappointed. Boy B identified with the feelings of the king - sadness, isolation, loneliness, despair and longing. He finally admitted that he misses his father and has nobody to talk to about his feelings. He feels he needs to be rescued, like the king. He also expressed his wish to grow bigger and to be good at sport.

The theme of loss, sadness and loneliness was evident again in the final activity. Boy B could not answer who he feels safest with, and expressed anxiety about school and the future. He feels very responsible for his little sister. He seems to use sleep as a means of escape. Boy B is happiest when “playing my play station” and doesn’t feel afraid “when I’m busy”. This is reminiscent of Levin (2002:338) and Levine's (2003:53, 75) descriptions of the need of people with ADHD to seek stimulation and entertainment in order to avoid boredom, appease restlessness and alleviate distress.

During termination, Boy B said he enjoyed the sessions and would miss them. There was nothing he didn't like, but had worried what his friends thought of him.

Boy B was referred to a children's clinic where he was diagnosed with depression and anxiety. He is being treated with anti-depressants and receives therapy.

4.2.3.3 Boy C: Parent interview

Boy C is a lively, talkative seven year old who lives with his mother, father and younger sister. The pregnancy was planned but there were complications during the pregnancy and birth resulting in Boy C's mother needing an emergency Caesarian when she began to haemorrhage. She experienced the birth as "traumatic" and suffered post-natal depression for three months afterwards. She had also suffered depression before this pregnancy following a previous miscarriage, but has only recently begun taking a course of anti-depressants. During the time of Boy C's birth his father was very concerned about his wife and also suffered a bout of depression. There is also a family history of depression, and the family do not discuss emotions. Boy C suffers from various allergies and complains of headaches. He was diagnosed with ADHD by a psychiatrist a few weeks before the interview and is taking Ritalin. His mother does not want him to know that he has ADHD because it may affect his self-esteem. Boy C was screened for emotional trauma during diagnosis, and it emerged that he misses his father. He has not received counselling or therapy, but has had occupational therapy. His mother describes him as "very confident" but also "very emotional" and he sometimes battles to sleep because he says he "feels something is wrong". She says that the medication has helped Boy C significantly and in order to manage his ADHD, he requires "quality time, especially with his dad." When asked how Boy C copes with challenges, his

mother said “he doesn’t cope, he just cries.” His mother says that her husband also has ADHD and was diagnosed at the same time as her son. Boy C’s teacher describes him as “a wonderful, bright little boy – as long as he’s on his Ritalin. If not, he’s impossible”. She also states that Boy C’s mother is often late to fetch him in the afternoons and there appears to be little discipline and order in the home. She sometimes feels that Boy C is emotionally neglected.

- Play therapy sessions

In the graphic family portrayal, Boy C described himself as “happy mostly” but “very unhappy when my mom break promises”. He calls his father “Dude” and described him as “tired and cross”. Boy C stated that “me and my dog N follow my mom around all the time”. He likes to “not be found”, like his cat. There is much sibling rivalry between Boy C and his little sister, characterised by many fights. Boy C feels that he needs to take care of her, and seems to feel guilty about his resentment of her. This theme was also evident in later activities where it emerged that she “gives me a thousand troubles”.

Boy C had trouble describing feelings in his body and had only a basic knowledge of emotions, although was good at detecting non-verbal signals. He is sad and angry “when nobody talks to me” and is scared of the dark - “I hate to sleep”. He is happy when he gets a present “like chocolate” and when “people keep their promises”. Boy C believes it does not help to express feelings - the only thing that helps “is chocolate”, and it definitely doesn’t help to cry because “everyone just gets mad”. He chose to name the brown stick “confusion - like when you ask your mother something and she says maybe, maybe not”. Boy C says he often gets a “funny feeling of going mad” but did not want to discuss it further. He believes he has to keep control of himself so that he’s not “a pain in the butt”. He believes strongly in the “pill that makes me good”.

Boy C is very observant and did not miss anything in his surroundings. He spontaneously closed his eyes in order to “feel things better”. During the Lucky Packet game, he used all his senses and guessed all objects correctly, describing them fully. He correctly identified the salty, sweet and sour foods and even identified the shapes of fruit gums.

In the sandtray, Boy C created a very wet scene. He used a lot of water to create an L-shaped lake surrounded by desert. At the top point of the L was a baby elephant stranded on a rock, surrounded by deep water. The baby elephant was “sad but not too unhappy”. At the corner of the L, on the sand bank, was the mommy elephant drinking. She did not know her baby was in trouble and couldn’t see him. At the other point of the L on the right was the Daddy elephant, stuck in “quicksand”. This prevented the Daddy elephant from moving, and kept him away from his family. He couldn’t get to the baby elephant to help him, and the baby elephant was trying to get to his Daddy but couldn’t. If anyone walked across the desert, they would be eaten by spiders. The sister elephant was “not there”. The Daddy and the baby were clearly in trouble, and the Mommy elephant was oblivious to the desperate situation. Boy C was not ready to own the projection, and the researcher respected his resistance.

In the remaining activity it emerged that although Boy C appears confident, he feels lonely at school and struggles to get on with his peers. He tends to use fantasy to escape from his troubles, and often imagines “aliens”. His greatest worry is “panic that something will kill me”. The reader is reminded that fear concerning personal survival is a reaction to trauma and loss (Blom, 2004:216, 217). Boy C feels anxiety around schoolwork and his behaviour, which he

describes as “silly and naughty”. Boy C describes his parents as “jealous” and longs for more time with them.

The following day, Boy C’s teacher showed the researcher a letter written by Boy C to his father. It reads: “Dear Dude, happy Father’s Day. Please be more nice to me. Please don’t break your promises. Please don’t ever again”.

4.2.3.4 Boy D: Parent interview

Boy D is a gentle, intelligent eleven year old who lives with his mother, father and younger brother. He is very attached to the family’s domestic worker, whom he calls his “second mother”. His father’s job requires a great deal of overseas travel, which impacts greatly on the family. The pregnancy was not planned and there were complications during the last month, resulting in an emergency Caesarian with a general anaesthetic. Both parents were emotionally stressed before, during and after the pregnancy, and Boy D’s father was not permitted to be present at the birth. He is a “hands-on dad, when he is at home”. Boy D’s mother stated that she coped “relatively well” with her new baby but struggled with post-natal depression and did not bond instantly with her child. She was working at home again three weeks after the birth and returned to her job when Boy D was three months old. Boy D’s milestones were reached later than normal, and from about 18 months he lost consciousness four times after holding his breath during tantrums. An EEG showed there was no problem. He had whooping cough and bronchitis at ten years. He saw a homeopath in 2001 (age seven) due to bed-wetting. The reader is reminded that bed-wetting can be a response to traumatic stress (Brohl, 1996:9). Boy D saw two psychiatrists: in 1999 (age five) and 2003 (age nine), when he was diagnosed with ADHD together with a learning difficulty. There was no screening for emotional trauma, but it was noted that he has low self-esteem. He began taking Ritalin and is

aware of his diagnosis. He has had two psychological assessments, occupational therapy, speech and language therapy (to address a stutter), remedial assistance, brain gym and brain profiling. He was also tested by an optometrist and required glasses. Boy D's mother appears anxious and controlling, and states that speech therapy and Ritalin have been helpful in managing his difficulties. She believes that Boy D does relatively well at school because she "drills him". She also believes that both she and her husband suffer from ADHD. There is a family history of learning difficulties, "emotional problems" and depression. Boy D received counselling following a hijacking in 2003. His mother states that he is not able to express his needs, feelings and thoughts verbally but uses "a great deal of non-verbal". He becomes "emotional" – cries, screams, withdraws, "shouts and orders people around, just like his mother". When facing a challenge, he often procrastinates or gives up before even trying. Other family members, with the exception of his father, have limited ability to express themselves freely. Boy D's father feels that his son's problems are largely emotional. Boy D's teachers describe him as a lovely, polite boy who puts a great deal of effort into his work but who has a "hard" mother who pushes him beyond his limits and who is a "health freak". They also commented on his low self-esteem.

- Play therapy sessions

During the graphic family portrayal, Boy D described himself and his family as happy and "loving" all the time, and appeared to be giving the researcher answers that he thought she wanted to hear, for example "our favourite thing is to spend time together". He struggled to make eye contact with the researcher and resisted the researcher's attempts to explore emotions on a deeper level by stating that he "feels nothing". His high levels of resistance when it came to anything emotional had a negative impact on contact-making

with the researcher, which she accepted as Boy D's attempts to avoid painful feelings (Blom, 2004:61).

Boy D did not seem able to describe his mother as a person he knows, for example, he did not know her favourite colour and had to think hard about her personal preferences and habits. He did, however, state that she "gets angry often" but quickly softened that by adding "but she is trying to control herself". He would like his parents to spend more time with him, especially his father. He seems to think of his father as isolated from the family and this is confirmed in his drawing where his dad is separate from the family, and is not linked graphically with them. Even so, Boy D idolizes his father and seems to know more about his father than his mother.

Boy D sees himself in the role of protector, and feels that as the older son he needs to "help the family" in his dad's absence. If he could be an animal he would be an eagle - "they fly gracefully and they are always happy". His favourite sound is "to hear mom and dad happy".

During the "Feelings Fiddlesticks" game, Boy D attempted to pick up only green (happy) sticks which were often converted to "proud", like when he receives a certificate for good work or when his mother gives him "a reward". He chose "worried" for the brown stick, "like when your mother doesn't fetch you when she says she will". He struggled to identify triggers for sad and angry feelings, often answering "I don't know". Boy D tried to steer the discussion away from emotional topics by introducing facts, often about animals. Boy D stated that he is not afraid of anything but later expressed concern regarding the crime in the country and said he does not feel safe. There is also anxiety relating to

schoolwork and a need to achieve very high standards so as not to disappoint his parents. There are times when he feels vulnerable and unsure of himself. Recently, an older “good” cousin was caught smoking at school and Boy D was very badly affected by this. He was shocked and disappointed that his cousin had “sinned” in this way, and was afraid that he might one day “slip up” in a similar way. Boy D believes anger is bad and denied ever feeling angry, although seemed to have angry feelings directed against his parents in the previous session. He resents his father being away from home a lot, and feels his mother is “very strict”. If someone hurts him, he will “feel normal”, although later admitted to feeling miserable sometimes. These contradictions suggest a lack of emotional awareness and a disconnection from his emotional world. Emotional disconnection is a feature of loss (James, 1996:26). Boy D said that crying does not help sad feelings, but talking sometimes does. When asked who he can talk to about his feelings, he said “a professional, or maybe your parents”. Boy D could not describe how emotions feel in his body. It is the researcher’s opinion that Boy D functions on a low level of emotional awareness (as described by Blom, 2004:95) and finds it difficult to explore his emotions. As a result he chooses to operate in the intellectual realm.

During the week following the second session focusing on emotional awareness, Boy D asked to withdraw from the research project. He said that he doesn’t have time because he has a lot to do, and that maybe we could continue in the new year. When the researcher approached him in January, he again declined, saying “it’s just not for me”.

Boy D’s mother was advised that Boy D did not wish to continue and she was not happy about this, stating that he “never sees anything through”. It was explained that he should not be forced to continue, but that he would benefit

from play therapy in the future to help him get in touch with his emotions and the appropriate expression thereof.

4.2.3.5 Girl A: Parent interview

Girl A is a shy, small eight year old who lives with her mother, father and younger sister. She was not a planned pregnancy and there were no complications, even though her mother smoked throughout the pregnancy. However, there was a great deal of emotional stress during the pregnancy because Girl A's father did not want children. He was unsupportive and refused to be involved in the pregnancy. He would not accompany his wife on visits to the doctor and would not buy necessities for the expected baby. Girl A's mother considered terminating the pregnancy. She describes her husband as having "insecurities" because his father was an alcoholic and he was brought up by a "fifteen year old older sister". There is a family history of depression, suicide, drug abuse and learning difficulties. During labour, the baby went into distress and had to be delivered via forceps "in a rush" because the umbilical cord was wrapped around her neck. After the birth, a nurse handed Girl A to her father and he "came around". He is a "great father" now even though he is "hard on the kids". Girl A's mother, however, struggled to adjust to the new baby. She relied heavily on the domestic worker for help, and states that "my babies would call for the maid before they called for me." She says her husband has a stronger bond with the children than she does. Girl A reached all her developmental milestones within normal limits, but wet her bed until the age of seven. She still wets her bed occasionally – which is an indicator of traumatic stress (Brohl, 1996:9). When she began nursery school at age two, Girl A suffered separation anxiety and "would vomit so that she could go home". Separation anxiety is a feature of loss (Blom, 2004:215).

Girl A was diagnosed with ADHD (inattentive type) by a paediatrician at the end of Grade 1 (age seven) and is taking Ritalin. She is aware of her diagnosis. She was not screened for emotional trauma, but had a session with a psychologist a few months ago after a bullying incident. The psychologist remarked that Girl A "thinks she has to look after everyone and solve problems on her own". Girl A sees an occupational therapist at school. Girl A's mother describes her daughter as "extremely sensitive" and says she "takes everything to heart". She cannot cope with stress. For example, she did not cope with her dog's death last year. Girl A's mother says that when her second daughter was born the family would "fawn over her for hours" which resulted in Girl A feeling left out and neglected. Her dad "over-compensated" for this by showering her with "loads of attention". Girl A's occupational therapist states that it is the *mother* who "is all over the little sister" and that there is "something not quite right there - Girl A gets no attention". Girl A's mother says the family do not generally talk about feelings, and Girl A "keeps things in". Sometimes, instead of saying she feels sad, Girl A will say "I'm not feeling well." This is indicative of low-level emotional functioning (Blom, 2004:95). In managing the ADHD, it is Ritalin that makes the big difference. Girl A's mother thinks her husband also has ADHD because "he's just like Girl A". Girl A's teacher describes her as quiet but often demotivated and distracted. She feels she has low self-esteem, and needs encouragement to follow through on tasks.

- <u>Play therapy sessions</u>

Girl A drew her family members, including herself, as "happy" or "friendly" except for her father who was described as "grumpy" because he "works hard and never has fun". She added, "Last night I let him go out and play darts." Girl A struggled to draw her mother's face, saying "I don't see her face often

because she's always turned away from me or out". She settled on a surprised expression, "like when I do well at school". Girl A talked a lot about her little sister throughout the activity, describing how tall she is and all the things she does. This led the researcher to remark that Girl A spends a lot of time with her sister, to which she replied, "It's my job to look after her." In a later session, Girl A described being left alone with her sister at a casino with instructions to take care of her. She was given her mother's cell phone in case there was a problem.

The domestic worker was described lovingly as "my second mommy" and she often puts the girls to bed at night. The five pets were described in detail.

Girl A chose "worried" for the brown feeling stick and moved quickly from third to first person. She feels worried when "people don't show up". She could identify and describe feelings and their triggers easily and used facial expressions and body movements to act them out. She was also good at matching triggers to emotions and describing varying intensities of emotion. This indicates a high level of emotional awareness (Blom, 2004:95). She had trouble, however, knowing what to do with sad and angry feelings. Girl A again referred to her sister many times, and twice mentioned that her little sister is almost as tall as she is. At one point, she said that *she* had felt afraid because her *sister* had watched a scary movie. Sad and disappointed feelings come from being left out and being let down by people not keeping their promises – "like when you go to a friend's party and she doesn't have the Astro game she promised". Crying makes sad feelings worse, and Girl A did not think it a good idea to talk to anyone about her feelings. The researcher noted that Girl A's parents were not mentioned once during the activity (negative evidence, as mentioned by

Neumann, 1997:435) and many feelings were experienced vicariously through her little sister.

In the sensory awareness activity Girl A used all her senses to experience her environment on the walk, and to correctly identify the objects in the bag. The hand cream reminded her that “my sister likes it when I put cream on her”. The medicine container reminded her of Ritalin, which “stops me staring out of the window and worrying”. Her classification of sour, sweet, bitter and salty was also accurate. Again, Girl A spoke a lot about her little sister. This made the researcher wonder about Girl A’s sense of self-identity (Blom, 2004:115) and her ability to differentiate from her sister. This was confirmed in the following session, where Girl A struggled to relate statements to herself without mentioning her sister.

In the sandtray activity, Girl A created three ponds in the sand. A mother was cooking with two pots. Three children (aged two, five and seven) were on one side. They “see their mother every day”. On the other side was an older girl and a younger girl holding a doll. A cat belonged to the five year old. A baby chair belonged to the two year old - “they each have something that belongs to them”, although Girl A didn’t know what belonged to the seven year old. There is no fighting amongst the girls, they all take care of each other and are happy. The father was at work and gets home late. The older girls miss their dad, and “*have missed him since before they were born*”. The baby does not feel this way. Sometimes the mom and dad fight about dad working a lot. They also fight when the mom goes out, leaving the dad “at home with the kids”. A bicycle fell over and “drowned in the pond”, so it can’t feel or say anything. Girl A identified with the seven year old “even though I’m eight now” and admitted that she misses her dad very much, especially on Tuesdays when he plays darts. She

does not get to see him before bedtime, and then “that’s that”. Girl A became sad and quiet, and the researcher had to bring the activity to a close and focus on a more cheerful topic.

The researcher was astounded by Girl A’s statement that the girls in the scene have missed their dad since before they were born, since it was her father who had rejected the pregnancy and almost convinced her mother to have an abortion. The reader is reminded that subcortical traces of trauma are indelible and that “emotional memory may be forever” (Van der Kolk, 1999:317). It is also striking that Girl A said “the baby does not feel this way” because her little sister was fawned over by the family since birth. Even though Girl A’s father was supposed to have “over-compensated” and lavished attention on her, it appears that Girl A still craves her father’s time and affection.

In the last two sessions it became clear that Girl A feels entirely responsible for her little sister as well as for her parents’ happiness. Girl A appears to gain her parents’ praise and approval by caring for her younger sibling. Her ambivalence towards her sister is evident when asked what she would do with a magical hat: “I’d make my sister disappear, then pull her back out of it, then vanish her again, then bring her back.” Girl A thinks fathers “should give you lots of love and presents, and *keep you safe*.”

Girl A had difficulty terminating the process and asked to continue. During the final session, Girl A began to express anger towards her sister. She consented to the researcher giving feedback to her parents, stating that even though she tells her father about the sessions, “he doesn’t listen”. The researcher informed Girl A’s mother of her findings, who agreed that Girl A may “come off second best” at times. It was recommended that Girl A receive further therapy.

4.2.3.6 Girl B: Parent interview

Girl B is an anxious ten year old. She lives with her mother, father and two younger brothers. Her maternal grandmother is staying with them while she receives chemotherapy for breast cancer. Girl B was a planned pregnancy and there were no complications until the birth, when an emergency Caesarian was performed because the baby went into distress due to “cephalic pelvic disproportion”. Girl B’s mother was terribly disappointed that the birth was not natural. Her husband took a long time to adjust to the new baby and struggled to “share time” with his wife. Girl B’s development was normal apart from asthma and a few respiratory infections. From the ages of three to six years, Girl B’s father was a gambler and was never home. This affected her badly. Girl B’s mother left her husband early in 2000 and moved to a new home with her children. In July 2001, Girl B’s father moved back into their home but soon the family lost everything as a result of his gambling. Girl B was traumatised by the loss of the home and frequently asked her mother about the house. Girl B has “always been aware” of her father’s gambling problems and has a “difficult relationship” with him. They fight a lot and girl B tends to “punish him” when he works long hours and is away from home. Girl B was diagnosed with ADHD by a psychologist in November 2002 and was put onto Ritalin. She is aware of her diagnosis. She was screened for trauma during the diagnosis and referred for play therapy, which she had for a year. There was a great improvement in her behaviour during this time. In managing the ADHD, Ritalin is important and Girl B’s mother feels she needs to be “more calm and understanding”.

Girl B “does not like sleeping” and there are always battles at bedtime. She is an “over-achiever” and has to be first in everything, although hates homework and written tasks. They are a constant cause of conflict between mother and

daughter. She is “extremely competitive” and determined. There is a lot of jealousy and sibling rivalry between Girl B and her brother S. Girl B’s mother believes this is because S was a sickly baby and received a lot of her time and attention, often at the expense of the other children. She says that Girl B “manipulates and brings him down” all the time.

Girl B’s mother says that Girl B is not able to express her needs, thoughts and feelings verbally. Instead, she becomes angry, argumentative, “stirs trouble in the family, upsets everyone” and is sometimes “uncontrollable”. Her behaviour is worse if there is stress in the home. The family generally do not express emotions or talk about problems. Girl B copes with stress by becoming angry and badly behaved, but if presented with a challenge she will not back down until she succeeds. Girl B’s teacher finds her caring and thoughtful of others but a bit of a loner. She appears to be confident but is sometimes quite insecure. Girl B’s mother believes her husband has undiagnosed ADHD. There is a family history of learning difficulties.

- Play therapy sessions

In the graphic family portrayal, Girl B described herself as “worried” – about school and about her dog getting out into the street and “something happening to him”. This was to be a concern that she expressed almost obsessively in every session, and related her many requests to the gardener to secure the gate. In the final session she excitedly told the researcher that her dog had run away. The researcher remarked that Girl B was taking it very well, and was told that “I am so relieved he is gone! Now I don’t have to worry about him getting out anymore! I am free!”

It appears that only the domestic worker in Girl B’s family is happy. Her parents are “stressed” and her brothers are “grumpy” and “irritable”. Girl B described the

constant conflict between herself and her brother S, as mentioned by her mother, but could not explain the reason for it. She drew her mother on the opposite end of the page from herself. Girl B spends most of her time with her youngest brother and the animals, and believes she needs to take care of them. She did not connect herself graphically to either of her parents. Her father "works late".

Girl B was articulate and able to describe emotions and how they feel in her body. She could match emotions with triggers and describe their intensity. She was less sure of how to express emotions and did not mention talking to someone as an option. She believes crying does not help one to feel better, and screaming into a pillow releases angry feelings. Girl B chose "worry" for the brown stick, and described anxiety in great detail. When worried, she tries to "think about something else" but this is not often successful. Girl B described an incident in which she jammed her brother's fingers in a door and has hated the sight of blood ever since. This incident was related twice more in the course of the research process, leading the researcher to speculate about Girl B's fixation on the incident. As it was her brother S's fingers, was it done on purpose? In a moment of anger? Is she feeling guilty about it? When relating emotional incidents, Girl B spoke objectively and did not show her feelings. Girl B said "me and my mom both bottle our feelings up". This indicates low-level emotional functioning and resistance towards talking about painful experiences (Blom, 2004:61, 95).

During the sensory awareness activity, a book of matches reminded Girl B of a time she got burnt at a braai and another time when trying to boil water for her hot water bottle. She treated the burn herself and hid it from her parents until the next day because "they would have been angry". She had tried to boil the

water herself because “nobody else would have done it for me”. Most of the objects evoked memories for Girl B, and she also had many stories to tell related to the sweet, salty, sour and bitter foods. The medicine container reminded her of her gran’s illness and also of her Ritalin, which helps her to write neatly, remember things and “be calmer”. When daydreaming, Girl B is “worrying that bad things might happen.” She “gets these feelings” when she knows something bad is going to happen and feels dread until it does. Such feelings of dread are characteristic of anxiety and trauma (Lewis, 1999:20). Occasionally the feelings are positive, like when she won a Bingo game because she knew she had to choose the winning number. On the walk, Girl B was distracted and concerned that she would be late getting back to class if she didn’t hear the bell.

Girl B arrived a few minutes late for the fourth session and was visibly anxious. She said she was afraid that she would be in trouble. While completing unfinished sentences, Girl B struggled to answer questions about herself and left many out. Her greatest worry was that her dog would escape and she is afraid of getting hurt or sick. Nothing annoys her as much as her brother. When she came to a sentence that begins “I wish I could tell my mom…” she asked if we could stop the activity because she was finding it too difficult. This is indicative of resistance as a form of protection against pain (Blom, 2004:61).

In the sandtray, Girl B created a very elaborate “sacred garden”. She worked slowly and methodically, choosing items from nature such as birds, animals, rocks, gemstones and feathers. A treasure chest of “saved money”, protected by a gate, stood in the centre of the garden. The gate was there in case there was burglary, “but nobody is afraid”. There were three “sisters” in the scene and a mother who was cooking outdoors. The father was “away at work”. One child

was placed close to the mother and the others were far away “on adventures”. The family loves nature “just like us”. Significantly, Girl B said, “None of them are jealous of each other. They all have their time with mom.” They all live harmoniously in the garden, although the sisters fight sometimes. The mom and the sisters miss the father very much and would like more time with him. The best thing would be to go on holiday with him. Girl B showed some resistance in owning the projection, and did not want to discuss the children’s fights or who the child closest to the mother might have been. The researcher felt that the idyllic garden represented some of Girl B’s wishes – a safe, secure place where everyone is happy and where there is no sibling rivalry.

In the week before the sixth session, Girl B, her brother S and her mother were involved in a car accident caused by a drunk driver. Her brother S was thrown from the car. Girl B said she knew it was going to happen. She spoke in the same emotionless way about the accident and how her brother had to receive twenty-five stitches. She did not look at him because she “hates blood”.

During the final session, Girl B was reluctant to terminate. She found “questions about me” the most difficult to answer. She didn’t think there was anything her mother needed to know, although the researcher did suggest that Girl B receive further therapy to help her deal with family issues such as sibling rivalry, the expression of emotion and to address her high levels of anxiety.

4.2.3.7 Girl C: Parent interview

Girl C is a good-natured, articulate, philosophical ten year old. She lives with her mother, father, older brother and younger brother. Both parents work long hours, but her father is at home more, except for when he is away on business. He is often away for months at a time. Girl C was not a planned pregnancy and

her mother “went through hell”. She was nauseous and itchy all the time – due to stress, she believes. The birth progressed normally though and she went home an hour after delivery. Unfortunately, Girl C became very ill after seven days and had to return to hospital for a course of very strong antibiotics. The cause of her illness was unkown. She “did not grow well” for the following six months and was placed in the care of a day-mother at eight months.

At the age of six, the family (living in northern Africa at the time) went through a time of severe stress when the youngest child was born with cystic fibrosis (CF). He required a lot of attention, which upset Girl C. Her mother’s response to this was that “life isn’t fair – get used to it.” Four months into her first year of school, Girl C was sent to South Africa to stay with her grandparents and start again at a new school. Her Grade 1 teacher became her “surrogate mom” until her parents arrived three months later. Girl C’s concentration was poor, her schoolwork was erratic and she struggled with reading. This led to a diagnosis of ADHD by a “neurocognitive specialist” a few months later. She was put onto Ritalin, which made her aggressive, and her mother discontinued it. Girl C is aware of her diagnosis – “you can’t keep anything from her.” She was not screened for trauma, but had a few sessions of counselling at school. She has had occupational therapy and receives remedial assistance at school.

There is a family history of depression, allergies and learning difficulties. Emotions are not freely discussed. Girl C’s older brother has also been diagnosed with ADHD and their father “probably also has it because he did not excel at school either.”

In managing Girl C’s ADHD, her mother says she needs “structure and routine, which she doesn’t get”. She believes that ADHD is “not a disease, it is a

condition of the modern child – of them not having their needs met." She states that Girl C is very perceptive and sensitive to her mother's moods, especially when the family is stressed. Girl C "goes into denial" and "tunes out" when faced with challenges. She tends to keep her feelings to herself or expresses them by becoming physically aggressive towards her brothers. Girl C struggles to sleep at night, saying she feels "abandoned". During the interview, Girl C's mother kept wanting to discuss her sons and had to be brought back to the topic of her daughter. Girl C's teacher is very concerned about her lack of progress. She states that Girl C is very weak academically and struggles to concentrate. Her self-esteem is low and she does not make friends easily. She fears that, without medication, Girl C is heading towards disaster.

- Play therapy sessions

Girl C has an advanced vocabulary and gives the impression of being an adult in a child's body, for example, saying "I just love Mozart". She was distractible during the sessions and had to be brought back to the present often. During the graphic family portrayal, she drew her brothers on either side of her and her parents on the far right of the page. She described herself as "happy and frustrated" and said she loves fishing. Her little brother is "sweet, but he has CF and wants his own way". There is conflict between Girl C and her older brother, who is "jumpy and annoys me. He's not happy or sad, he's hard to describe". Her mother is "sometimes upset" and works hard, spending most of her time with "her colleagues". Her father also loves fishing and is home most afternoons, unless he is away on a trip. These long trips are a source of great despair for Girl C.

Girl C did not connect herself graphically to her mother, but attached herself to her brothers, her father and the family pets. She especially loves the two dogs,

and spends much time playing with them, stating that “dogs are always happy to see you”. Girl C was very concerned that a rabbit at school was not being cared for properly, and is overly concerned about her rabbit at home escaping. She was also caring for a baby bird, feeding it with an eye-dropper at regular intervals.

Girl C was easily able to identify and describe feelings, including how they manifest in her body. She was good at picking up non-verbal cues and emotional triggers. She was most familiar with sad feelings and detailed how sadness affects your body: “It makes you sigh a lot”. She believes that crying releases sad feelings and that the best way to deal with feelings is to talk to someone about them, provided “someone is around”. Girl C feels that at home nobody listens to her feelings and she feels “sad, lost and lonely” because her brothers get “all the attention”. She considered calling a family meeting, but decided it wouldn’t work, and concluded “I’m a kind of orphan”.
During the sensory awareness activity, Girl C was descriptive, guessed quickly and accurately described all the objects. Some evoked happy memories for her but she quickly became bored and asked if we could “just have a party” and eat the food! On the walk, she became distracted by her own thoughts and lost contact with her environment.

Girl C’s biggest fear is that her little brother will die. She often cares for his physical needs and even changes his nappy. She worries about him falling into the deep end of the pool “because that’s where I can’t stand”. Another fear she has about life is “getting married – I’d rather live in a little cottage by myself and have lots of animals”. Her wish is that “my dad could be with me all the time” because he makes her feel loved and she can talk to him about her feelings. She feels he is “extinct – like tigers. I would like to bring them both back”. She

would also like to tell her mother to give up work “so she can be with her children”. When things get too difficult, Girl C “needs to punch something”. When she is daydreaming at school, she is “pining for my dad”.

Girl C created a messy sand scene where the focus was on separation. She buried a treasure chest under a “mound” on which birds liked to feed. She also sprinkled tiny shells over the sand and buried them. A herd of black adult elephants walked passed a “coffee shop” of vases, where “people like my mum” have coffee. One of these adult elephants was missing. There was a dungeon where naughty children and non-paying customers were imprisoned. A little doll and a bible were also buried in the sand. A small, pink elephant was “separated from his herd” by the coffee shop. “Friends” (other dolls) were playing with an “abandoned puppy” which had been rejected at birth. The missing “father elephant” was spotted by the pink elephant and brought back to the herd by the mother and brother elephants, who stampeded the coffee shop in the process. A little girl found the buried doll and she was reunited with the other dolls. The elephant herd adopted the puppy and the pink elephant. The researcher noted that although the pink elephant spotted the father, it was the mother and brother who brought him back. Also, the “coffee shop” seemed to be the cause of the separations and the researcher wondered if Girl C blames her mother for the situation.

Girl C owned the projection by identifying with the “*abandoned from birth*” puppy and the lost pink elephant, but said “at least I have a family”. She said “I just carry on my day and try not to think about it”. She believes her father is separated from the family like the missing elephant, while she (the pink elephant) looks out for his return. Girl C also yearns to “be found” by her family, like the doll. Although her mother tries to compensate for her father’s absences,

it is her father who “talks to me when I am lonely”. Girl C agreed there was hope in her scene because everyone was eventually found, and “even the tiniest shells were recovered”.

Girl C was reluctant to terminate. What she liked most about the sessions was “being allowed to say things I shouldn’t say”. She did not like the incomplete sentences about herself. She learnt that she can tell her father how much she needs him and express her sad feelings about his absences. She agreed to allow the researcher to tell her parents that she feels “neglected and abandoned” and that she longs for more time with them. She would dearly love to go on a fishing trip with her dad - “only us two”. This information was fed back to her parents, as well as the recommendation that Girl C have further therapy and another ADHD assessment with a review of medication.

4.2.3.8 Girl D: Parent interview

Girl D is a quiet, shy and nervous ten year old. She lives with her mother, father, older sister and younger sister. Both parents are self-employed and work from home. The pregnancy was not planned, and the birth was induced four weeks early due to pre-eclampsia and high blood pressure, however, Girl D’s mother was not emotionally stressed. The labour and birth were quick and easy and there were no post-natal difficulties. Both parents adjusted “well” to the new baby. Girl D was six months late in reaching her milestones. She had speech therapy at age five.

Girl D’s mother states that Girl D has been anxious and “highly strung” since birth. She “makes herself upset” by worrying about all eventualities, for example, stressing about what might go wrong way ahead of time or worrying that there will be a car accident. She also hates any kind of change and being

taken unawares. She was diagnosed with ADHD (inattentive type) in Grade 3 by a neuropediatric specialist and takes Ritalin which “helps her to be calm and listen to instructions” but the anxiety is still present. She is aware of the diagnosis. She was screened for trauma during the assessment and “had play therapy in speech therapy”. Girl D’s mother says that Girl D is worrying when she is daydreaming, and is constantly planning ahead. She even worries about seemingly ridiculous things, such as walking upstairs at school. She has low self-esteem and battles to make friends. Girl D’s teacher states that Girl D is a well-mannered, diligent learner but is extremely anxious. She receives remedial assistance.

Girl D’s mother believes that her husband has ADHD because he was a “rebellious teen” until “the army sorted him out”. His father left him when he was thirteen. There is a family history of “neurotic behaviour”.

- Play therapy sessions

Girl D was initially nervous about the process and the researcher had to reassure her that it was not a test. In the graphic family portrayal, she described herself as mostly happy, but worried when she loses something and worried about “what might happen”. She drew herself at the opposite end of the page to her parents, and did not connect herself graphically to anyone other than her little sister. None of the children were connected to the parents. Her father was described as “worried” and her mother as “grumpy”. She gets along best with her younger sister. Her older sister is “bossy”.

Girl D was able to identify and describe different emotions and possible triggers of emotions, but kept the discussion in the third person. She could understand non-verbal expressions of feelings but could only describe the physical

sensations of “worry”. She was also unsure how people express emotion, but thought that “people daydream when they’re sad”. She stated that people “get angry when their brothers pull their hair”. Reading a book helps anger and nothing much helps worry. As mentioned earlier, anxiety is a feature of loss and trauma (Lewis, 1999:14, 20).

During the sensory awareness activity, Girl D was not very observant and did not notice all sounds and sights around her. During the guessing game she was uncomfortable with closing her eyes (which is a sign of mistrust), and her descriptions of objects were superficial, basic and sometimes incorrect. Girl D thought that ADHD was a “blood sample” but said that Ritalin “helps me a lot. I don’t get hyper and silly and I don’t daydream”.

Girl D’s incomplete sentences reflected her great difficulty in discussing anything emotional. She purposely kept her answers superficial and used humour to deflect from possibly threatening topics, for example “I wish I could tell my mom…I really like chocolate” and “My greatest worry is…having no chocolate”. Deflection is a means of avoiding emotional pain (Blom, 2004:27).

Girl D hastily created a sand scene that was only two dimensional. With her finger, she drew a face in the sand and used her ten miniatures (no people or animals) as hair around the face. She told a sad story about the girl in the sand, who was on holiday with a friend. Her parents don’t miss her and she doesn’t miss them. She doesn’t miss her sisters because they sometimes fight a lot. They fight when one of them “gets more than the others”. They also fight about who will get to play with dad in the pool. Their mom and dad work a lot and dad is often late. Even when they’re at home the children have to stay in their rooms so as not to bother them. The girls “miss their parents” and would like to do

more “fun things” with them. Girl D often said “we” instead of “they”, and after many similarities were noted between the “sand girl” and Girl D, the researcher suggested they were much alike. Girl D shook her head and refused to own the projection. She stated that it is actually her little sister who feels like the sand girl, and asked if she could leave a little early so as not to be late for her next class.

During the Maze Journey game, Girl D was asked to complete “My family is different because…” and she replied “because of my father”. When probed to elaborate, she said “because he laughs funny”. When asked what she would bring back into her life, she again used “chocolate” to avoid an emotional answer. She feels safest “at school with my sister” and her worst fear is “stepping in mud”.

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Girl D chose not to attend the final termination session, saying there was “too much to do for my teacher”. Girl D displayed resistance throughout the process, which is indicative of a loss of contact and a need to protect herself against pain (Blom, 2004:37). The researcher believes that Girl D’s emotional life is impoverished, and recommended further therapy for Girl D, to help identify the root cause of her anxiety and to assist her with reaching emotional awareness and developing healthier coping skills.

4.2.4 Method of Data Analysis

As described in Chapter One, the researcher followed Cresswell’s model and moved in analytical circles rather than in a linear method. She also made use of methods discussed by Neumann (1997:421-433). The “steps” followed were:

1. Collecting and recording data: The researcher planned for collecting and recording data in a systematic manner and detailed process notes were

written after each interview and play therapy session. Observations were recorded. Data was kept intact, organized and accessible.

2. Managing data: This stage involved organizing the data (background information, process notes, drawings and other paperwork) into files, one for each child. Notes were also kept on computer files. The researcher's transcription, done with the literature review of previous data, formed an important part of data analysis.
3. Reading, memoing: The process notes were read in their entirety several times in order to get a sense of the interviews as a whole before breaking them into parts (De Vos, 2002b:343). "Open coding" was used to look for critical terms, key events and themes arising from concepts in the literature. (Neumann, 1997:422). The researcher also looked out for new and unexpected categories. "Axial coding" was used to review and examine initial codes, looking for categories or concepts that are clustered together and dividing them into subcategories (Neumann, 1997:423). In addition, it reinforces the links between evidence and theoretical concepts. Memos written in margins are short phrases or key concepts that occurred to the researcher. The "analytic memo" is a memo or discussion of thoughts and ideas about the coding process that the researcher wrote to herself (Neumann, 1997:425).
4. Describing, classifying, interpreting: This stage represents the heart of qualitative data analysis and demands a heightened awareness of the data (De Vos, 2002b:344). This is where themes, sub-themes, contexts, underlying meanings, patterns and recurring ideas are identified. This is also an essential part of the play therapy process. "Selective coding" was used once the researcher began to organize the overall analysis around several core ideas (Neumann, 1997:424). These major themes or concepts guided the researcher's search, which included looking for

similarities and contrasts. Interpretation involves making sense of the data and may be based on hunches or insights. In the play therapy process, the therapist always "tests" these insights with the child, and this fits with the researcher's "search for other plausible explanations for these data and the linkages between them" (De Vos, 2002b:344). As in the case of play therapy, the researcher also looked for what is missing – the importance of negative evidence (Neumann, 1997:435). The literature review was the guiding framework for the identification of themes, meanings and contexts. These were colour-coded in the transcripts, and separate analytic memos were kept for each theme.

5. Representing, visualising: The data in this study is presented in text form, with the use of quotes (De Vos, 2002b:344).

4.3 FINDINGS AND INTERPRETATION

The following themes, sub-themes, underlying meanings and recurring ideas were identified:

4.3.1 Family history

Approximately 80% of children with ADHD have a parent or close relative with ADHD but it is difficult to control for environmental factors that family members share and that may influence the development of ADHD behaviours (Cooper & Bilton, 1999:7). There was a family history of possible ADHD in seven of the families. In six of the families there was a history of depression or "emotional problems" and of difficulty in expressing emotions. Approximately 50% of children with ADHD suffer some specific weakness in learning (Venter *et al*.,

2003:8). A family history of learning difficulties was noted in three of the families.

4.3.2 Traumatic experiences

Traumatic birth or illness close to birth may be responsible for interfering with normal brain development (Coleman, 2002:1; Venter *et al*., 2003:5). The researcher is of the opinion that traumatic experiences before birth (in vitro), during birth and after birth may also lead to disruptions in brain circuitry and imbalance in neurotransmitters. For this reason, the possibility was explored in the study.

4.3.2.1 *Before birth*

- Four pregnancies were planned; four were unplanned.
- Six mothers were emotionally stressed during the pregnancy.
- Four mothers suffered complications during the pregnancy.

4.3.2.2 *During birth*

- Four mothers had Caesarian sections; three of these were emergency procedures.
- Five mothers described the birth as traumatic - all five births were hastened due to health risks for mother and baby.
- Six mothers described difficulties bonding with the new baby. According to Venter (2003) there is evidence that a lack of bonding/attachment at birth can be linked with the early development of ADHD. Chronic stress and lack of attunement and soothing can cause permanent alterations to occur in neurotransmitter receptors (Brink, 2006:9).

4.3.2.3 *After birth, before ADHD diagnosis*

- Seven children experienced marital conflict, domestic violence and/or parental stress in the home, whether or not it resulted in divorce. Three of these children experienced their parents' separation and/or divorce. Conflict and violence within the home, as well as divorce, are traumatic for a child (Lewis, 1999:2).
- One of the children was separated from her parents for three months.
- One of the children experienced his mother's mood disorder.

4.3.3 ADHD assessment

- Two children were diagnosed by psychiatrists; two by psychologists; one by a "neurocognitive expert"; one by a neurologist; one by a paediatrician; one unknown.
- Five children were *not* screened for emotional trauma; three were. This confirms the researcher's view that environmental factors and the social context are often ignored in the diagnosis and treatment of ADHD. A thorough and comprehensive evaluation of contributing factors is required (Coleman, 2002:6-9).
- Ritalin was prescribed in all cases, even though research shows that medication alone neither improves nor worsens outcomes (Diller, 1999:215). One parent believes it does not work. Two children were not on medication at the time of the study.
- One child was referred for play therapy at the time of diagnosis.
- No alternative methods of treatment were presented to parents, even though treatment models should include assessments by other professionals and other strategies such as psycho-education, behavioural interventions, parent counselling, psychotherapy (including play therapy) and social skills training (Austin, 2003:289; Brink, 2003:43; Cooper & Bilton, 1999:69; Diller, 1999:217).
- In managing their child's ADHD, seven parents believe that medication is the answer. Three parents believe structure and routine helps, one of these also

mentioned diet; two parents believe their child needs “quality time” with them, but admit this isn’t always possible.

4.3.4 Children’s thoughts on ADHD

None of the children had a clear or accurate idea of what ADHD is and described it in terms of their bad behaviour such as being naughty or silly. Boy B seemed to be ashamed of having ADHD. This lack of understanding suggests poor communication between children and their parents regarding the true nature of ADHD, and is a further indication of a weakness in the parent/child relationship.

Seven out of eight children believe that their Ritalin helps them. Out of seven children, two did not know what they think about while “daydreaming” while five described thoughts of sadness, longing and anxiety while daydreaming.

4.3.5 Sense of Self

All the children, except for Boy A, did not like the “Incomplete Sentences” activity and expressed difficulty in answering questions about themselves. They appeared to have a poor knowledge of themselves and struggled to make assertive statements about their likes and dislikes. Two children described their emotions in terms of how *others* were feeling.

Only three out of seven children fully owned all their projections and feelings; four children could not fully own their sandtray projections. Only two children displayed a noticeable sense of humour. Poor self-knowledge, inability to own projections, restricted sense of humour and disconnection from own emotions indicate a fragmented sense of self, low-level emotional awareness and possibly trauma (Blom, 2004:95,117, 121).

All the children displayed low self-esteem and were uncertain of themselves. While low self-esteem and feelings of inferiority are problems of ADHD (Green & Chee, 1997:27, 35; Venter *et al*., 2003:10), the researcher believes that children who are not being validated by their parents, the people who are supposed to love and accept them unconditionally, will always struggle with self-worth.

Five of the children can be described as overly anxious to please and sensitive to rejection. The researcher reminds the reader that compliance, a fragile sense of self and loss of confidence are also responses to post-traumatic stress (Perry *et al.,* 1996:8; see Chapter Three).

Four children were sensorially very alert to their surroundings; four children were sensorially "shut-off". This could be explained as "hyperarousal/hypervigilance", characteristic of survival-oriented behaviour (Jensen, 1998:56), and "numbing" – both of which are post-traumatic stress responses (Friedman, 2003:9; Thomas, 1995:315; Blom, 2004:99). Related to this, the researcher speculates about the sensory defensiveness experienced by many children with ADHD (Venter, 2003). Children who are traumatised can become "shut-off" as protection from pain, but perhaps some children become hypersensitive to sensation. Since body and emotion are linked, children who have lost contact with their bodies also experience problems with emotional contact-making (Blom, 2004:101; Brink, 2006:8).

4.3.6 Relationships

4.3.6.1 *With mother*: all the children perceived their mothers as separated from themselves, emotionally and/or physically. Apart from Boy A, who believes his

mother is only physically separated from him, the children did not perceive their mothers as being responsive to their emotional needs. Even though mothers were aware of their children's inability to express their emotions, they were unable or unwilling to amend the situation. Some children appeared to avoid their mothers, and the researcher wondered whether this was linked to them experiencing their relationships with their mothers rejecting and therefore traumatic. Only three children wanted more time with their mothers. This is discussed further in 4.3.9.

4.3.6.2 *With father*: Apart from Boy A (who lives with his father and not his mother), all children perceived their fathers as separate from the family and expressed longing for him. Father figures were missing in all the sandtray projections, except for Boy C's father who was represented as weak and immobile. This is also discussed further in 4.3.9.

4.3.6.3 *With siblings*: relationships with siblings were portrayed as close or filled with rivalry and jealousy, or a combination of both. Where there was rivalry, it was related to the child with ADHD perceiving the sibling as getting most of their parents' attention. This is contrary to the opinion of Green & Chee (1997:78) who state that it is the child with ADHD who is envied for receiving more time and attention from parents.

There was a sense of assuming responsibility for younger siblings, sometimes to a degree that was of concern to the researcher. As with pets (see 4.3.6.6), the researcher felt that these children were seeking nurturance by nurturing and in at least one case, gaining parental approval by caring for a "favoured" sibling.

4.3.6.4 *With teachers*: none of the children described a close relationship with a teacher, which highlights the absence of yet another vital support system. The teachers of five children said they are manageable if on Ritalin, otherwise not. Seven of the children expressed anxiety around schoolwork, and are anxious to please their teachers. Problems meeting the demands of school are a feature of ADHD (Green & Chee, 1997:26, 32, 42; Venter *et al*., 2003:5, 8; Trueit, 2004:41), but these were not the main focus of the respondents' anxiety.

4.3.6.5 *With peers*: all the children have difficulty making and sustaining friendships. There is a sense of being different from their peers and of being left out. Although this is a feature of ADHD (Green & Chee, 1997:31, 35), it highlights another area in which there is a lack of support.

4.3.6.6 *With pets*: Five of the children described close emotional ties with family pets or fondness for wild animals. The researcher believes this is because children can identify with animals, which are also dependent and vulnerable, but also because pets provide acceptance, acknowledgement, recognition and unconditional love. In three cases, the children assumed total responsibility for the nurturance and physical welfare of the pets, which the researcher related to Arluke's (2001:70) conclusion that children who supernurture animals are attempting to replace affection and nurturing that they themselves are lacking.

4.3.6.7 *With domestic workers*: Of the six children who have domestic workers in their families, four of them described the relationship as close, loving and maternal. These relationships did not, however, seem to compensate much (in the children's minds) for the inadequate relationships with parents.

4.3.6.8 *Absence of other significant relationships*: none of the children mentioned significant relationships with grandparents, other family members or adult friends. This may suggest a lack of other possibly supportive, nurturing relationships.

4.3.7 Inappropriate sense of responsibility

Six of the children displayed an overly-developed sense of responsibility towards a younger sibling. The researcher wonders to what extent the younger siblings benefit from the nurturance and care of the older sibling with ADHD, and if this nurturance "spares" the younger child from suffering the same lack of safety and security experienced by the older child.

Six children felt overly responsible for themselves, for example, that they need to solve problems on their own and maintain high standards. This is related to anxiety and perception of safety and security, discussed in following sections.

Five children felt responsible for the wellbeing of their family as a whole. Responsibility for the welfare of pets was discussed in the previous section.

4.3.8 Anxiety

All the children experience anxiety, either about schoolwork, their competence in various areas; their perceived responsibilities (see 4.3.7) and/or their own behaviour. At least three children have difficulties with sleep, which is an indicator of trauma (Lewis, 1999:20, 29), as is bed-wetting (Brohl, 1996:9).

All the children experience fearfulness and anxiety relating to anticipation of disaster or "bad things happening", and the need to "plan ahead" in order to

prevent bad things from happening or to be prepared in case they do happen. Anxiety and fearfulness is closely related to lack of safety and security, and is a feature of post-traumatic stress responses (Lewis, 1999:14, 20).

4.3.9 Lack of safety and security

4.3.9.1 *Parents not perceived as available and responsive*

Thomas (2000:421) states that "the mere knowledge that an attachment figure is available and responsive provides a strong and pervasive feeling of security". Van der Kolk states that "emotional attachment is essential for survival" (Van der Kolk, 1987:31; 2005:376). Conversely, unavailable and unresponsive attachment figures can result in children feeling abandoned and insecure. As discussed in 4.3.6, the respondents generally portrayed their mothers as emotionally unavailable and their fathers as physically unavailable. Good parenting requires providing the child with a sense of containment and involves receptivity and response to the child's needs and emotions (Brink, 2005:6, 8).

There is a deep, suppressed longing for the parent who provides emotional nurturance and fulfils the need for recognition, self-worth, love and support. In seven cases, the longing was for the children's fathers. In three cases, children expressed longing for both parents. In Boy A's case, the longing is for his physically-absent mother and he perceives his physically-present father as unresponsive. The researcher believes that the fathers in these cases are viewed as protectors, as mediators and as compensators for insecure relationships with mothers (Brink, 2005:8; Shaffer, 2002:403). This may also be the explanation for the notion that fathers, babysitters and grandparents cope better with ADHD (Coleman, 2002:9; Green & Chee, 1997:6). Note that suppressed longing is a feature of loss and also of post-traumatic stress responses (James, 1996:25; Blom, 2004:216). It appears that fathers who are "there but not there" cause the most pain and disappointment for children, as

opposed to divorced fathers who are absent except for weekends and who are not expected to be available at other times.

The reader is reminded that children who are not "rescued" from perceived threat by nurturing caregivers move through a dissociative continuum. One of these responses is numbing or protective distancing, of which inability to concentrate and daydreaming are examples (Perry *et al.,* 1996:8; James, 1996:26).

4.3.9.2 *Self-reliance in times of stress*:

All the children have a sense of having to cope with challenges and problems on their own, and feel unable to do so. This was corroborated by their parents who stated that their children do not cope well with challenges or stress. An experience that overwhelms a child's ability to cope is traumatic (Lewis, 1999:8).

Mistrust is a feature of loss and disturbs the very foundations of a child's development (James, 1996:25). Erikson stated that a mother's overall responsiveness to her child's needs fosters trust, whereas unresponsive or inconsistent caregiving breeds mistrust (Shaffer, 2002:390). Six children displayed lack of trust. Their parents' broken promises and unreliability were mentioned most. Boy A also did not trust his father to be truthful and honest. Lack of trust is related to anxiety, discussed in 4.3.8.

4.3.9.3 *Lack of open communication with parents:*

There was a lack of effective communication with children regarding ADHD – parents had not adequately discussed the causes, effects and management of the condition with their children.

When asked who they can speak to about their feelings, none of the children immediately named their parents. Little or no emotional feedback from parents results in feelings of isolation and loneliness. Six children experience feelings of being alone and lonely.

4.3.10 Inability to express thoughts and emotions

All the parents interviewed stated that emotional expression was not something that is easily engaged in within their families. Even when children had a good emotional vocabulary, good knowledge of emotions and good cognitive skills, they were unable to express their thoughts and feelings. Although seven parents were aware of this inability in their children, none of them appeared to be addressing the problem. The researcher believes that children need to feel safe and accepted before they will express their feelings. Only three children did so completely during the research sessions. Five children were resistant to emotional expression and are operating in Perls' first two layers of neurosis (Blom, 2004:35, 36). Three children moved into the third layer during the sandtray session, whereby they became aware of issues and wanted to take steps to address them.

Angry feelings were suppressed or expressed inappropriately. Oppositional behaviour, temper outbursts, irritation and aggression are indicators of loss and trauma (Brohl, 1996:9; Lewis, 1999:29; James, 1996:26; Blom, 2004:216).

There was lack of trust in the parent's ability to cope with their emotions and a need to protect parents from being overwhelmed by their strong feelings. Suppression of thoughts and feelings is cited by Lewis (1999:17, 20) as an indicator of trauma. There is also fear of rejection or punishment when

expressing angry and sad feelings. Emotional disconnection is a feature of loss (James, 1996:26).

4.3.11 Avoidance

Five out of seven children avoided emotional pain by not completely owning their projections. The eighth child avoided discussion by withdrawing from the study. All the children fear rejection and avoid situations where this is perceived to be likely, including expressing feelings.

Although all the children portrayed their mothers as emotionally distant, only three children expressed a desire to be closer to them. The researcher wonders whether the mothers are perceived as rejecting and are therefore avoided. This is reminiscent of Bowlby's disorganized (resistant-avoidant) phase of attachment in which infants are confused about approaching the mother and have difficulty reuniting with her (Pervin & John, 2001:150). Children can be influenced by the quality of their attachments for many years to come (Shaffer, 2002:405).

Avoidance of stimuli associated with trauma and emotional distance are also features of loss and of post-traumatic stress responses (Lewis, 1999:14; James, 1996:26).

4.4 SUMMARY

This chapter outlines the research methodology and presents the empirical data gathered during the qualitative research methods. Themes, sub-themes, underlying meanings and recurring ideas are discussed and interpreted according to gestalt play therapy assessment guidelines (Blom, 2004:71). Major themes that emerged include lack of perceived safety and security; inability to express thoughts and feelings; anxiety; suppressed longing and insecure

relationships with parents. Although children with ADHD experience problems in many areas, this study highlights deficiencies in their attachment relationships with their parents. Most of the children perceived their mothers as emotionally unresponsive, and were seeking time and affection from their physically-absent fathers. In one case, the roles were reversed. In another case, the death of the father resulted in depression. These unfulfilled needs result in children needing to be self-reliant, feeling alone in the world and experiencing high levels of anxiety and lack of trust in caregivers. The researcher believes that this state of being is traumatising for children who, in middle childhood, are still dependent on their parents for physical and emotional care. In addition, negative attachment experiences have a damaging effect on a child's nervous system and biochemistry (Brink, 2006:6). These emotional and biological effects can, according to the researcher, be grouped together and labelled ADHD.

CHAPTER FIVE
CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter concludes the research report by summarising the purpose, goals and objectives of the study and by answering the research question. Recommendations are made in accordance with the findings.

5.2 PURPOSE, GOAL AND OBJECTIVES OF THE STUDY

5.2.1 Purpose of research

The purpose of research is to expand knowledge, to explore and to gather information on a topic. The purpose is also to verify knowledge and to compare variables (Fouché, 2002a:107). The purpose of this research study was to investigate events and emotional experiences in the lives of children with ADHD, and to explore whether they suffered ongoing traumatic stress, especially related to loss of safety and security, before the symptoms of ADHD emerged.

Any fully scientific endeavour in social work should have at least one of three primary objectives: to explore, to describe or to explain. The broad objective of this study was *exploratory.* The aim of exploratory research is to gain insight into a situation, phenomenon, community or individual (Bless & Higson-Smith, 2000:44).

5.2.2 Goal of the study

The goal of social work research can be to expand or elaborate on theory, to develop theory or to develop solutions to problems. The words “aim” and

"goal" can be used interchangeably to refer to the "end towards which effort or ambition is directed" (Fouché, 2002a:107).

The goal of this study was to explore ADHD as a response to traumatic stress.

5.2.3 Objectives of the study

Objectives are the steps one has to take, one by one, realistically and within a time-span, in order to attain the "dream" of the aim.

The objectives of this study were:

- To describe "ADHD", "response", "traumatic stress" and "gestalt play therapy". This objective was fulfilled in Chapters Two and Three of the literature review, which are summarised below.
- To use gestalt play therapy techniques to investigate whether children diagnosed with ADHD suffered ongoing traumatic stress (in particular loss of safety and security) before receiving the diagnosis. This objective was fulfilled by conducting an empirical study, as outlined in Chapter Four.
- To investigate whether children with ADHD have trouble expressing thoughts and feelings. This objective was realised by conducting gestalt play therapy sessions with a sample of ADHD children, as discussed in Chapter Four, which is summarised below.
- To draw conclusions and make recommendations in order to promote awareness of the likelihood of traumatic stress in children with ADHD. Conclusions were reached throughout the research report and recommendations follow.

5.2.3.1 Summary of Chapter Two (ADHD)

In Chapter Two the researcher's goal was to describe the condition of ADHD in as balanced a way as possible, providing the reader with a good understanding of the symptoms, diagnostic criteria and procedures, methods of treatment, related disorders and the controversies surrounding the condition. A thorough and comprehensive evaluation is the most effective way of identifying the problems and is crucial in planning interventions. Although hyperactivity is the most visible manifestation of ADHD, inattention is perhaps more disabling. In the section on "Attention Deficit" the researcher delves deeper into the workings of the brain and the problems of "inattention", touching on the possible emotional factors contributing to this core feature of ADHD. In terms of gestalt therapy, we can speculate about inattention as a difficulty in the child being able to distinguish between foreground and background needs, resulting in self-dysregulation (Blom, 2004:12-14).

Looking at the middle childhood phase of development, we see that children go through major developmental transitions in the years between six and twelve, and it is exactly in these areas that ADHD can seriously inhibit the developmental process and cause damage that may have lifelong implications. Particularly at risk is the child's self-esteem because children with ADHD struggle to "fit in" to school and family life, appearing to be in constant conflict with their environment.

- Conclusion

Although ADHD has been around for decades, the medical world has still not reached consensus regarding certain aspects of ADHD. The exact cause is

unknown, the diagnostic process is largely subjective and various experts have differing opinions on aspects of the condition, such as when and how to prescribe stimulants and whether external or environmental factors influence the development and nature of ADHD. Even in their own writings, authors seem to contradict themselves by, for example, stating that bonding and attachment have nothing to do with ADHD, but then emphasising the vital importance of nurturance in the management thereof (Green & Chee, 1997:228, 58).

The researcher is of the opinion that emotions play a role in the condition and since feelings are registered biochemically (Brink, 2006:4), ADHD could be the result of unacknowledged, unexpressed and unresolved emotion. The researcher is of the opinion that investigation into ADHD should not only focus on cognitive, neurobiological and genetic aspects, but should also include the environmental context and the emotional world of the child.

- Recommendations

- Holistic diagnostic procedures for ADHD which take into account all dimensions of a child's development and functioning, not only cognitive, biological and behavioural dimensions, are needed.
- Stricter controls on which medical professionals are permitted to diagnose and treat the condition.
- Further training for mental health professionals in ADHD as a specialist field.

5.2.3.2 Summary of Chapter Three (Traumatic Stress)

Children who have been traumatised develop defensive reactions/responses, which if left untreated, can become traits. There is a

high degree of symptom overlap between the indicators of ADHD and those of trauma. While reviewing literature on responses to trauma and Post-Traumatic Stress Disorder, it becomes obvious that childhood trauma is not adequately described. The researcher uses the term “traumatic stress” to refer to ongoing childhood trauma which may be experienced unconsciously.

Children lack an adult’s capacity for abstract thinking and linguistic expression, and emotional trauma may be expressed behaviourally (Friedman, 2003:11; Brohl, 1996:13). The organizing, sensitive brain of an infant or young child is more malleable to experience than a mature brain (Perry *et al.*, 1996:5). While experience may alter the behaviour of an adult, experience literally provides the organizing framework for a child. The researcher is of the opinion that ADHD can be regarded as a combination of adaptive responses to traumatic stress, resulting when a child does not have an emotionally safe place in which to deal with frightening experiences. Bowlby’s attachment theory and Brink’s “good enough parenting” are discussed in this regard.

Gestalt play therapy offers psychological explanations for the features of ADHD, and provides a therapeutic framework for helping children with ADHD to cope with their thoughts, emotions and behaviour.

- Conclusion

A critical period exists during which sensory experience is required for optimal organisation and development of the brain. Some of the most powerful clinical examples of this phenomenon are related to lack of attachment experiences early in life. The researcher postulates that when there is an inadequate or non-existent attachment bond between parents

and child, resulting in the child not having a sense of being psychically “held” and contained, the child experiences a deeply ingrained, unconscious lack of safety and security. This experience leaves the child feeling “alone in the world”, which is continuously traumatic and therefore pervasively detrimental to his development. This is compounded by the climate of fear and uncertainty in South Africa. It manifests in the physiological (neurobiological), psychological, emotional, social, and behavioural symptoms of dysregulation in attention, impulsivity, hyperactivity and distractibility - the “syndrome” of ADHD. Within the features of ADHD are elements of complex PTSD as well as (mal)adaptive, defensive, “coping” strategies.

- Recommendations

- Treatment that focuses on the misbehaviours of ADHD may be inappropriate or even harmful for a child who is traumatised. For this reason, it is recommended that further research into the diagnostic categories of ADHD and childhood trauma be conducted, especially in the South African context. The DSM-IV criteria for PTSD need to be revised and amended in order to accurately define features of ongoing childhood trauma, especially unconscious traumatic stress suffered as a result of inadequate attachment bonds with nurturing caregivers. The absence of exposure to a sudden, specific “traumatic event” should not preclude trauma, and assessment methods need to account for this.
- Play therapy and family therapy are recommended for children with ADHD and their parents, not only to understand and cope with ADHD, but to address unresolved traumatic stress, particularly that arising from deficiencies in the parent/child bond.

5.2.3.3 Summary of Chapter Four (Empirical Study)

This chapter outlines the research methodology and presents the empirical data gathered utilizing qualitative research methods. Themes, sub-themes, underlying meanings and recurring ideas are discussed and interpreted according to gestalt play therapy assessment guidelines (Blom, 2004:71). Major themes that emerged include lack of perceived safety and security; inability to express thoughts and feelings; anxiety; suppressed longing and insecure relationships with parents. Although children with ADHD experience problems in many areas, this study highlights deficiencies in their attachment relationships with their parents. Most of the children perceived their mothers as emotionally unresponsive, and were seeking time and affection from their physically-absent fathers. In one case, the roles were reversed. In another case, the death of the father resulted in depression. These unfulfilled needs result in children needing to be self-reliant, feeling alone in the world and experiencing high levels of anxiety and lack of trust in caregivers.

- Conclusion

The researcher believes that circumstances such as those described above are traumatising for children who, in middle childhood, are still dependent on their parents for physical and emotional care. In addition, negative attachment experiences have a damaging effect on a child's nervous system and biochemistry (Brink, 2006:9). These emotional and biological effects can, according to the researcher, be grouped together and labelled ADHD.

Although various authors (such as Green & Chee, 1997:3) maintain that poor parenting is not a cause of ADHD, the researcher is of the opinion that it is not so much "poor" parenting as "not good enough" parenting which is a contributing factor in ADHD.

- Recommendations

- Children with ADHD and children who suffer from traumatic stress need assistance (play therapy) in bringing unfinished business to awareness, and in identifying and expressing thoughts and emotions.
- Further research needs to be conducted to compare the symptoms of children with ADHD who have suffered trauma with those who have not.
- Further research is required to explore whether children with ADHD can be "healed", both emotionally and neurobiologically, if they experience a sustained period of safety and security in the form of secure attachment to a nurturing, protective caregiver, and if they are able to accurately express their thoughts and emotions without fear of negative consequences.
- Further education is recommended for teachers, parents and health care professionals regarding lesser-known aspects of ADHD and childhood trauma.
- Cooper & Bilton (1999:53) list five essential needs for the child with ADHD. The researcher believes they apply to all children, including those suffering traumatic stress: The need for clearly specified rules, expectations and instructions; frequent, immediate and consistent feedback on behaviour *and emotions*; reasonable and meaningful consequences for both compliance and non-compliance; need for programming and adult intervention designed to compensate for distractibility, limited organisational skills and low frustration tolerance; well-integrated and functioning team of parents, teachers and clinicians who communicate often and work together to create a *structured, supportive and nurturing environment*.

5.3 THE RESEARCH QUESTION

In answering the question "What is the possibility that ADHD could be a response to traumatic stress?" the researcher believes there is enough

empirical evidence to answer that there is a strong possibility. At the very least, there is enough evidence suggesting an interaction between the two variables. This warrants further scientific investigation.

5.4 CONCLUDING REMARKS

ADHD describes children who are impulsive, inattentive, hyperactive (not in all cases) and distractible (Venter, 2003). A diagnosis of ADHD is currently made according to the criteria specified in the DSM-IV (Diagnostic Criteria from DSM-IV, 1994). According to Venter (2003) as well as White and Rouge (2003:289), the exact cause is unknown, but it is thought to be hereditary and the result of an imbalance of neurotransmitters.

When left untreated, ADHD has serious psychological and social consequences. ADHD is associated with many behavioural and academic problems. Many of the treatments, however, focus on reducing and modifying the problematic *behaviours* of ADHD, and very little attention is given to the psychological and emotional aspects (either as a cause or an effect) of this disorder.

When we examine trauma more closely, we discover that the neurobiology and symptoms of trauma are very closely related to those of ADHD. In addition, there is no adequate definition for ongoing traumatic stress in childhood, in particular that arising from a loss of safety and security. According to Abraham Maslow (in Meyer, Moore & Viljoen, 1997:439), the need for safety, security, stability, structure, limits and freedom from fear is second only to physiological needs, and children “react uninhibitedly when they feel unsafe.”

Loss of safety is not only a result of trauma but trauma also occurs when one loses the sense of having a safe place to retreat within or outside oneself to deal with frightening emotions or experiences. The researcher is of the opinion that the children in this study have lost their safe place of retreat. This is not only traumatising in itself, but predisposes children to further trauma.

The researcher concludes that the “Attention Deficit” in ADHD is better applied to the lack of attention paid by government to the safety and security of South African citizens especially children; the lack of attention paid by researchers and health care professionals working with ADHD to environmental as well as intrapersonal factors; to the lack of attention paid to the interaction of emotional and biological functions within the body and the mind, and the insufficient attention paid by adults to the emotional needs of children.

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