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## CHAPTER ONE

### GENERAL INTRODUCTION

#### 1.1 INTRODUCTION

The aim of this study was to develop and evaluate a play technique programme for autistic children in middle childhood. The play technique programme aimed to impact and improve the quality of life of autistic children. Autism is not considered a disease, but is defined as:

A developmental disorder of brain functioning, with three main symptoms: impaired social interaction, problems with verbal and non-verbal communication and imagination, and unusual or severely limited activities and interests (What is Autism? 2002).

Autism leads to lack in development in all areas of an individual's life. It normally appears during the first three years of childhood and continues throughout his/her life. It is considered treatable, but not curable.

According to Indystar.com (2005) autism is a "disorder that prevents children from interacting normally with other people and affects almost every aspect of their social and psychological development". The Autism Primer (2002) comments further that "individuals with autism have to painstakingly learn normal patterns of speech and communication and appropriate ways to relate to people, objects, and events, in a similar manner to those who have had a stroke".

According to the DSM-IV (in Exhorn, 2005: 10) autistic individuals show restricted repetitive and stereotyped patterns of behaviour, interests and activities. This will have an impact on the child's willingness or ability to learn, owing to his/her restricted behaviours and interests. According to Puterakembara (2005), outside of the triad of impairment, namely limited communication, limited social



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interaction and repetitive behaviours, autistic individuals may show the following additional features:

- Little or no eye contact;
- No real fear of dangers;
- Abnormalities in the development of cognitive skills;
- Odd responses to sensory input;
- Self-injurious behaviour; and/or
- Crying or laughing for no apparent reason.

Autistic individuals therefore have a great deal of difficulty in developing and maintaining contact with both themselves and those around them. Building relationships and managing emotions are considered to be challenging and an aspect that an autistic individual battles with throughout his/her life.

Play therapy can be used to “address specific problems and to facilitate positive developmental progress” (Why Play Therapy? 2003). Schoeman and Van der Merwe (1996: 3-5) consider play therapy to be the use of play to assist children in dealing with their particular problem/s. This involves the use of various play materials and techniques.

Axline (in What is Play Therapy? 2003a) defines play therapy as follows:

Play therapy is based upon the fact that play is the child’s natural medium of self-expression. It is an opportunity that is given to the child to “play out” his feelings and problems just as in certain types of adult therapy an individual “talks out” his difficulties.

Alfred Adler in What is Play Therapy (2003b) states that “Play is a child’s work and this is not a trivial pursuit”. This brings to one’s attention the importance of play for a child, and the great benefits of play therapy. Play presents an adult, and more specifically a therapist, with the opportunity to reach the child’s inner



world and bring about the necessary changes in order for the child to have a better quality of life. Carroll (Research Autism – Play Therapy, 2008) comments that “play therapy develops children’s natural ability to express themselves through play”. Lowery (Research Autism – Play Therapy, 2008) claims that “these children’s (autistic children) capacity to form relationships exists and develops in play therapy”.

Play techniques refer to the specific tools and medium of play that are used in play therapy.

This study aimed to explore the various play techniques that can be used with autistic children, in order to improve their social behaviour. How to use play therapy to treat autism (2008) stated that “play therapy can draw autistic children out and give them a way to express themselves, while learning important life skills”. The researcher attempted to draw conclusions and make recommendations that will assist all professionals and individuals involved with autistic children, in helping them to make contact with themselves and develop relationships with others. In this study the researcher adapted the identified play techniques so that they can be used by or involve parents or professionals who are not trained in play therapy.

The researcher is of the opinion that the rationale for a study such as this one can easily be explained. The field of autism, as can be seen in the above definitions and explanations, is a broad one that had received relatively little attention, particularly within a South African context, as Botha (2005) states.

On a professional level, a study of this nature will have a profound effect on both the social work and play therapy fields. Within a social work context, given the fact that autism appears to be sharply on the rise, as Gous (2005) comments, social workers are going to be exposed to autistic children and their families on a much larger scale. The Autism Primer (2002) notes: “Autism knows no



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boundaries, no nations, and no race”. This highlights the fact that social workers will come into contact with autistic children and adults, on an individual, group and community level. Autism is generally not a field that is covered during studies towards a social work degree and therefore can be considered a relatively new field for most social workers. Through a study like this, social workers will gain a better understanding of what autism is and have some guidelines on how to treat the disorder.

The same can be said for the play therapy field. This study will give insight into the use of play techniques with autistic children. The field of play therapy is also starting to deal with autistic children on a much larger scale, owing to the fact that autism is on the increase, as Botha (2005) notes. At this stage, information on how autistic children respond to the specific play techniques is limited. Through the research the various play techniques will be implemented and evaluated in order to make a researched, scientific analysis of the play techniques that can be used with autistic children.

This study will also have an effect on autistic children and their families, both within their own lives and on a national level. As Stacey (2002) states “...living with an autistic child is exceptionally hard”. This study aimed to give practical, everyday guidelines on how to assist in coping with the disorder. This was done through adapting the play techniques in order to allow for their use by the parents and/or teacher, who do not, in most cases, have the necessary training in play therapy. This, it is hoped, will give at least some support to parents and teachers of autistic children who live with and deal with the children as this support is not being given on a national level at this stage.

This chapter will therefore focus on problem formulation; the purpose, goals and objectives of the study; the hypothesis for the study; the research approach and procedure as well as the type of research, the research design and strategies; a



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discussion on the pilot study and the sampling method; ethical issues; definitions of the key concepts; and the contents of the research report.

## 1.2 PROBLEM FORMULATION

Autism is a challenging and ever increasing disorder. “Autism knows no boundaries, no nations, no race. It seems to be as much a part of us as love, and the common cold, as genius, as art” (Autism Primer, 2002). The researcher is in agreement with the above statement, believing that those affected by autism are becoming a larger part of the population and that society is now beginning to acknowledge this.

Wetherby and Prizant (2000: 1) state that autism has three core features, namely “impairments in social interaction, impairments in verbal and nonverbal communication, and restricted and repetitive patterns of behaviour”. This quotation highlights the great implications that the disorder has for the individual. In society individuals are constantly in contact with other people, having to be able to communicate effectively to succeed in getting what they want, and being pressured to fit into a typical mould or type of behaviour to be accepted. These everyday challenges for a person not battling with autism are great to overcome, but for an autistic individual they can be considered almost impossible.

Autism is a neurological disorder that is normally evident by the age of three, and affects a child’s “ability to communicate, understand language, play, and relate to others” (Autism and Pervasive Developmental Disorder Fact Sheet, 2002). However, according to Botha (2005) children above the age of three years are now being diagnosed with autism, with her son being one of the first in South Africa. Owing to this fact and various others, the number of individuals being diagnosed with autism appears to be increasing. This was verified by Gous (2005), who states that the occurrence of autism in South Africa at present is 1:158.



The researcher understands autism as being a dysfunction of the brain, which leads to the inability to interact on a social level, both through verbal and non-verbal communication. Again, social interaction is a behaviour that drives the human race, but this is not known to an autistic individual.

Williams (1996: 1) describes autism as “one bucket with several different jigsaws in it, all jumbled together and all missing a few pieces each but with a few extra pieces that didn’t belong to any of these jigsaws”. This statement shows the complexity and confusion of the disorder and the serious implications it has for the individual’s ability to cope with everyday life.

Stacey (2002) writes that:

Living with an autistic child is exceptionally hard. It does put a damper on your life. We are always tense as such when Michael (the autistic child) is around. Even when he is being good. You are tense because you don’t know what is going to happen next. Everything you do has to be planned, and thought through carefully, as to accommodate Michael.

Botha (2005) states that through living with an autistic child the whole family learns how to “live on the raw edge of fear”.

According to the Mind Institute (2005) the hallmark of autism is the “inability to interact socially”. A parent in this article stated:

I’ll never forget the day we went to see him at pre-school. You see all these kids playing together, doing all this social swinging and playing in the sandbox together, and there’s Chas (their autistic child) over in the corner spinning the wheels on his fire truck turned upside down. And it was at that point in time that it hit us...we’ve got a problem here.

The researcher is of the opinion that these statements, from parents of autistic children, show the great impact that autism has on the families who are living



with an autistic child. There is continuous stress owing to the fact that life is uncertain and ever changing. The challenges can be considered overwhelming and the support given to these families, namely the autistic child, his/her siblings and his/her parents, in South Africa, is limited.

Autistic children engage in unusual behaviour. Encyclopaedia article from Encarta (2002) explains that:

Autistic children often engage in repetitious activities, such as arranging objects in meaningless patterns, flipping a light switch on and off, or staring at rotating objects. Some engage in repetitious body movements, such as spinning, flapping their arms, swaying, rocking, snapping their fingers, and clapping or flapping their hands. In some cases these movements may be harmful, involving repeated biting of their wrists or banging their heads.

Autism Western Cape (2005) considers the following behaviour to be signs and symptoms of autism:

Displays indifference; resistance to change in routine; no fear of real danger; inappropriate laughing or giggling; lack of eye contact; inappropriate attachment to objects; destructive and aggressive at times; aloof; and difficulty with social relationships, verbal communication and non-verbal communication.

As noted, one of the most challenging aspects of autism is the inability to develop contact with self and with others, in forming meaningful relationships. Science News (2005) states that “families with a child with autism find themselves isolated from others, either because the parents are overwhelmed and too tired to do anything, or because they are worried or embarrassed by what their child may potentially do (or not do) in a social situation”. Angelfire (2002) explains that autistic children experience an “inability to relate themselves in an ordinary way to people and situations from the beginning of life, whenever possible



disregarding, ignoring and shutting out anything that comes to the child from outside”.

The researcher is of the opinion that the above quotations highlight the difficulties that parents, teachers and other professionals experience in dealing with autistic children face everyday. They are unable to interact with the child, and the child often does not even recognize them. They are also limited in the amount of help they can give the child, owing to a lack of understanding and support.

Kimmel (2005) states that one of the most challenging aspects of autism is the fact that the children are unable to communicate, on both a verbal or non-verbal level. This leads to a great deal of frustration for the child. Dancer (2005) agrees with this by stating that many of the children need different methods as a means of communication in order to reduce their frustration level and then the children, when exposed to the methods/techniques, become more involved and happier in their environment, communicate (nonverbally) more appropriately and become more expressive.

The autistic child is therefore almost an island, battling to interact or communicate with anyone around him/her. He/she is unable to get his/her feelings or needs across to anyone, particularly his/her parents or teachers, who are dealing with him/her everyday. Although there might be ways to assist in dealing with the autistic child, there is definitely a lack of support and information.

According to BambooWeb Dictionary (2005) there are various major comorbid disorders associated with autism. These may include:

Post-traumatic stress disorder, sensory integration disorder, anxiety disorder, panic disorder, social anxiety disorder, attention deficit hyperactivity disorder, obsessive-compulsive disorder, seizures, Tourette’s syndrome, and depression.



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Through the above information and through personal contact with autistic children, the researcher reached the following conclusions. Autistic children and their families are constantly faced with many challenges. The autistic child is often placed in a situation where he/she is required to interact with other people, while it is an activity for which he/she is not equipped. Autistic children are unable to make contact within themselves and this inability to have internal contact only compounds the difficulty of an autistic child in developing and maintaining social relationships with people around him/her. This leads to a great deal of difficulty for the parents, in trying to care for their autistic children. Autistic children are also faced with various other problems that could be seen in the above quotes, which adds a further challenge to coping with everyday life, for them as individuals and within their families.

The statistics on autism were varied, depending on the particular author or research that has been done. The researcher noticed the change in statistics over the past three years. On an international level, according to Encyclopaedia article in Encarta (2002), "autism affected two to five out of every 10,000 children". In an article in The International Child and Youth Care Network (2002) it was noted that autism ranges from around 40 to 90 per 10 000 births, although the true figures are still being investigated. In South Africa the statistics are limited, but Stacey (2002) mentioned that the "national body knows of approximately 1,000 people with autism, but statistically there must be over 25 thousand people affected".

The statistics have changed dramatically. According to Autism Western Cape (2005) "autism affects 1 in 158 South African children under the age of six years, with it being four times more prevalent in boys than in girls". According to the Autism Society of America (2005) "autism is the most common of the Pervasive Developmental Disorders, affecting an estimated 1 in 166 births". Science News (2005) agrees, stating that "1 in every 166 people is affected with autism.... the



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rate of people being diagnosed with autism has increased substantially over the past two decades”.

Stacey (2002) states that the most difficult thing to deal with was “accepting the fact that Michael will never get better, that this is a lifelong problem and worry”. Botha (2005) further comments on this, stating that “it is hard to believe that life is never going to just be normal”. According to Autism FAQ (2005):

The amount of supervision that autistic children require varies, but in general there is an extra burden on the parents which in many cases is severe. Providing the care and supervision can possibly require as much effort as would an additional full time job.

These three quotations, two from parents who have lived and are living with an autistic child, again highlights the extreme pressure and difficulties associated with raising and working with autistic children.

Gous (2005) states that there is limited support for both teachers and parents, and the parents are often unable to afford the limited support that is offered. The parents also often show a high level of denial, owing to a lack of understanding, and are therefore not interested in receiving the required support or education.

The researcher is of the opinion that this is a serious problem that is being faced by all individuals living with or affected by autism. There are a limited number of schools that cater specifically for autistic children and these schools are privately run and are therefore often under-funded. Then once the children reach 18 years of age there are very few aftercare facilities available to them and their families.

The focus of this study was therefore on developing and evaluating a play technique programme for autistic children in middle childhood, aiming to improve their social skills, in order to support parents and/or professionals who are dealing with autistic children. Through using such a programme the parents and/or professionals will hopefully be able to help the autistic child to become



more aware and make contact with his/her environment and to stimulate the child in reaching some of his/her developmental tasks. The programme will be adapted in order to allow parents and/or professionals to use it, without prior play therapy training. It will be practical and hopefully useful in managing the stresses of everyday life, through improving their child's social behaviour. Play, according to Axline (1974: 9), is a "child's natural medium of self-expression" and therefore the researcher considers play to be an appropriate medium in working with a child.

### **1.3 PURPOSE, GOAL AND OBJECTIVES OF STUDY**

#### **1.3.1 Purpose of the study**

This study is exploratory in nature. According to Bless and Higson-Smith (in Fouché, 2002a: 109), exploratory research is "conducted to gain insight into a situation, phenomenon, community or individual". Rubin and Babbie (2001: 247) define the aim of an exploratory study as being "to explore a new area about which little is known – in the hope of generating new insights and hypotheses that will be studied more".

This study can be considered exploratory because it intends to gain insight into a relatively new area namely the use of play techniques with autistic children.

#### **1.3.2 Goal of the study**

According to Fouché, (2002a: 107) a goal is "... the end towards which effort or ambition is directed". Rothman and Thomas (1994: 31) state that a goal refers to "the broad conditions or outcomes that are desired by the community of interest".

The goal of this study was **to develop and evaluate the effectiveness of a play technique programme to enhance the social behaviour of autistic children between the ages of six and 12 years.**



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### 1.3.3 Objectives of the study

Rubin and Babbie (2001: 111) comment that the objectives of a study should answer questions such as “What exactly do you want to study? Why is it worth studying? In what ways does the proposed study have significance for practice and policy? Does it contribute to our general understanding of a thing?”

Rothman and Thomas (1994: 31) state that objectives “refer to those more specific changes in programs, policies, or practices that are believed to contribute to the broader goal”.

According to the Oxford School Dictionary (2004: 306) an objective is “what you are trying to reach or do; an aim”.

In this study the objectives were the following:

- 1.3.3.1 To theoretically conceptualize autism as a phenomenon in middle childhood and the impact thereof on the family, as well as play techniques in the context of autism.
- 1.3.3.2 To explore the nature, on a national and international level, of existing play technique programmes for autistic children.
- 1.3.3.3 To develop a play technique programme for autistic children.
- 1.3.3.4 To implement the play technique programme.
- 1.3.3.5 To evaluate the effectiveness of the play technique programme.
- 1.3.3.6 To come to conclusions and make recommendations to enhance the effectiveness of the play technique programme for autistic children.



## 1.4 HYPOTHESIS

Given the fact that the researcher intended to investigate what the effect of a play technique programme (independent variable) is on the social behaviour of autistic children (dependent variable) a hypothesis was the most appropriate.

Monette, Sullivan and DeJong (2002: 31) state that a hypothesis is a “testable statement of presumed relationships between two or more concepts”. Gravetter and Forzano (2003: 16) define a hypothesis as a “tentative answer that is intended to be tested and critically evaluated”. Babbie (2004: 44) considers a hypothesis to be “a specified testable expectation about empirical reality that follows from a more general proposition”. Grinnell (1997: 91) describes a hypothesis as “a statement that can be proved or disproved by comparison with objective facts”. Bless and Higson-Smith (1995: 38) acknowledge that a hypothesis should be conceptually clear, have empirical referents, be specific and must be testable with available techniques.

Based on the above definitions the following hypothesis and sub-hypotheses were formulated for this study:

**If autistic children are involved in the play technique programme, then their social behaviour will improve.**

- **If autistic children are involved in the play technique programme then their verbal communication skills will improve.**
- **If autistic children are involved in a play technique programme then their non-verbal communication skills will improve.**
- **If autistic children are involved in a play technique programme then their social interaction skills will improve.**



- **If autistic children are involved in a play technique programme then their challenging behaviours will decrease.**

## 1.5 RESEARCH APPROACH

For the purposes of this study the researcher utilized the quantitative approach. Creswell (in Fouché & Delpont, 2002: 79), defines quantitative research as:

A paradigm based on positivism, which takes scientific explanation to be nomothetic (i.e. based on universal law). Its main aims are to measure the social world objectively, to test hypotheses and to predict and control human behaviour.

Rubin and Babbie (2001: 44) state that quantitative research emphasizes “the production of precise and generalizable statistical findings...it verifies whether a cause produces an effect in general”.

According to Reid and Smith (in Fouché, 2002: 105) quantitative research is focused on relatively specific questions or hypotheses; the researcher’s role is that of an objective observer; and statistical methods are used to determine the associations between variables.

Babbie (2004: 396) defines quantitative research as “the numerical representation and manipulation of observations for the purpose of describing and explaining the phenomena that those observations reflect”.

In this study the approach was quantitative, focusing on the development and evaluation of the effectiveness of a play technique programme in enhancing the social behaviour of autistic children. This study aimed to “measure the social world objectively” (Fouché & Delpont, 2002: 79), specifically social behaviour in autistic children; “verify whether a cause produces an effect in general” (Rubin & Babbie, 2001: 44), namely a play technique programme on the social behaviour of autistic children; and impact/control human behaviour, particularly the social



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behaviour of autistic children in middle childhood. This therefore verified the fact that the study was quantitative in nature.

## **1.6 TYPE OF RESEARCH**

Within this study the type of research to be conducted was applied research, more specifically intervention research.

Monette, Sullivan and DeJong (2002: 5) comment that applied research is “designed with a practical outcome in mind and with the assumption that some group or society as a whole will gain specific benefits from it”. Babbie (2004: 28) states that the outcomes of applied research are put into practice.

Owing to the fact that this study aimed to impact and benefit the treatment of autism, particularly providing a practical outcome to impact the social behaviour of autistic children, it falls into the category of applied research.

### **1.6.1 Description of intervention research**

Rothman and Thomas (1994: 4) state that intervention research is “an integrative perspective for human service research”. It is important to note that Rothman and Thomas (1994) can be considered an older source, but it has been used due to the fact that it can be considered the original source when referring to intervention research.

Intervention research can therefore be described as focusing on practical issues and concerns in an attempt to come up with relevant and realistic interventions which will benefit the population and/or community.



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### **1.6.2 Motivation for the choice of intervention research**

The researcher is of the opinion that intervention research was the most appropriate type of research for this particular study. This is due to the fact that the researcher aimed to conduct an intervention, namely a play technique programme, which was attempting to impact a particular problem within society, namely the lack of support provided for parents and/or professionals dealing with autistic children in middle childhood.

### **1.6.3 Facets of intervention research**

Within intervention research there are three facets as well as six phases. With regard to the facets, the following three facets are present: knowledge development; knowledge utilization; and design and development.

#### **1.6.3.1 Knowledge development**

The facet of knowledge development aims to “create findings that will apply to the understanding and/or solutions of practical problems” (Rothman & Thomas, 1994: 4).

Within this facet the objective is to contribute knowledge of human behaviour (Rothman & Thomas, 1994: 7). This is achieved through conventional social and behavioural science research methods. The outcome that is aimed at is to gather information about human behaviour in the form of a concept, hypothesis, theory and empirical generalizations.



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### **1.6.3.2 Knowledge utilisation**

Knowledge utilization, according to Rothman and Thomas (1994: 6), consists of “converting knowledge from the theory and empirical research of social and behavioural science to knowledge and having an application thrust”.

The method used within this facet is to transform available knowledge into theories and applications that are relevant to a given target, population problems and/or intervention method.

### **1.6.3.3 Design and Development**

This facet aims to evolve new human service technology, such as treatment methods, programmes, service systems or policies. This is achieved through several approaches, such as developmental research, social research and development, experimental social innovation, and model development research (Rothman & Thomas, 1994: 8).

This facet of intervention research can be carried out independently, according to Rothman and Thomas (1994: 8), although knowledge utilization is generally included.

Design and development aims to develop technical means of achieving human service objectives like assessment and intervention methods as well as service programmes, systems and policies.

In the light of the study’s focus, it is clear that the facet of intervention research relevant for this study is Design and Development (D & D). The proposed type of research is relevant for this particular study because it is a problem-solving process seeking the development of an effective intervention programme for autistic children.



### 1.6.4 The process (phases) of intervention research

Intervention research involves six phases. Within each of these phases there are specific steps or operations that must be considered and completed in order to reach the aim of the particular phase. These phases have been portrayed in the following Table 1 and will then be discussed in more detail.

Phase six of intervention research, namely dissemination, is not applicable to this study and therefore will not be included or further described.

**Table 1: Phases of intervention research**

Phases of Intervention Research	Selected stages of the phases applicable to this study	Application of intervention research in this study	Chapter relevance
<p><b>Problem analysis and project planning</b></p>	<p>Identifying and involving clients</p> <p>Gaining entry and cooperation from settings</p> <p>Identifying concerns of the population</p> <p>Analyzing identified concerns</p> <p>Setting goals and objectives</p>	<ul style="list-style-type: none"> <li>• <u>Key Partners</u> included: (a) The Key School for Specialized Education, (b) autistic children in middle childhood, (c) parents and (d) principal and teachers.</li> <li>• The Key School for Specialized Education has been supportive and has accommodated the study.</li> <li>• A written letter of approval was obtained from the principal, Jenny Gous, of The Key School for Specialized Education.</li> <li>• The parents of the respondents were briefed about the research and provided the opportunity to refuse or allow their children to participate in the study.</li> <li>• The study was scheduled at the</li> </ul>	<p>Chapter 1</p>



		<p>convenience of the school and participants.</p> <ul style="list-style-type: none"> <li>Concerns of the population: The nature and prevalence of autism was determined through an in-depth literature study and interviews with experts.</li> <li>The study's goal and objectives were established.</li> </ul>	
<b>Information gathering and synthesis</b>	<p>Using existing information sources; Studying natural examples</p> <p>Identifying functional elements of successful models</p>	<ul style="list-style-type: none"> <li>Literature was studied in-depth in order to gather information.</li> <li>The researcher has contacted various experts in the field, such as teachers and parents, in order to gather information.</li> <li>Previous programmes/studies were looked at in order to identify their successful traits.</li> </ul>	Chapters 2, 3 & 4
<b>Design</b>	<p>Designing an observational system</p> <p>Specifying procedural elements of the intervention</p>	<ul style="list-style-type: none"> <li>The observational system that was used in this study was structured observation, using a self-constructed scale as the measuring instrument.</li> <li>The procedures of the intervention were clearly defined.</li> </ul>	Chapter 5
<b>Early development and pilot testing</b>	<p>Developing a prototype or preliminary intervention</p> <p>Conducting a pilot test</p>	<p>Early development and pilot testing within this study included:</p> <ul style="list-style-type: none"> <li>The development of a play technique programme,</li> <li>A literature study,</li> </ul>	Chapters 2, 3, 4 & 5



	Applying design criteria to the preliminary intervention.	<ul style="list-style-type: none"> <li>• Consultation with experts in the field, such as teachers, therapists and parents,</li> <li>• Exploration of the feasibility of the study, and</li> <li>• Pilot test of the measuring instrument (i.e. self-constructed scale).</li> </ul>	
<b>Evaluation and advanced development</b>	<p>Selecting an experimental design</p> <p>Collecting and analyzing data</p>	<ul style="list-style-type: none"> <li>• The designs used in this study were a combination of (1) exploratory design, and (2) the one-group pre-test–post-test design, which is a quasi-experimental design.</li> <li>• Data collection was done by means of structured observation, using a self-constructed scale in the pre-test i.e. before introducing the play techniques, and post-test with 12 autistic children in middle childhood. Data was statistically analyzed and displayed by means of graphical presentations.</li> </ul>	Chapter 6
Dissemination	This phase is not applicable to this study.		

#### 1.6.4.1 Phase 1: Problem analysis and project planning

Within this phase it is vital that there is collaboration between the researcher and the clients. This will help to gain the necessary support and cooperation for conducting the research. This stage of the process was achieved through completing chapter 1 of this study.



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De Vos (2002: 397) mentions that in this phase it is important to differentiate between a private problem and a social problem. A social problem is something that affects many people rather than just an individual. Hastings (in De Vos, 2002: 397) defines a social problem as a “condition of society that has a negative effect on a large number of people”. In the context of this study autism can be categorised as a social problem that has a negative effect on a large number of people.

a. Identifying and involving clients

The researcher should identify the particular goals and targets of the intervention, with the involvement and support of the clients. Through identifying relevant issues and compiling agreed upon goals, the intervention is more likely to be of benefit to those involved: “The researcher should select a population whose issues and problems are of current or emerging interest to clients themselves, researchers and society” (Fawcett, Suares-Balcazar, Balcazar, White, Paine, Blanchard & Embree, in Rothman & Thomas, 1994: 27).

In this study it was important for the researcher to involve the various client systems, such as the autistic children, teachers and/or parents, throughout the whole process. The researcher had a great deal of contact with various members at The Key School for Specialized Education as well as experts in the field, such as parents and professionals in the field of social work and play therapy.

b. Gaining entry and cooperation from settings

It is important for the researcher to identify key individuals who can assist in gaining entry into the specific population and environment as well as get the necessary cooperation from those involved.



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In order to achieve this, the researcher, according to Fawcett et al. (in Rothman & Thomas, 1994: 29), must have a good understanding of what they have to offer and how to articulate the benefits.

The researcher developed a relationship with the headmistress at The Key School for Specialized Education as well as the teachers, in order to be allowed the necessary entry as well as the cooperation from the children. The researcher developed a relationship with these individuals, through spending time at The Key School for Specialized Education.

c. Identifying concerns of the population

Within this stage it is vital that the researcher does not impose his/her external views of what the problem is and how to solve the particular problem. Fawcett et al. (in Rothman & Thomas, 1994: 29) state that “once they (the researchers) have access to the setting they should attempt to understand the issues of importance to the population”.

The manner in which to do this would be to talk to key informants within the population who can give the researcher a good understanding of the circumstances. In this study the concerns of the population were identified through conversations with experts in the field, such as teachers, professionals and parents. The purpose of these discussions was to gain a better understanding of circumstances within South Africa, with regard to autism. The concerns of the population were identified further through an in-depth literature study.

d. Analyzing identified concerns

In this phase the researcher can ask various questions, such as: “What is the nature of the discrepancy between ‘ideal’ and ‘actual’ conditions that define the problem? For whom is the situation a problem? What are the negative



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consequences of the problem for affected individuals? Who should share the responsibility of ‘solving’ the problem? What is the acceptable level of change?” (Fawcett et al., in Rothman & Thomas, 1994: 30).

Through answering these questions the researcher was able to clearly identify and gain a good understanding of the concerns. She gathered these answers through experts in the field as well as through the literature study.

e. Setting goals and objectives

This is considered the final operation in this phase. In this stage a “careful problem analysis yields potential targets for change and possible elements of the intervention. Stating broad goals and more specific objectives clarifies the proposed ends and means of the intervention research project” (Fawcett et al., in Rothman & Thomas, 1994: 31).

The goals and the objectives of this study have been stated in section 1.3.

Through developing and establishing the goals and objectives, the researcher was assisted in structuring the next phase, namely information gathering and synthesis.

1.6.4.2 Phase 2: Information gathering and synthesis

Fawcett et al. (in Rothman & Thomas, 1994: 31) state that this phase could be subtitled “Not Reinventing the Wheel”. In other words this phase should aim at looking at what has already been done in order to develop a new intervention. This was done through studying existing information sources and natural examples as well as identifying functional elements of previous successful models. This stage of the process was achieved through completing chapter 2, 3 and 4 of this study.



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a. Using existing information sources

Fawcett et al. (in Rothman & Thomas, 1994: 32) comments that “a literature review usually consists of an examination of selected empirical research, reported practice, and identified innovations relevant to the social or health concern”.

In this stage it is important to look further than an individual profession, as a social problem is not simply confined to one discipline.

Within this study the existing information sources included literature as well as information from experts in the field, such as various professionals, teachers and parents of autistic children.

b. Studying natural examples

Through studying natural examples the researcher can get an understanding of how individuals or the community have attempted to address the problem. This can be done through personal interviews as well as observing previously successful/unsuccessful programmes and practices.

In this study the researcher gathered this information through contact with experts in the field as well as looking at the previous studies done with autistic children.

c. Identifying functional elements of successful models

In this stage the focus is specifically on previous programmes and practices. Questions that can be asked include: Is there a model program, policy, or practice that has been successful in changing targeted behaviour and outcomes? What made it effective? What caused it to fail? Which events appeared critical?



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What conditions were critical? What specific procedures were used? (Fawcett et al., in Rothman & Thomas, 1994: 33).

In this study the researcher looked at previous programmes and research in order to gather knowledge which helped to guide the design and development of the intervention.

#### 1.6.4.3 Phase 3: Design

The stages of design and early development can be considered interrelated. According to Fawcett et al. (in Rothman & Thomas, 1994: 33) there are two types of products that result from intervention research, namely the research data that may demonstrate relationships between the intervention and the behaviour or outcome that define the problem of interest; and the intervention – which may include a strategy, technique or programme; informational or training material; environmental design variables; a motivational system; a new or modified policy; or other procedures (Fawcett et al., in Rothman & Thomas, 1994: 34).

This phase includes designing the observational system and specifying procedural elements of the intervention. This stage of the process was achieved through completing chapter 5 of this study.

##### a. Designing an observational system

It is necessary for the researcher to design a way of observing events related to the specific phenomenon, in this case autism, in a natural manner. This observational system is closely linked to the process of designing the particular intervention. If possible, the clients should be involved in the specification of the behaviour and environmental conditions that need to be observed.



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The observational system should consist of three working parts. Fawcett et al. (in Rothman & Thomas, 1994: 34) explain that this includes firstly, “definitions of the behaviours associated with the problem are defined in operational terms; secondly examples and non-examples of the behaviour are provided to help discriminate occurrences of the behaviour; and finally scoring instructions are prepared to guide recording of desired behaviours”.

De Vos (2002: 408) states that “relevant behaviours and outcomes may be measured, using direct observation by independent observers or self-monitoring or self-reporting for events that may be difficult to observe directly”.

Fawcett et al. (in Rothman & Thomas, 1994: 35) comment that the “type of measurement to be chosen depends on many factors, including how many individuals and behaviours must be observed, the length of the observation phase, the duration of intervals within the phase, and the availability of trained observers”.

The method of observation in this study was structured observation through the use of a self-constructed measuring instrument, focusing on the social behaviour of autistic children in middle childhood.

#### b. Specifying procedural elements of the intervention

Through studying naturally occurring innovations and observing the problem, the researcher can identify procedural elements for use in the intervention. According to Fawcett et al. (in Rothman & Thomas, 1994: 35) “these procedural elements should be specified in enough detail so that they can be replicated by other typically-trained change agents”.

In this study the researcher observed the social behaviour of autistic children in the school environment, noting how they are managed by the teachers involved.



The researcher also gathered information from parents of autistic children, in order to gain an understanding for their coping methods. The researcher then took this understanding and integrated it into the study.

#### 1.6.4.4 Phase 4: Early development and pilot testing

During this phase a primitive design is evolved to a form that can be evaluated under field conditions. This stage of the process was achieved through completing chapter 1, 2, 3, 4 and 5 of this study.

##### a. Developing a prototype or preliminary intervention

At this particular stage preliminary intervention procedures are selected and specified. Barnes-September (in De Vos, 2002: 410) comments “that the draft protocol developed by the protocol development team includes a functional flow chart describing the proposed process of intervention (sequence of events), detailed description and motivation for each step, structural mechanisms and suggested time-lines for the completion of intervention tasks”.

In this study the researcher developed a draft protocol based on the phases and stages intervention. These are all mentioned in section 1.6.

##### b. Conducting a pilot test

According to De Vos (2002: 410) a pilot study is “designed to determine whether the intervention will work.” The pilot study should be done in an environment convenient for the researcher and that is similar to the one in which the intervention will take place. Fawcett et al. (in Rothman & Thomas, 1994: 37) comment that the “observational system that was devised is instrumental here...pilot test helps to determine the effectiveness of the intervention and identify which elements of the prototype may need to be revised”.



In this study the researcher identified two autistic children, who were not part of the main study, to participate in pilot testing the play technique programme and the observational system. The pilot test in this study is referred to in more detail in paragraph 1.8.

c. Applying design criteria to the preliminary intervention concept

Fawcett et al. (in Rothman & Thomas, 1994: 37) highlight the importance of the “design process [being] informed by common guidelines and values for intervention research”. Relevant questions include: Is the intervention effective? Is it simple to use? Is it practical?

These criteria cannot suggest how to optimize the standards but they do help to guide the design or interventions that are subjected to pilot testing and formal evaluation.

The design process in this study was guided by the process of intervention research as well as the researcher’s common knowledge and understanding.

1.6.4.5 Phase 5: Evaluation and advanced development

Although this is not the final phase of intervention research, in this study it is considered the final phase because Phase 6, namely dissemination, is not applicable. This stage of the process was achieved through completing chapter 6 of this study.

a. Selecting an experimental design

Fawcett et al. (in Rothman & Thomas, 1994: 37 – 38) state that “experimental designs help demonstrate causal relationships between the intervention and the behaviours and related conditions targeted for change”.



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Factors that may affect the researcher's choice include:

- The goals and magnitude of change sought by clients;
- The types of behaviours and the desired immediacy of the changes;
- The stability of the setting or context; and
- The goals of the research.

In this study the design was divided into two phases: firstly, the exploratory design and secondly, the quasi-experimental design, more specifically the one-group pre-test–post-test design. This is discussed further in paragraph 1.7.

#### b. Collecting and analyzing data

The final stage of this study, within the parameters of intervention research, is to collect the necessary data using the observational system selected and then analyze this data through specified procedures.

Fawcett et al. (in Rothman & Thomas, 1994: 38) describe this process in the following way: “during a pilot test and more formal evaluations of an intervention, data are collected and analyzed continuously”.

The researcher collected the data through structured observation using a self-constructed measuring instrument. The data was analysed through statistical procedures and displayed by using graphical presentations. This is discussed further in paragraph 1.7.

## **1.7 RESEARCH DESIGN AND METHODOLOGY**

Fouché and De Vos (2002: 137) state that a research design “focuses on the end product, formulates a research problem as a point of departure and focuses on the logic of the research”.



Babbie and Mouton (2001: 72) comment that research design “addresses the planning of scientific inquiry – designing a strategy for finding out something”.

The type of research to be focused on in this study is intervention research. Rothman and Thomas (1994: 4) state that intervention research is “an integrative perspective for human service research”.

The researcher utilized the exploratory design to achieve the following two objectives:

- To theoretically conceptualize autism as a phenomenon in middle childhood and the impact thereof on the family, as well as play techniques in the context of autism.
- To explore the nature of existing play technique programmes on a national and international level.

The exploratory design was selected because it assisted the researcher in exploring the phenomenon of autism as well as the nature of existing play technique programmes. Exploratory studies, however, are on the lowest level of the continuum of knowledge that can be derived from research. According to Strydom (in De Vos, 2002: 214) an exploratory study is a “very valuable manner in which practical knowledge of, and insight into, a certain research area can be gained”. The purpose is to uncover generalizations and develop hypotheses which will be investigated and tested at a later stage. An exploratory study goes no further, and therefore will be utilized as a preliminary investigation prior to the more structured study.

The researcher then applied the one-group pre-test–post-test design (i.e. quasi-experimental/associative design) with the respondents to achieve the next four objectives, namely:



- To develop a play technique programme for autistic children.
- To implement the play technique programme.
- To evaluate the effectiveness of the play technique programme.
- To come to conclusions and make recommendations to enhance the effectiveness of the play technique programme for autistic children.

The one-group pre-test–post-test design, according to Fouché and De Vos (2002: 144), has a built-in strategy for comparing pre-test with post-test. In this particular design there is a measurement of a dependent variable (the autistic children’s social behaviour) when no independent variable (play technique programme) is present (pre-test). Subsequently the independent variable is introduced, followed by a repeated measurement of the dependent variable (post-test).

A sample of 12 autistic children in middle childhood was selected through probability sampling, specifically stratified and systematic sampling, at The Key School for Specialized Education. The respondents’ social behaviour was then measured individually at the beginning of the study, i.e. before implementation of the play technique programme (pre-test), through the use of a self-constructed measuring instrument within structured observation. Thereafter each respondent was involved in six individual phases using various play techniques. Following this the respondents were measured again (post-test). This enabled the researcher to measure the effectiveness of the intervention by comparing the pre- and post-test measurements.

### **1.7.1 Data collection**

Data was collected through structured observation, using a self-constructed measuring instrument in the form of a scale. Structured observation, according to Bailey (1994: 24) involves “counting the frequency with which certain



behaviours occur or certain things are said". As mentioned by Fawcett et al. (in Rothman & Thomas, 1994: 34), it is necessary for the researcher to design a way of observing events related to the specific phenomenon, in this case autism, in a natural manner.

When conducting structured observation the steps that were followed included:

- Defining the behaviour and listing the indicators of behaviour to be studied, particularly social behaviour of autistic children.
- Identifying a time frame during which the behaviour will be observed for the pre- and post-test observation.
- Developing a data collection instrument, namely the self-constructed measuring instrument.
- Selecting an observer role, within structured observation.
- Conducting the structured observation.
- Verifying the data.

The particular behaviour that was observed was the social behaviour of the autistic child. Social behaviour refers to the behaviour of individuals within a group of two or more people, such as within the family unit or in the classroom (Google, 2005).

The data collection instrument used in the structured observation was a self-constructed measuring instrument in the form of a scale. A self-constructed measuring instrument was used in this study because no applicable measuring instrument had yet been developed to measure the social behaviour of autistic children.

The self-constructed measuring instrument was administered within the pre-test and post-test phase in order to gather data on the autistic childrens social



behaviour. This was done within the school environment. The intervention, specifically the play technique programme, was implemented between the pre- and post-test data collection. This took place on an individual basis within the framework of a play therapy phase. One play therapy phase, using the various play techniques, was held on a weekly basis with a total of 12 children. A total of six phases with each child were completed.

It is important to note that each individual session held with the respondents' is referred to as a phase, due to the fact that the researcher did not want to place a time limit on the specific phase. Although there is a time limit within the actual research study (half an hour), for future reference, when the play technique programme will be implemented outside of the study, the time allocated for each phase will depend on the particular child involved in the programme.

On the measuring instrument there were various behavioural aspects that are considered typical to autistic children, particularly linked to their social behaviour (See Addendum B).

The following indicators of social behaviour were operationalized and included on the measuring instrument:

- Verbal communication.
- Non-verbal communication.
- Social interaction.
- Challenging behaviour.

It is important that the measuring instrument is considered valid and therefore can be deemed to have validity. A valid instrument, according to Bostwick and Kyte (in Delpont, 2002: 166), has been "described as doing what it is intended to do, as measuring what it is suppose to measure, and as yielding scores whose differences reflect the true differences of the variable being measured rather than



random or constant errors". In order to validate the theory behind the measuring instrument developed, the researcher made use of content, face and construct validity.

Content validity involves asking two questions, namely "is the instrument really measuring the concept we assume it is and does the instrument provide an adequate sample of items that represent that concept?" (Delport, 2002: 167). Face validity, according to Delport (2002: 167) can be understood as the "appearance of what is being measured" in order to ensure that "it appears to be a relevant measure of the attributes". Construct validity "is concerned with the meaning of the instruments, i.e. what it is measuring and how and why it operates the way it does. It involves not only validation of the instrument itself, but also of the theory underlying it" (Delport, 2002: 168).

Through the in-depth literature study the researcher ensured that the instrument was measuring the concept focused on, namely social behaviour, and that there were adequate samples of items to represent the concept, namely verbal communication, non-verbal communication, social interaction and challenging behaviours. When looking at the instrument (Refer to Addendum B) it give an adequate appearance of what it is measuring and one can clearly see what is being measure, how it is being measure and why it was used in the particular manner that it was.

Through completing this phase of data collection, the final four objectives of the study were achieved.

### **1.7.2 Data analysis**

Quantitative data can either be analyzed manually or by computer (De Vos et al., (2002: 222). Rubin and Babbie (2001: 44) state that quantitative research



emphasizes “the production of precise and generalizable statistical findings ... it verifies whether a cause produces an effect in general”.

In this study the researcher analyzed the data through the use of the computer, particularly MS Word, and with assistance from the Department of Statistics at the University of Pretoria, using two programmes, namely BMP Statistical Software and SAS (version 8.2).

The results of the quantitative research were then presented by using graphical presentations. Graphical presentations, according to De Vos, Fouché and Venter (2002: 230) are “pictorial devices to illustrate data” and the six principal types are “bar graphs, doughnut graphs, histograms, frequency polygons, pie charts and pictograms”.

The researcher is of the opinion that the most appropriate forms of graphical presentation would be the bar graph, pie chart, donut graph and frequency table, as they depict the data gathered in a straightforward and understandable manner.

Once the structured observation (using the self-constructed measuring instrument) was completed, the researcher reached conclusions regarding the use of play techniques to improve the social behaviour of autistic children in middle childhood. This led to achieving the specific aim of intervention research, as stated by Schilling (in De Vos, 2002: 396): to “enhance the functioning and well-being of an individual, family, group, community or population”.

## **1.8 PILOT STUDY**

When conducting a study of this nature it is necessary to consider and verify the feasibility of such a study as well as the reliability of the testing instrument through conducting a pilot study. Fawcett et al. (in Rothman & Thomas, 1994: 37)



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comments that the “pilot test helps to determine the effectiveness of the intervention and identify which elements of the prototype may need to be revised”.

Within intervention research the pilot study takes place within phase four, namely early development and pilot study. As previously mentioned, a pilot study was conducted with two autistic children at The Key School for Specialized Education, who were not included in the study.

### **1.8.1 Feasibility of study**

When considering the feasibility of the study, the following aspects were taken into consideration, namely: the time necessary for the study; the money needed for the research; the venue to be used for the research and the availability of respondents.

The researcher aimed to complete this study within a two-year time frame and did not face problems in achieving this goal.

Owing to the fact that the measuring instrument was self-constructed and that the structured observation as well as the play therapy phases were done by the researcher, the cost of the study was minimal. The researcher experienced no problems with the financial aspect of the study.

The study was conducted at The Key School for Specialized Education, in Parktown West, Johannesburg. Permission was granted by Jenny Gous, the principal of The Key School for Specialized Education, for the study to be conducted. She agreed that the children who attend The Key School for Specialized Education were available for the study and would benefit from the study. Permission was also obtained from the parents of each child who was involved in the study prior to conducting the study, through a consent form.



Therefore the researcher could not foresee and did not experience any problems with the venue or the availability of respondents.

### **1.8.2 Testing of data collection instrument**

Strydom (2002a: 210) defines a pilot test as “a way in which the prospective researcher can orientate himself to the project he has in mind”.

The researcher conducted a pilot study before conducting the main study, which involved the researcher following the research procedure with two autistic children who were not included in the main research. This involved structured observation, using the measuring instrument, to ascertain that it measured the relevant behaviour. The two children selected for the pilot study were not a part of the research group, but were also scholars at The Key School for Specialized Education, and they went through procedures identical to those used in the actual study. No problems were experienced with any of the procedures or the measuring instrument.

## **1.9 RESEARCH POPULATION, SAMPLE AND SAMPLING METHOD**

When defining the population in a study one needs to look at two separate issues, namely universe and population. Lane (in Strydom & Venter, 2002: 198) defined a universe as “all potential subjects who possess the attributes in which the researcher is interested” while population is defined as “individuals in the universe who possess specific characteristics”.

In this particular study the universe was all the autistic children within middle childhood, within a school environment. The population was the autistic children in middle childhood within the specific school chosen, namely The Key School for Specialized Education.



Arkava and Lane (in Strydom and Venter, 2002: 199) define a sample as being “the element of the population considered for actual inclusion in the study”. In this study the sample was a group of 12 children within the chosen school, between the ages of six and 12 years.

In this study the sampling method used was probability sampling, more specifically a combination of stratified and systematic sampling. Probability sampling is, according to Babbie (2004: 186), “the general term for samples selected in accord with probability theory, typically involving some random-selection mechanism”.

Stratified sampling “consists of the universe being divided into a number of strata that are mutually exclusive and the members of which are homogeneous” (Mitchell & Jolley, Singleton et al., in Strydom & Venter, 2002: 205). This procedure, which may be used in conjunction with simple random, systematic, or cluster sampling, improves the representativeness of a sample, at least in terms of the stratification variables”.

Systematic sampling involves selecting the first case randomly, preferably from a random table, and then all subsequent cases are selected according to a particular interval (Strydom & Venter, 2002: 205).

In this particular study four classes, which had already been divided at the school according to level of functioning, were considered the strata. From each stratum the researcher selected three participants through systematic sampling. The systematic sampling was conducted by randomly selecting the first participant from the class list and then selecting every third child in order to gather a group of twelve children. Within this study the gender of the participants was considered irrelevant.



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The researcher is of the opinion that this combination of stratified and systematic sampling was the best method to be used in order to ensure that rich information was collected.

## **1.10 ETHICAL ASPECTS**

When doing research, there are various ethical issues that have to be taken into consideration. Babbie (2004: 30) states that “ethics is a key consideration in the design of social research”. The following ethical issues were considered.

### **1.10.1 Harm to respondents**

Subjects can be harmed in a physical and emotional manner. According to Babbie (2004: 29) it is the “fundamental rule of social research that the researcher should bring no harm to the subjects”.

The researcher was well aware of the possibility that the children involved in the study could be harmed either in a physical or emotional way. In order to prevent this, the researcher aimed to create a safe environment within the play therapy setting and considered the children’s well-being and rights of foremost importance.

If it had become a concern that one of the children had been harmed the researcher would have removed the child from the group immediately and referred him/her to the acting psychologist at The Key School for Specialized Education. This was not required, however.



### **1.10.2 Informed consent**

Denzin and Lincoln (2000:138) state that the “research subjects have the right to be informed about the nature and consequences of experiments in which they are involved”.

The researcher was aware of the fact that the children themselves were not able to give consent, owing to their disability. However, the researcher ensured, through the use of consent forms, that all the parents of the children involved gave written informed consent for the study to be done, prior to conducting the study. In the consent form it was clearly stated that the parent had the right to withdraw his/her child from the study at any stage, for any reason that the parent felt was legitimate (See Addendum C).

### **1.10.3 Deception of subjects**

Judd (in Strydom, 2002b: 66) states that there are three reasons why subjects may be deceived: to disguise the real goal of the study; to hide the real function or the actions of the subjects; and to hide the experiences through which the subjects will go.

Loewenberg and Dolgoff (in Strydom, 2002b: 66) mention that “deception of subjects is deliberately misrepresenting facts in order to make another person believe what is not true, violating the respect to which every person is entitled”. This deception can be either deliberate or it can be a deception of which the researcher was not aware.

The researcher ensured that at all times the relevant parties were aware of how the study was developing and exactly what was taking place. The researcher aimed to avoid any kind of deception in the study and is of the opinion that this was achieved.



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#### **1.10.4 Violation of privacy and anonymity**

In research the privacy of the individuals should be of the utmost importance. Denzin & Lincoln, (2000:139) state that “codes of ethics insist on safeguards to protect peoples’ identities....confidentiality must be assured to the primary safeguard of unwanted exposure”.

In this study the researcher aimed to safeguard the privacy of the individuals at all times, ensuring that their rights were upheld. In order to protect their privacy, the names of the children are not included in the research report at any stage, but were replaced by pseudonyms.

#### **1.10.5 Actions and competence of researcher**

Strydom (2002b: 69) states that “researchers are ethically obliged to ensure that they are competent and adequately skilled to undertake the proposed investigation”. He further states that when sensitive investigations are involved, these requirements are even more important and no value judgments are to be made under any circumstances whatsoever on the cultural aspect of communities.

The researcher has graduated with a master’s degree in Play Therapy, having completed a research module in this course at the University of Pretoria. A qualified professional also guided and supervised the researcher at all times throughout the study.

#### **1.10.6 Release or publications of the findings**

Strydom (2002b: 71) comments that “the findings of the study must be introduced to the reading public in written form, otherwise even a highly scientific investigation will mean very little and not be viewed as research”.



The researcher held a seminar at the University of Pretoria, sharing the results of the study with other professionals. The researcher has completed a publication for the University of Pretoria, in the form of a thesis, in order to allow all the relevant professionals access to the research. An article for possible publication in a scientific journal has also been prepared.

#### **1.10.7 Debriefing of respondents**

Strydom (2002b: 73) explains that it might be necessary to include “debriefing sessions during which subjects get the opportunity, after the study, to work through their experiences and its aftermath”.

The researcher was aware of this and was prepared to deal with the situation if the need arose. This was to ensure that all subjects were satisfied and were on a normal level of functioning, once the study was completed. If the need had arisen the researcher would have referred the children to the acting psychologist at The Key School for Specialized Education. This, however, was not necessary.

### **1.11 LIMITATIONS OF THE STUDY**

There are limitations in a study of any nature, but the researcher aimed to reduce these as much as possible in the present study.

In this particular study the limitations could include the large continuum of autistic features, number of respondents included in the study, the fact that only six sessions were held as well as the method of observation and measurement, namely structured observation by the researcher and completion of the measuring instrument by the researcher.

The Autism and Pervasive Developmental Disorder Fact Sheet (2006) states that autism is “not just one disorder with a well defined set of symptoms; autism is a



broad spectrum of disorders that ranges from mild to severe". This highlights the enormity of dealing with such a disorder, particularly 12 children within this spectrum. The researcher attempted to manage this limitation by approaching each child as a unique individual on the spectrum of autism, thereby dealing with the child within his/her own specific characteristics and behaviours.

As regards the number of respondents involved in the study, the researcher arrived at the number of 12 respondents for various reasons. Firstly, as the respondents were required to be diagnosed on the autism spectrum, dealing with autistic children can be considered a challenging endeavour and therefore the researcher was not willing to deal with more than 12 respondents at a particular time. If more respondents had been involved in the study the researcher is of the opinion that the study would have been impacted negatively because of the difficulties associated with working with autistic children.

Secondly, although the statistics on autism are showing a drastic increase, as seen in the previous sections, a lot of the children have not formally been diagnosed on the autism spectrum. This had an impact on the sample size.

Thirdly, the researcher aimed to test the benefits of specific techniques within a specific programme with children on all levels of the autism spectrum. Although the sample size can be considered small, this was achieved.

In terms of the fact that only six phases were held, which can be considered a limited number of phases particularly with regard to phases with autistic children, the researcher is of the opinion that this was sufficient number of phases in order to observe and comment on the effectiveness of the techniques used.

When focusing on the limitation of objectivity, linked to the method of scoring, the researcher aimed to reduce subjectivity through very specific methods. Firstly, the researcher included, based on a thorough in-depth literature review, very



specific assessment areas for measurement within the four areas measured, namely verbal communication, non-verbal communication, social interaction and challenging behaviour (refer to Addendum B). It was decided that a video recorder would not be used to record the phases because this would have had an impact on the respondents' behaviour as it would have been in the room and the respondents would have been aware of it.

Secondly, the frequency of the behaviour measured was done in a very specific way: it was linked to the number of times that the behaviour was observed, thereby reaching a score of between 1 (very poor/did not appear) and 5 (very good/completely). This is explained in more detail in Chapter 6 (refer to page 168).

Thirdly, the researcher also obtained verbal feedback from the teachers on the social behaviour of the specific respondents, and they also confirmed positive changes that had taken place regarding the social behaviour of the respondents.

## **1.12 DEFINITIONS OF KEY CONCEPTS**

### **1.12.1 Play techniques**

Play, according to Axline (1974: 9), is a "child's natural medium of self-expression". Play techniques refer to the specific tools and medium of play that will be used within play therapy with the autistic child.

According to Thompson and Rudolph (2000: 386) play techniques should:

Facilitate the relationship between therapist and child;  
encourage the child's expression of thoughts and feelings;  
help the therapist gain insight into the child's world; provide  
the child with an opportunity to test reality; and provide the  
child with an acceptable means for expressing unacceptable  
thoughts and feelings.



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The play material should be selected carefully, not just accumulated, and the categories of play media can include the following: real-life toys, acting out and aggressive-release toys and creative expression and emotional-release toys (Thomas & Rudolph, 2000: 386).

The researcher is of the understanding that play techniques refer to all the techniques that may be used, within the context of play therapy, to assist a child in improving his/her behaviour. In this study the researcher adapted the techniques in order to allow parents and/or professionals to use them without requiring prior training in play therapy.

### **1.12.2 Autism**

Autism is a neurological disorder that is normally evident by the age of three, and affects a child's "ability to communicate, understand language, play, and relate to others" (Autism and Pervasive Developmental Disorder Fact Sheet, 2002).

Autism is also defined as:

A developmental disorder of brain functioning, with three main symptoms: impaired social interaction, problems with verbal and non-verbal communication and imagination, and unusual or severely limited activities and interests (What is Autism?, 2002).

The researcher gained the understanding from the above definitions that autism is a dysfunction of the brain that affects individuals in completing simple, necessary tasks on an everyday basis. The focal task within this study will be the social behaviour of the autistic child.



### **1.12.3 Middle childhood**

Child and Family Canada (2005) commented that “middle childhood is a time when children are beginning to assume a larger share of responsibility for their own behaviour in relationship to their parents, peers and others”.

According to DeBord (2005):

“Between the ages of six to 12, the child’s world expands outward from the family as relationships are formed with friends, teachers, coaches, caregivers, and others. Because their experiences are expanding, many factors can alter children’s actions and impact how they learn to get along. Some situations can create stress and affect self-esteem.”

Craig (1996: 332) states that middle childhood refers to “the period from six to 12 years”. The Oxford School Dictionary (2004: 283) defines middle as “placed or happening in the middle” and childhood as “the time when a person is a child”.

The researcher is therefore of the understanding that middle childhood refers to children who are experiencing or living the middle period of their childhood, specifically between the ages of six and 12 years.

### **1.12.4 Social behaviour**

Social behaviour is defined by Answers.com (2005) as “behaviour directed at other people...it is more advanced than behaviour or an action”.

Google (2005) states that social behaviour is “how the person interacts with others (e.g. habituated body signals; general voice characteristics; style of speech; visible handicaps)”.



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The researcher understands social behaviour as behaviour arising in the interaction of two or more individuals, which can either be positive or negative depending on the purpose of the behaviour.

### **1.13 CONTENTS OF THE RESEARCH REPORT**

Chapter 1: General introduction: this chapter focused on giving an overview of the study, introducing the issues of concern as well as the research methodology.

Chapter 2: Literature review: this chapter focuses on autism as a social phenomenon.

Chapter 3: Literature review: this chapter focuses on autism in middle childhood, as well as the impact of autism on the family system.

Chapter 4: Literature review: this chapter focuses on play techniques within the context of play therapy.

Chapter 5: Literature review: this chapter gives an outline of the play technique programme that was used in this study.

Chapter 6: Empirical study: this chapter focuses on the research and empirical findings.

Chapter 7: Conclusions and recommendations: this chapter presents the conclusions of the study as well as the recommendations issuing from it