## THE IMPACT OF MUSIC WITHIN PLAY THERAPY ON THE CLASSROOM BEHAVIOUR OF AUTISTIC CHILDREN

by

**Catherine Elizabeth Ablort-Morgan** 

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In the Department of Social Work

**Faculty of Humanities** 

**University of Pretoria** 

SUPERVISOR: MRS H BAULING OCTOBER 2003

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### **KEY TERMS**

| Play therapy        |
|---------------------|
| Gestalt             |
| Projection          |
| Autism              |
| Autistic behaviour  |
| Music               |
| Classroom behaviour |
| Children            |
| Impact of music     |
| Research            |

#### SUMMARY

The Impact of music within play therapy on the classroom behaviour of autistic children.

by

**Catherine Ablort-Morgan** 

Supervisor: Mrs. H. Bauling

Department of Social Work M.A. (SW) Play Therapy

When doing this research, the researcher aimed to prove the hypothesis that if music is introduced within a play therapy framework then the classroom behaviour of an autistic child will improve. The goal of the study was to determine the impact of music, within play therapy, on the behaviour of autistic children in a classroom situation. Autism and play therapy were discussed, and the benefits of background music in the classroom were explored.

The population consisted of all the autistic children attending the Key School. Six children between the ages of nine and 12 were selected from the population through non-probability purposive sampling.

The quasi-experimental design was used in order to complete the empirical investigation. A scale was used in order to measure the impact of music on the classroom behaviour of the autistic child. Pre- and post-test measurements were done in order to indicate any changes in the autistic children's behaviour. More in-depth information was gathered through the use of unstructured observation.

Research results have indicated that the introduction of background music into the classroom of children affected by autism has a positive effect on their behaviour. It can therefore be concluded that background music can contribute to enhancing the functioning of the autistic child. Consequently it was recommended that background music be used in the classroom in future, to improve the behaviour of the autistic child.

### **TABLE OF CONTENTS**

|  | Page    |
|--|---------|
| CHAPTER ONE  |         |
| GENERAL INTRODUCTION   |         |
| 4.4 INTRODUCTION   | 4 0     |
| 1.1. INTRODUCTION  |         |
| 1.2. MOTIVATION FOR CHOICE OF SUBJECT                        |         |
| 1.3. PROBLEM FORMULATION                                     |         |
| 1.4. GOAL AND OBJECTIVES OF THE STUDY                        |         |
| 1.5. HYPOTHESIS OF THE STUDY                                 |         |
| 1.6. RESEARCH APPROACH                                       |         |
| 1.7. TYPE OF RESEARCH  |         |
| 1.8. RESEARCH DESIGN   |         |
| 1.9. RESEARCH PROCEDURE                                      |         |
| 1.10. PILOT STUDY  |         |
| 1.10.1. Literature study                                     |         |
| 1.10.2. Consultation with experts                            |         |
| 1.10.3. Feasibility of the study                             |         |
| 1.10.4. Pilot test of measuring instruments                  | 14 – 15 |
| 1.11. DESCRIPTION OF RESEARCH POPULATION, DELI-              | 45 40   |
| MINATION OF SAMPLE AND SAMPLING METHOD  1.12. ETHICAL ISSUES |         |
|  |         |
| 1.12.1. Harm to subjects                                     |         |
| 1.12.2. Informed consent                                     |         |
| 1.12.3. Deceptions of subjects/respondents                   |         |
| 1.12.4. Violation of privacy                                 |         |
| 1.12.5. Actions and competence of researcher                 |         |
| 1.12.6. Release of publications and findings                 |         |
| 1.12.7. Debriefing of respondents                            |         |
| 1.13. LIMITATIONS OF THE STUDY                               |         |
| 1.14. DEFINITION OF KEY CONCEPTS                             |         |
| 1.14.1. Music  |         |
| 1.14.2. Play therapy   | . 21    |

| 1.14.3. Autism                              | 21 – 22 |
|---|---------|
| 1.14.4. Children                            | 22      |
| 1.15. CONTENTS OF RESEARCH REPORT           | 23      |
|   |         |
| CHAPTER TWO                                 |         |
| AUTISM                                      |         |
| 2.1. INTRODUCTION                           | 24 – 25 |
| 2.2. DEFINING AUTISM                        | 25 – 27 |
| 2.3. ORIGINS OF AUTIMS                      | 27 – 28 |
| 2.4. CAUSES OF AUTISM                       | 28 – 31 |
| 2.4.1. Genetics                             | 29      |
| 2.4.2. Pregnancy/birth                      | 29 – 30 |
| 2.4.3. Parenting                            | 30      |
| 2.4.4. Neurological causes                  | 30 – 31 |
| 2.5. CHARACTERISTICS OF AUTISM              | 31 – 36 |
| 2.6. PREVALENCE OF AUTISM                   | 36 – 37 |
| 2.7. SOCIAL EFFECT OF AUTISM                | 38 – 39 |
| 2.8. EFFECT OF AUTIMS IN THE CLASSROOM      | 40 – 41 |
| 2.9. SUMMARY                                | 42      |
|   |         |
| CHAPTER THREE                               |         |
| PLAY THERAPY AND MUSIC                      |         |
| 3.1. INTRODUCTION                           | 43      |
| 3.2. DEFINING PLAY THERAPY                  | 44 – 46 |
| 3.3. GESTALT APPROACH TO PLAY THERAPY       | 46 – 51 |
| 3.3.1. Gestalt approach                     | 46 – 48 |
| 3.3.2. Techniques within gestalt therapy    | 48 – 51 |
| 3.3.2.1. 'l' language                       | 48      |
| 3.3.2.2. Substituting won't for can't       | 48      |
| 3.3.2.3. Substituting what and how for why  | 48      |
| 3.3.2.4. No gossiping                       | 49      |
| 3.3.2.5. Changing questions into statements | 49      |

| 3.3.2.6. Taking responsibility  | 49      |
|---|---------|
| 3.3.2.7. Incomplete sentences   | 49      |
| 3.3.2.8. Bipolarities   | 50 – 51 |
| 3.4. PROJECTION IN PLAY THERAPY   | 51 – 54 |
| 3.5. MUSIC WITHIN PLAY THERAPY  | 54 – 61 |
| 3.6. SUMMARY  | 61      |
|   |         |
| CHAPTER FOUR  |         |
| THE EMPIRICAL STUDY   |         |
| 4.1. INTRODUCTION   | 60      |
|   | 62      |
|   | 60      |
| TEST-POSTTEST DESIGN  |         |
| 4.3. THE RESEARCH SCALE AS MEASUREMENT INSTRU-                          |         |
|   |         |
| 4.3.1. The scale  |         |
| 4.3.2. Definition of the constructs                                     |         |
| 4.3.2.1. Communication  |         |
| 4.3.2.2. Social interaction   |         |
| 4.3.2.3. Attention span   |         |
|   |         |
| 4.3.2.5. Impact of music  |         |
|   | 67 – 69 |
| 4.4.2. Presentation of the quantitative data:                           | 67 60   |
| the dominant approach   | 67 – 68 |
| 4.4.3. Presentation of the qualitative data: the less-dominant approach | 69 60   |
| 4.5. THE PURPOSIVE SAMPLE   |         |
| 4.6. THE QUANTITATIVE ASPECT: ONE-GROUP PRETES                          |         |
|   |         |
| POSTTEST DESIGN   |         |
| 4.6.2. The pre-test   |         |
| 4.6.3. The post-test  |         |
| 4.6.4. The comparison   | /5      |
| 4.7. THE QUANTITATIVE ASPECT: STRUCTURED                                |         |

| O         | BSERVATION                           | 76 –  | 83   |
|-----------|--------------------------------------|-------|------|
| 4.7.1. Re | espondent A                          | 76 –  | - 77 |
| 4.7.2. Re | espondent B                          | 77 –  | - 78 |
| 4.7.3. Re | espondent C                          | .78 – | 79   |
| 4.7.4. Re | espondent D                          | .79 – | 80   |
| 4.7.5. Re | espondent E                          | .80 – | 81   |
| 4.7.6. Re | espondent F                          | 81 –  | 82   |
| 4.7.7. Ev | aluation of quantitative measurement | 82 –  | 83   |
| 4.8. TH   | IE QUALITATIVE ASPECT: UNSTRUCTURED  |       |      |
| OE        | BSERVATION                           | 83 –  | 101  |
| 4.8.1. Re | espondent A                          | 83 –  | 87   |
| 4.8.1.1.  | Communication                        | 83 –  | 84   |
| 4.8.1.2.  | Social interaction                   | 85    |      |
| 4.8.1.3.  | Attention span                       | 85 –  | 86   |
| 4.8.1.4.  | Minimizing challenging behaviour     | 86    |      |
| 4.8.1.5.  | Impact of music                      | 87    |      |
| 4.8.2. Re | espondent B                          | 87 –  | 90   |
| 4.8.2.1.  | Communication                        | 87    |      |
| 4.8.2.2.  | Social interaction                   | 87 –  | 88   |
| 4.8.2.3.  | Attention span                       | 88 –  | 89   |
| 4.8.2.4.  | Minimizing challenging behaviour     | 89    |      |
| 4.8.2.5   | Impact of music                      | 89 –  | 90   |
| 4.8.3. Re | espondent C                          | 90 –  | 92   |
| 4.8.3.1.  | Communication                        | 90    |      |
| 4.8.3.2.  | Social interaction                   | 91    |      |
| 4.8.3.3.  | Attention span                       | 91 –  | 92   |
| 4.8.3.4.  | Minimizing challenging behaviour     | 92    |      |
| 4.8.3.5.  | Impact of music                      | 92    |      |
| 4.8.4. Re | espondent D                          | 93 –  | 96   |
| 4.8.4.1.  | Communication                        | 93 –  | 94   |
| 4.8.4.2.  | Social interaction                   | 94    |      |
| 4.8.4.3.  | Attention span                       | 94 –  | 95   |
| 4.8.4.4.  | Minimizing challenging behaviour     | 95    |      |
| 4.8.8.5.  | Impact of music                      | 95 -  | 96   |

| 4.8.5. Re           | spondent E                            | 96 - 98   |
|---------------------|---------------------------------------|-----------|
| 4.8.5.1.            | Communication                         | 96        |
| 4.8.5.2.            | Social interaction                    | 97        |
| 4.8.5.3.            | Attention span                        | 97        |
| 4.8.5.4.            | Minimizing challenging behaviour      | 98        |
| 4.8.5.5.            | Impact of music                       | 98        |
| 4.8.6. Respondent F |                                       | 98 - 101  |
| 4.8.6.1.            | Communication                         | 99        |
| 4.8.6.2.            | Social interaction                    | 100       |
| 4.8.6.3.            | Attention span                        | 100       |
| 4.8.6.4.            | Minimizing challenging behaviour      | 100 - 101 |
| 4.8.6.5.            | Impact of music                       | 101       |
| 4.8.6.6.            | Evaluation of qualitative measurement | 101       |
| 4.9. SL             | JMMARY                                | .102      |
|                     |                                       |           |

# CHAPTER FIVE SUMMARY, CONCLUSIONS AND RECCOMMENDATIONS

| 5.1   | INTRODUCTION                | 103       |
|-------|-----------------------------|-----------|
|       |                             |           |
| 5.2   | THE GOAL OF THE STUDY       | 103 – 105 |
| 5.2.1 | Summary                     | 103 – 104 |
| 5.2.2 | Conclusions                 | 104 – 105 |
| 5.2.3 | Recommendations             | 105       |
| 5.3   | THE OBJECTIVES OF THE STUDY | 106 – 111 |
| 5.3.1 | Summary                     | 106       |
| 5.3.2 | Conclusions                 | 107       |
| 5.3.3 | Recommendations             | 107 – 108 |
| 5.3.4 | Summary                     | 108 – 109 |

| 5.3.5        | Conclusions             | 109       |
|--------------|-------------------------|-----------|
| 5.3.6        | Recommendations         | 109       |
| 5.3.7        | Summary                 | 110       |
| 5.3.8        | Conclusions             | 111       |
|              |                         |           |
| 5.3.9        | Recommendations         | 111       |
| 5.4          | THE RESEARCH HYPOTHESIS | 112       |
| 5.5          | CONCLUDING STATEMENT    | 113       |
|              |                         |           |
| BIBLIOGRAPHY |                         |           |
| BIBLIC       | OGRAPHY                 | 114 – 123 |

### LIST OF FIGURES

|           |   | Page |
|-----------|---|------|
| Figure 1: | Pretest and Posttest answering distribution for |      |
|           | Respondent A                                    | . 76 |
| Figure 2: | Pretest and Posttest answering distribution for |      |
|           | Respondent B                                    | . 77 |
| Figure 3: | Pretest and Posttest answering distribution for |      |
|           | Respondent C                                    | 78   |
| Figure 4: | Pretest and Posttest answering distribution for |      |
|           | Respondent D                                    | 79   |
| Figure 5: | Pretest and Posttest answering distribution for |      |
|           | Respondent E                                    | 81   |
| Figure 6: | Pretest and Posttest answering distribution for |      |
|           | Respondent F                                    | 82   |
|           |   |      |

### LIST OF TABLES

|          |   | Page    |
|----------|---|---------|
| Table 1: | Criteria for diagnosis of autism                      | 33 – 34 |
| Table 2: | Pretest answering distribution for construct 1 and 2  | 71      |
| Table 3: | Pretest answering distribution for construct 3 and 4  | 72      |
| Table 4: | Posttest answering distribution for construct 1 and 2 | 73      |
| Table 5: | Posttest answering distribution for construct 3 and 4 | 74      |
| Table 6: | Posttest answering distribution for construct 5       | 75      |

### **ADDENDUMS**

Addendum A: Research Scale

Addendum B: Letter of Permission

Addendum C: Consent Form

**CHAPTER ONE: GENERAL INTRODUCTION** 

1.1 INTRODUCTION

In the following study, the researcher aimed to investigate the effect of music on autistic children's behaviour in the classroom in order to develop a greater understanding of the treatment of autistic children. Autism is defined as not

being a disease, but rather it 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 a child'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 the Autism Primer (2002), autism is defined as being 'a lifelong developmental disability that prevents individuals from properly understanding what they see, hear, and otherwise sense'. The article goes on further to state 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'.

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

This study aimed to identify the impact that music has on the autistic child's behaviour in the classroom situation. Through conducting the study the researcher attempted to draw conclusions and make recommendations that will

assist all professionals, more specifically play therapists, in helping autistic children to make contact with themselves and developing relationships with others.

As noted, music within play therapy was the decided medium to be used in attempting to impact the behaviour of autistic children. Kruger (2001:12) stated that music could be used in all facets of a child's life, namely physical, emotional, spiritual and social. Oaklander (1988:115) wrote that 'music and rhythmic beats are ancient forms of communication and expression'. Play therapy, according to Schoeman & Van der Merwe (1996:3-5), is the use of play to assist children to communicate to the therapist, what he/she may be experiencing. The researcher is therefore of the opinion that music in combination and within play therapy can be considered an effective medium to change the behaviour of autistic children.

Fouché & De Vos (1998:74) stated that a research proposal must demonstrate that the research is worth doing; that the researcher is competent to conduct the study; and that the study is carefully planned and can be executed successfully. This chapter therefore included motivation for choice of subject; problem formulation; the 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 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 MOTIVATION FOR CHOICE OF THE SUBJECT

In doing this study, the researcher was driven by certain motivations. These included personal feelings, as well as educational growth.

The researcher has had a personal interest in working with autistic children for a long period, with this factor being one of the main reasons for considering a

Masters degree in Play Therapy. With the researcher having completed a social work degree, she had been exposed to various areas of concern, excluding autism. For this reason there was a great interest in gaining more knowledge about the diagnosis as well as the treatment of children with autism. The reason that music was chosen as a medium for assistance was based on the researcher's personal interest and enjoyment of music.

Once this research has been completed, the researcher is hoping to develop a programme from the information gathered, to be used by professionals working with autistic children, more specifically play therapists. This will be done as part of a Doctorate degree.

On a more intellectual level, motivation for this research was based on the great number of children who are living with autism. The Society For The Autistically Handicapped (2002) stated that 'Autism is one of the four major developmental disabilities, and it occurs in five per 10,000 (low functioning) and approximately 18 per 10,000 (within the autism continuum). Therefore, through doing this study, the researcher aimed to help in improving the knowledge on treating autistic children, thereby assisting in improving the conditions and lives of those children diagnosed with autism.

#### 1.3 PROBLEM FORMULATION

'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 autism is becoming more a part of our society and that society is now beginning to acknowledge this. As has been mentioned, 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). The researcher

interpreted this 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.

Stacey (2002) wrote 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'.

The researcher is of the opinion that this shows the great amount of stress that families who are living with an autistic child, are placed under. This stress is continuous, and something that they are faced with every day. The challenges can be considered overwhelming.

Stacey (2002) stated 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'.

The researcher is of the opinion that this statement is a vital component in the disorder of autism, the fact that it is not curable. However, the researcher is of the opinion that it is definitely treatable.

Autistic children engage in unusual behaviour. Encarta (2002) explained 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'.

The Society for Autistically Handicapped (2002) commented further on the behaviour of autistic individuals. It is written that:

'Autistic behaviour problems range from very severe to mild. Severe behaviour problems take the form of highly unusual, and in some cases, even self-injurious behaviour...in its milder form, autism resembles a learning disability'.

As has been 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 (2002) stated that 'by age three, children diagnosed with autism have already begun a retreat into social isolation...even an inability to distinguish their own mothers' faces from those of strangers'. Angelfire (2002) explained 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'.

Through the above information and through personal contact with autistic children, the researcher reached the following conclusions: Autistic children are faced daily with the challenge of interacting with other people, while it is an activity for which they are not equipped. Autistic children are unable to make contact within themselves, as can be seen in the following statement by Fedics (2002), 'autism can be described as a perpetual state of disorientations and chaos, similar to what one experiences in nightmares, and resulting in feelings of fear and confusion'. 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.

The statistics on autism were varied, depending on the particular author or research that has been done. On an international level the following statistics were given. According to Encarta (2002) 'autism affects two to five out of every 10,000 children. In an article in the International Child and Youth Care Network (2002) it is written that autism ranges from around 40 to 90 per 10 000 births, although the true figures are still being investigated. The same article

commented on the fact that internationally, autism is approximately four times more common than Cerebral Palsy and 17 times more common than Down syndrome. Within 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 focus of this study was on the impact of music on the behaviour of the autistic child. According to Dancer (2003), music has a 'profound affect on the autistic child'. Dancer (2003) explained that many of the children use music as a means of communication and their behaviour, when exposed to music, can be considered uncharacteristic of the particular child. Many of the children become more involved and happier in their environment, communicative (nonverbally) and expressive. Dancer (2003) is of the opinion that the time spent in the music class each week by the children, affects their behaviour and states of mind positively in almost all cases.

All these statistics show the large incidence of autism in our society, with a great number not having been documented. The problem then, as formulated for this research, is the autistic child's inability to develop contact with self and with others in forming meaningful relationships and the continuous pressure and challenges that are faced by both the autistic child and his/her caregivers. The researcher is of the opinion that autism therefore requires a great deal of attention and that the use of music, within the classroom, can benefit the autistic child greatly.

#### 1.4 GOAL AND OBJECTIVES OF STUDY

#### 1.4.1 Goal of the study

According to De Vos, Schurink & Strydom (1998:7) a goal is '.... the end toward which effort or ambition is directed' and it is further stated that the terms 'goal', 'purpose' and 'aim' are often used interchangeably.

In the following study the goal was to determine the impact of music, within play therapy, on the behaviour of autistic children in a classroom situation.

#### 1.4.2 Objectives of the study

- 1.4.2.1 To extend the knowledge regarding autism as a phenomenon, autistic children in a classroom situation, as well as the use of music within play therapy, through a literature study.
- 1.4.2.2 To gain data through an empirical study on the effect of music on the behaviour of autistic children in the classroom.
- 1.4.2.3 To make conclusions and recommendations regarding the use of music in play therapy with the autistic child.

#### 1.5 HYPOTHESIS FOR THE STUDY

Based on the fact that the researcher wanted to investigate what the effect of music (independent variable) is on the behaviour of autistic children (dependent variable) a hypothesis seems to be most appropriate. According to Kerlinger (in De Vos, 2002a:116) 'a hypothesis is a conjectural statement of the relation between two or more variables'. De Vos (2002a:116) went on further, having mentioned that a good hypothesis has two criteria, namely; that they are statements about the relations between variables and that they carry clear implications for testing the stated relations. Grinnell (1993:74) described a hypothesis as 'a statement written in such a way that it can be proved or disproved by comparison with known facts'. Bless & Higson-Smith (1995:38) acknowledged that a hypothesis should be conceptually clear, has empirical referents, is specific and must be testable with available techniques.

From all the above definitions the following hypothesis was developed in relation to this specific study:

If music is introduced within a play therapy framework then the classroom behaviour of autistic children will improve.

#### 1.6 RESEARCH APPROACH

In this particular research a combination of quantitative and qualitative research was used, with triangulation as the specific method. Triangulation is defined by Mouton and Marais (in De Vos, 2002b:365) as 'the use of multiple methods of data collection with a view to increasing the reliability of observation. Jick (in De Vos, 2002c:342) mentioned the following advantages of triangulation:

- It allows researchers to be more confident of their results;
- It may help to uncover the deviant or off-quadrant dimension of a phenomenon;
- It can lead to a synthesis or integration of theories.

Within triangulation various models are given by Creswell, in which research can be done. For this particular study the researcher is of the opinion that the correct model to be used would be the dominant-less-dominant model. De Vos (2002b:366) defined this model as 'the researcher presenting the study within a single, dominant paradigm with one small component of the overall study drawn from the alternative paradigm'.

Within this study the dominant paradigm was quantitative. Creswell (in Fouché & Delport, 2002:79), defined 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'.

The less-dominant approach was qualitative. Qualitative research is defined by the same author (Creswell in Fouché & Delport, 2002:79) as 'an antipositivistic, interpretative approach, which is idiographic and thus holistic in nature, and aims to mainly understand social life and the meaning that people attach to everyday life'.

The researcher is of the opinion that this model would be most appropriate due to the fact that the dominant aspect is linked and aimed at achieving the goal that is set out in the study, and the less-dominant aspect will add great value to the information that will be gathered. Although one aspect will constitute most of the study, the other aspect will also be vital in adding value to the study.

#### 1.7 TYPE OF RESEARCH

The type of research that was used in this study was applied research. Applied research was defined by Fouché (2002a:108) as being 'aimed at solving specific policy problems or at helping practitioners accomplish tasks...it is focused on solving problems in practice'. Applied research is therefore aimed at attempting to solve practical problems within the field of practice.

The researcher is of the opinion that the study can be considered as having an impact on solving a particular problem within practice, regarding the behaviour of autistic children in the educational environment. A limited amount of information is available in this regard, and a study of this nature can be of great benefit to the management of autism in the classroom.

#### 1.8 RESEARCH DESIGN

Bless & Higson-Smith (1995:63) described a research design as having two meanings. Firstly, 'it can be understood as the planning of any scientific research from the first to the last step. In this sense it is a programme to guide

the researcher in collecting, analyzing and interpreting observed facts'. Secondly, 'it relates directly to the testing of hypotheses. It is a specification of the adequate operations to be performed in order to test a specific hypothesis under given conditions'.

De Vos & Fouché (1998:77) stated that a research design is defined as being the 'blueprint or detailed plan for how a research study is to be conducted, operationalizing variables so they can be measured, selecting a sample of interest to study'.

In the following study the research design used was a quasi-experimental design, more specifically the one-group pretest-posttest design. According to Fouché, (2002b:144) in this particular design, there is measurement of a dependent variable (the autistic children's classroom behaviour) when no independent variable (music) is present. Subsequently the independent variable is introduced, followed by a repeated measurement of the dependent variable at a later stage.

The researcher is of the opinion that this was the most appropriate design to be used in this study, as it would be the most accurate manner in which to measure the impact that music has on the behaviour of the autistic child. This was done through the use of the scale (Addendum A) within structured observation, as well as unstructured observation of each autistic child's individual response.

#### 1.9 RESEARCH PROCEDURE

When completing a study of any nature, a particular research procedure is followed. In this study the following research procedure was followed.

As mentioned, the dominant-less-dominant model was followed. This involved triangulation, a combination of approaches, and therefore a procedure was

followed for each aspect, namely; a conscious combination of quantitative and qualitative methodology.

When conducting the quantitative aspect of the research, structured observation took place, using a scale. Structured observation, according to Bailey (1994: 246), involves 'counting the frequency with which certain behaviours occur or certain things are said'. When conducting structured observation the steps that were followed included defining the behaviour and listing the indicators of behaviour to be studied; identifying a time frame during which the behaviour will be observed; developing a data collection instrument; selecting an observer role; conducting observation; and verifying the data.

The particular behaviour that was observed was that of the autistic child in the classroom. The manner in which the structured observation took place was through the use of a scale. According to Neumann (in Delport, 2002:185) a scale can be defined as 'a measure in which a researcher captures the intensity, hardness or potency of a variable and then arranges responses or observations on a continuum, through single or multiple indicators'. On this particular research scale there are various behavioral aspects that are considered typical to an autistic child.

According to Nash; Bonestell & Noble (2002) signs of autism may include: loss of language skills, short attention span, no eye contact and temper tantrums. Ruble & Dalrymple (2002) considered autistic individuals to have impairment in: (i) social interaction with peers (ii) communication. The Autism and Pervasive Developmental Disorder Fact Sheet (2002) commented that autistic children have 'communication problems (for example using and understanding language); difficulty in relating to people, objects, and events; unusual play; difficulty with changes in routine; and repetitive body movements or behaviour patterns'. In the Autism Primer (2002) it is written that although the degree and severity of characteristics differs from person to person, the characteristics usually include:

severe delays in language development; severe delays in understanding social relationships; inconsistent patterns of sensory responses; uneven patterns of intellectual functioning; and marked restriction of activity and interests.

Based on the above supplied information, the following indicators of behaviour were included on the scale:

- Communication (verbal and/or non-verbal);
- Social interaction
- Attention span
- Challenging behaviour.

The researcher is of the opinion that it is important to mention that each individual child will have different behavioural patterns and will respond in a unique manner to the introduction of music into the classroom. For that reason, a qualitative approach was also presented, whereby the researcher conducted unstructured observation. Bailey (1994:246) stated that when doing unstructured observation, the 'researcher does not look for any particular behaviours but merely observes and records whatever occurs'. Through the unstructured observation the researcher was able to comment, in more detail, on what took place in the classroom when the music was introduced.

The quantitative aspect of the study, namely the structured observation with a scale, occurred at the beginning of the study whereby the researcher observed the autistic children in their classroom environment without the independent variable (music) being present. This was then repeated at a later stage, after music had been introduced into the classroom, in order to document any changes in behaviour.

Data analysis also involved two aspects, due to the combination of approaches used. The results of the quantitative research were analyzed 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'. Researcher was of the opinion that most appropriate form of graphical presentation was the bar graph, as it depicted the data gathered in a straightforward and understandable manner. The information gathered through the qualitative research was analyzed by categorizing the information according to the specific respondents that where observed. This process involved reducing the data into 'small manageable sets of themes to write into the final narrative' (De Vos, 2002c: 344).

Once both the structured observation (using a scale) and the unstructured observation were completed, the researcher could reach conclusions regarding the impact that music had on the classroom behaviour of the autistic child.

#### 1.10 PILOT STUDY

#### 1.10.1 Literature study

The goal of the study was to research the benefits of including music in the classroom, on the behaviour of autistic children. Literature was used from both national and international sources that were retrieved from the Academic Information Service of the University of Pretoria. These resources included books, journal articles and Internet information, which were gathered from all the different disciplines that are linked to the field of study. These resources focused on autism, the behaviour of autistic children and the use of music within play therapy.

#### 1.10.2 Consultation with experts

For this study the following experts were consulted:

Mrs. J. Stacey at the Autism Society of South Africa, who provided information on autism, as well as the contact details for other individuals involved with autistic children, especially the Key School in Parktown West.

Mrs. I. Kimmel, the headmistress of the Key School where the study was conducted. Mrs. Kimmel provided unlimited information gained, through her many years of experience with autistic children and their behaviour.

Mrs. J. Dancer at the Key School for children with Autism, who provided information on using music with autistic children.

Relevant individuals identified at the school, such as Mrs. P. Androliakos, the class teacher, who provided access to the children and assistance in carrying out the study.

#### 1.10.3 Feasibility of the 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; and the venue to be used for the research.

The researcher planned to complete this study within a year and anticipated no problems with either the money or the venue needed for the study. The study was conducted at The Key School for Specialized Education, in Parktown West, Johannesburg. Permission had been granted for the study (See Addendum B).

#### 1.10.4 Pilot test of measuring instrument

Strydom (2002a:210) defined 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 beginning the research, which involved the researcher following the research procedure with two autistic children who were not involved in the research. This involved structured observation, using the scale, to ascertain that it measured the relevant behaviour. The children were not part of the research group, but attended the Key School, and went through the identical procedures that took place in the actual study.

# 1.11 DESCRIPITION OF THE RESEARCH POPULATION, DELIMITATION OF SAMPLE AND SAMPLING METHOD

When looking at the population in a study one needed to look at two separate issues, namely **universe** and **population**. Ideally, as stated by Bailey (1994:83), one would like to study the 'entire population or universe, to give more weight to our findings'. Strydom & De Vos (1998:190) defined universe as being all the 'potential subjects who possess the attributes in which the researcher is interested'. Population is a term that 'sets boundaries on the study units. It refers to individuals in the universe who possess specific characteristics'.

In this particular study the universe was all the schools for autistic children within the Gauteng Region, where as the population was the autistic children within the specific school that the study focused on.

Strydom & De Vos (1998:191) defined a sample as being 'the element of the population considered for actual inclusion in the study'. In this study the sample used was a small group of six children within the chosen school, between the ages of six to 12 years.

In this study the sampling method used was **non-probability sampling**, focusing on the **purposive sampling** method. Non-probability sampling is 'done without randomization' (Strydom & De Vos, 1998:195), and therefore is based on a planned, strictly followed method. Purposive sampling, according to Strydom &

De Vos (1998:198-199), is a 'type of sample based entirely on the judgment of the researcher, in that a sample is composed of elements which contain the most characteristic, representative or typical attributes of the population'. The criteria that were present in order to select the participants, were the following:

- The individual should be a child, between the age of six and 12 years;
- The child should be diagnosed with autism;
- The child should be a member of the particular classroom that is selected;
- The child could be of either gender; and
- The child should be from any culture, as language is not a variable.

The researcher is of the opinion that this would be the best sampling method to use in this study due to the fact that this study requires well-chosen participants to be involved, in order to gain the richest information.

#### 1.12 ETHICAL ISSUES

When doing research, there are various ethical issues that had to be taken into consideration. Ethical issues that need to be identified according to Strydom (2002b: 64-73) include:

#### 1.12.1 Harm

Subjects can be harmed in a physical and emotional manner. According to Dane (in Strydom, 2002b:64) 'ethical consideration rests with the researcher to protect subjects against any form of physical discomfort which may occur within reasonable limits from the research project'.

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 classroom and considered the children's well-being and rights of foremost importance.

#### 1.12.2 Informed Consent

In Strydom (2002b:65) it is stated that:

'Obtaining informed consent implies that all possible or adequate information on the goal of the investigation, the procedures which will be followed during the investigation, the possible advantages, disadvantages and dangers to which respondents may be exposed, and the credibility of the researcher, be rendered to potential subjects or their legal representatives'.

Denzin & Lincoln (1994:90) stated that the 'subjects of research have the right to be informed that they are being researched and also about the nature of the research'.

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

#### 1.12.3 Deception of Subjects

Judd (in Strydom, 2002b:66) stated 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) mentioned that 'deception of subjects as 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.

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.

#### 1.12.4 Violation of privacy

Strydom (2002b:67) defined privacy as 'that which normally is not intended for others to observe or analyze'. Within research the privacy of the individuals should be of utmost importance. Bulmer (in Denzin & Lincoln, 1994:92) stated that 'identities, locations of individuals and places are concealed in published results, data collected are held in anonymized form, and all data kept securely confidential'.

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

#### 1.12.5 Actions and competence of researchers

Strydom (2002b:69) stated 'that researchers are ethically obliged to ensure that they are competent and adequately skilled to undertake the proposed investigation'. He goes on further to state 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 had completed a required module in research at the University of Pretoria and a qualified professional guided the researcher and supervised at all times throughout the study.

#### 1.12.6 Release or publications of the findings

Strydom (2002b:71) wrote 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 has had a publication completed for the University of Pretoria, in the form of a mini-dissertation, in order to allow access to all the relevant professionals. An article for possible publication in a scientific journal has also been prepared.

#### 1.12.7 Debriefing of respondents

Strydom (2002b:73) explained 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 prepared to deal with the situation if the need arose. This aimed to ensure that all subjects were satisfied and were on a normal level of functioning, once the study was completed. The need did not arise.

#### 1.13 LIMITATIONS OF THE STUDY

Within a study of this nature various limitations are always present, which the researcher should aim to minimize.

The researcher was aware that her presence within the classroom could have had an impact on the behaviour of the respondents, although the researcher wanted to only monitor the impact of the music. The researcher attempted to rectify this by being present in the classroom for a long period before the introduction of the intervention. This aimed to allow the children to adjust to the presence of the researcher before the music was introduced.

The researcher had hoped to find improvements once the music had been introduced and therefore this could have impacted on the researcher's objectivity. However, the researcher aimed to remain objective at all times throughout the study.

When conducting the scoring of the scale (Addendum A) the researcher had to use personal judgment, when referring to very poor or very good. Another researcher could have interpreted the behaviour differently. However, once again the researcher aimed to maintain objectivity at all times.

#### 1.14 DEFINITIONS OF KEY CONCEPTS

#### 1.14.1 Music

The Concise Oxford Dictionary (1995:667) defined music as 'an art combining sounds of voice(s) or instrument(s) to achieve beauty of form and expression of emotion'.

A further definition is given by Marley (1984:127) stating that 'music involves the individual so totally and in such a unique fashion that closeness is felt, and painful aloneness may be alleviated...music is nearly always an expression of good will, a reaching out to others'.

The researcher is of the belief that music is a powerful tool in affecting individuals in both a mental and emotional manner. Music affects all individuals in whatever particular situation they are placed and can be used by therapists in a very effective manner.

#### 1.14.2 Play therapy

Play therapy can be considered the use of play to assist children, in therapy, in dealing with their particular problem/s. This involves the use of various play materials and the therapist being in tune with the needs of each unique child (Van der Merwe, 1996:3-5).

Play therapy can therefore basically be defined as using play as the main medium of therapy. This is based on the fact that 'play is children's symbolic language and provides a way for them to express their experiences and emotions in a natural, self-healing process' (Landreth, 1991:373).

The researcher defined play therapy as doing therapy through playing with a child. This can be through various mediums, such as music, toys, sand, water or games.

#### 1.14.3 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 on an everyday basis, in completing simple, necessary tasks.

#### 1.14.4 Children

Skelton (1998:27) defined a child as 'any person under 18, unless by law, majority is attained at an earlier age'.

The Concise Oxford Dictionary (1995:171) defined a child as 'a young human being, boy or girl, unborn or newborn, a person who has not reached the age of discretion'.

The researcher understands children to be individuals from birth until the age of 18 years.

Within this particular study the age of the child was not considered of importance due to the fact that within the school focused on, the classes are divided according to ability and not age, although the children do fall between the ages of six to 12 years.

General Introduction 23

# 1.15 CONTENTS OF RESEARCH REPORT

- <u>Chapter 1:</u> This chapter focused on giving an overview of what the study included, introducing the issue of concern, as well as research methodology.
- Chapter 2: Literature review: this chapter focused on autism.
- <u>Chapter 3:</u> Literature review: this chapter focused on the use of music in play therapy, in order to complete this particular study with autistic children.
- <u>Chapter 4:</u> Empirical study: this chapter focused on the research and empirical findings.
- <u>Chapter 5:</u> Conclusions and recommendations: this chapter focused on the conclusions of the study, as well as the recommendations, gained from the study.

**CHAPTER TWO: AUTISM** 

2.1 INTRODUCTION

Autism is defined by the Autism Society of South Africa (2002) as 'a lifelong, complex, pervasive developmental disability, which appears to have genetic predisposition and stems from a multi-faceted origin, causing disturbances in brain development and functioning'.

children in today's society. Aarons & Gittens (1996:1) commented on this in the

Autism is a disorder that is being diagnosed and recognized in more and more

following statement:

'Until quite recently, autism, with its paradoxical signs and symptoms, was considered to be a rare condition. It had an aura of fascination – to such an extent that the majority of the population had a viewpoint about it without necessarily having had any direct experience of the condition'.

The above statement, according to the researcher, shows the lack of information and research that had been conducted with regards to autism. However, the public at large seems to be aware of it, although their understanding can be considered, more often than not, incorrect.

Autism, according to Trevarthen; Aitken; Papoudi & Robarts (1996:4), is 'a compound of two Greek words – 'aut-', which means 'self', and '-ism', which implies 'orientation or state'. Therefore, in a simple statement, autism can be considered a condition of an individual who is unusually absorbed in him/herself. An individual with autism explained her 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' (Williams,1996: 1).

Autism, according to the researcher, appears to be an ever-growing field, in both the prevalence of it and research being done with regards to it. Individuals who are placed in the circumstances of living with autism are faced with a challenging, and at times frustrating, life. However, there are various ways in which their quality of life can be improved.

In this chapter the researcher aims to give the reader a better understanding of autism, looking at autism's origins, causes, characteristics, behaviour, as well as the effect of autism on society. There is a section focusing on the effect of autism in the classroom, which is relevant for this particular study.

Autism is a disorder that requires a great deal of attention due to the increasing number of children who are now being diagnosed with this disorder. Although the disorder is not curable, there are definitely ways in which both the parent/s and professionals can improve the quality of life of these individuals.

#### 2.2 DEFINING AUTISM

When attempting to define autism there are many definitions given. The researcher will mention a few of them in order to educate the reader with a basic understanding of autism.

Fedics (2002) defined autism as 'a perpetual state of disorientation and chaos, similar to what one experiences in nightmares and resulting in feelings of fear and confusion...autistic children cannot awake from the nightmare in which their mind is trapped'.

# The Autism Checklist (2002) stated that:

'Autism affects thought, perception and attention. It 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. In addition, the behaviour usually occurs across many different situations and is consistently inappropriate for the individuals age'.

'What is Autism?' (2002) defined autism as 'a developmental disorder of brain functions, which shows three classical symptoms: impaired social interaction, problems with verbal and non-verbal communication and imagination, and unusual or severely limited activities and interests'.

The Autism Primer (2002) wrote that 'Autism is a life-long developmental disability that prevents individuals from properly understanding what they see, hear, and otherwise sense...this results in severe problems of social relationships, communication and behaviour'. The article goes on further to state 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'.

The International Child and Youth Care Network (2002) defined autism as 'a lifelong, complex and variable, pervasive developmental disability, which stems from a multi-factorial origin and results in disordered brain developmental function'.

The Autism and Pervasive Developmental Disorder Fact Sheet (2002) defined autism according the 'The Individuals with Disabilities Education Act (IDEA)', where it is stated that autism is 'a developmental disability significantly affecting verbal and non-verbal communication and social interaction, usually evident before age three, that adversely affects a child's educational performance'.

The researcher is of the opinion that all the above definitions provide an understanding of what the theoretical definition of autism. However, the researcher is of the belief that each individual who is diagnosed with the disorder will respond and behave differently. These definitions are merely a guideline, and then the parent/s or professional needs to deal with the child as a unique individual within his/her circumstances.

#### 2.3 ORIGINS OF AUTISM

As has been previously stated, autism was considered a rare condition for a long period, with this only really beginning to change over the last ten to 15 years. Autism was initially defined by the pioneers Leo Kanner and Hans Asperger, who worked independently of each other in publishing the first accounts of autism (Frith, 1989:7). Frith (1989:7) stated that the 'publications, Kanner's in 1943 and Asperger's in 1944, contained detailed case descriptions and also offered the first theoretical attempts to explain the disorder'. Frith (1989:7) went on further to write that the term 'autistic' was first identified by Ernst Bleuler in 1911, when referring to a basic disturbance in schizophrenia.

Aarons & Gittens (1996:5) also mentioned the fact that Kanner first described the condition in 1943. The authors go on further to state that Kanner listed a number of features, which included aspects such as an inability to develop relationships; non-communicative use of spoken language after it develops; repetitive and stereotypical play; and maintenance of sameness (Aarons & Gittens, 1996:5-6). Kanner then reduced these features to two main points, namely: maintenance of sameness in children's repetitive routines and extreme aloneness, with onset within the first two years. According to Aarons & Gittens (1996:6) this led to a great deal of confusion, as these two features only refer to autism in its most classic form. Aarons & Gittens (1996:6) go on to mention that Asperger was working on a similar area of concern, around the same time. However, his work

was written in German, and only really reached the public in 1991 through an edition done by Uta Frith.

Trevarthen, et al. (1996:4-6) had also documented that Kanner published the first clinical paper describing the disorder in 1943. Itard, in 1801, and Kaspar Hauser, in 1828, also gave descriptions of the disorder, and can be considered reliable sources, although not a great deal of research was actually done. Trevarthen, et al. (1996:4) wrote that Kanner recognized the condition as 'early infantile autism', concluding that the essential characteristic is a disturbance of effective contact.

The researcher is of the opinion that since then a great deal more information has been gathered regarding the disorder, leading to a better understanding of autism. This understanding includes the causes, characteristics and behaviour/s associated with autism, as well as ways in which the disorder can be addressed.

#### 2.4 CAUSES OF AUTISM

The researcher is of the opinion that the information gathered on the causes of autism can be considered incomplete. This is due to the fact that research is still being conducted in various fields to gain a better understanding in this area. Aarons & Gittens (1996:19) best describe all the factors that could contribute to the onset of autism, in the following statement:

'For autism to develop, brain damage has to occur in the setting of a genetic predisposition ... the causation of autism which is likely to be heterogeneous, arises when a number of quite common facts coincide'.

When looking at the causes of autism, the various authors give varied opinions of the source or beginnings of the disorder. The researcher is of the belief that it is important to look at all the different theories in order to gain a deeper and overall understanding of what the causes of autism may be.

### 2.4.1 Genetics

The first and most obvious cause of autism could be that of genetics. According to Attwood (1995:141), Hans Asperger mentioned the 'ghosting or shadow of similar characteristics in the parents (particularly fathers) of the children'. Aarons & Gittens (1996:17) stated that 'autism is highly heritable ... there is an autism "phenotype". Frith (1989:77) wrote that in a study done, approximately two percent of siblings of autistic children are found to be autistic, which is 50 to 100 times higher than that of the population in general.

It is important to note that the genetic connection is not merely referring to autistic parent/s having an autistic child, as this is highly unlikely, but rather various different disorders being present that seem to have a link with autism. These disorders can include speech disorders, learning difficulties and other minor cognitive disabilities (Aarons & Gittens, 1996:17). The researcher is of the opinion that parents are often in denial when making any connection between themselves and their child with autism.

The research on this specific cause, however, can be considered inconclusive, although there do seem to be tangible links between the genetic heritages of the autistic child.

### 2.4.2 Pregnancy/birth

Frith (1989:78-79) stated that 'the incidence of perinatal hazards in autism is astonishing high...significantly more hazards of pregnancy and birth are present in autistic than in normal children'. Attwood (1995:142) wrote that three potential causes of autism are recognized, namely 'genetic factors, unfavorable obstetric events and infections during pregnancy or early infancy that affect the brain'.

There is not a great deal of information with regards to difficult pregnancy/birth causing autism. However, the few authors that do mention it provide valuable information, which should be considered.

# 2.4.3 Parenting

Aarons and Gittens (1996:15) explained that initially there was a belief that parents were at fault, not providing enough warmth and affection for the child. This idea was disregarded. However, another similar idea arose at a later stage, stating that a breakdown in the bonding process between the child and the parent had led to the development of autism, which therefore also lead to an opportunity for a cure (Aarons & Gittens, 1996:15). This idea was also disregarded. Attwood (1995:144) commented on these beliefs, stating that 'a belief that must be discouraged is that autism is a consequence of inadequate parenting, abuse or neglect'.

The researcher is in agreement with the above statement, but is of the opinion that parent/s are responsible for the quality of life of the child once autism has been diagnosed. Many parent/s appear to often be in denial or constantly searching for the 'miracle' cure. This is in no way beneficial for the child, and can cause a more severely affected and unhappy child.

#### 2.4.4 Neurological causes

Aarons & Gittens (1996:19) explained that 'it seems very likely that brain damage or dysfunction is present in autism in all its manifestations...areas of interest include the right hemisphere, limbic system and cerebellum'. Trevarthen, et al. (1996:49) postulated that:

'The evidence is now overwhelming that a prenatal fault in brain development can cause autism...this can be caused in a variety of ways, such as by a fault in genetic instructions for formation of specific systems in the brain, or an infection or toxic chemical influence that impinges on

the same processes...in nearly every case of autism evidence of an abnormality in the brain can be found.'

However, Frith (1989:77) stated that 'until we are clearer about the underlying cognitive dysfunction in autism, it is difficult to make further progress along the lines of neuropsychological investigations'. The researcher is in agreement with this statement, although there is valuable evidence linking autism to a neurological problem that should be considered.

All the above causes of autism should be taken into serious consideration when undertaking a study of autism, working with, or living with autistic individuals. All these causes have a value and although a great deal of research still needs to be done in this regard, the causes that are mentioned can be of assistance.

#### 2.5 CHARACTERISTICS OF AUTISM

Autism can be considered as a confusing and challenging disorder that is still being researched and understanding gained. The Autism and Pervasive Developmental Disorder Fact Sheet (2002) stated 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'. When looking at the disorder there are various characteristics that are mentioned by many authors, with regards to autism. The researcher is of the belief that in order to gain the best understanding of the disorder, various authors and their ideas need to be mentioned.

There are considered to be five different types of autism, which include the following (Defining Autism, 2002):

 Autistic disorder: this is impairment in social interaction, communication and imaginative play prior to age three. There are stereotyped behaviours, interest and activities;  Asperser's disorder: this is characterized by impairments in social interactions and the presence of restricted interests and activities. There is no clinical significant general delay in language, and these individuals have an average to above average intelligence;

- Pervasive development disorder: this is typically known as atypical autism. A child does not meet the criteria for a specific diagnosis, but there are severe and pervasive impairments in specified behaviours;
- Rett's disorder: this is a progressive disorder, which up until this stage has occurred only in girls. In this disorder a child will develop normally and then will lose previously acquired skills, leading to a loss in the use of his/her hands. This normally begins between the age of one to four years, and is characterized by the repetitive hand movements that develop;
- Childhood disintegrative disorder: this disorder is characterized by the normal development up until the age of two years, and then losing all previously acquired skills.

The Autism Primer (2002) stated the following as characteristics of autism:

- Severe delays in language development;
- Severe delays in understanding social relationships;
- Inconsistent patterns of sensory responses;
- Uneven patterns of intellectual functioning; and
- Marked restriction of activity and interest.

Koegel; Koegel; Frea & Smith (1995:2) also mentioned various characteristics of autism, which they found most prevalent. These include:

- Lack of social-communicative gestures and utterances;
- Lack of verbal language development;

• The presence of self-stimulating behaviour, which refers to repetitive behaviour, such as hand-flapping;

- The presence of self-injurious and aggressive behaviour; and
- A demand for sameness and preoccupation with objects.

Groden & Baron (1988:3) stated that autism is a 'behavioural syndrome, the essential features of which are typically manifested before 30 months of age and include disturbances of (1) developmental rates and/or sequences; (2) responses to sensory stimuli; (3) speech, language, and cognitive capacities; and (4) capacities to relate to people, events and objects.

The Autism Society of South Africa (2002) composed the following characteristics or criteria for the diagnosis of autism:

Table 1: Criteria for diagnosis of autism

| CHARACTERISTIC  | SPECIFIC BEHAVIOUR   |
|---|--|
| Severe Impairment in Reciprocal Social Interaction (at least two of the following). | <ul> <li>Inability to interact with peers;</li> <li>Lack of desire to interact with peers;</li> <li>Lack of appreciation of social cues; and/or</li> <li>Socially and emotionally inappropriate behaviour.</li> </ul>  |
| All-absorbing narrow interests (at least one of the following).                     | <ul> <li>Exclusion of other activities;</li> <li>Repetitive adherence; and/or</li> <li>More rote than meaning.</li> </ul>  |
| Imposition of routines and interests (at least one of the following).               | <ul><li>On self, in aspects of life and/or</li><li>On others.</li></ul>  |
| Speech and language problems (at least three of the following).                     | <ul> <li>Delayed development of speech;</li> <li>Superficially, perfect expressive language;</li> <li>Formal, pedantic language;</li> <li>Odd prosody, peculiar voice characteristics; and/or</li> <li>Impairment of comprehension, including misinterpretations of literal/implied meanings.</li> </ul> |

| Non-verbal communication problems (at least one of the following). | <ul><li>Limited use of gestures;</li><li>Clumsy/gauche body language;</li><li>Limited facial expression; and/or</li></ul> |
|--|---|
|  | <ul> <li>Inappropriate expressions.</li> </ul>  |

The Autism and Pervasive Developmental Disorder Fact Sheet (2002) stated that 'communication problems (such as using and understanding language); difficulty in relating to people, objects, and events; unusual play with toys and other objects; difficulty with changes in routine or familiar surroundings; and repetitive body movements or behaviour patterns', can be considered some or all the characteristics observed in mild to severe forms of autism.

According to What is Autism? (2002) 'the hallmark feature of autism is impaired social interaction' and this may include a child failing to respond to his/her name and deliberately not looking at other people. The article further stated that autistic children might battle to interpret tones of voice and/or facial expressions as well as struggling to respond to other individual's emotions. They can be considered to be totally unaware of others' feelings. What is Autism? (2002) explained that children with autism may engage in repetitive behaviour, as well as self-injurious behaviour, and may develop language at a later stage, which is often presented in a singsong voice.

Frith (1989:11) considered the following to be the diagnostic criteria of autism:

- Qualitative impairment in reciprocal social interaction;
- Qualitative impairment in verbal and non-verbal communication, and in imaginative play; and
- Markedly restricted repertoire of activities and interests.

The researcher is of the opinion that although there are many more references that contain information regarding autism, the above references give a good understanding of what the characteristics of autism are, without repetition.

From all the above given characteristics, there are various symptoms identified in the behaviour of an autistic child. According to Williams (1996:8-9), these symptoms include the following:

- An impairment in the ability to interact socially;
- Lack of communication, both verbally and non-verbally;
- Certain 'bizarre' behaviour/s:
- 'Bizarre' responses to sensory stimuli; and
- Impairment in the use of imaginary play.

The researcher is of the belief that when looking at an autistic child, there are various obvious signs that one will notice. In a more direct sense than the above given information, this may include:

- The child constantly being on his/her own by choice;
- The child not wanting to communicate with anyone, in any manner;
- The child displaying inappropriate behaviour in social settings, such as swearing, screaming or causing bodily harm to him/herself or others; and
- The child not displaying normal play behaviour for his/her age.

Autism could be considered a complex disorder and there was no strict guideline for diagnosis. Therefore, each individual case should be dealt with as such, and the professional/s should approach the case with flexibility and a good understanding of what autism may and could include. This especially refers to the symptoms, as they will definitely vary according to the degree of autism, as well as the individual child's responses.

Through gathering the characteristics and symptoms of autism, one can gather the great complexity and challenge of the disorder, for both the child affected and

his/her significant caregivers. It is a disorder that requires a great deal more attention, in order to assist the individuals affected.

# 2.6 PREVALENCE OF AUTISM

Autism, until quite recently was considered a rare disorder. However, the statistics show otherwise. As is stated by The International Child and Youth Care Network (2002) the 'highest estimate for the whole spectrum, ranges from around 40 to 90 per 10 000 births ... four times more common than Cerebral Palsy and 17 times more common than Down Syndrome. The researcher found this comment quite surprising, as both Cerebral Palsy and Down syndrome appears to be so much more prevalent than autism.

Trevarthen, et al. (1996:38) originally documented an estimate of four and half to six cases of autism per 10 000, but then increased this to 10 to 14 cases of autism per 10 000 population. Trevarthen, et al. (1996:38) attributed this increase to the weakening of the definition of autism, rather than an increase in actual numbers.

Aarons & Gittens (1996:17) however, felt strongly that there had been an increase in the numbers of autistic individuals over the past few years. It is stated by Aarons & Gittens (1996:17) that 'in the past the incidence of autism was confirmed as being 4 to 5:10,000 for classic cases, and 17:10,000 for closely related conditions...estimated number of individuals diagnosed with the autistic spectrum disorders is now 91:10,000'. This, according to the researcher, shows a great increase, although this could be attributed to an increase in awareness, rather than actual numbers of individuals with autism.

The Autism Primer (2002) suggested that autism could be considered one of the four major developmental disabilities. Here it is written that 'autism is distributed throughout the world among all races, nationalities, and social classes'. What is

Autism? (2002) is in agreement with this, wherein it is stated that autism 'has been found throughout the world in people of all racial and social backgrounds'.

When referring to the impact of autism on males and females, it is documented in most research that autism affects males four times more than females. The Autism and Pervasive Developmental Disorder Fact Sheet (2002) postulated that autism is 'four times more common in boys than in girls'. Aarons & Gittens (1996:17) reiterated this, by stating that 'males with autism tend to outnumber females by three or four times', as do the International Child and Youth Care network by commenting that autism affects four times as many boys as it does girls.

Within South Africa, research on Autism appears only to be beginning, and the statistics are limited. However 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 researcher is of the opinion that there are many children who have been misdiagnosed, or who have simply not received any form of diagnosis, due to the fact that they are living within the poorer and underprivileged areas of the country. Surely, if these numbers where included, the statistics would be of a much higher ratio within South Africa.

All the above statistics show the documented cases of autism within our society. The researcher feels strongly that there are a great many more cases that have simply not been recognized. However, even with the statistics that are given, the researcher was quite surprised at the high incidence of autism, both nationally and internationally.

#### 2.7 SOCIAL EFFECT OF AUTISM

Aarons & Gittens (1996:88) stated that 'almost as soon as parents learn that their child may have autism, their thoughts inevitably turn to the future – what will the outcome be?' The effect that autism has on a family is almost incomprehensible. The families undergo a great deal of changes, which are documented by Braude (1999:24-26) and include the following:

- Reaction to changes in routine: As has been previously stated, autistic children require the most rigid of routines. As soon as this routine is altered the child becomes unsettled. This is related to the insistence on sameness as one of the symptoms of autism.
- Temper tantrums: 50% of parents reported that their children exhibited temper tantrums when a change of environment occurred. This, according to the researcher, places a great strain on the parent/s and/or family to maintain an environment of sameness in order to decrease the likelihood of a temper tantrum.
- Avoidance of physical contact: Many autistic children tend to avoid any
  form of physical contact. This forms an essential part of the lives of many
  autistic children, although it does appear that when the child is
  approached sensitively, he/she is not totally averse to physical contact.
- Social interaction: Attwood (1995:28) commented that autistic children might have an inability to interact with peers, as well as a lack of desire to interact with those around them. They may display socially and emotionally inappropriate behaviour.
- Behaviour characteristics: Many parents mentioned that their children displayed specific behaviour such as a dislike for bathing; food preferences; and/or mood swings and tics.

The researcher is of the opinion that all the above listed behaviours place a great deal of stress on the family within its social environment. Each aspect, depending on the individual child, will vary in severity, and may even lead to the family avoiding social events/situations at all costs. The researcher is of the opinion that in the case where there are other siblings, the constant attention that is required by the autistic child and to his/her routine, could severely affect the sibling/s.

However, Attwood (1996:88) stated that although looking into the future of an autistic child may be daunting, even 'looking into the future of normal children is also fraught with imponderables'. The difference however, would be that with the parents of children with special needs, the concerns are greatly increased. This brings to the researcher's attention that the parent/s and family of an autistic child are faced with great challenges and the future of the child and the family can be disconcerting at times. Attwood (1996:89) stated that parents of children with special needs are burdened with the added concern of 'What will happen when we are gone, or too old to look after him/her?'

Autistic children can be considered, through the belief of the researcher, to be 'socially underdeveloped'. This would have a profound effect on the lives of those around the autistic child, as one is normally used to interacting with others on a daily basis. The behaviour of the autistic child places the family in a predicament, leading to avoidance of social situations.

All the above information indicates that besides the everyday challenges that are faced within the home of an autistic child, there is the added pressure faced when dealing with the autistic child within his/her society.

#### 2.8 EFFECT OF AUTISM IN THE CLASSROOM

The researcher is of the belief that it would be highly beneficial to include a section on the effect that autism has in the classroom, due to this particular study being conducted in a classroom environment. Aarons & Gittens (1996:22) commented on the fact that the 'observation of children in a social setting, such as school or nursery, where their difficulties are more likely to be highlighted among socially normal peers, is always advisable'. However, the researcher is of the opinion that it is important to be educated on how the autistic child may behave like in the classroom, and what effect the child may have on the classroom environment.

Williams (1996:26) stated that 'in the case of two people showing all three symptoms associated with autism, one person may have one underlying problem, the other may have a different underlying problem, but both result in the same three symptoms associated with autism'. The author goes on further to create fictional children within a fictional classroom in order to illustrate her point. Her fictional children include Joanne with a case of compulsion; Jed with a case of obsession; Jasmine with a case of acute anxiety; Jake with a case of sensory hypersensitivities; and Josh with a case of attention problems. Although this is fictional, the story is very close to reality. All these children have been diagnosed with autism, correctly. However each underlying problem creates a unique situation to deal with.

The researcher is of the opinion that this example shows exceptionally well what the effect of an autistic child may be on the classroom situation. Each child is presenting his/her underlying personal problem leading to many differences within the classroom situation.

Trevarthen, et al. (1996:172) highlighted that:

'However varied the severity of autism may be, and whatever the precise form of disability may come with the autism in different children, autism is a disorder of relating. Whether the child may speak or make inarticulate sounds, all autistic children communicate in a way that makes sharing of experience, and especially teaching, difficult. This means that the fundamental task of anyone, parent, teacher, playmate or friend, who wants to help the child to communicate and learn better, is to find a way to be as accessible and comprehensible to the child as possible'.

The researcher is of the belief that this paragraph highlighted various aspects. Firstly, one of the core aspects of autism is mentioned, that autism is a disorder of relating. Secondly, autistic children do communicate in some way, although in most cases it is not audible. And finally the vital factor that is necessary for all individuals to grasp – one needs to be accessible to the autistic child at all times. However, when one considers this in the classroom situation, it appears almost impossible. The challenges appear incomprehensible.

Looking at education of autistic children within South Africa, Braude (1999:39) commented on the fact that generally there appears to be unhappiness. It is written that 'a number of responses which called for the Department of Education to treat the education of children with autism as unique, requiring individual attention for each child...the size of the class in proportion to the number of teachers was far greater than it should be'.

This comment, in conjunction with the previous statements regarding education, leaves the researcher feeling disheartened. Autistic children require a great deal of personal attention and understanding within the educational setting, in order to achieve their potential.

Autistic children, within the classroom, have a great impact on the everyday happening of a normal day. Each autistic child is experiencing his/her day uniquely, leading to a classroom filled with children diagnosed with the same disorder (autism), but they are miles apart.

#### 2.9 SUMMARY

Autism is a complex and challenging disorder that is being diagnosed in more and more children in our society today. The reasons for this increase are not only due to an increase in actual numbers of children affected by autism, but it could be due to an increased awareness and more appropriate diagnosis.

This chapter aimed at creating a greater understanding of autism in the mind of the reader. This involved looking at the various definitions given for autism, as well as the origins, characteristics, prevalence, and social impact of autism. The final section explored the impact of autism on the classroom situation, which is relevant for this particular study.

Through doing this particular literature study, the researcher has learnt a great deal. The most prominent of these learnings was the fact that although there is material available regarding autism, there still seems to be great confusion about what autism includes. This led the researcher to believe that a study of this particular nature could be of great benefit to those who are affected by autism, either directly, or indirectly.

# **CHAPTER 3: PLAY THERAPY AND MUSIC**

### 3.1 INTRODUCTION

Fedics (2002) defined autism as 'a perpetual state of disorientation and chaos, similar to what one experiences in nightmares, resulting in feelings of fear and confusion...autistic children cannot awake from the nightmare in which their mind is trapped'.

According to the article Play Therapy (2003a) 'play is the method that children use to communicate and process their world'. What is Play Therapy? (2003a) defined play therapy as therapy that 'helps children work through emotional and behavioural issues and helps address family problems'.

Amir (1995:53) stated that 'music is the essence of humanness which is why music can be so beautiful and powerful...it comes from the heart, and as each individual is unique, so are each person's sounds unique'.

In the following chapter the focus was on play therapy, as well as the gestalt approach to play therapy. The final section then focused on music within play therapy, as this was the focus of this particular study. This was linked up with the autistic child, experiencing music within play therapy.

Although the researcher is of the belief that music is already a vital aspect in dealing with autism, the use of background music in the classroom is an unknown field. By means of this chapter the researcher aimed to educate the reader and others on the benefit of using music, within play therapy, in order to impact and improve the behaviour of the autistic child.

#### 3.2 DEFINING PLAY THERAPY

What is Play therapy? (2003b) stated that 'play therapy is a type of mental health or developmental intervention which is designed to help children grow up as happy and well adjusted as possible'.

Axline (in What is Play Therapy? 2003a) defined 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'.

In the article, Play Therapy (2003b), the following definition is given for play therapy: 'It is a technique whereby the child's natural means of expression, namely play, is used as a therapeutic method to assist him/her in coping with emotional stress or trauma'.

Schoeman & Van der Merwe (1996:3-5) considered play therapy to be the use of play to assist children, in therapy, in dealing with their particular problem/s. This involves the use of various play materials and the therapist being in tune with the need of each unique child.

Play therapy, according to What is Play Therapy? (2003c), 'takes place in a playroom, especially designed, decorated, and furnished with toys and equipment children need to use as tools for the dramatic scenes they direct for the therapist'.

Play therapy, according to the researcher, is based on the principal that play is the main medium of communication for a child, which can be seen in the above given definitions. Through the use of play, the child is able to communicate to the therapist what he/she has experienced, what the resulting feeling of the experience is and how the feelings can be resolved.

Play therapy can be used to 'address specific problems and to facilitate positive developmental progress' (Why Play Therapy? 2003). The article, Play therapy (2003c), commented further on this, stating that play therapy is helpful for children who have experienced/are experiencing the following:

- Dealing with parental conflict, separation or divorce;
- Have been traumatized (sexual, physical or emotional abuse);
- Have been adopted or are in foster care;
- Dealing with issues of loss, such as illness or death of a loved one;
- Have been hospitalized;
- Have witnessed domestic violence;
- Diagnosed with Attention Deficit Disorder (ADD/ADHD); and/or
- Have experienced serious accidents or disasters.

The article, Play Therapy and its Assumptions (2003), stated that there are various underlying assumptions to play therapy. These include that play is revealing on many levels; intervention in the 'play world' generalizes to other life arenas; play therapy changes the child client by offering new understanding and greater awareness; the use of the child's language (play) to discuss needs and events relevant to the child, is essential; and there is motivation within the child to change.

Play Therapy (2003c) listed the following as benefits of play therapy:

- Reduces anxiety about traumatic events in the child's life;
- Facilitates a child's expression of feeling;
- Promotes self-confidence and a sense of competence;

- Develops a sense of trust in self and others;
- Defines healthy and comfortable boundaries;
- Creates or enhances bonding in relationships;
- Enhances creativity and playfulness; and
- Promotes appropriate behaviour.

As Alfred Adler stated 'Play is a child's work and this is not a trivial pursuit' (What is Play Therapy? 2003c). This brings to one's attention the importance of play for a child, and the great benefits of play therapy. It is a manner in which an adult, more specifically the therapist, can reach the child's inner world and bring about the necessary changes to lead to a better quality of life for the child.

# 3.3 GESTALT APPROACH TO PLAY THERAPY

# 3.3.1 Gestalt approach

Thompson & Rudolph (2000:163) defined gestalt as 'a form, a configuration or a totality that has, as a unified whole, properties that cannot be derived by summation from the parts and their relationship'. It may refer to physical structures, to physiological and psychological functions, or to symbolic units.

Yontef (1993:129) commented on the following:

'Gestalt therapy focuses more on process (what is happening) than content (what is being discussed). The emphasis is on what is being done, thought and felt at the moment rather than on what might be, could be, or should be'.

Fritz Perls and his wife Laura founded gestalt therapy in the 1940's. Walter (2002:47) emphasized that Perls was not the incarnation of gestalt theory pure and simple, but he had impressed so many people in his concrete work with them that it (gestalt) has spread. The movement originated in Germany and later spread to the United States and other countries.

Much of Perls' doctrine is summarized in his famous gestalt prayer as quoted by Thompson & Rudolph (2000:165):

'I do my thing and you do your thing.
I am not in this world to live up to your expectations,
And you are not in this world to live up to mine.
You are you and I am I.
And if by chance we find each other, it's beautiful.
If not, it can't be helped'.

The researcher is of the opinion that the goals of gestalt therapy can be considered to be, to know who he/she (the individual child) really is by clarifying those parts of him/herself that he/she carefully hide from his/her awareness. Added to this is to become aware of what he/she is doing, how he/she is doing it and how he/she can change him/herself and learn to accept and value him/herself, and have honesty and purity in him/herself.

Thompson & Rudolph (2000:166-167) stated that Perls based the counseling stages of gestalt therapy on five neurotic layers, which he considered to be the basis of all human thinking. These include:

- Phony layer: this can be considered to be the false or clichéd layer. This
  is how the individual normally arrives at therapy.
- Phobic layer: at this level the individual becomes aware of his/her problem.
- Impasse layer: the individual, in this stage, becomes resistant to any necessary change.
- Implosive layer: within this layer the individual becomes involved and interactive within therapy.
- Explosive layer: this is the final layer, when the individual becomes in contact with self, and change begins to take place.

When assuming the role of the therapist within gestalt therapy, the therapist's function is to 'facilitate the client's awareness in the "now". The gestalt therapist can be considered an aggressive therapist who frustrates the client's attempts to break out of the awareness of the here and now. The focus remains on the immediate present (Thompson & Rudolph, 2000:167).

# 3.3.2 Techniques within gestalt therapy

Within gestalt therapy there are various techniques that can be used by the therapist (Thompson & Rudolph, 2000:167).

# 3.3. 2.1 'l' language

Within the therapy the client should be steered away from generalizations and third person reference, but rather focus on using 'I'. This encourages the child to take responsibility for his/her feelings, thoughts and behaviour. An example would be 'Don't you get cross when your brother takes your things?' This should change to 'I get cross when my brother takes my things'.

### 3.3.2.2 Substituting won't for can't

Once again the client is encouraged to remove can't from his/her frame of reference and replace it with won't. It again leads to an increase in the child's responsibility of his/her feelings, thoughts and behaviour. An example would be 'I can't pass math' should change to 'I won't pass math'.

### 3.3.2.3 Substituting what and how for why

Within this particular technique the child is encouraged to, rather than using 'why' in the sentences, focus on 'what' and 'how'. For example 'how are you feeling about what happened to you?'

# 3.3.2.4 No gossiping

If the child needs to talk about someone who is not present in the room, it is encouraged that the child talks to an empty chair. This should take place in the present tense, as if the child were talking directly to the person in question. The child may also move to the position of the chair to answer the person, in order to reach some form of solution through practising the confrontation, as well as seeing the problem in a more clear light.

# 3.3.2.5 Changing questions into statements

By doing this, the child becomes more direct in expressing his/her thoughts and feelings. Perls had the belief that most questions are phony, as they are really disguised as statements. An example would be 'Don't you think I should stop fighting with my mom'? This should become 'I think I should stop fighting with my mom'.

# 3.3.2.6 Taking responsibility

Within this particular technique the child is encouraged to fill in sentence blanks as another way of examining his/her personal responsibility for the way that he/she is managing his/her life. An example would be 'Right now I am feeling \_\_\_\_\_ and I take \_\_\_\_\_ percent responsibility for how I feel'.

### 3.3.2.7 Incomplete sentences

With this technique, which is quite similar to "taking responsibility", the child is encouraged to complete sentences, in order to gain greater awareness on how he/she helps and hurts him/herself. An example would be 'I help myself when \_\_\_\_\_\_' or 'I hurt myself when \_\_\_\_\_\_'.

### 3.3.2.8 Bipolarities

This refers to thinking in terms of opposites, or as Perls stated 'differential thinking'. Much of one's everyday is composed of trying to solve conflict, posed by competing polarities. Within this technique there are various activities. They include the following.

- Topdog versus underdog: this can be considered a common bipolarity.
  The topdog is considered to be what an individual 'should' do whereas
  the underdog focuses on what the individual 'wants' to do. In dealing
  with this, the child should have two chairs, (each one representing the
  opposite feelings), and talk it through, alternating from one chair to the
  other.
- The empty chair technique: this can be used to resolve conflict between people or within one's self. The child may sit in one chair as himself, and then alternate to the other for a response. This would involve the child playing out a projection of what he/she is feeling.
- My greatest weakness: the client is asked to identify his/her greatest
  weakness and then write a paragraph on how this is actually his/her
  greatest strength. This leads to the individual feeling in control of
  his/her weaknesses, rather than the other way around.
- Fantasy games: there are many fantasy games that can be used with children of all ages, which help the child to become aware of how he/she is feeling in the here and now. This could include pretending to be an animal, a rosebush or a wise person. Almost any object or situation can be used for fantasy.
- Dreamwork: as dreams can be considered to be linked to the here and now, within gestalt there is a relatively big focus on serious consideration of one's dreams. This appears to help an individual who are struggling with a dilemma, as well as the average 'healthy' person.

Other activities or techniques may include the use of music to encourage particular feelings or the use of musical instruments to express feelings. This would take place in the form of both introducing a particular type of music and then discussing with the child what he/she feels when hearing the music. The researcher is of the opinion that this could also be effective with an autistic child, Even though he/she may not be able to communicate what he/she are feeling, one would be able to observe his/her non-verbal reactions to the music. When using musical instruments to express feelings, the child would simply be encouraged to express what he/she is feeling by playing an instrument. As was stated by Dancer (2003) autistic children respond incredibly well to drumming, allowing them the opportunity to express their frustration and simply be free.

One may also use art activities, as well as one's tone of voice or body movement.

The researcher is of the opinion that within gestalt there are many more techniques and activities that the therapist could use with a child, but the researcher has simply highlighted a few of the more prominent ones. The researcher is of the opinion that the gestalt approach to play therapy could be considered a highly effective manner of conducting therapy with a child.

#### 3.4 PROJECTION IN PLAY THERAPY

Projection is defined by Schoeman (1996a:64-65) as 'imagining that our own (unwanted) feelings belong to someone else' and projection may serve as 'various objectives for the child, such as giving the child space to sort out the expectations with which the world confronts him/her and to help a child dispel that which he/she cannot yet handle'. Thompson & Rudolph (2000:73) defined projection as the following:

'When children sense within their own personality a motive of which they are ashamed or which they fear, they may not admit its existence consciously to themselves, but instead may constantly see the motive in other people, attributing to others those unacceptable acts and feelings that their own id urges them to express'.

Polser (in Schoeman, 1996a:65) defined projection as 'the development of artistic and creative qualities but at the same time it is a primitive defense mechanism, used when one cannot accept his/her feelings and actions because one should not feel or act that way'.

Schoeman (1996a:70) stated the following reasons for the use of projection:

- To get rid of certain feelings or to want to own the feelings. This is not only due to unfinished business but due to the fact that the child finds the feeling acceptable and therefore wants to own it;
- Often a child will want to try something out but is afraid and therefore gives the characteristic to someone else. If it is acceptable to the other person/people, then the child will act on or own the feeling/s; and/or
- A child may use projection as a method of escape.

Schoeman (1996a:65) postulated the following:

'The basic principle underlying this technique is that the child must use natural media to communicate his responses, in cases where he would otherwise find it difficult to respond. The child organizes the material in terms of his own perceptions, motivations and attitudes to adapt to his own uniqueness. He uses the familiar and reformulates situations to suit him'.

Projection, within play therapy, serves various purposes, which have been summarized by Schoeman (1996a:67-70). Firstly, it is important that projection takes place in the here and now, as it is much easier for a child to express and deal with things that are affecting him/her now. Secondly, projection can be used

to stimulate self-growth. Finally, projection can be used to solve unfinished business.

There are various ways in which one can use projection within play therapy. These include the following:

- Sand play: this involves, according to Van Dyk (2000:2), allowing the play-maker to experience a new learning process of picture making that is satisfying for the individual, providing a physical outlet of energy.
- Water play: Schaefer & Cangelosi (1993:126-127) stated that through water, a child might develop a feeling of mastery and liberation, which allows a feeling of satisfaction.
- Puppets: Oaklander (1988:104) wrote that 'it is often easier for a child to talk through a puppet than it is to say directly what he finds difficult to express.
- Clay: Oaklander (1988:67) stated that through the use of clay those who
  are insecure and fearful could feel a sense of control and mastery, and
  clay can be considered the most graphic of media, allowing the therapist
  to observe the process of the child.
- Art: Kaduson & Schaefer (1997:55) stated that 'most children enjoy drawing and will find it less threatening than talking about an upsetting experience or loss, which is likely experienced as overwhelming and extremely confusing'.
- Bibliotherapy: Van der Merwe (1996a:109) considered various advantages to bibliotherapy, such as a development of insight, verbalization of problems, a result of clearer perspective and teaching the child a language through which feelings can be verbalized.
- Drama/role play: Mellou (1994:77) defined dramatic play as 'play that occurs when a child, or children, by means of interacting with the

environment, adopt roles and use make-believe transformations to act out stories, real or imaginary, and create new stories as well'.

 Music: Oaklander (1988:115) stated that 'music and rhythmic beat are ancient forms of communication and expression...fits in nicely with therapeutic work with children'.

All the above techniques can be used in order to encourage projection in the child, in order to assist the child in dealing with his/her problem.

The researcher is of the opinion that projection can be considered a highly effective technique in assisting children cope with their particular problem/s. Projection can be considered a vital and well-used defense mechanism in both children and adults, and therefore professionals working with children should be well educated in this area.

#### 3.5 MUSIC WITHIN PLAY THERAPY

In the following section the researcher aimed to focus more specifically on music within play therapy, as this was relevant for this particular study. Driekurs (in Oaklander, 1988:115) stated the following, with regards to the use of music within therapy:

'Using music brought results in cases where other approaches had failed. It seems that the pleasant experience with music, often merely in the background, stimulates participation, permits an increase in the child's attention span, and raises his frustration tolerance. External and internal tensions disappear, as reality becomes more pleasant and less threatening. The demands for participation are so subtle that they are not resented or defied'.

Schoeman (1996b:95) wrote that 'people have been aware for some time that listening to music is one of the pathways to the deepening and expanding of unusual levels of human consciousness'. The author went on further to state that

'music has the ability to make the child face unfulfilled needs, but concomitantly creates a positive experience in problem solving'.

Barnes (1996:368) stated that:

'Sounds are able to terrify us or tranquillize us. Our moods can also be influenced by sound. The sound of gentle drops of summer's rain, or the soothing sounds of a bubbling stream will have a different impact on our mood to that of a powerful and intense waterfall or the howling rage of a hurricane'.

Staum (2003) stated that music can be used as a tool to 'encourage development in social/emotional, cognitive/learning, and perceptual-motor areas. The author went on further to state that 'music is effective because it is a non-verbal form of communication, it is a natural reinforcer, it is immediate in time and provides motivation for practising non-musical skills...and almost everyone responds positively to at least some kind of music'.

The researcher is of the opinion that music can create positive or negative experiences. Music has the ability to bring back childhood memories of Christmas, a day at the fair and of certain people. When we hear a tune or song, we often immediately remember the situation where we last heard the tune.

Schoeman (1996c:45) stated that music could create new dimensions of awareness for the child, in its ability to bring out things in that child that nothing or no one has ever elicited. Schoeman (1996c:46) commented that 'music can be used effectively in the therapeutic milieu...it can put the child in a specific mood, while also having a calming and reassuring effect'.

Van der Merwe (1996b:78) commented that music can 'have a calming or stimulating effect ...it may also influence other bodily functions, such as blood pressure, heartbeat, muscle tone and abdominal functioning'.

Yssel (2003) commented on various aspects of the use of music within play therapy. Firstly, music can be used with the individual child or within a group, depending on the goal of the music. Secondly, music has many advantages when working with a child. These included the following:

- The options of the use of different instruments, assists the child in learning to making choices;
- The child is able to express his/her emotions in a non-threatening manner;
- The use of 'playing' music is of great sensory worth;
- Music can improve the child's energy level; and
- Music makes the child aware of his/her process.

There are many other advantages for children, both who have experienced a trauma as well as the 'normal' child, in using music. When working with disabled children, in this case autistic children, the child may find music more accessible than speech or language. Most children's songs have a clear beginning and end, which is a source of satisfaction to a child who can feel that they have achieved something. This can be considered vital to a child who is confused by ordinary speech who needs to feel a sense of achievement and satisfaction in order to build self confidence (Van der Merwe, 1996a:139).

Van der Merwe (1996b:78) felt that the use of music within therapy could be highly beneficial, due to the fact that it 'may lead to the expression of feelings, to catharsis and may serve as an opener for communication'.

Staum (2003) commented that using music particularly with the autistic child, could be highly effective due to the fact that music is a non-threatening medium. The author commented further on this, by stating:

'Music is particularly effective in the development and remediation of speech. The severe deficit in communication observed among autistic children includes expressive speech that may be nonexistent or impersonal. Speech can range from complete mutism to grunts, cries, explosive shrieks, guttural sound, and humming. There may be musically intoned vocalizations with some consonant vowel combinations, a sophisticated babbling interspersed with vaguely recognizable word-like sounds, or a seemingly foreign sounding jargon. Higher-level autistic speech may involve echolalia, delayed echolalia or pronominal reversal, while some children may progress to appropriate phrases, sentences, and longer sentences with non-expressible or monotonic speech. Since autistic children are often mainstreamed into music classes in the public schools, a music teacher may experience the rewards of having an autistic child involved in music activities while assisting with language'.

Yssel (2003) commented on the fact that by using music with the autistic child, the child is given a non-threatening medium for contact and expression and a greater sense of self.

Schoeman (1996b:44) stated that:

'Children like listening to and making music. Music offers the child the opportunity to come into contact with what he hears and experiences. When reacting to music, the child can come into contact with his own body, particularly with muscles in his body. He learns to release emotions in healthy ways that are more beneficial than internalizing those feelings'.

The researcher is of the opinion that the above statement shows clearly the benefit of introducing music to the autistic child, by encouraging the child to come into contact with him/herself and others, and giving the opportunity to express his/her emotions.

When looking at the goals of music, there are two aspects to take into consideration. Firstly, according to Holland (1995:431), self-knowledge through sound has the ability to change values and perceptions. Secondly, allowing sound to enter our awareness, we make contact with the world. Therefore, by

appreciating sound, the child's sense of being in the world increases (Oaklander, 1988:114).

Smeijster (1995:385) considered various purposes to music within therapy. These include, fulfilling:

- Social needs;
- The need for compensation and release;
- The need to experience different emotions; and
- The need for relaxation and tension.

Within play therapy, music is a very useful technique. O'Connor (2000:279) stated that music can be considered useful due to the fact that it is an indirect method of discovering a child's feelings. This can be particularly useful when working with a child who is unsure of the meaning of words and the exact response required, such as an autistic child.

Music can be considered a non-verbal effort of communication, and children who have isolated themselves, and rejected any effort made to communication, are able to take time in responding to the play therapist who is simply playing music to him/herself. Oldfield (1995:226-228) stated that once a relationship has developed between the child and therapist, music could be used as a more elaborate form of communication.

Within play therapy there are various techniques that the therapist may use, which incorporate music. These include the following:

# Repetition

The repetition of a tune, for example at the beginning of each session, can be reassuring for the child, giving a sense of familiarity (Oldfield, 1995:228).

## Improvisation

When using music as an improvisation, there are various methods that can be considered. One example will be given, taken from Holland (1995:420). The child can be asked to think about the necessary change that needs to take place in his/her life, and then play out the feeling associated with thinking about change. Then the child can be asked to think about the same change, but rather play a definite rhythm. This shows that change is possible, as has just taken place within therapy.

#### Identification

Through the child experiencing any form of music, the therapist is able to pick up on any projections that the child may be experiencing. This is based on the fact that an individual will normally choose music relating to one's mood, therefore giving an indication of what one is feeling at the present time.

#### Emotional expression

This can be considered the most obvious use of music within therapy, allowing the child to express his/her emotions and feelings through playing an instrument. This allows the child to place his/her feelings out in the open, without feeling threatened, as well as having the opportunity to let go of the feeling (Schoeman, 1995:44).

## Relaxation

Holland (1995:430) commented on the fact that music can simply be used to allow the child to relax, and feel comfortable with him/herself as well as the environment of the therapeutic setting.

The researcher is of the opinion that all the above definitions and explanations of music can be connected directly with the therapy or involvement of autistic children. The autistic child, is more often than not, placed in the situation where verbal communication is challenging, which leads to great frustration within the individual.

The researcher is of the belief that music does not only have an impact on a child within individual therapy, but also on a group of children. In this case, however, it is vital to remember that each child is going to respond to music in a unique manner, due to personal interpretation.

There is not a great deal of information given on the impact of background music on a child, within individual or group setting. However, from all the above gathered information, the researcher has reached the following conclusions:

- Music has a profound affect on any individual, no matter the circumstances;
- Music encourages expression;
- Music leads to an increase in awareness and self-understanding;
- Music, more often than not, has a positive affect on an individual; and
- Music can be considered a highly effective technique within therapy.

From all the above reached personal conclusions, the researcher feels strongly that introducing background music into the classroom of children with autism, will

have a definite affect on the children. This study aims to identify the particular affect that does occur.

## 3.6 SUMMARY

Within this chapter, the researcher had focused on various aspects of interest to this particular study. This included an in-depth look at play therapy, including the gestalt approach to play therapy, as well as projection within play therapy. More importantly though, there was a focus on music within play therapy.

The amount of information on the above-mentioned topics can be considered overwhelming. However, the researcher has aimed to inform the reader on what is relevant for this particular study.

Play therapy is an interesting and highly effective manner of therapy, especially when working with a child. Music can be considered an effective mode of communication for a child, who has been faced with trauma of some kind. In combination, music and play therapy will be used in order to infiltrate the mind of the autistic child, in order to bring about a positive change in his/her behaviour and quality of life.

CHAPTER FOUR: THE EMPIRICAL STUDY

4.1 INTRODUCTION

The following chapter will focus on the empirical study that was completed in order to reach the goals and objectives of the study, and prove the hypothesis that was stated in chapter one. The goal of the study was to determine the impact of music, within play therapy, on the behaviour of autistic children in a classroom situation. This led to the hypothesis, stating, that if music is introduced within a play therapy framework then the classroom behaviour of autistic children would improve. The type of research that was conducted was applied research, aiming at having an impact in solving a particular problem within practice, namely the classroom behaviour of the autistic child.

The researcher decided to identify the technique of music within play therapy for this particular study. Other forms of play therapy were not utilized due to the fact that the researcher specifically wanted to study the impact of music on the children's behaviour. The researcher is of the opinion that further studies could be done utilizing other play therapy techniques, in order to study the impact of those techniques on autistic children's classroom behaviour.

As an investigation into the impact of music on the classroom behaviour of the autistic child is the core focus of this study, the following chapter will present a field experiment conducted with autistic children at the Key School in Parktown West. The focus of the chapter will be on the analysis and interpretation of data that was gathered, through the use of a structured and unstructured observation, before and after musical intervention. This occurred over a period of four months. The result expected is to reveal that music has a positive impact on the classroom behaviour of the autistic child.

# 4.2 QUASI-EXPERIMENTAL DESIGN: ONE-GROUP PRETEST-POSTTEST DESIGN

As previously mentioned, the researcher utilized a quasi-experimental design, more specifically the one-group pretest-posttest design, when conducting the empirical study. According to Fouché (2002b:144) in this particular design there is measurement of a dependent variable (the autistic children's classroom behaviour) when no independent variable (music) is present. Subsequently the independent variable is introduced, followed by a repeated measurement of the dependent variable at a later stage.

The research procedures and strategies that guided the researcher to implement this design included the use of structured and unstructured observation. The structured observation involved the use of a scale (Addendum A), which enabled the researcher to measure the change in behaviour, and represented the quantitative approach. The unstructured observation gave the researcher the opportunity to identify various behavioural variables, and represented the qualitative approach.

#### 4.3 THE RESEARCH SCALE AS THE MEASUREMENT INSTRUMENT

#### 4.3.1. The scale

Neumann (in Delport, 2002:185) stated that a scale is 'a measure in which a researcher captures the intensity, hardness or potency of a variable. It arranges responses or observations on a continuum. A scale can use a single indicator or multiple indicators'.

Delport (2002:185) went on further to state that 'scales take into consideration the intensity with which different items reflect the variable being measured and convey more information than index scores'.

As the researcher was unable to find a scale that was appropriate for this study, an individual scale was developed (Addendum A). When developing the scale, the researcher had to take various aspects into consideration. According to Delport (2002:191-195) there are four phases to scale development, namely the predevelopment, development, validation and utilization phase. Within the predevelopment phase, one has to consider problem identification and theory formulation. The development phase includes 'designing the items, determining scale length, scaling the items, developing a scoring formula and finally writing instructions for the respondents' (Delport, 2002:193). The validation phase involves testing the validity of the scale, and finally the scale should be documented in order to ensure further utilization of it.

The particular scale used in this study was validated through the pilot study that was conducted. This involved conducting the research process, using the scale, with two respondents who were not involved in the research process at all. This gave the researcher the opportunity to identify any problems that could have existed and areas that need to be improved.

In order to interpret the scale, a scoring formula had to be developed. The researcher did this personally. Due to the fact that each individual respondent was unique, specifically with regard to his/her diagnosis of autism, the researcher had to have a clear understanding of how to score respondents. The scale was conducted on a five-point scale, ranging from very poor to very good. Very poor refers to no positive evidence of the behaviour at any stage. As the five-point scale improves, so does the behaviour of the respondent. Very good refers to positive evidence of the behaviour, easily identified by the researcher when observing the respondent. Each respondent was scored according to his or her ability.

A scale consists of various constructs or items. In order to give a greater understanding of the scale, each construct will now be defined individually.

## 4.3.2. Definitions of the constructs

#### 4.3.2.1. Communication

According to Encyclopedia Britannica (Volume 6. 1996:203) communication is a process that is both interactive and purposeful. Communication is derived from the Latin *communicare*, which is translated as 'to make common, to share, to impart, to transmit'.

According to The Concise Oxford Dictionary (1995:190), communication is an 'act of imparting...the science and practice of transmitting information'.

For the purpose of this study, communication refers to both verbal (spoken) and non-verbal (gestures and facials communication), due to the fact that the respondents are not fully equipped to communicate verbally. The researcher is of the opinion that the non-verbal can be considered the most vital form of communication to be observed for this study.

## 4.3.2.2. Social interaction

Social can be considered companionable, friendly, neighbourly and/or gregarious. Interaction refers to 'relations between persons...act reciprocally, act on each other' (The Concise Oxford Dictionary, 1995:522). Social interaction can be considered a friendly, comfortable relationship between two or more people.

Social interaction, or the lack thereof, can be considered one of the obvious signs of autism, as this is normally an area of the child's life that is not developed at all, or is developed to a limited capacity. Therefore, observing any improvement in this regards, can be considered highly beneficial for the study.

# 4.3.2.3. Attention span

Attention is defined as 'the selective process by which certain events in the environment come to be consciously perceived. That of which a person is clearly aware at a given instant is said to be attended to' (Encyclopedia Britannica, vol.2. 1996: 728).

Span, according to the Concise Oxford Dictionary (1995:1015), and in relation to attention, is defined as 'full extent, from end to end'.

Attention span therefore refers to the ability of an individual to maintain his/her attention. In relation to this study, this would be referring to the autistic child's ability to maintain focus in the classroom situation.

For this study, the researcher is of the opinion that the attention span of the respondents will be a key element in identifying the impact of background music on their classroom behaviour.

## 4.3.2.4. Minimizing challenging behaviour

The Concise Oxford Dictionary (1995:152) defined challenging as 'demanding or difficult...offer interesting difficulties', and behaviour (1995:81) as 'way of conducting oneself...moral conduct, treatment shown to or towards others'.

Challenging behaviour, for the purpose of this study, refers to unusual behaviour portrayed by the respondents, due to autism. This may include repetitive, inappropriate, self-injurious and/or aggressive behaviour.

As has been previously mentioned, each individual who is diagnosed with autism will not portray the same behaviour, specifically with regard to challenging

behaviour. For this reason, some of the respondents will not be included in all aspects identified within this construct.

## 4.3.2.5. Impact of music

Music was defined by Marley (1984:127) as involving the individual so totally and in such a unique fashion that closeness is felt, and painful aloneness may be alleviated...music is nearly always an expression of goodwill, a reaching out to others'. Impact is defined as 'effect and/or influence' (The Concise Oxford Dictionary, 1995:499).

In relation to this particular study the impact of music can be considered the most vital aspect of the study. It is this impact that has interested the researcher and is therefore being researched. The impact that music has on the respondents will directly relate to the hypothesis of the study.

## 4.4 DATA PRESENTATION

Creswell's dominant-less-dominant model was used in this study. De Vos (2002b:366) defined this model as 'the researcher presenting the study within a single, dominant paradigm with one small component of the overall study drawn from the alternative paradigm'. The study therefore involved a combination of quantitative and qualitative styles of research, data gathering and analysis. It is therefore necessary to present both quantitative and qualitative data.

#### 4.4.1 Presentation of the quantitative data: the dominant approach

De Vos; Fouché & Venter (2002:223) commented on the fact that this step of the research process can be extremely challenging and overwhelming. According to De Vos, et al. (2002:223)

'Data analysis basically entails that the analyst breaks data down into constituent parts to obtain answers to research questions and to test research hypotheses. The analysis of research data, however, does not in itself provide the answers to research questions. Interpretation of the data is necessary. To interpret is to explain, to find meaning. It is difficult or impossible to explain raw data; one must first describe and analyze the data and then interpret the results of the analyses'.

In this study, the researcher utilized graphical presentation and frequency distribution to enable the researcher to analyze the data, and in turn allowing the researcher to interpret the data.

When the researcher analyzed the quantitative data, the quantitative variables took on numerical values and were obtained by measuring or counting (De Vos, et al., 2002:225). The quantitative variables were measured by means of the scale (Addendum A), which has been explained in the previous section, before and after the introduction of the background music.

#### 4.4.2 Presentation of the qualitative data: the less-dominant approach

The qualitative aspect of the study aimed to give a deeper explanation of the impact of music on the classroom behaviour of the autistic children. Fouché & Delport (2002:79) stated that qualitative data 'aims mainly to understand social life and the meaning that people attach to everyday life'. Although in this study the respondents where unable to give personal opinion of their experience, through unstructured observation, the researcher was able to identify changes in the respondents' behaviour. The manner in which this data is going to be presented is through written word, with the researcher describing in detail the behaviour of each particular child, and the changes that took place.

It is therefore obvious that in this study the data will be presented in both numbers and words, resulting from the structured and unstructured observation

that took place. Through this method the researcher has managed to prove the hypothesis stated in chapter one.

## 4.5 THE PURPOSIVE SAMPLE

In this study the sampling method used was **non-probability sampling**, focusing on the **purposive sampling** method. Non-probability sampling is 'done without randomization' (Strydom & De Vos, 1998:195), and therefore is based on a planned, strictly followed method. Purposive sampling, according to Strydom & De Vos (1998:198-199), is a 'type of sample, based entirely on the judgment of the researcher, in that a sample is composed of elements which contain the most characteristic, representative or typical attributes of the population'. The criteria that were present in order to select the participants, were the following:

- The individual must be a child, between the age of six and 12 years;
- The child must be diagnosed with autism;
- The child must be a member of the particular classroom that is selected;
- The child may be of either gender; and
- The child may be from any culture, as language is not a variable.

The researcher was able to select six respondents with the assistance of staff members at the Key School, guided by the judgment of the researcher.

# 4.6 THE QUANTITATIVE ASPECT: ONE-GROUP PRETEST-POSTTEST DESIGN

Based on the researcher's opinion, as well as an extensive literature study, the introduction of background music was decided on as a beneficial method of intervention in the classroom, to improve the behaviour of the autistic children.

The music did not interrupt the running of the ordinary school day, but was provided merely as background music, integrated into the normal programme.

# 4.6.1 The pretest

As has been previously mentioned, a scale was designed in order to serve as the measuring instrument for the purpose of this study. Groden & Baron (1988:3) stated that autism is a 'behavioural syndrome, the essential features of which are typically manifested before 30 months of age and include disturbances of (1) developmental rates and/or sequences; (2) responses to sensory stimuli; (3) speech, language, and cognitive capacities; and (4) capacities to relate to people, events and objects. According to Williams (1996:8-9), symptoms of autism include (1) An impairment in the ability to interact socially; (2) Lack of communication, both verbally and non-verbally; (3) Certain 'bizarre' behaviour/s; (4) 'Bizarre' responses to sensory stimuli; and (5) Impairment in the use of imaginary play. Through all the information gathered in the literature review, the researcher identified four key characteristics of an autistic child's behaviour, and the scale was developed constituting these four characteristics. These included communication, social interaction, attention span, and challenging behaviour.

The six respondents were identified as respondents A, B, C, D, E and F, in order to maintain confidentiality.

The following table shows the pretest results of construct one and two, namely; communication and social interaction. Both the individual average and the group average show the low level of functioning of the respondents. The researcher observed the respondents for a period of a month, with no background music present, which allowed the researcher to record the following scores.

Table 2: Pretest answering distribution for construct 1 and 2.

| Construct          | Average for individual respondent |     | Average for group |
|--------------------|-----------------------------------|-----|-------------------|
| Communication      | A                                 | 2.1 | group             |
|                    | В                                 | 1.7 |                   |
|                    | С                                 | 3.6 | 2.7               |
|                    | D                                 | 1.9 |                   |
|                    | E                                 | 3.6 |                   |
|                    | F                                 | 3.6 |                   |
| Social Interaction | Α                                 | 3.5 |                   |
|                    | В                                 | 1.3 |                   |
|                    | С                                 | 4   | 2.9               |
|                    | D                                 | 2   | 2.9               |
|                    | Е                                 | 3.3 |                   |
|                    | F                                 | 2.3 |                   |

The structured observation took place for the period of one month, on a weekly basis. In other words the researcher observed for five full school days, prior to the introduction of the background music. This allowed for the above-mentioned results, when conducting the pre-test.

The next table focuses on construct three and four, namely attention span and minimizing challenging behaviour. The same trend is shown as in the previous table, identifying the low functioning of the respondents. This can be seen with both the individual scores of the respondents as well as the group average for each construct. This was conducted with no introduction of background music.

Table 3: Pretest answering distribution for construct 3 and 4.

| Construct                | Average for individual respondent |     | Average for group |
|--------------------------|-----------------------------------|-----|-------------------|
| Attention Span           | А                                 | 2.5 | 2.3               |
|                          | В                                 | 1.3 |                   |
|                          | С                                 | 4   |                   |
|                          | D                                 | 2   |                   |
|                          | E                                 | 3.3 |                   |
|                          | F                                 | 3.3 |                   |
| Challenging<br>Behaviour | А                                 | 1.5 |                   |
|                          | В                                 | 1.5 |                   |
|                          | С                                 | 1.5 | 1.6               |
|                          | D                                 | 1.3 | 1.0               |
|                          | Е                                 | 2.8 |                   |
|                          | F                                 | 1.3 |                   |

# 4.6.2 The posttest

After the intervention process, namely the introduction of background music, which lasted for six consecutive weeks, the researcher conducted the post-test with the purposive sample. Oaklander (1988:115) stated that 'music and rhythmic beat are ancient forms of communication and expression...fits in nicely with therapeutic work with children'.

The same scale (Addendum A) was utilized to allow the researcher to measure the behaviour characteristics of the autistic children identified as the respondents. The following tables represent the average scores identified for the respondents and for the group as a whole.

Table 4: Posttest answering distribution for constructs one and two.

| Construct          | Average for individual respondent |     | Average for group |
|--------------------|-----------------------------------|-----|-------------------|
| Communication      | Α                                 | 2.6 | •                 |
|                    | В                                 | 2.8 |                   |
|                    | С                                 | 4.2 | 3.9               |
|                    | D                                 | 2.4 |                   |
|                    | Е                                 | 4.1 |                   |
|                    | F                                 | 4.2 |                   |
| Social Interaction | Α                                 | 4   |                   |
|                    | В                                 | 2   |                   |
|                    | С                                 | 4.5 |                   |
|                    | D                                 | 2.8 | 3.7               |
|                    | Е                                 | 4.3 |                   |
|                    | F                                 | 4.5 |                   |

The above table shows the scores identified after intervention took place, particularly focusing on constructs one and two, namely communication and social interaction. The researcher is of the opinion that one can immediately observe the improvement that has taken place, in almost all the aspects.

The following table, focusing on construct three and four, namely; attention span and challenging behaviour, also shows a great deal of improvement in nearly all of the respondents. The group averages in all the constructs have improved substantially, showing the overall improvement that was achieved by introducing background music into the classroom.

Table 5: Posttest answering distribution for constructs three and four.

| Construct                | Average for individual respondent |     | Average for group |
|--------------------------|-----------------------------------|-----|-------------------|
|                          | Α                                 | 3.3 |                   |
|                          | В                                 | 2.3 |                   |
| Attention Span           | С                                 | 3.8 |                   |
|                          | D                                 | 2.3 | 3.2               |
|                          | E                                 | 3.8 |                   |
|                          | F                                 | 3.5 |                   |
| Challenging<br>Behaviour | Α                                 | 2   |                   |
|                          | В                                 | 2.3 |                   |
|                          | С                                 | 2   | 2.4               |
|                          | D                                 | 2.3 |                   |
|                          | Е                                 | 4   |                   |
|                          | F                                 | 1.8 |                   |

It is important to mention the fifth and final construct conducted on the scale, namely the impact of music. Schoeman (1996b:95) stated that 'music has the ability to make the child face unfulfilled needs, but concomitantly creates a positive experience in problem solving'.

As the impact of music could only be measured once the background music had been introduced, no mention was made of this in the pretest. The researcher used two types of music, namely: (i) Classical, such as Baroque and Mozart; and (ii) Panpipes, such as Love Songs and Movie Classics. The researcher is of the opinion that the different types of music did not have a different impact, but rather the impact was as beneficial with both types of music. The most important aspect to consider is that there were no lyrics, the music was purely instrumental, and the tempo of the music was relaxed and slow. When looking at the scores

achieved, with regard to awareness of music and the impact of music, all the children showed positive results. This can be seen in the table below.

Table 6: Posttest answering distributions for construct five.

| Respondent | Awareness of Music | Impact of Music |
|------------|--------------------|-----------------|
| А          | 4                  | 5               |
| В          | 3.5                | 5               |
| С          | 3.5                | 5               |
| D          | 5                  | 5               |
| Е          | 5                  | 5               |
| F          | 5                  | 5               |

Through focusing on the pre- and posttest answering distribution, through the use of a scale, the researcher is of the opinion that one can notice the improvements that occurred. However, the researcher is further of the opinion that in order to prove the hypothesis clearly, one needs to show a comparison between pre- and posttest measurement for each individual respondent.

#### 4.6.3 The comparison

When looking at the hypothesis of the study, namely, if music is introduced within a play therapy framework then the classroom behaviour of autistic children will improve, the researcher is of the opinion that analyzing the data for each individual respondent who was observed, would best prove the hypothesis.

# 4.7 THE QUANTITATIVE ASPECT: STRUCTURED OBSERVATION

# 4.7.1 Respondent A

Figure 1 is a comparison between the pretest and posttest scores for respondent A.

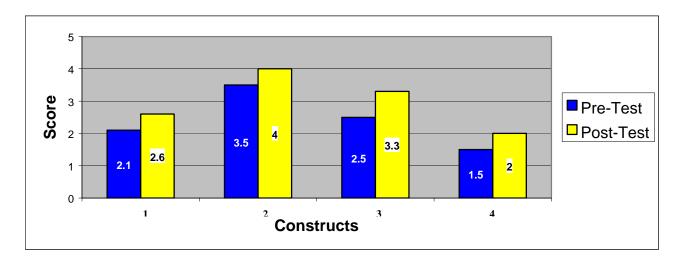


Figure 1: Pretest & posttest answering distributions for respondent A

Respondent A showed the lowest level of functioning, with no level of verbal communication, limited non-verbal communication, and severely limited ability with regard to achievement in the classroom.

However, as can be seen in the above figure, background music was still able to impact on the respondent's behaviour. Although there was limited improvement with regard to communication, respondent A showed great improvement in the other areas, namely social interaction, attention span and minimizing challenging behaviour. The most obvious change could be seen in the respondent's increased desire to make contact with other individuals. The respondent began to approach other classmates and attempt to communicate. This had not been present before. This had an impact on both social interaction and the reduction of challenging behaviour. However, there is a reason for limited improvement with regard to communication. Respondent A does not communicate verbally at

all, and although there have been small improvements, this is not expected to change a great deal, no matter what the circumstance. However, the researcher is of the opinion that the non-verbal communication of respondent A improved, and this had been considered highly unlikely.

## 4.7.2 Respondent B

Figure 2 is a comparison between the pretest and posttest scores regarding respondent B.

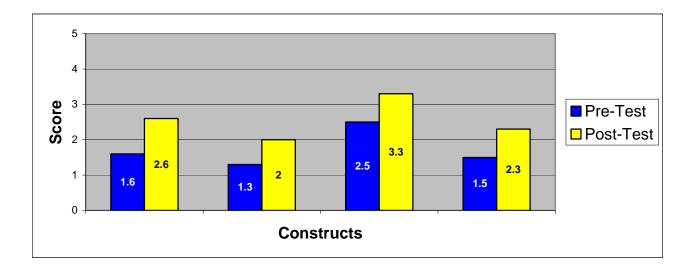


Figure 2: Pretest & posttest answering distributions for Respondent B

Respondent B is also considered as showing a low level of functioning, especially with regard to communication and social interaction. Although the respondent is able to communicate, both verbally and non-verbally, it is not always comprehensible and appropriate. The respondent's ability to participate and complete tasks in the classroom is limited.

As can be seen in the above figure, respondent B showed great improvement in all areas, particularly with regard to communication and social interaction. The researcher however feels that it is vital to comment on the minimizing of

challenging behaviour, which showed great improvement. Previously the respondent was using obscene language on various occasions, not responding to any attempt of discipline and causing disruption to the class. This decreased considerably, with the respondent beginning to react positively to discipline. This aspect of the respondent's behaviour is considered the most challenging to deal with, and the researcher was pleased to note that this area had greatly improved.

# 4.7.3 Respondent C

Figure 3 is a comparison between the pretest and posttest scores for respondent C.

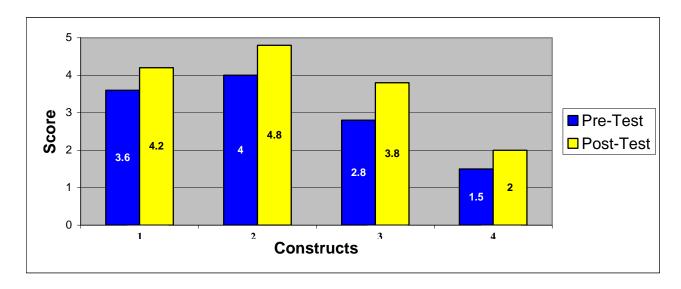


Figure 3: Pretest & posttest answering distributions for respondent C

Respondent C is a very keen participant in the classroom and thoroughly enjoys interacting with the other children in the class. The respondent shows good ability to communicate, although her ability to concentrate can be considered limited.

The above figure shows the respondent's ability to function within all areas relatively well, in comparison with the previous respondents and in conjunction

with the disorder diagnosed. However, the respondent still showed improvement on all levels, particularly with regard to attention span. Although the respondent always showed great interest in class participation, the respondent had previously struggled to maintain a satisfactory attention span. This could be seen in the respondent appearing interested in classroom activity, but quickly losing concentration. This improved, with the respondent being able to maintain her attention span for greater lengths of time.

The researcher is of the opinion that this respondent's improvement showed that the level of functioning and the behaviour of an autistic child could always improve, leading to a greater quality of life for the child concerned.

# 4.7.4 Respondent D

Figure 4 is a comparison between the pretest and posttest scores for respondent D.

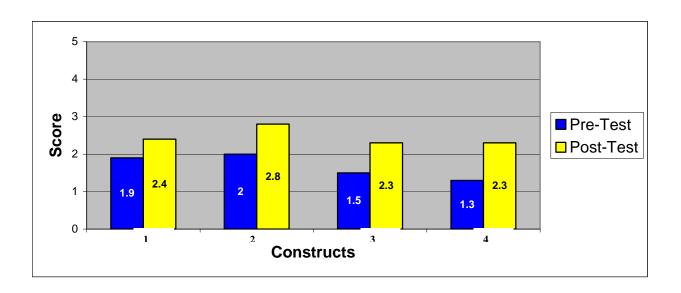


Figure 4: Pretest & posttest answering distributions for respondent D

Respondent D also presented a low level of functioning in all areas mentioned on the scale. The respondent is able to communicate to a limited degree, and

shows interest in class activities. However, the respondent is completely averse to any form of physical contact. The respondent is able to complete class activities, but with constant assistance.

As can be seen in the above figure, respondent D did not show great improvement, but showed some improvement in three of the four constructs. This respondent was considered to have reached his level of potential and therefore it was encouraging to see the improvement that took place. The only area in which this respondent did not show improvement was in the area of attention span. The researcher is of the opinion that this is due to the fact that the respondent showed an unusually high level of interest in the music that was introduced. This respondent was the only one who was both aware of the music and occasionally would sit closely to the source of the music to simply listen. This understandably has an affect on the respondent's ability to pay attention. However, this decreased as the respondent became more comfortable with the background music.

# 4.7.5 Respondent E

Figure 5 is a comparison between the pretest and posttest scores for respondent E.

Respondent E can be considered on a similar level of functioning as respondent C, in that this respondent is able to communicate well and shows good ability in participation and the completion of class activities. This respondent can be considered the most highly functional respondent of the respondent group.

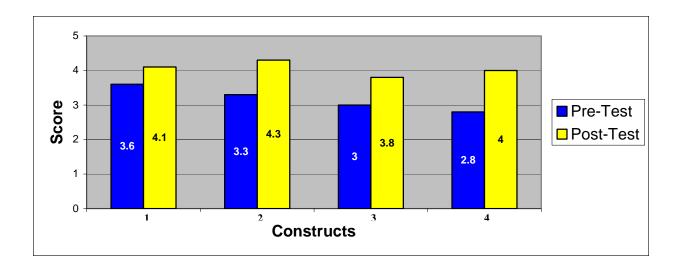


Figure 5: Pretest & posttest answering distributions for respondent E

From the above figure, one can again observe that substantial improvement took place. Although this respondent showed high score results in the pretest, due to the respondent's level of functioning, a great deal of improvement still took place. The greatest amount of improvement can be seen in the area of social interaction. Although the respondent was not averse to social interaction, and participating in class, there was still room for improvement. This definitely took place. This could be seen in the fact that the respondent began to initiate interaction more, and was not as aggressive to his classmates. This led to the classmates enjoying interaction with this respondent more, which in turn encouraged the respondent to interact more. The researcher is of the opinion that this had an overall positive effect on this respondent's behaviour.

# 4.7.6 Respondent F

Figure 6 is a comparison between the pretest and posttest scores for respondent F.

Respondent F was an extremely capable individual, who showed great interest in the classroom, and a great desire to achieve what was set before him. However,

the respondent, although a high level of functioning was present, still showed an inability to understand and complete tasks and was, at times, exceedingly hyperactive.

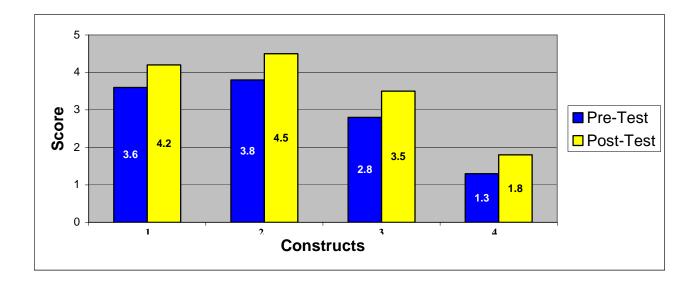


Figure 6: Pretest & posttest answering distributions for respondent F

Although the respondent showed an improvement in all the areas measured, the researcher is of the opinion that the greatest area impacted by the music, was simply to assist the respondent to calm down, to reduce hyperactivity, and to allow for more acceptable and appropriate behaviour. This was evident in the respondent talking in a more relaxed manner and completing tasks more thoroughly. The result was an improvement in all the areas measured in this study.

## 4.7.7 Evaluation of quantitative measurement

Through indicating a direct comparison between the pre- and posttest scores for each individual respondent, the researcher is of the opinion that one could observe more clearly the extent of improvement that occurred with regard to each respondent, and well as the impact that music had on each individual's classroom behaviour. Each respondent showed improvement in almost all the

areas, which can be considered phenomenal. As the classroom behaviour of the respondents improved, this had a positive impact on the other classmates, as well as the general functioning and atmosphere of the classroom. This led to an overall improvement in classroom behaviour and achievement.

## 4.8 THE QUALITATIVE ASPECT: UNSTRUCTURED OBSERVATION

A combination of the quantitative and qualitative approach was used in this study. This section will focus on qualitative data analysis, in order to add to the quantitative data that has already been provided.

Due to the extent of the data that was gathered, the researcher displayed the data for each respondent, commenting on each construct that was measured in the study. The focus would be on both the pre- and posttest unstructured observation.

## 4.8.1 Respondent A

Respondent A had lived with autism for most of her life. The respondent displayed many of the typical autistic characteristics, such as rocking, limited communication and high levels of frustration due to the disorder. When this respondent was observed, she showed a remarkable improvement. The respondent warmed almost immediately to the researcher, which was considered highly unusual.

#### 4.8.1.1 Communication

Respondent A has no verbal communication capacity, and a limited non-verbal communication capacity. Koegel, et al. (1995:2) stated that individuals who are diagnosed with autism show a lack of social-communicative gestures and

utterances and verbal language development. This was definitely evident in respondent A. The respondent also showed a limited ability in written tasks.

The researcher was able to observe, clearly, the respondent's frustration due to her inability to communicate. The respondent attempted to communicate nonverbally consistently, but this was not comprehensible. Originally, the researcher was of the opinion that non-verbal communication was limited, but was proved incorrect, as can be seen in the previous statement. The respondent would on various occasions demand the attention of a caregiver, other classmate, or the researcher, and attempt, through non-verbal communication, to hold a conversation. This she would do by indicating an activity/feeling, such as swimming, and would show a desperate expression, in order to indicate that she wanted to swim immediately. This the researcher found impressive.

Although the communication of respondent A did not show dramatic results due to the introduction of background music, the researcher is of the opinion that one was able to observe a decrease in the level of frustration that the respondent was experiencing. This led to a greater willingness to attempt communication, which led to an increase in the portrayal and understanding of non-verbal communication. Previously the respondent was frustrated when attempting to communicate, but this decreased remarkably. The respondent was prepared to achieve understanding through perseverance, attempting various ways in which to illustrate her point, until she was understood.

The researcher is of the opinion that with further exposure to /use of background music, the respondent will improve her ability to communicate, on both a verbal and non-verbal level. According to the extent of improvement that occurred within a six-week period, the researcher is of the opinion that with extended exposure to background music, there would be an even greater improvement.

#### 4.8.1.2 Social interaction

The respondent showed great enthusiasm in interacting with the other children in her class, but due to her inability to communicate, the interest was normally not reciprocal. The respondent was a well-developed individual, physically, for a child her age, and this often led to her dominating other children in her class. She could become unintentionally aggressive, due to her great desire to interact with the other children. This, predictably, created a tense situation, and led to a negative experience with regard to social interaction.

The respondent could be considered a loving individual, who desired for a caring touch. When the background music was introduced, the respondent showed a decrease in her levels of frustration, which in turn led to a decrease in aggression. She, for instance, would wait for a reaction from another individual, rather than demand it immediately. When communicating with others, she appeared more willing to allow a relaxed and reciprocal conversation to take place, rather than demanding individual attention all the time. This was not to a great extent, but the researcher is of the opinion that it was definitely evident.

#### 4.8.1.3 Attention span

As can be seen in the quantitative scores given in the previous section, this respondent showed a relatively low attention span, with an inability to complete any given task in the classroom. She required constant supervision in order to encourage completion of such a task. When communicating with the respondent, one had to continually force maintained contact, due to the respondent's limited attention span. When the respondent was under supervision and guided attention, a slight improvement could be noted.

Once the background music was introduced, there seemed to be an improvement with regard to the respondent's attention span. The respondent

was able to complete a task, almost single-handedly, maintaining her attention. The researcher is of the opinion that it is important to identify the fact that this respondent was diagnosed with autism to extreme proportions and any improvement that occurred could be considered monumental. Therefore, although the improvement with regard to attention span was minimal, any improvement was considered remarkable.

# 4.8.1.4 Minimizing challenging behaviours

This respondent had been diagnosed with autism, of extreme proportions, and therefore showed excessive challenging behaviours, namely: repetitive, inappropriate, self-injurious and aggressive behaviour. The behaviours could be controlled under highly supervised conditions, but otherwise they can be considered highly challenging.

Once music was introduced, the respondent's frustration level was greatly decreased. This had a direct effect on and caused a reduction of the respondent's challenging behaviours. The respondent no longer rocked continually, and was less aggressive when interacting with other classmates. The researcher is of the opinion that the improvement could be considered monumental, due to the severity of the respondent's autism.

## 4.8.1.5 Impact of music

The researcher is of the opinion that one can clearly observe the positive impact that music had on respondent A. The respondent improved in all areas measured on the scale developed, and therefore showed a good overall improvement. The researcher is of the opinion that this respondent would benefit greatly from more exposure to background music.

# 4.8.2 Respondent B

Respondent B was also diagnosed with autism of extreme proportions, showing low levels of functioning within both the classroom and home environment. The respondent was able to communicate verbally, although it was not always comprehensible. His participation in class was limited, resulting in continued guidance being necessary, to enable task completion in the class.

#### 4.8.2.1 Communication

The respondent was able to communicate verbally, although not clearly. At times he would simply repeat phrases or comments that he had heard, without relation to context. For example, the respondent would be in the middle of completing a task and would shout out 'Clean your bedroom now'. This would not be in relation to the task, but rather something that he had heard in the past. The respondent's non-verbal communication was limited as was his ability to write.

Once music was introduced into the classroom, the respondent showed great improvement with regard to verbal communication. Although the amount of communication did not increase, it was more easily understood. In relation to the example given above, the respondent no longer shouted out unrelated comments constantly. He began to talk to individuals, in context. In pretest observations the respondent did not communicate with those around him at all, but this definitely improved. The respondent even began greeting the researcher by name, and initiating conversation. This could be considered a phenomenal improvement.

#### 4.8.2.2 Social interaction

Respondent B showed incredibly low level of functioning with regard to social interaction. The Autism Society of South Africa (2002) commented on the fact that autistic individuals may show severe impairment in reciprocal interaction and

this may include an inability to interact with peers, lack of desire to interact with peers and lack of appreciation of social cues. This was definitely evident in the behaviour of respondent B.

The respondent reacted negatively to any attempt by class members or teachers to interact socially. He would show aggressive behaviour, such as screaming or physical abuse, if forced into social interaction. The respondent could be considered a 'loner', and therefore rarely interacted with others.

Once music was introduced the researcher is of the opinion that the respondent showed improvement in this area, although only to a limited extent. The researcher is of the opinion that the improvement in the respondent's language contributed to improved social interaction. This was seen in the respondent's ability to communicate more effectively, resulting in a good response from his classmates. This was a positive experience of social interaction for the respondent who therefore felt encouraged to interact with others.

# 4.8.2.3 Attention span

The attention span of respondent B was poor. He was prone to daydream or simply 'tune-out' from the environment. The respondent did not react well to any form of discipline, and simply ignored any reprimand or discouragement. When attempting to complete a classroom task, such as painting alternative colours in a sequence, the respondent required constant supervision and strict guidance in order to complete the task. He needed constant reminding from the teacher or caregiver as to the task on hand: what the aim was and how it was to be done, for example painting one colour.

Once music was introduced, the respondent improved. The researcher is of the opinion that, as the respondent had been diagnosed with autism of extreme proportions, any amount of improvement could be considered significant.

Although the respondent still required supervision, the background music resulted in a greater ability to pay attention. In relation to the above-mentioned activity, the respondent showed that he was able to maintain a better level of attention by painting three of four sequences of colour, before requiring assistance and/or guidance.

# 4.8.2.4 Minimizing challenging behaviours

The respondent showed severe challenging behaviours, with inappropriate behaviour being of the greatest concern. The respondent was prone to use obscene language and to expose himself at inappropriate times. The respondent was also aggressive and portrayed various levels of self-injurious behaviour.

The background music appeared to reduce the respondent's level of anxiety. This directly affected the challenging behaviours that the respondent portrayed. The researcher is of the opinion that the greatest improvement was apparent in this area, due to the fact that the challenging behaviours had been so evident. Although this area still required much improvement, the degree of improvement was significant.

# 4.8.2.5 Impact of music

Once again the researcher is of the opinion that the positive impact of music is evident in all areas measured on the scale, with regard to respondent B. The respondent is diagnosed with autism to extreme proportions, and the fact that he showed improvement on all levels is remarkable.

The researcher is of the opinion that this respondent would also benefit, to an even greater extent, with the continual use of background music. This statement is based on the fact that in the course of six weeks the respondent had already

improved significantly. Therefore over a longer period of time, a greater improvement should be evident.

# 4.8.3 Respondent C

Respondent C could be considered to have adapted considerably well to the classroom environment. She was able to communicate fairly well, on both a verbal and non-verbal level. She was involved in the classroom activities, and showed a keen interest and an ability to interact with her classmates. Sometimes she could be considered to be over-active, but at other times she was prone to daydream.

#### 4.8.3.1 Communication

As can be seen on the quantitative answering distributions, respondent C showed good communication skills. She was one of the three respondents who achieved the highest score in communication ability. She was able to communicate both verbally and non-verbally, and displayed some written skills, such as the ability to write her name or copy information. Due to the fact that she could at times be over-active, her speech could become confused and rushed.

With the introduction of music, the respondent appeared to calm down considerably. This directly influenced her ability to communicate, reducing the pace of her speech and allowing it to be more easily understood. Her non-verbal communication remained similar, although it appeared to be more closely linked to her verbal communication than previously noted. This was evident in the respondent's ability to link her facial expression with her verbal communication in an appropriate manner.

#### 4.8.3.2 Social interaction

Respondent C thoroughly enjoyed social interaction with her classmates, continually encouraging interaction. Due to her ability to communicate, she was able to converse freely and to develop a relationship with her peers. However, due to the fact that she may at times become hyperactive, and due to some children's negative response to interaction, the respondent's desire for interaction can be considered demanding and overbearing. She would often demand attention, continually patting the individual on the shoulder, until attention was given. This understandably evoked a negative reaction from her peers.

With the introduction of music, the respondent became less agitated. It was due to this that all areas of the respondent's behaviour were affected. In spite of the respondent's desire for social interaction, she was able to approach the other children more spontaneously, therefore reducing the chances of a negative reaction.

# 4.8.3.3 Attention span

This area could be considered the most challenging area for the respondent. Frith (1989:11) stated that children diagnosed with autism might show markedly restricted repertoire of activities and interests, which affects the individuals' ability to concentrate and maintain their attention span. The respondent found it difficult to maintain her attention span, especially when being asked to complete a classroom task. The respondent required that the teacher or caregiver continually gave guidance and supervision. The respondent was at times totally averse to persevering to complete the task.

Due to the fact that the music assisted the respondent to behave in a more relaxed manner, she was able to concentrate on a slightly increased level. Although the improvement was minimal it was still evident and the researcher is

of the opinion that improvement will continue with further exposure to background music.

# 4.8.3.4 Minimizing challenging behaviours

This respondent did not show a large degree of challenging behaviours. Therefore her score on the scale was relatively low, as all the areas identified within the construct where not applicable to her. The respondent did however show a tendency to be aggressive and to exhibit repetitive behaviour. This added to her inability to complete tasks and a negative response to the initiation of social interaction.

Once again due to the fact that the respondent behaved more spontaneously, her challenging behaviours were minimized. The respondent showed less aggression when interacting with her classmates and in reaction to discipline. The challenging behaviours were not completely removed, as the researcher is of the opinion that this would involve a much longer process over a longer period of time. However, an improvement was definitely evident, in particular with regard to interaction with her peers.

# 4.8.3.5 Impact of music

When observing respondent C the researcher is of the opinion that music had a profound impact on the respondent's classroom behaviour. All areas that were measured on the scale improved. The researcher is of the opinion that the children who were functioning on a higher level showed improvement on a smaller scale compared to those who were severely affected by autism. This is due to the fact that the individual had already responded positively to her classroom environment. However, the introduction of background music encouraged even further improvement. This was noticeable in respondent C.

# 4.8.4 Respondent D

This respondent presented many challenging situations within the classroom setting. He was able to communicate, but on a very low level and only through verbal expression. He was completely averse to any form of social interaction, including even the least amount of physical contact. To this he responded by screaming and by being aggressive. He required constant supervision.

#### 4.8.4.1 Communication

The respondent was limited in his communication skills. He would only communicate when prompted to do so and he would then copy a response. This he would do only under extreme duress. The respondent did not communicate spontaneously with any of his classmates or teachers. Verbal communication was not apparent. He was able to copy written tasks, but under constant supervision.

The respondent was aware of the background music as soon as it was introduced. He was the only child who really took notice of the music, often sitting with his ear pressed up against the speaker. Although this could have been considered a distraction (which it might have been at times) the music had a valued impact on the respondent's behaviour.

With regard to communication, the researcher is of the opinion that with the introduction of music, the respondent appeared less frustrated and agitated. This allowed for him to take more time to consider what he wanted to say, without feeling pressurized. The non-verbal communication also increased slightly, although at times it seemed inappropriate or mismatched to his verbal communication. Although the respondent still required prompting, it appeared that he was more willing to communicate and felt more comfortable doing so. This could be seen in the respondent's willingness to greet the researcher

spontaneously, and hold a simple conversation about the weather or how he was feeling. He also began to spontaneously participate in class discussions.

#### 4.8.4.2 Social interaction

This respondent did not initiate any form of social interaction and responded negatively to any attempts by his classmates to initiate interaction. According to What is Autism? (2002) 'the hallmark feature of autism is impaired social interaction' and this may include a child failing to respond to his/her name and avoiding eye contact with others. He could be totally unaware of others' feelings. Respondent D was totally averse to any form of social interaction. He responded to even the slightest physical contact with aggressive screaming or aggressive physical behaviour. The respondent could be considered a 'loner', often wandering off on his own, avoiding social situations at all costs. This area could be considered the most challenging behaviour for this child.

With the introduction of music, improvement with regard to social interaction definitely occurred. Although this improvement was not significant, it was considered substantial. The most obvious sign of improvement was the fact that the respondent reacted in a more positive manner when approached by his classmates. Although he did not begin to initiate contact, he began to reciprocate the interaction attempted by his classmates. This could also be linked to his improved communication skills, which made interaction a positive experience for all parties concerned.

#### 4.8.4.3 Attention span

The respondent found difficulty in maintaining his attention, especially when given a task to complete. In order for the task to be completed by the respondent, the teacher or caregiver had to continually remind the respondent what needed to and how it should be done. He became frustrated when

expected to maintain a long period of attention, and therefore his task completion skills were poor.

Through the introduction of background music, the respondent's degree of frustration was reduced. This directly impacted on the respondent's ability to maintain his attention. Although he still required much supervision in completing a task, he appeared to be more keen to attempt it, and less frustrated when being asked to complete it. This led to the respondent completing tasks on a regular basis, which was a positive experience for him and resulted in greater concentration.

#### 4.8.4.4 Minimizing challenging behaviours

The most recognizable challenging behaviours that the respondent displayed were aggression and inappropriate behaviour. These were mentioned in connection with the respondent's reaction to any form of physical contact, whereby the respondent would scream uncontrollably. In other circumstances his behaviour was acceptable, but still challenging.

Due to the fact that music led to a decrease in the respondent's frustration level, an improvement in social interaction became evident, which in turn led to a decrease in his challenging behaviours. As a result of being able to communicate more effectively, he was encouraged to interact. Although at times the respondent still screamed when approached, this usually occurred when he was taken by surprise or was busy with another activity.

#### 4.8.4.5 Impact of music

This respondent displayed a positive improvement due to the impact of the background music. Almost all areas improved, such as communication, social

interaction and his attention span. Although the improvement was not significant, it was evident.

Again, due to the fact that the respondent was diagnosed with autism to extreme proportions, the degree of improvement was remarkable. This respondent would certainly benefit from further use of background music, considering the extent to which he improved over the six-week period.

#### 4.8.5 Respondent E

This respondent could be considered to be a relatively well-adjusted child within the classroom situation. He showed relatively high levels of functioning, as a child diagnosed with autism. He was able to communicate well, both verbally and non-verbally and was competent in written skills. He interacted with his classmates relatively normally, although, at times aggression was evident. He was able to complete given tasks and appeared to enjoy activities.

#### 4.8.5.1 Communication

Respondent E communicated very well on all levels. His written work was above expectation, considering his diagnosis. Most of the children were unable to write at all, but this respondent was able to write his name, selected words and sentences with out assistance. The only concerns were the respondent's inability to maintain concentration and the occasional display of aggression.

However, with the introduction of music, due to the general calm that was established in the classroom, the respondent managed to limit his aggression and to improve concentration. This led to greater communication skills, resulting in better task achievement. This motivated the respondent to continue achieving and working hard.

#### 4.8.5.2 Social interaction

Although the respondent is not averse to social interaction, he did not initiate interaction often. When he did, it was usually aimed at individuals in the class from whom he was sure to obtain a negative response. For example, respondent E would often attempt to interact with respondent D, who was totally averse to any form of contact. This led to a negative reaction, which pleased respondent E.

The introduction of music led to a decrease in the respondent's aggression, which in turn led to a decrease in his desire to encourage negative reactions from other classmates. This resulted in a general improvement in the respondent's social interaction, with him showing more interest in interacting with classmates positively.

#### 4.8.5.3 Attention span

Respondent E had a relatively good attention span, although at times he appeared to daydream and to lose concentration. After instructions had been repeated, he could complete the task. However, during the task, he required supervision in order to ensure the completion thereof.

With the introduction of background music, the researcher is of the opinion that the respondent showed greater levels of concentration and ability to maintain his attention. Due to the fact that his aggression had also decreased, the respondent was more willing to complete tasks and interact with others. The frequency of his daydreaming was reduced.

#### 4.8.5.4 Minimizing challenging behaviours

Apart from slight aggression that could be observed in the social interaction with his classmates, the respondent did not display any severe challenging behaviours. However, this was reduced with the introduction of music, which resulted in lower levels of frustration within the classroom and therefore less aggression towards his classmates.

#### 4.8.5.5 Impact of music

Respondent E showed a positive reaction to music. As he was not severely affected by autism, the improvements did not appear to be as obvious or as impressive. However, the researcher is of the opinion that these improvements were just as relevant to the study. Encouraging improvement within each child who was affected by autism lead to a better quality of life for both the children and their significant caregivers.

#### 4.8.6 Respondent F

Respondent F could also be considered to be a relatively well-functioning individual, considering his autistic status. He was able to communicate very well, on a verbal and non-verbal level. His written skills were very limited, although he could write his own name, with assistance. He interacted relatively well with his classmates, although at times he was aggressive. The respondent also tended to daydream, and demanded much attention. He was very aware of his classmates, and can be considered a telltale.

#### 4.8.6.1 Communication

The respondent is very capable of communicating, on both a non-verbal and verbal level. At times, when the respondent was excited or hyperactive, he

stuttered and was difficult to understand. Generally the respondent could be understood relatively easily. However, due to the fact that the respondent could be considered demanding, at times he would dominate a conversation and not allow for any response. Due to his classmates not being skilled in communication they simply ignored him, which caused great frustration. This led to aggression, which had a negative result in the classroom. His written skills were limited, with him only being able to write his name, under supervision.

With the introduction of music, the respondent appeared to relax, which led to a slower pace of speech and therefore a slight decrease in his stuttering. The respondent remained demanding, but due to his speech being more clear, it was more easily understood.

#### 4.8.6.2 Social interaction

Socially, he responded positively, but due to the fact that at times he was aggressive, some of his classmates responded negatively to his initiating interaction. Koegel, et al. (1995:2) stated that an autistic individual might present self-injurious or/and aggressive behaviour. The respondent often dominated his classmates by interrupting their conversations or by pushing them out of his way. He demanded much attention from the caregivers, often appearing to be jealous of any other child attempting to make contact with them. It was often due to jealousy that the respondent would identify fault in other classmates, in order to get them into trouble.

Although the introduction of music definitely impacted on the respondent's ability to interact socially, the researcher is of the opinion that jealousy is part of the respondent's character, rather than a result of autism. This would need to be dealt with differently.

#### 4.8.6.3 Attention span

This could be considered the respondent's weakest attribute, due to a severe inability to maintain concentration. Although the respondent was able to tackle tasks within the classroom, he was often unable to complete these due to a lack of attention and concentration. He also often interrupted the other children, which caused problems with regard to these individuals completing their tasks.

However, the researcher is of the opinion that once music was introduced into the classroom, the respondent showed improvement. He appeared to be able to maintain his attention for longer, due to his being more relaxed and less frustrated. He was able to complete tasks more consistently, which was a positive experience for him. He continued to irritate and interrupt the other children, but the researcher is of the opinion that had become habitual.

#### 4.8.6.4 Minimizing challenging behaviours

The most challenging behaviour that the respondent exhibited was that of aggression. In most circumstances, where he became frustrated due to not being attended to or not getting away, he would react aggressively. This aggression would be aimed at whoever was standing closest to him, or whom he considered to be the problem. He would often attack his classmates physically, by pushing or hitting them.

This is clearly an area that was positively affected by the background music, as it pacified the respondent and decreased his frustration level. Although aggression was still evident, the researcher is of the opinion that there was definitely a noticeable decline in the respondent's aggressive behaviour. With greater exposure to background music, the researcher is of the opinion that the respondent's behaviour would further improve. This is based on the fact that

there was a marked improvement over the six-week period and therefore should further improve over a longer period of time.

#### 4.8.6.5 Impact of music

The researcher is of the opinion that the impact of music resulted in a positive response. In all the areas measured on the scale, the respondent improved. Although some of the behaviour still persisted, the researcher is of the opinion that the music definitely led to an improvement in the respondent's classroom behaviour. With further exposure to background music, greater improvement should therefore take place.

#### 4.8.6.6 Evaluation of qualitative measurement

All the above information in this section refers to the data analysis of the qualitative data that was gathered over the period of the research process. The researcher is of the opinion that one could clearly observe the improvement in all the respondents who were involved in the study. The most important observation, according to the researcher, is the fact that all the respondents would benefit greatly from further use of background music in the classroom. This statement is based on the fact that all the respondents showed improvement over the six-week period, when music was introduced into the classroom. In spite of six weeks being considered to be a relatively short period of time, an improvement was evident. Therefore one can conclude that over a longer period of time a more marked improvement would result.

Through all the above qualitative data the researcher hopes to have given a greater indication of the data that was gathered. Through analyzing both the quantitative and qualitative data, an overall perception of the data gathered could be observed. This indicated the degree of improvement, due to the impact of music on the respondents' classroom behaviour.

#### 4.9 SUMMARY

The previous chapter covered a large portion of information, which could be considered to be the most vital information of this study. The researcher began by reminding the reader of the frame of this research, particularly looking at the data-gathering that was recorded. This data was then analyzed, on both a quantitative and qualitative level, by using a dominant-less-dominant approach. Through analyzing the data, the researcher hoped to indicate how children diagnosed with autism responded when background music was introduced into the classroom.

The following chapter will contain the summaries, conclusions and recommendations that were gathered from the data analysis. This will pave the way for further study and promote the use of the intervention that has been researched.

# CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.

#### 5.1 INTRODUCTION

The following and final chapter aims to provide closure to the research process. Chapters one to four, have given a detailed explanation of how the research was done, looking at a theoretical and literature study, as well as the empirical study. The closure to the study will be done by summarizing the research material that was gathered in the previous chapters, drawing conclusions from the material and making recommendations for future implementation. The summaries, conclusions and recommendations will be presented by focusing on the goal, objectives and hypothesis of the study.

#### 5.2 THE GOAL OF THE STUDY

The goal of the study was to determine the impact of music within play therapy on the classroom behaviour of autistic children.

Through chapter one the researcher attempted to indicate the thought processes that led to the formulation of the broad goal for this study. Chapter one also covered the research procedure followed. Therefore, it is appropriate to discuss this chapter under this heading.

#### 5.2.1 Summary

Autism appears to be an ever-increasing problem in society and more specifically in classrooms. According to the Autism Primer (2002), autism is defined as being 'a lifelong developmental disability that prevents individuals from properly understanding what they see, hear, and otherwise sense'. The article goes on further to state 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'.

The statistics on autism were varied. Internationally, the following statistics were given. According to Encarta (2002) 'autism affects two to five out of every 10,000 children'. In a publication of the National Information Center for Children and Youth with Disabilities (2002) it was stated that approximately five to 15 children out of 10,000 are born with autism, with it being four times more common in boys than girls. Within 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 researcher conducted the study through the use of Creswell's dominant-less-dominant model, which included a combination of quantitative and qualitative styles of data-gathering and analysis, with the quantitative approach being the dominant paradigm. Within the context of applied research, the researcher conducted a quasi-experiment, in the format of a one-group pretest-posttest design. The respondents participating in the study formed part of a non-probability sample, more specifically, a purposive sample. Through the above-mentioned design and sample, the researcher attempted to determine the impact of music within play therapy, on the classroom behaviour of children diagnosed with autism.

#### 5.2.2 Conclusions

The following conclusions were drawn from the introduction to this study:

- The ever-increasing number of children who are being diagnosed with autism is a cause for concern, both to society and the individuals within it.
- Autism is considered a relatively unknown disorder with regard to both professionals and people in general. This is impacting on the quality of life of those individuals who are diagnosed with autism.

- Autism is considered to be a disorder that provides many challenges within the classroom, with autistic children demanding individual attention and guidance at all times. This leads to a greater need for specialized education and improved quality of life for these individuals.
- Creswell's dominant-less-dominant model was appropriate for this study.
   Through using the quantitative approach dominantly, the researcher was able to prove the research hypothesis, as well as reach the goal of the study. The qualitative approach on the other hand, allowed the researcher to gain more insight into autism and the behaviour of children diagnosed with autism and to gather more in-depth data. Both the quantitative and qualitative approach contributed positively to attaining the goal of this study.
- A quasi-experiment within the context of applied research was employed in this study. This was felt to be appropriate for the study and assisted the researcher in reaching the goal and objectives of the study.

#### 5.2.3 Recommendations

The following recommendations are made in light of the above-mentioned conclusions:

- Autism is an area of concern in our society. Societies as a whole and
  particularly the education system need to be informed with regard to the
  disorder. Through access to the information, individuals will strive to
  develop a better quality of life for children who are diagnosed with autism.
- This study aimed to discover the impact that music has on the classroom behaviour of children diagnosed with autism. It is possible that this study could serve as a basis for further in depth study regarding this topic.

# 5.3 THE OBJECTIVES OF THE STUDY OBJECTIVE ONE:

To extend the knowledge regarding (a) autism as a phenomenon, autistic children in a classroom situation, as well as (b) the use of music within play therapy, through a literature study.

The first objective of this study was researched through the literature study, namely chapters two and three. This section will focus on chapter two and three separately.

(a) Autism as a phenomenon and autistic children in the classroom.

#### 5.3.1 Summary

Autism, according to Trevarthen, et al. (1996:4), is 'a compound of two Greek words – 'aut-', which means 'self', and '-ism', which implies 'orientation or state'. Therefore, in a simple statement, autism can be considered to be a condition of an individual who is unusually absorbed in him/herself. An individual with autism explained her 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' (Williams, 1996:1).

There are various factors that could contribute to the onset of autism such as brain damage occurring in the setting of a genetic predisposition; underdevelopment of specific areas of the brain; problems occurring during pregnancy, birth or early infancy; and/or parenting.

Autism involves various characteristics, namely severe delays in language development; severe delays in understanding social relationships; inconsistent patterns of sensory responses; uneven patterns of intellectual functioning; and marked restriction of activity and interest.

Almost as soon as parents learn that their child may have autism, their thoughts inevitably turn to the future, wondering what the prognosis will be. The effect that autism has on a family is almost incomprehensible, affecting both the immediate family, such as parents and siblings, as well as other significant caregivers and acquaintances.

Autism is unique in each individual who is diagnosed with the disorder. In the case of two people showing all three symptoms associated with autism, one person may have one underlying problem, the other may have a different underlying problem, but both result in the same three symptoms associated with autism. This shows the great challenge when working with/educating children with autism.

#### 5.3.2 Conclusions

The following conclusions were drawn from this chapter:

- Autism is a complex and challenging disorder.
- There are various causes of autism, which should all be considered when working with/educating individuals who have been diagnosed with autism.
- There are various characteristics and symptoms associated with autism,
   covering a wide spectrum of behaviours and circumstances.
- The individual diagnosed with autism places great strain and difficulty on the social lives of all his/her significant caregivers, due to his/her disorder.
- Each individual diagnosed with autism is unique in the manner in which he/she is affected and impacted by the disorder.

#### 5.3.3 Recommendations

The following recommendations are made in light of the above-mentioned conclusions:

- Society as a whole needs to become more aware of autism and the effects on the individuals living with autism.
- Individuals diagnosed with autism should be treated separately, and not as a group, as each individual diagnosed with autism is unique.
- The education system needs to ensure that it is fully equipped to deal with autistic children, both within the school and at home.
- (b) The use of music within play therapy.

#### 5.3.4 Summary

According to the article Play Therapy (2003a) 'play is the method that children use to communicate and process their world'. What is Play Therapy? (2003a) defined play therapy as therapy that 'helps children work through emotional and behavioural issues and helps address family problems'.

Play therapy can be considered to be a form of intervention that uses a child's natural means of expression, namely play, as the therapeutic method to assist him/her in coping with emotional trauma or stress.

Gestalt therapy focuses more on what is happening than on what is being discussed. The emphasis of gestalt therapy is on what is being done, thought and felt at a moment rather than on what might be, could be, or should be at a later stage. The main goal is self-awareness, therefore living in the 'here-and-now'.

Perls who is considered to be the founder of gestalt therapy, based the counselling stages of gestalt on five neurotic layers, which he considered to be the basis of all human thinking. These included the phony layer; phobic layer; impasse layer; implosive layer and explosive layer.

There are various projection techniques that can be used within gestalt therapy. Projection can be considered to be a process whereby one imagines his/her own unwanted feelings belonging to someone else.

Music can be considered to bring about various positive changes, when introduced in its various forms. It can be considered to stimulate participation, improve attention span and decrease frustration levels. Music also appears to decrease internal tension and reality can become more pleasant and tolerable.

#### 5.3.5 Conclusions

The following conclusions were drawn from this chapter:

- Play therapy is an intervention using play as the main medium of therapy to assist individuals in dealing with emotional problems.
- Gestalt therapy, within play therapy, focuses on the here-and-now, with the main goal of self-awareness.
- Perls, the founder of gestalt therapy, believed that the therapy process is based on five layers, which the individual experiences as he/she goes through the process of therapy.
- Music can be considered to be a highly effective medium in assisting individuals in dealing with their emotional problems or situations.
- Music should have a positive impact on individuals diagnosed with autism.

#### 5.3.6 Recommendations

The following recommendations are made in light of the above-mentioned conclusions:

- One should carefully consider all the aspects of play therapy, particularly gestalt therapy, before implementing it.
- Play therapy should be used to a greater extent, to help individuals who are dealing with emotional problems of any kind.

 Music should be used on a regular basis within therapy, particularly with individuals diagnosed with autism.

#### **OBJECTIVE TWO:**

To gain data through an empirical study on the effect of music on the behaviour of autistic children in the classroom.

The second objective of the study is described in chapter four. This objective was achieved by conducting structured and unstructured observation with the purposive sample, over a period of three months.

#### 5.3.7 Summary

The researcher used Creswell's dominant-less-dominant approach, in order to complete the empirical study. This involved both a quantitative and qualitative approach, in order to obtain greater depth and diversity in the data gathered. The quantitative approach allowed the researcher to prove the research hypothesis, and was therefore considered to be the dominant paradigm. The qualitative approach, the less-dominant paradigm, aimed to add value to the data that was gathered.

The goal of the study was to determine the impact of music on the classroom behaviour of autistic children. The researcher conducted a one-group pretest-posttest design in order to measure the impact of the introduction of music as the intervention process. The researcher conducted structured and unstructured observation before and after the introduction of music. The changes in behaviour were identified through the use of the scale. The outcome of this study enabled the researcher to reach certain conclusions and to make recommendations on the benefits of using background music in the classroom, with autistic children. These conclusions and recommendations follow below.

#### 5.3.8 Conclusions

The following conclusions were reached from Chapter four, regarding the empirical study:

- Children diagnosed with autism face many challenges in their daily lives, particularly within the classroom. They are challenged by communication, social interaction, attention span and unusual behaviour, such as swearing or self-injurious behaviour. This also places enormous pressure on the educators.
- The behaviour of the children diagnosed with autism appeared to improve dramatically with the introduction of background music. The researcher was able to observe this in the children's communication skills, social interaction, attention span and the reduction of challenging behaviour.
- The results of this study revealed that the introduction of background music into the classroom definitely impacted positively on the behaviour of the autistic children.

#### 5.3.9 Recommendations

The following recommendations are made in light of the results of the empirical study:

- The continual use of background music in the classroom of children diagnosed with autism, in order to improve behaviour, is recommended.
- Development of a programme using music that can be provided to both educators and families, in order to improve the behaviour of children diagnosed with autism.
- The education of individuals in contact with children diagnosed with autism, with regard to the benefits of using background music in the classroom.
- Further research into the effective implementation of music within the classroom, to improve the behaviour of autistic children, is recommended.

#### **OBJECTIVE THREE:**

To make conclusions and recommendations regarding the use of music in play therapy with the autistic child.

The last objective was achieved through reaching conclusions and making recommendations regarding the literature and empirical study, as provided above. The literature study allowed for the researcher to conduct the empirical study, due to the fact that the researcher learnt about autism and the use of music within the classroom. The empirical study then allowed the researcher to achieve the above-mentioned objective.

By reaching all the stated objectives the researcher was able to attain the goal of the study. The researcher was able to determine the impact of music, within play therapy, on the classroom behaviour of autistic children. Through both the quantitative (the scale) and qualitative (unstructured observation) paradigms, the researcher was able to reach all the above-mentioned objectives and the overall goal of the study.

#### **5.4 THE RESEARCH HYPOTHESIS**

If music is introduced within a play therapy framework then the classroom behaviour of autistic children will improve.

Due to the fact that the researcher utilized the quantitative paradigm as the dominant approach, the research hypothesis could be proven. This was achieved through the implementation of a quasi-experimental design, more specifically the one-group pretest-posttest, with the purposive sample. This was conducted over a period of three months.

The researcher is of the opinion that when looking at the stated hypothesis, through the implementation of the empirical study, one can clearly state that the hypothesis is true. When music was introduced within the play therapy framework, the classroom behaviour of autistic children did improve.

#### 5.5 CONCLUDING STATEMENT

The number of autistic children within society is an ever-increasing concern. Fedics (2002) defined autism as 'a perpetual state of disorientation and chaos, similar to what one experiences in nightmares and resulting in feelings of fear and confusion...autistic children cannot awake from the nightmare in which their mind is trapped'. This places stress on societal structures, such as the education system.

However, through determining the positive impact of music on the classroom behaviour of autistic children, there is assistance which can be given to both educators and individuals diagnosed with autism. Through the introduction of background music into the classroom, the behaviour of the autistic children improved, which would allow for greater benefits of education and in turn would improve the quality of life of individuals diagnosed with autism.

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# ADDENDUM varsity of Pretoria etd – Ablort-Morgan, C E (2003)

### **RESEARCH SCALE**

| Evaluation Scale |                          |  |
|------------------|--------------------------|--|
| 1                | Very Poor/Did not appear |  |
| 2                | Poor/To a little extent  |  |
| 3                | Average/To some extent   |  |
| 4                | Good/ To a great extent  |  |
| 5                | Very good/Completely     |  |

### 1. Communication

| 1.1. Listening                |   |   |   |   |   |
|-------------------------------|---|---|---|---|---|
| Interest in listening         | 1 | 2 | 3 | 4 | 5 |
| Ability to listen             | 1 | 2 | 3 | 4 | 5 |
| Ability to comprehend         | 1 | 2 | 3 | 4 | 5 |
| 1.2. Non-verbal communication |   |   |   |   |   |
| Facial expressions            | 1 | 2 | 3 | 4 | 5 |
| Gestures                      | 1 | 2 | 3 | 4 | 5 |
| Eye contact                   | 1 | 2 | 3 | 4 | 5 |
| 1.3. Verbal communication     |   |   |   |   |   |
| Spontaneous speech            | 1 | 2 | 3 | 4 | 5 |
| Comprehensive speech          | 1 | 2 | 3 | 4 | 5 |
| Speech when required          | 1 | 2 | 3 | 4 | 5 |

### 2. Social Interaction

| 2.1. Level of interest in social interaction           | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| 2.2. Desire for contact with classmates and/or teacher | 1 | 2 | 3 | 4 | 5 |
| 2.3. Participation in class                            | 1 | 2 | 3 | 4 | 5 |
| 2.4. Reaction/level of comfort to social interaction   | 1 | 2 | 3 | 4 | 5 |

### 3. Attention span

| 3.1. Attentiveness                  | 1 | 2 | 3 | 4 | 5 |
|-------------------------------------|---|---|---|---|---|
| 3.2. Ability to focus               | 1 | 2 | 3 | 4 | 5 |
| 3.3. Ability to take in information | 1 | 2 | 3 | 4 | 5 |
| 3.4. Agitation                      | 1 | 2 | 3 | 4 | 5 |

# ADDENDUM varsity of Pretoria etd – Ablort-Morgan, C E (2003)

### 4. Minimizing challenging behaviour

| 4.1. Repetitive behaviour    | 1 | 2 | 3 | 4 | 5 |
|------------------------------|---|---|---|---|---|
| 4.2. Inappropriate behaviour | 1 | 2 | 3 | 4 | 5 |
| 4.3 Self-injurious behaviour | 1 | 2 | 3 | 4 | 5 |
| 4.4 Aggressive behaviour     | 1 | 2 | 3 | 4 | 5 |

### 5. Impact of Music

| 5.1. Awareness of music       | 1 | 2 | 3 | 4 | 5 |
|-------------------------------|---|---|---|---|---|
| 5.2. Positive impact of music | 1 | 2 | 3 | 4 | 5 |



UNDER THE SOCIETY FOR CHILDREN AND ADULTS WITH AUTISM (S. TVL)

Telephone (911) 726-2440
Telefax (011) 726-7901
PO Box 84811, Greenside. 2034
7 Rhodes Avenue, Parldown West.
Johannesburg



6 March, 2003

To Whom It May Concern:

I, inge Kimmel, agree that Catherine Ablort-Morgan will be doing her research at The Key School to complete her MSD (play therapy).

Yours Sincerely,

Inge Kimmel Principal Key School

## ADDENDUM versity of Pretoria etd – Ablort-Morgan, C E (2003)

| Participants' name  | Date  |
|---|---|
| Principal investigator:   |   |
| classroom situation.  3. Procedures: My child will be involve environment, completing his/her nor in the school day. Music will be introtimes during selected schools days their behaviour and social skills, bei   | e of this study is to investigate the behaviour of autistic children, within the ed in the study in his/her classroom rmal tasks that are required of him/her oduced as background music at various during particular school activities, with ng observed by the researcher. This |
| school time, and will not require any<br>4. Risks and discomforts: There are n<br>associated with this study, although  | to known medical risks or discomforts the child may experience stress due to This will be carefully monitored by the  |
| <ol><li>Benefits: I understand that there ar<br/>child for participating in this study.</li></ol>   | e no immediate benefits for me or my<br>However, the results of the study may<br>erstanding of autism and how it best can   |
| <ol> <li>Participant's Rights: My child may an armonia.</li> <li>Confidentiality: I understand that un name be used in the study, and that importance. The results of this study professional journals or presented arecords or identity will not be revealed.</li> <li>If I have any questions or concerns, (011) 784 1912 at any time.</li> </ol> | nder no circumstances will my child's confidentiality will be of utmost may be published in the professional conferences, but my ed unless required by law.   |
| I understand my rights as the parent/s voluntarily consent to my child's participathe study is about and how and why it is copy of this consent form.   | pation in this study. I understand what   |
| Parent's Signature  | Date  |

Signature of the Researcher