

**CLASSROOM AND PLAYGROUND INTERACTION OF
CHILDREN WITH AND WITHOUT DIASBILITIES: A CASE
OF GEORGE BASIC SCHOOL**

**BY
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**A Dissertation Submitted to the University of Zambia in
Partial Fulfillment of the Requirement for the Award of
Master of Education (Special Education) Degree.**

November, 2006

DECLARATION

I, **BANDA NOSTO GRACE**, declare that this dissertation is my own work and has not been submitted for a degree award at this or any other university.

Signature Banda

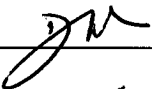
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CERTIFICATE OF APPROVAL

This dissertation by Banda Nosto Grace is approved as partial fulfillment of the requirements for the award of the Master of Education (Special Education) degree of the University of Zambia.

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DEDICATION

This dissertation is dedicated to:

My Family

My sons, Taurai, Suzyo, Chewe and my only daughter, Chimfwembe.

I love you guys!

ACKNOWLEDGEMENTS

I wish to acknowledge the encouragement that I received from friends and colleagues who kindly read and corrected the manuscript and made suggestions, otherwise it would not have been complete in a satisfactory way.

Special thanks go to Dr. D. M. Kalabula course supervisor for his sincere criticisms and encouragement during the period that I had been writing this paper, without his guidance, it could not have made the completion of research paper possible. I am also grateful to the specialist teachers of George Central School for their co-operation and assistance. I am deeply indebted to all those teachers who sacrificed their valuable time to work along side me as assistant observers.

I wish to also extend my sincere gratitude to the Lusaka District Education Board for allowing me to do my studies and for their sponsorship of my entire study programme. It was never easy combining studies and work, but it was their support which gave me the encouragement to pursue my studies to completion.

I further wish to record my sincere and deep gratitude to my brother Mr. Charles Banda and his wife Jane for their constant support throughout my course work. Special thanks to my sister-in-law Jane for typing this work.

Finally, my deep sense of gratitude goes to Mr Charles Makasa (Partner) out there in the UK for being caring and supportive to our children and me during trying times of my studies.

To all the above named people I would say your constant support add up to a debt no friend or relative can fully repay.

ABSTRACT

The aim of the present study was to investigate and compare the social behaviours of children with mild mental retardation with that of their ordinary class – peers. The study also sought views of teachers on how they perceived social behaviours of children with mild mental retardation as well as on their perceptions of intervention programmes for promoting social interaction at their school. A sample size of 30 children with and without mental retardation and 10 teachers with two or more years of teaching experience participated in the study. Children's age range was from 8 to 13 years. Children with mild mental retardation were all receiving their education in the ordinary classroom on fulltime basis, while children without disabilities had been regular class members prior to integration. Children with mild mental retardation were matched with a non- disabled child. This was done by choosing an ordinary class peer of the same sex, with closest birth date to the targeted child.

A time – sampling technique was used to collect observational data. The results generally indicate that there are similarities and differences in behaviour pattern between children with mild mental disabilities and those without disabilities attending ordinary classes. For example, both groups of children displayed inappropriate behaviour such as disruptive and aggressive behaviour, The only difference was that, while children with mild mental retardation showed higher levels of such behaviour their ordinary class- peers showed lower levels of inappropriate behaviour. The results in this study have also shown that there were differences between the two groups in the types of behaviour engaged in both the classroom and playground environments. In the classroom, children with mild mental retardation were more often off- task than their ordinary class peers. On the playground, children with mild mental retardation interacted and played less with their peers than did those without disabilities. The

results of this study seem to suggest that, integrating children with mild mental retardation in ordinary classroom may not always result into intergroup social interaction. Since the aim of integration is to facilitate intergroup social interaction opportunities for interaction should be carefully planned and evaluated constantly

A look at the present data, shows that although the study school has been integrating children with mild mental retardation for some years, there are several issues which need to be addressed if this concept has to work in favour of the affected groups of children. Since the results of this study show that children with mild mental retardation interacted less with their peers, there is need for the concerned teachers to develop programmes that facilitate intergroup social interaction e.g. sports in action activities that include children with mental retardation. There is also need for the ministry of education to provide uniform policies on social integration of children with disabilities the District Education Board Secretary in Lusaka should appoint a task force to formulate standard procedures for integration. This will help to avoid a situation whereby there are varied uncoordinated ways of interacting children in ordinary classrooms.

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CHAPTER ONE

1.0 Introduction

In this section the background of the study is described as well as the statement of the problem. Also the purpose of the study is explained and questions, which guided the study and significance of the study are presented.

1.1 Background

In Zambia, special education became the responsibility of the government in 1971. Before 1971, special education was administered by private agencies such as church organizations and the Cheshire Homes (Ministry of Education, 1977) and only catered for children with physical disabilities, visual and hearing impairments but children with mental retardation were outside this scope of provision. Following government take over of the running of special education, children with mental retardation became recognized for the first time as a special needs group. However, education for children with mental retardation did not start until 1974 when the first school was established at Chainama Hills Hospital in Lusaka Urban (Chainama School Annual Report 1974). The 1977 education policy spelt out how education services were to be delivered to the affected groups of children. The above policy gave substantial attention to the settling in which special education was to be delivered.

As a result of this, strong emphasis was placed on providing an enriched curriculum in order to help the affected children to rise above their limitations (Ministry of Education 1977).

From the very beginning, the major type of placement has been the special class. The special class usually has a specially trained teacher who is helped by an assistant teacher in the delivery of the curriculum to a small group of children, usually of no more than fifteen.

However, apart from the special class some children have been taught in resource rooms and ordinary classrooms. The education policy of 1977, recommended that some of the children especially those with mild mental retardation ought to be

integrated in ordinary classrooms. In response to this recommendation, some schools like George Central Basic have been placing children with mental retardation in mainstream classes. Coleman and Minnet (1993) noted that the justification for placing children with mental retardation in ordinary classrooms has always been based on possible academic gains for children with mental retardation and on the potential social benefits for all children that would result from such integration. Asher and Hymel (1981) show that low levels of peer acceptance are a good measure of psychological risk in relation to later behavioural problems and occurrence of emotional and mental health problems in adulthood. The above researchers' evidence was based on their studies with ordinary classroom children. However, research work with children with learning disabilities has stressed the importance of acceptance by peers for general community adjustment as an adult (Roberts and Zubrick, 1999). It is also important to see how children with learning disabilities are supported. Gresham (1982), Salend and Duhaney (1999) in their research point out that children with disabilities such as those with mental retardation are socially rejected and excluded from interactions with their ordinary class peers because of their behaviour. The problem of rejection of children with special needs by their ordinary class peers during classroom and playground interaction has been a major concern. There has been some research evidence which point out that children with disabilities are socially rejected by their class peers.

1.2. Statement Of The Problem

Failure to interact with special needs children has led to social isolation or rejection by their ordinary class peers. However, the true extent of rejection or isolation of these children is not fully understood or known hence the dire need for research on the nature of social interaction between the two groups.

1.3 Purpose Of The Study

The aim of this study was to examine and compare behaviours of children with mild mental retardation disabilities with that of their ordinary class peers in both classroom and playground settings.

1.4 Objectives

In this study, the objectives were to:

- To find out the type of problem behaviour children with mental retardation and their matched peers display in both classrooms and playground environments.
- To determine the nature of interactions among children and their teachers in both classroom and playground settings.
- To compare the level of knowledge the teachers and peers have about behaviours that lead to social acceptance and isolation of children with mild mental retardation and their matched peers.

1.5 Research Questions

This study focused on the following research questions.

- (a) What types of problem behaviour do children with mild mental retardation and their matched peers display in both classroom and playground environments?
- (b) How do children with mild mental retardation socially get along with their ordinary class peers and teachers in both classroom and playground settings?
- (c) What level of knowledge do teachers and peers have about behaviours that lead to social acceptance and isolation of children with mild mental retardation and other matched peers?

1.6 Significance of The Study

Interaction is a very important aspect in one's life. Children with mild mental retardation seem to be isolated or rejected by their peers in the classroom and play ground environments. This study therefore, may create better awareness amongst teachers and peers on the needs of children with mild mental retardation who are receiving their education in mainstream classrooms. It is also hoped that this study will contribute to the growing literature in the field of mental retardation.

1.7 Definition of Terms

Some keywords have been used in such a way that they vary considerably from the contexts in which they are normally applied. Consequently, the operational definitions of these key concepts is made as follows:

- **Children with mental retardation**- the American Association on Mental retardation defines mental Retardation as subaverage intellectual functioning which is concurrent with deficits in adaptive behaviour and manifested during the developmental period. However, in this study, the term is used to describe children who are classified by their educators as performing at a level of academic achievement two (2) years or more below that expected of their chronological age. The above term has, for the purpose of the present study, been used interchangeably with the term children with mild disabilities to describe one and the same group of children.

- **Peers**- this word has been used to describe children who are approximately of the same age and are learning in the same classroom or are playing with other children in the same playground environment

- **Playground** – is operationally defined as an outdoor area or field of play where children go to play such games as netball, football, roundus and other related outdoor games.

- **On- task behaviour** - in this study, children were said to be on task when they were observed to be reading from the board, books or work cards, copying notes from the board, cards or books, carrying out drawing or writing tasks, listening attentively to their teachers or peer, asking for help, matching and sorting out objects as well as counting, objects.

- **Off- Task** - Children were described as being off- task when they were engaged in disruptive and aggressive behaviour (eg shouting, dropping objects deliberately, pushing a peer, fighting etc) looking at others when they should be working, staring out the window, moving up and down and day dreaming.

- **Solitary play** – the term has been applied to denote instances when children engaged in individual play (e.g. Kicking a ball, throwing catching objects) and never wanted to play with peers.

- **Ordinary classroom**- this has been defined as an enclosed space with four walls in which 30 or more children without disabilities learn, and integration of children with disabilities also takes place leading to the formation of one single intersocial group.

- **Special class** – Is operationally defined as an enclosed space with four walls and accommodating not more than 15 children with disabilities who are taught by a specially trained teacher.
- **Integration** - This term has been used to refer to the practice of placing children with disabilities in ordinary classroom for the purpose of enabling children with disabilities to acquire appropriate social skills.
- **Social interaction** – this key word is operationally defined as those instances when children were observed sharing things, talking to one another, greeting each other, making jokes, laughing, helping one another, playing games with peers, shaking hands, praising a peer and smiling at other people.

1.8 Limitations

The scope of the investigation was limited by a number of factors. First, the writer had an initial plan of covering more than one institution of learning as this was one way in which she could collect adequate data for generalizing the results. However, due to lack of resources such as time and money, only one school was involved. Consequently, the results of the present study may be hard to generalize. This simply means that the result can only be restricted to the study school. At the same time that the writer was conducting the research project, she had also to fulfill other course requirements such as attending lectures and writing assignments. Second, as an Education Standards Officer, the writer was expected to perform office and field work whenever it was deemed necessary by the employers. All these constraints made it extremely difficult for the writer to dedicate much of her time to the study as she would have liked. Third, Inadequate funding resulted into a situation where by the writer could not engage the services of several research assistants at more than one school. In the same vein the writer could not reach other schools other than the study school.

Finally in Lusaka province and other areas of Zambia, there are no formal ways of assessing school going children. In the present study, recruitment of subjects with disabilities was simply based on teachers' recommendations. Therefore, some of the children disabilities who participated in this study may not necessarily be those who are described and classified as mildly mentally retarded by the American Association on Mental Retardation. This in a way might have affected the

interaction patterns of subjects with disabilities and hence the results of the present study.

CHAPTER TWO

LITERATURE REVIEW

2.0 CHILDREN WITH MENTAL RETARDATION

2.1. Introduction

The study investigated classroom and playground interaction of children with and without mild mental retardation. This section therefore, provides a review of literature relevant to the above topic of investigation. However, before examining literature relating to classroom and playground interaction, the writer has examined briefly issues relating to definition and classification. Also, a brief review has been made of the literature concerning learning environments of children with mild mental retardation in general.

In the writers opinion, an examination of these issues does provide in depth understanding of the nature of circumstances surrounding children with mild mental retardation in as far as ordinary class placement is concerned.

2.2. Definition

Several major efforts to define mental retardation have been made ever since the French Physician Jean Marc Gaspard Itard attempted to educate a boy found living in the wild forests of Aveyron, a town in France in 1799 (Maloney, et al, 1979). These numerous attempts have not yielded a satisfactory definition. However in recent years, the educators in the United States of America (USA) operating under the Umbrella organisation called American Association on Mental Retardation (AAMR) have devised a definition which is now universally accepted in the education field.

According to the AAMR mental retardation refers to:-Significantly sub average general intellectual functioning, existing. Concurrently with deficits in adaptive behaviour and manifested during the developmental period (Grossman, 1983 p11).

In the above definition, significantly sub-average general intellectual functioning is operationally defined as the result obtained by assessment with or more of the individual administered standardized general intelligence tests developed for that purpose (Grossman, 1983 p.11). A child with mental retardation obtains a score of

70 or lower than 97 to 98 percent obtained by children of the same age and cultural group (Kirk and Gallagher 1989). In the above definition, deficits in adaptive behaviour is a child's failure to meet standards of independence and social responsibility expected of the individual of the same age and cultural group (Grossman, 1983,p.II). The developmental period is the children's age from birth to age 18 (Kirk and Gallagher 1989, p. 132).

However, some experts e.g Zigler and Hodapp (1986) have favoured the use of social competence (adaptive behaviour) as a reasonable criterion. They argue, for instance, that social adaptation is itself not clearly defined and as such it cannot be used as one of the two key factors (apart from intelligence) in defining the condition of mental retardation. In any case a vast majority of experts in the field of education have found the use of intellectual sub normality, and deficits in social competence as reasonable criteria for identifying children with mental retardation. It must be made clear from the outset that for the purpose of this study, the writer has found it convenient to use the term children with mild mental retardation interchangeably with the term children with mild disabilities.

2.3 CLASSIFICATION

Children with mental retardation differ in terms of characteristics, severity of developmental delay, in the causes of the condition and in intervention programmes lined up for them (Drew,1988, Kirk and Gallagher 1989). As the result of these differences the AAMR has found it possible to classify the affected children into specific categories comprising mild, moderate severe and profound levels of retardation. Children with severe and profound retardation have more obvious difficulties in coping with environment demands than those who are moderate and mild.

2.4 Educational Placement Programmes for Children with Mental Retardation

The recent focus and emphasis on inclusive schooling implies that many children with mental retardation are being brought into closer contact with their ordinary peers. However, the traditional placement programmes for these children have been, according to Kirk and Gallagher (1989);

- (a) Special classes

- (b) Resource room
- (c) Ordinary classroom

2.5 Research evidence on the impact of Ordinary classrooms on Children with Mild Mental Retardation

The current educational policy document of 1996 has placed firm emphasis on educating children with mental retardation especially those with mild conditions in ordinary classrooms. Data is not available at present to show how many children with mild mental retardation are receiving instructions in ordinary classrooms in Zambia. Experiences of other countries (e.g. UK and Australia) show that placement of children in ordinary classes need to be examined fully if the affected children are to benefit from such programmes. It is in the context of this statement that the writer has reviewed literature relating to the impact of ordinary classes on children with disabilities especially the mildly mentally retarded children.

2.5.1 Academic Outcomes

The impact of receiving instructions in ordinary classrooms on the academic performance of children with mild mental retardation has been examined by a number of researchers. For example, Waldron and Mcleskey (1988), and Duhaney (1999) compared the reading and mathematics performance of 71 primary school children with mental retardation educated in an ordinary classroom to that of 73 children with mild mental retardation who received resource room services. Although the findings showed that the children with mild mental retardation educated in the inclusive classroom showed significant greater gain in reading than their peers who received resource room services, no significant differences were found between the two groups in terms of their progress in Mathematics. Banerji and Dailey (1995) used quantitative methods to study the effects of an inclusive programme on academic skills of 13 primary school children with mental retardation and 17 of their average achieving classmates. Academic performance measures in reading and writing were collected after the children had been in inclusion programmes for 3 months. The results showed that the reading and writing progress of children with mild retardation was similar to the progress of peers without disabilities.

The studies revealed above show that with appropriate help, children who are placed in ordinary classrooms could have substantial academic gains. From the very beginning, the major type of placement has been the special class; the special class usually has a specially trained teacher who is helped by an assistant teacher in the delivery of the curriculum to a small group of children, typically of no more than fifteen. However, apart from the special class, some children have been taught in resource rooms and ordinary classrooms. The 1977 Education Policy recommended that some of the children especially those with mild mental retardation ought to be integrated in ordinary classrooms. In response to this recommendation, some schools for example, George Central Basic School have been placing children with mental retardation in mainstream classes. Coleman and Minnet (1993) noted that the justification for placing children with mild mental retardation into ordinary classrooms has always been based on possible academic gains and on potential social benefits for all children that would result from such integration.

2.5.2 Social Outcomes

In addition examining the impact of placement in the ordinary classrooms on the academic performance of children with mild mental retardation, studies have also been conducted to examine social behaviours of children with mild mental retardation receiving education in ordinary classroom settings. The social behaviour of children with mild mental retardation has often been investigated because of its relationship to social acceptance and rejection by peers (Roberts and Pratt, 1991). Social behaviour such as asking for assistance, greeting others, positive peer interaction and making conversation, are predictive of social acceptance (Asher and Hymell, 1981). However, children with mild mental retardation often display inappropriate social behaviours which lead to social isolation and rejection of this group of children by their ordinary class peers (Asher, Oden and Gottman, 1977).

The classroom behaviour of children with mild mental retardation has been studied using observational research methods (Henrick and Lee, 1985). One of an earlier study by Gampel et al. (1974) compared the classroom behaviour of 12 segregated children classified as mildly mentally retarded and 14 recently integrated mildly

mentally retarded children with their regular class peers with low IQs and children of average intellectual ability in the primary grades of a primary school in the USA. The researchers found out that the included children's behaviour more closely resembled that of low IQs and regular class children than of the segregated setting. When observed again at the end of the year, the included children were found to be displaying more positive social behaviour than both the segregated mild mentally retardation children and the regular class children with mental retardation.

Research carried out in Australia (e.g Hudson and Clunies –Ross, 1984), New Zealand (e.g Espiner et al, 1985) provided similar results. However, a more detailed analysis of the social behaviour of the two groups of children revealed some differences. Hudson and Clunies –Ross (1984) systematically observed 15 children with mild mental retardation in both the playground and ordinary classroom (grades 1-3). The researchers found no difference between overall rules of both positive and negative interactions for children with mental retardation and randomly selected peers group sample without mental retardation.

Children with mental retardation were, however, observed to initiate only half as many positive interactions as were their ordinary / regular class peers. They were also observed to initiate twice as many interactions with the classroom teachers as were their non-mentally retarded peers. It is difficult to tell the findings on classroom and playground behaviours separately as the researchers' results refer to the overall patterns observed (Roberts and Pratt, 1991). Henrink and Lee (1985) compared the social behaviour of 20 pre-school children with mild and moderate mental retardation and found that children with mental retardation were fully integrated in the emotional and social life of the peers group, but not fully integrated in the verbal life of the peer group in the USA. Kauffman et al. (1985) observed 300 children with mild mental retardation and regular / ordinary class children. They found that children with mild mental retardation who were placed in ordinary classes displayed more anti social and less friendly / cooperative behaviour than did the regular / ordinary class peers. These differences were not significant to be of any concern. Looking at playground behaviour, Pipe, Redman and White (1983) found high levels of social interaction between pre-school

children with mental retardation and those without both in the classroom and playground.

Also Robert, Prat and Leah (1992) compared the classroom and playground behaviour of 95 children with mild mental retardation with that of 95 children without mental retardation. They were matched for age and sex. These researchers found out that the behaviour of both groups of children were in many ways similar, regardless of the presence of disabilities.

2.6 Conclusion

The studies revealed that the impact of placement in inclusive / ordinary class, settings on academic and social behaviours of children with mild mental retardation has been varied. Studies have reported that placement in ordinary classrooms has resulted into improved academic and social outcomes. However, it is important to realize that, it is not just a question of placing children with mild mental retardation in ordinary classes, but also ensuring that children and their teachers are provided with needed support. For example, children with mental retardation need modification of instructional materials, they thus need to be handled by teachers with a full understanding of their needs. Also children without disabilities need to be educated on the difficulties their peers are likely to face and how they can assist them to overcome such limitations.

The majority of the studies revealed above did not include play ground behaviours, hence the need to extend the area of investigation. Also all the above studies were conducted in countries with different social context from the present writer's country, hence the need to exercise caution in making generalized views about the impact of ordinary classrooms on children with mild mental retardation.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter discusses the methodology used to investigate classroom and play ground interaction of pupils with and without disabilities. Specific issues that have been considered are: design of the study, target population, sample size, sampling technique, sampling procedure and means of data analysis.

3.1 Research design

A survey method was used in this study, where observation schedules and questionnaires were applied in the collection of data.

According to authorities such as Kerlinger (1970), the survey design is one of the most commonly used descriptive methods in educational research. Survey research involves collection of information from groups of people in order to describe some aspects or characteristics such as attitudes, abilities, opinions and beliefs of the population of which that group is a part. The main way in which information is collected is through asking questions; and the answers solicited from the members of the group constitute the data of the study. These data are collected from a sample rather than from every member of the population. The major purpose of surveys is to describe the characteristics of a population, what researchers want to find out is how the members of a population distribute themselves on one or more variables (for example, age, ethnicity, attitudes towards school. As in other research types, of course, the population as a whole is rarely studied. Instead, a carefully selected sample of respondents is surveyed and a description of the population is interred from what is found out about the sample. (Cohen and Manion 1997 P. 83). Cohen & Manion (op cit) further point out that in survey research, data is gathered at a particular point in time with the intention of describing the nature of existing conditions, or identifying standards against which existing conditions can be compared or determining the relationship that exists between specific events. It is these advantages of the survey method over other design that compelled the writer to use the survey design.

3.2 Target population

One of the pre-quisites to survey design is the specification of the population to which the investigation is linked (Kerlinger, 1970). Specifying the population enables the ~~the~~ researchers to make decisions pertaining to sampling and resources (Cohen & Manion, 1996). In the present study, specification of the population helped the writer to focus on one single group of interest and to make appropriate sampling decisions (see next section below). The target population were all children with mild mental retardation and their matched peers as well as all ordinary and special education teachers at George Central Basic School in Lusaka Urban district.

3.3 Sample Size

A sample in any research study refers to any group on which information is obtained (Cohen and Manion, 1996). In this study, A total of 30 children, 15 with mental retardation and 15 without disabilities constituted the sample. The composition of teachers was as follows; there were 5 special education teachers and 5 ordinary class teachers,

3.4 Sampling procedures

There are two methods of sampling. One yields probability samples while the other yields non-probability samples. In this study the writer used both of these methods to select subjects or children with and without disabilities as well as their teachers.

The probability sample technique used in the selection of children without disabilities was simple random sampling. According to Kerlinger (1970) and Faranked & Warren (2003), simple random sampling is one in which each and every member of the population has an equal and independent chance of being selected. Because of probability and chance, the sample should contain subjects with characteristics similar to the population as a whole (Cohen & Manion, 1996, p.87).one problem associated with random sampling is that a complete list of the population is needed and this is not always readily available (Kerlinger, 1970). However, since the present study involved only one study school, the above noted problem was avoided.

In this study, the simple random sampling technique required the researcher to write down the names of children without disabilities in the matched grade level on an A4

paper and assigned numbers. That meant that each name on the list had a specific number written against it. These numbers were written on small pieces of paper and placed in a box. Then a raffle draw was done. This involved picking one paper from the box at a time. Each time a single paper was picked from the box, the researcher had to shake the box so that all papers had a chance of being picked. This continued until 15 papers representing the 15 names of children without disabilities were drawn from the box. However, in addition to the simple random sampling, a non-probability sampling technique known as convenience sampling was used to select children with mild mental retardation and their teachers. This sampling technique was applied because of its acclaimed advantages. Some of the advantages were that, it was far less complicated to set up, was less expensive and proved perfectly adequate because the writer did not intend to generalize the findings of the present study beyond the sample or subjects in question (i.e. Teachers and children with and without disabilities at George Central Basic School). It also allowed the researcher to pick the closest member of a group until the desired sample was reached.

Convenience sampling technique involved asking teachers at the study school for details about children with disabilities who had been integrated in ordinary class rooms and were receiving their education in these classrooms at the time of carrying out this study. Fifteen (15) names of children with disabilities were obtained by the writer and these children constituted one half of the sample size. The other half of 15 children were those without disabilities, who as noted above were selected by simple random sampling. Children with mild mental retardation or disabilities were matched with an ordinary class – peers of the same sex, closest birth dates and grade level. Convenience sampling technique was also used in the selection of teachers. The writer picked each and every teacher who were involved in teaching children with and without disabilities in ordinary classrooms. As a result 10 teachers were selected.

3. 6 Instrument for Data Collection

Three instruments were applied in the collection of data pertaining to the questions raised in the above section. These instruments are described below:

3.6.1 Behaviour Observation Schedule

a) Classroom observation schedule

The write adapted and used models available in Roberts, Pratt & Leach (1991)

and Ollendick (1981) to collect data concerning classroom behaviours of children with and without disabilities (see Appendix IA). The classroom observation schedule had a list of classroom attending behaviours based on well developed theories and research findings. These attending behaviours consisted of the following:

- i. On – Task
- ii. Off – Task (Quiet)
- iii. Off – Task (Aggressive)
- iv. Off – Task (Disruptive)

The classroom observation schedule also included some personal details of the target child and the type of lesson observed. In addition, the schedule had provision for extra comments from the observer.

b) Playground Observation Schedule

This schedule had items adapted from Gampel et al (1974) and Hudsone Clunies – Ross (1984). As is shown in Appendix IB, the Schedule consisted of the following behaviour categories:

- i. Unoccupied behaviour
- ii. Solitary Play
- iii. On looker behaviour
- iv. Parallel play and
- v. Interactive play

Like in the case of Appendix IA, Appendix IB, also had provision for recording extra comments arising from observations.

c) Observation Schedule for Interaction Patterns

Social interaction of subjects was measured by using the model adapted from Roberts, Pratt & Leach (1991). The observation Schedule (see Appendix II) had items which were intended to provide a profile of positive and negative social behaviours. In other words, the observation schedule was used to obtain data relating to the subjects and interaction patterns. Specific details that the observation schedule sought to yield included the following:

- i. The type of interaction – an initiation whether successful or unsuccessful

- ii. The person involved in the interaction other than the target child – that is whether peer or teacher.
- iii. The quality of interaction, whether successful or unsuccessful.

d) Teachers' and Peers' Perceptions Questionnaire

A 15 item questionnaire was used to collect data concerning perceptions of teachers and peers of behaviours that may lead to acceptance and social isolation of children with disabilities. The items in the questionnaire (see Appendix III) have been discussed and presented in the literature on interaction (e.g. Coleman & Minnett, 1992) as predictors of acceptance and rejection of children with disabilities. The instrument had items which were on a five (5) – point likert scale ranging from “strongly disagree” to “strongly agree”. To show teacher and peer responses.

7 Procedure of Data Collection

Data collection was carried out during a four months period from January to April 2006. The collection of data was carried out stage by stage in the following way:

- a. Seeking formal permission from relevant authorities to facilitate school visits.
- b. Identification of study school and children.
- c. Identification of research assistants.
- d. Collection of data from direct observation and administering of questionnaires to teachers and peers

7.1 Formal Permission

First and foremost, the writer sought permission from the Ministry of Education through the Lusaka District Education Board which formerly allowed her to visit the identified study school. Meetings were then arranged with the head teacher and some members of staff and it was at these meetings that the writer explained the purpose for carrying out the research. Additionally, the visits enabled the writer to develop close contacts with teachers and put all necessary logistics in place. Logistics of concern related to recruitment of research assistants and preparation of a working time table in collaboration with the school staff. Four teachers were recruited as assistant observers in the last three (3) weeks of January, 2006

.2 Observations

Before the commencement of data collection, the four assistant observers underwent training in techniques of observing and recording behaviour. The training of observers was conducted by the writer and was carried out in 6 one-hour sessions over a 2 weeks period. The chief method used to gather observational data was time sampling. According to Kerlinger (1970), time sampling involves the selection of behavioural units for observation at different points in time; they can be selected in systematic or random ways to obtain samples of behaviours. Time sampling is the appropriate means for taking time samples of behavior acts of the group of people being investigated (Kerlinger, 1970:545). These time samples can for example, be systematic three – five minutes observation at specific times or the time samples can be random, five –five minute observation periods selected at random (Kerlinger, 1970:545-546) and so on.

However, in the present study, time sampling was used because of its acclaimed advantage of obtaining representative samples of behaviour. Subjects were observed for 20 minutes in the ordinary class and 20 minutes on the playground. The observation interval was 30 seconds including 20 seconds of observational time and 10 seconds of recording time. In both the classroom and playground settings, targeted children were observed in a series of 5 minutes blocks broken into 20 seconds intervals (see Appendix 1 & 2).

In the classroom setting, a matched pair of children was observed in an alternating sequence as they worked on academic tasks. During each observation, observers sat at the back of the class and avoided any form of contacts with children and their teachers. Each observer had a digital watch, which was calibrated in seconds and this was used to check time. The names of children to be observed were written on an A 4 sheet of paper to guide observers. However, observation of children did not follow the order in which their names appeared on the list, instead a pair of names was chosen randomly as one way of counter-balancing the observations. It was thought such an approach would also help to reduce the effect of variance in behaviour due to the beginning or end of classroom lessons. The observations were carried out across several lesson types. It must be mentioned that, prior to

commencement of observation children were told about the presence of observers in their classrooms. Teachers advised children to go on with their classroom work in the usual way and ignore the presence of observers. In the playground setting, children were observed during free play sessions. Children within a target pair were observed one after another. The first child being observed for up to three consecutive five minutes blocks then the second child. The change in procedure for the classroom to playground settings was related to the practical difficulties of observing children in large playground areas. The playground observations included free play activities like structured games such as netball and football.

7.3 Reliability

Reliability checks were carried out before observation began, with all four observers present. According to Farenkel and Wallen (2003) reliability refers to the consistency of the scores obtained. How consistent they are to each individual from one administration of an instrument to another and from one set of items to another, for example, a test designed to measure reading ability. If the test is reliable, we would expect a student who receives a high score the first time he or she takes a test, scores would probably not be identical, but they should be close.

Farenkel & Warren (2003) further state that reliability estimates provide researchers with an idea of how much variations to expect. Such estimates are usually expressed as another application of the correlation coefficient known as a reliability coefficient. A validity coefficient expresses the relationship that exists between scores of the same individuals on two different instruments and also scores of the same individuals on the same instrument at different times.

The reliability of the main method used to collect data was assessed by using the formula recommended by Anastasi (1974) and Cohen and Manion (1996). The formula involves adding all agreements for all observers and then the total number of these agreements is divided by the total sum of agreements plus all disagreements. The final result is then converted to a percentage by multiplying by 100. This formula is presented as follows:

$$\frac{\text{Number of agreements for all observers}}{\text{Agreements + disagreements}} \times 100$$

In the present study an interater reliability was 86% for classroom observation while 82% was yielded for playground observations. According to Cohnen and Manion (1996) if a reading of 80% or above is reached by use of the above formular, the method applied for collecting data ought to be accepted as reliable. In this study, data collection only started after the above criteria (of 86% for classroom observations and 82% for playground observations) observations were reached for this reason, the method used to collect data in the present study can be said to be reliable.

.4 Administering the Questionnaire

Teacher and peer perceptions were collected during the last two months of data collection. Teachers were asked to complete a 15 item questionnaire (see Appendix III) which related to social acceptance and rejection of children with mild mental retardation or disabilities. Teachers were asked to use a five (5) point likert scale to rate their perceptions of behaviours that can be used as predictors of social acceptance and rejection of children with disabilities

The above questionnaire was also used to rate peers' perceptions. Since it was revealed to the writer by teachers that the majority of children did not possess sophisticated literacy skills that would enable them to respond favorably to the items in the questionnaire, the writer found it reasonable to have each item on the questionnaire read to children concerned by the research assistants as children completed the rating scale under guidance and supervision of the members of the research staff.

3 Data Analysis

After gathering data, the next task was to break down these data into constituent parts in order to obtain answers to the research questions which are presented in Chapter one. Analysis of data was inevitable because the writer had to reduce data to meaningful and interpretable form. The data obtained for question one (1) "What types of problem behaviour do children with mild mental retardation and their matched peers display in both classroom and play ground environments?" was analyzed by means of descriptive statistics. This involved two stages of data reduction with both classroom and play ground observational data.

The first stage required the writer to eliminate and collapse categories that showed a very low rate of occurrence. The second stage involved calculating frequency scores for the data with high rate of occurrence by using the computer based statistical package for the social sciences programme (SPSS). These frequencies were then added up to get total number of observations for each subject in both the classroom and playground settings. Then resulting scores were transformed into percentages in order to facilitate meaningful interpretation of data pertaining to classroom and playground behaviours of subjects (see Figures 1 & 2 in Chapter Four).

The above procedure was repeated when analyzing data obtained for the question ‘How do children with mild mental retardation socially get along with their ordinary class peers and teachers in both classroom and playground setting?’ The above method enabled the writer to reduce data concerning interactions to understandable form (see Figures 4 and 5 in Chapter four).

The data concerning question 3 “what level of knowledge do teachers and peers have about behaviours that lead to social acceptance and isolation of children with mild mental retardation and other matched peers?” was analyzed descriptively as means and standard deviations (see Table 5 in chapter four). This required the writer to code the item on the writer to likert scale (see Appendix III) in preparation for analysis. The likert scale had five types of responses, which were coded as follows:

Strongly Agree - 5

Agree - 4

Strongly Disagree - 2

Disagree - 3

Not sure – 0

The responses for each individual subject were analyzed by using the SPSS programme and the data obtained is shown in Table 5 (see Chapter four)

CHAPTER 4

PRESENTATION OF RESULTS

Introduction

This study was designed to assess classroom and playground interaction of children with mild mental retardation and their ordinary class-peers. A survey method was used to collect data from subjects. The results of the investigation are reported in this section under sub-headings, beginning with demographic details of subjects, while implications of these findings are discussed in Chapters 5.

Demographic Details Of Subjects

Table 1: Sex and Average number of years spent in the ordinary classroom for children with mild mental retardation and non-disabled children

Children with Disabilities			Children with out Disabilities		
Males	Females	Average No. of years in class	Males	Females	Average No. of years in class
5	10	3.4	5	10	4.5

The data in Table 1 shows that there were 15 children with mild mental retardation and 15 non-disabled children. As is shown in the above Table 1, 5 of the 15 children in each group were boys while 10 were girls. The above Table shows that the average number of years in the ordinary class were 3.4 for children with mild disabilities and 4.5 for children without disabilities.

Table 2: Mean age and number of children with and without mental Retardation

Children with Disabilities			Children without Disabilities	
Grade	No.	Mean age	No.	Mean age
3	2	9.8	2	9.1
4	7	10.7	7	10.2
5	6	11.5	6	11.1

Table 2 above indicates the mean age and number of children with and without mental retardation according to their grade. The data in Table 2 show that children with mild mental retardation were somewhat older than their ordinary class – peers. This is not surprising as children with mild mental retardation tend to perform at a level of academic achievement 2 years or more below that expected for their chronological age (Kirk and Gallagher, 1989). For this reason it is not uncommon for children with mild mental retardation to repeat a grade or two, hence the differences in age for the two groups of children with similar frequency rates of behaviour.

Lesson Observations- (Classroom)

The observations were carried out when children were involved in academic work. This required to observe a pair of children across several lesson types. Table 3 below shows the different lesson types during which observations were made.

TABLE 3: Different Lessons and Percentages of Classroom Observational Entries

Lesson Type	Percentage of total observations for both groups of children
English	20.6
Mathematics	19.4
Social studies	10.5
Reading	16.4

Table 3 shows that target children were observed across a total of 4 lesson types which included Mathematics, English, Social Studies and Reading. Table 3 further shows that, since children were observed in pairs, the percentages were the same for both groups of children. The observational data in Table 3 were obtained when children were engaged in individual seat work or while they listened to their teacher giving explanations/ instructions.

Observed Behaviour

The first question to be answered in this study was “ what types of problem behaviour do children with mild mental retardation and their ordinary class peers display in both classroom and playground environments?” In order to obtain answers for the above question, children’s behaviours were observed using a time – sampling method with

specific categories of behaviour in each setting, that is classroom and playground.

Frequency scores were calculated for the data characterizing the type of activity for four categories of classroom attending behaviour and five categories of playground behaviour.

In the classroom environment attending behaviour of the target children were recorded, which consisted of the following:

- (i) On - Task
- (ii) Off- Task (Quiet)
- (iii) Off – Task (Disruptive) and
- (iv) Off – Task (Aggressive)

The observations of target children were carried out during academic work (see Table 2 for lesson types).

In the playground, children were observed during break time when they were involved in free play activities including netball and football. The categories of behaviours observed were as follows:

- (i) Unoccupied behaviour
- (ii) Solitary play
- (iii) On looker behaviour
- (iv) Parallel play and
- (v) Interactive play.

Figures 1 and 2 below show the observational data obtained for the two environments (Classroom and play ground).

Figure 1: Mean Percentage Of Classroom Observation For Different Categories Of Attending Behaviour

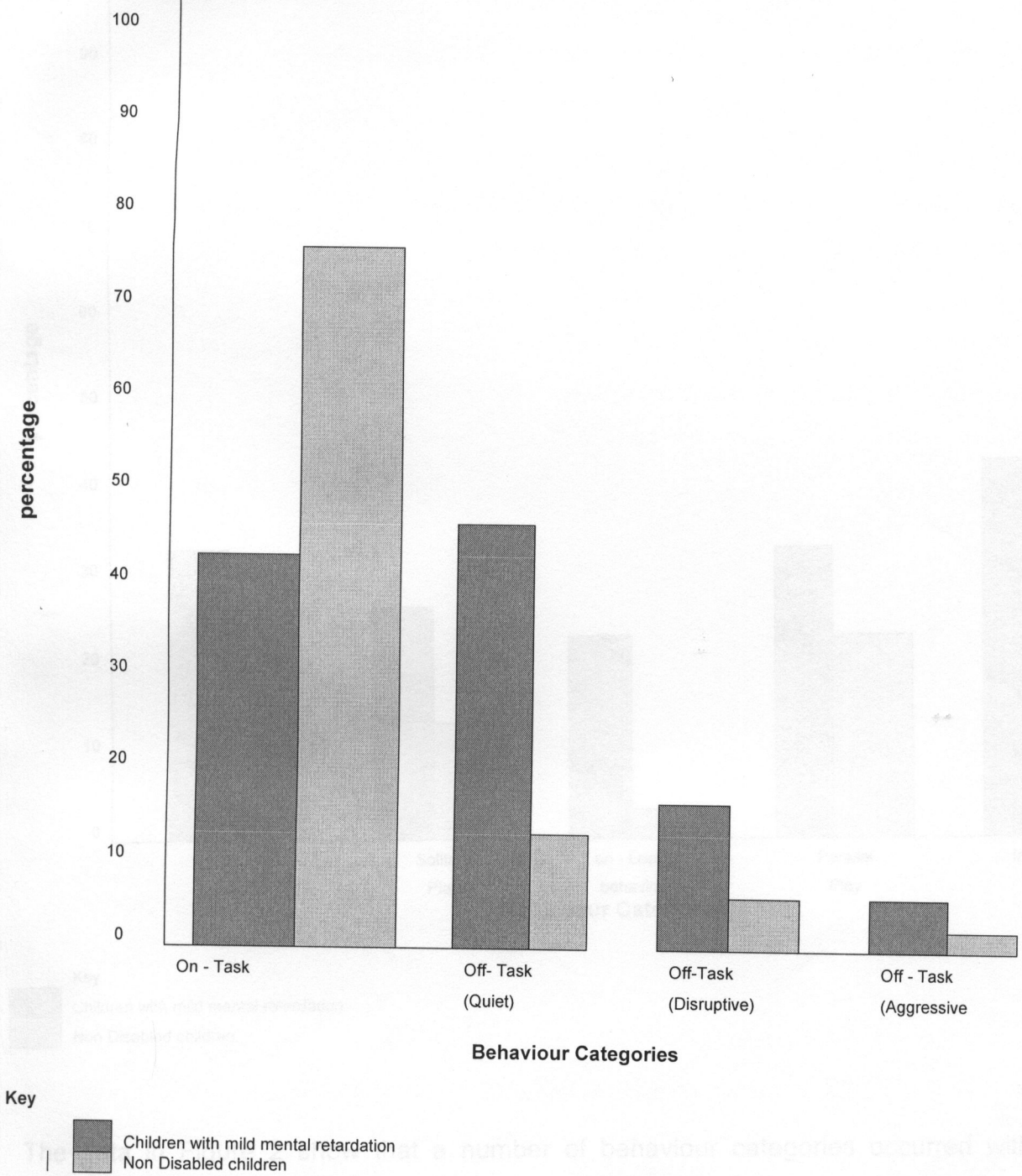
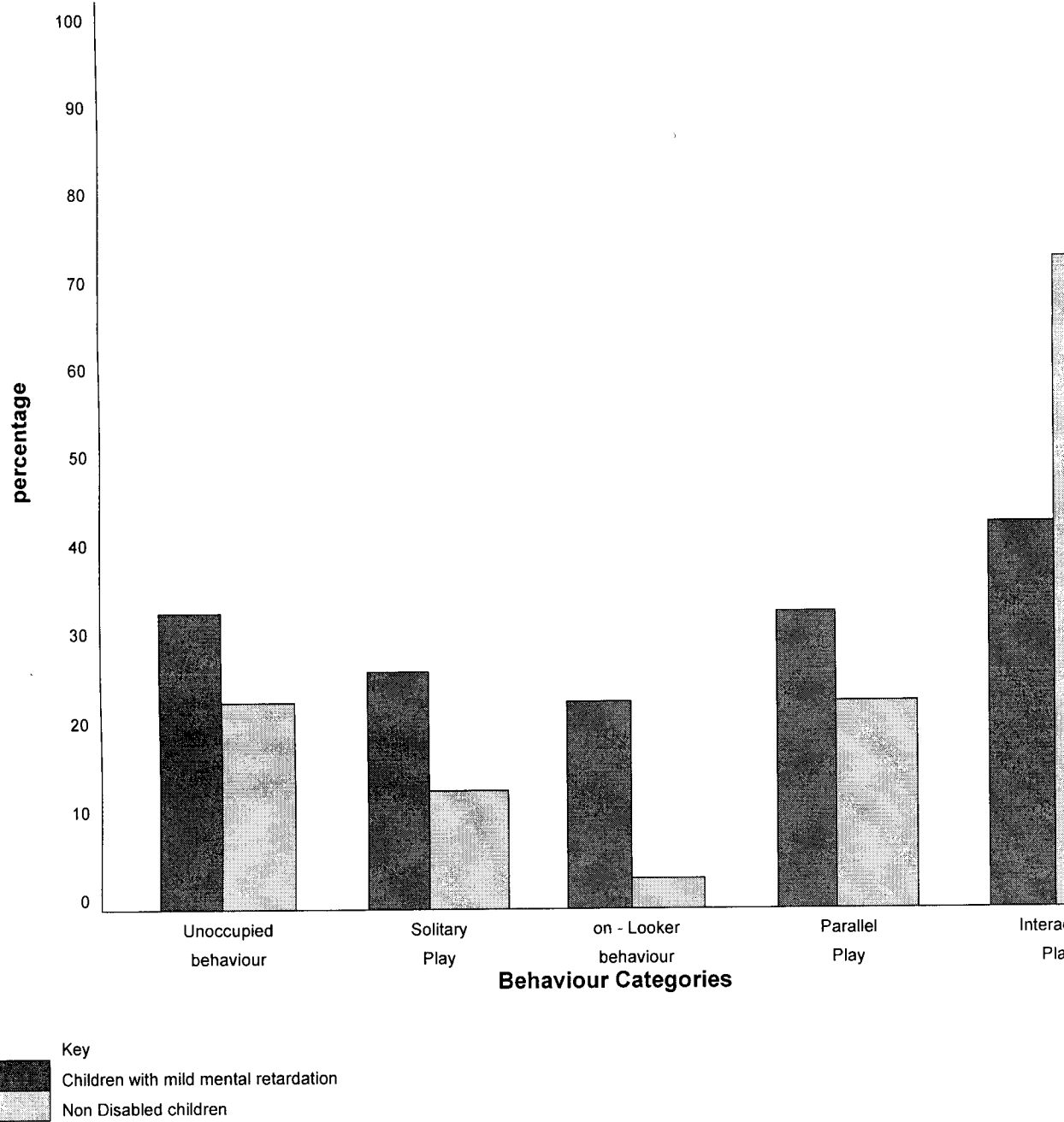


Figure 2: Mean Percentage of Playground Observation for Different Categories of Play ground Behaviour



The data in Figure 2 show that a number of behaviour categories occurred with less frequency in the playground, with an exception of interactive behaviour. Children with mild mental retardation exhibited lower frequencies of interactive behaviours (at 33%) than did their non-disabled peers (at 62%). Similarities in patterns of behaviour occurred for the two groups of children as shown in Figure 2. Children with disabilities differed less

in behaviour occurrence with non – disabled children. Both groups of children exhibited more less similar rates of inappropriate behaviour. For example Figure 2 shows that frequencies for parallel play and for unoccupied behaviour were almost similar for the two groups.

Social Interactions

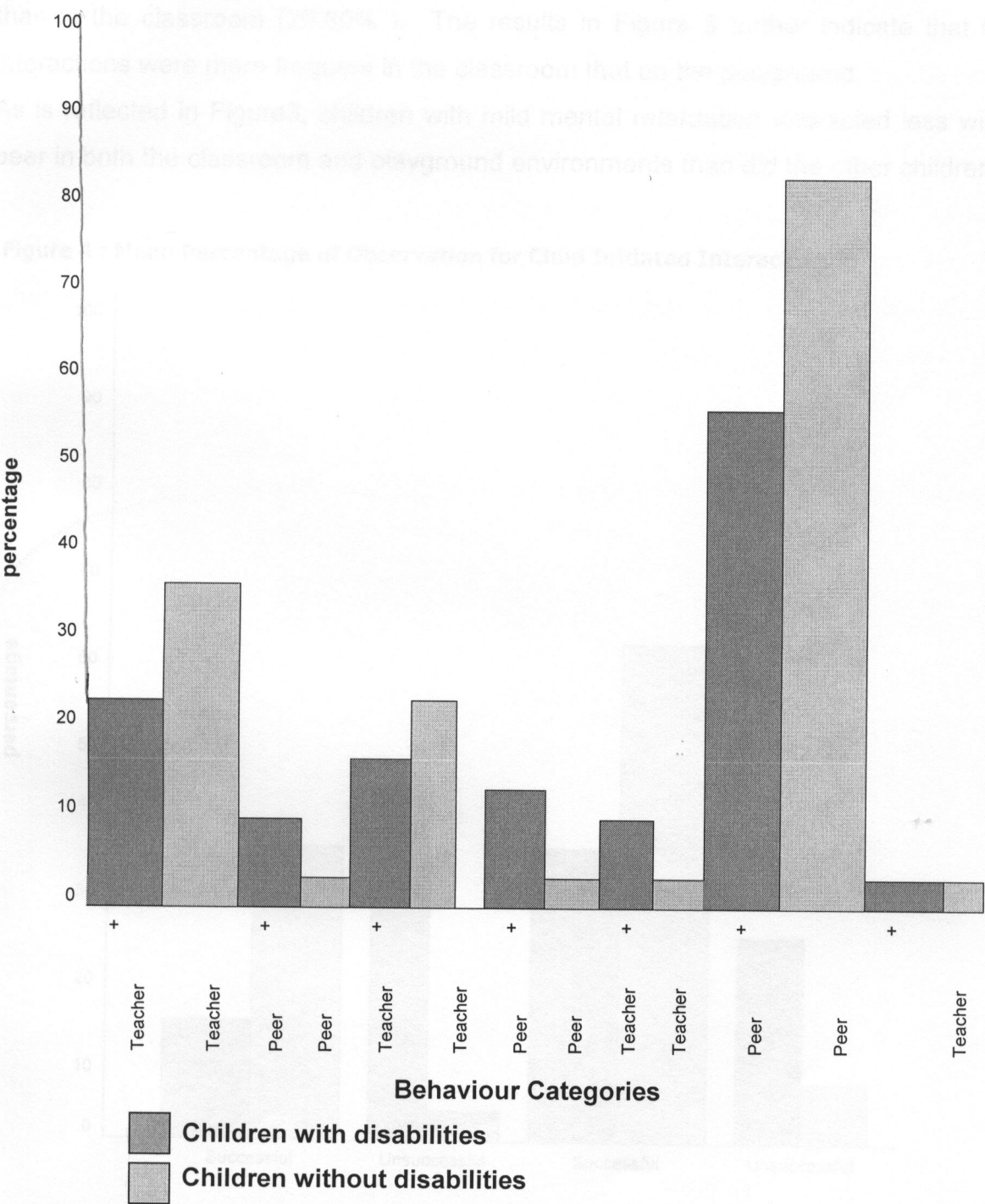
One of the objectives in this study was to determine the nature of interaction among children and their teachers in both the classroom and playground environments. The specific question that was linked with the above objective was “How do children with mild mental retardation socially get along with their ordinary class-peers and teachers?” In order to obtain answers pertaining to this question, an observation schedule (See Appendix II) was also used to collect data. The observation schedule was intended to provide data that related to the way the subjects socially interacted. The observation schedule was intended to yield data that indicated negative and positive aspects of interaction, which included the following;

- i. Positive adult interaction
- ii. Negative adult interaction
- iii. Positive peer interactions
- iv. Negative peer interactions
- v. Successful initiations from child
- vi. Unsuccessful initiations from child
- vii. Unsuccessful initiations from an adult
- viii. Successful initiations from a peer
- ix. Unsuccessful initiations from peer

In order to make sense of the obtained data, all positive and negative interactions for peers and teachers were added together to get the total number of interactions for each subject. These totals were then transformed into percentages, Figure 3 below shows the mean percentage of the interactions for children with and without disabilities.

Additionally, data were gathered for successful and unsuccessfully initiations, and then total number of initiations for each subject were calculated and transformed into percentages.

Figure 3: Mean percentage of positive and negative Teacher and Peer Interaction



The data in Figure 3 demonstrate that both groups of children were engaged in less interactive behaviour in the classroom than on the playground. On one hand, the level of positive child to child interaction for children with disabilities was 15% in classroom and 56.4% in the playground, while on the other hand, the level of interaction for children

without disabilities was 26.7% in the classroom and 80.45% in the playground. The result in Figure 3 suggest that peer interaction occurred more often in the playground (80.45% than in the classroom (20.80%). The results in Figure 3 further indicate that teacher interactions were more frequent in the classroom that on the playground. As is reflected in Figure3, children with mild mental retardation interacted less with their peer in both the classroom and playground environments than did the other children.

Figure 4 : Mean Percentage of Observation for Child Initiated Interaction

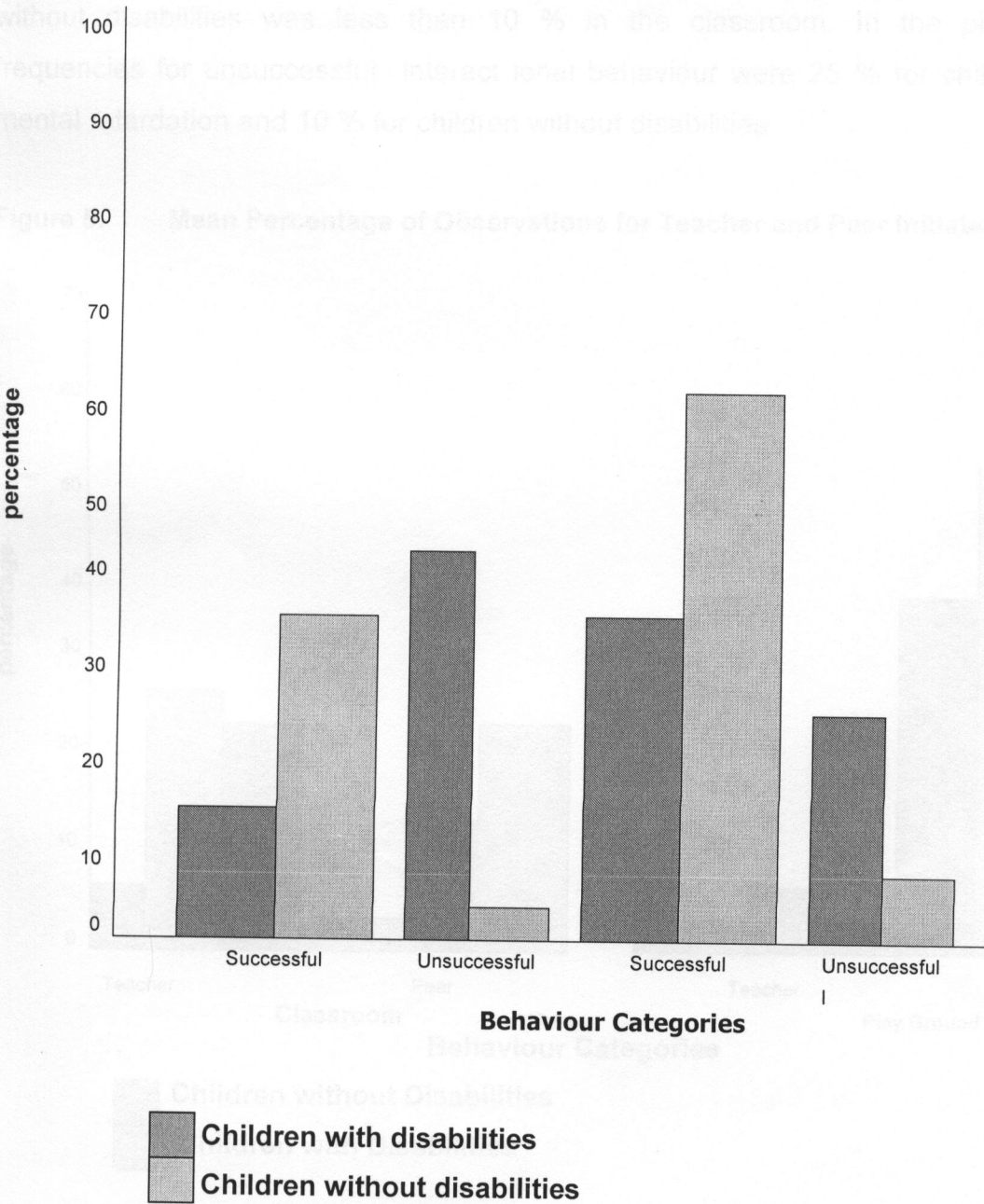
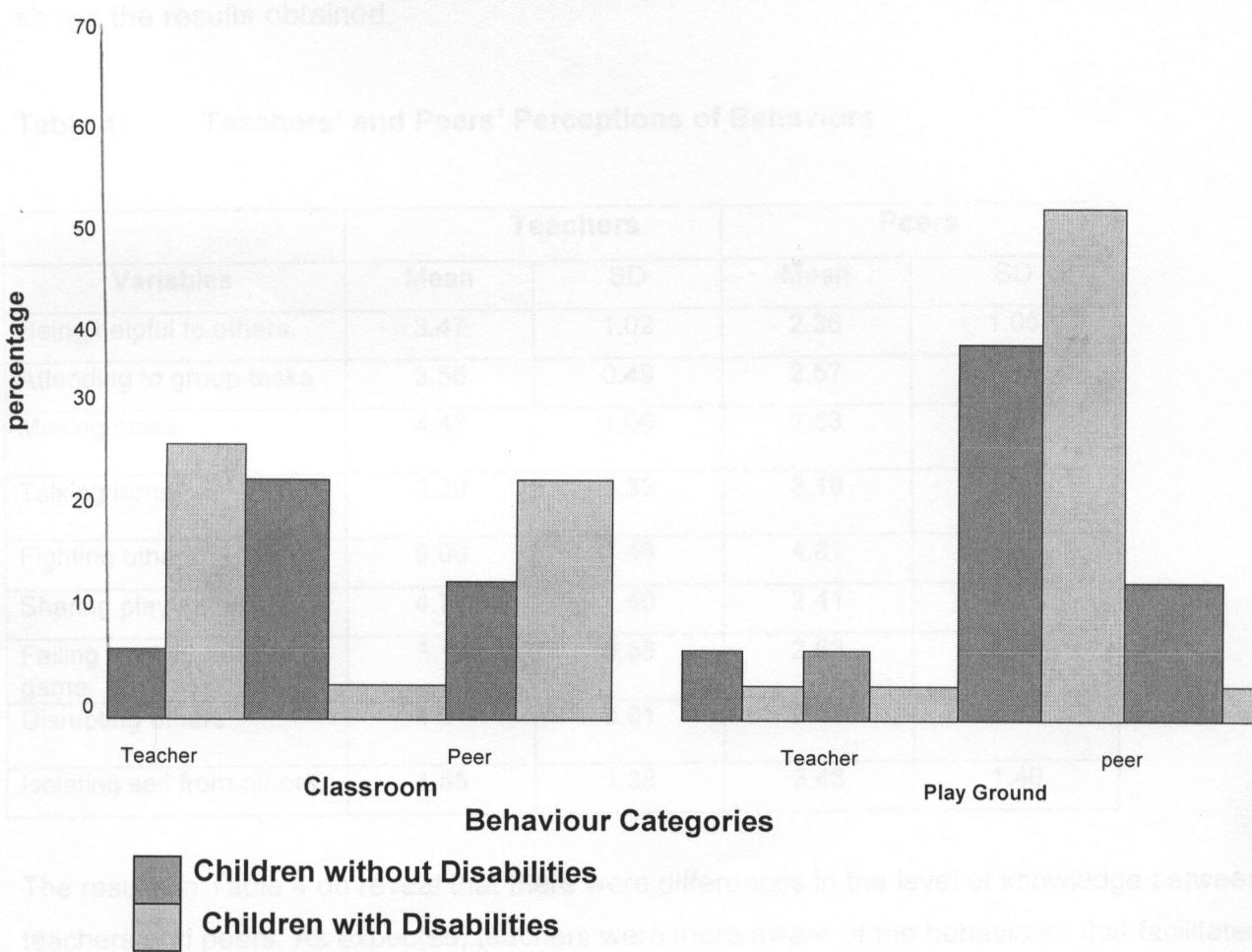


Figure 4 presents the mean percentage of child initiations, while Figure 5 below shows the mean percentage of teacher and child or peer initiations for both groups of children in the two settings (classroom and playground).

The results in Figure 4 seem to suggest that children without disabilities successfully initiated twice as many positive interactions with others as did their peers in both the classroom and playground settings.

The results in Figure 4 also indicate that the frequencies of unsuccessful interactional behaviours were 40% for children with mild mental retardation while that for children without disabilities was less than 10 % in the classroom. In the playground, the frequencies for unsuccessful interactional behaviour were 25 % for children with mild mental retardation and 10 % for children without disabilities.

Figure 5: Mean Percentage of Observations for Teacher and Peer Initiated Interactions.



The data in Figure 5 show that children without disabilities were more likely to initiate interactions with peers and teachers than were children with mild mental retardation in both the classroom and playground environments. The data in Figure 5 also show that the frequencies for peer initiated interactions were 59% for children without disabilities and 38 % for children with disabilities in the playground. Much lower frequencies of peer and adult initiated interactions were obtained in both the classroom and playground environments.

Teachers’ and peers’ perceptions

One other issue of interest in the present study was to determine perceptions of teachers and peers regarding behaviors that would lead to social acceptance and rejection. To achieve this objective teachers were asked to complete a 14 item questionnaire (see Appendix III) while selected children were interviewed on the same 14 items. Table 4 shows the results obtained.

Table 4: Teachers’ and Peers’ Perceptions of Behaviors

	Teachers		Peers	
Variables	Mean	SD	Mean	SD
Being helpful to others.	3.47	1.02	2.36	1.05
Attending to group tasks	3.56	0.49	2.57	1.44
Making noise	4.47	1.06	2.53	1.57
Talking turns	3.29	1,33	3.10	1.50
Fighting others	5.00	1.46	4.81	1.50
Sharing play materials	4.73	1.40	2.41	1.33
Failing to obey rules of a game	3.12	0.58	2.63	0.59
Disrupting others	4.01	0.81	2.33	0.62
Isolating self from others	4.85	1.38	3.46	1.40

The results in Table 4 do reveal that there were differences in the level of knowledge between teachers and peers. As expected, teachers were more aware of the behaviours that facilitated social acceptance than their pupils.

As illustrated in Table 4, behaviours that were thought to promote social acceptance included such aspects as being helpful to others, taking part in group activities or tasks, sharing play or learning materials and talking in turns. Table 4 also presents behaviours that may lead to rejection. These include such aspects as disrupting others, or making noises when others are working and failing to obey rules of a game.

CHAPTER 5

DISCUSSION OF RESULTS

As noted earlier, the present study was designed to investigate and compare social behaviours of children with mild mental retardation with that of their ordinary class peers. Behavioural observations were taken in two contexts, the classroom and the playground. The results of this study raise several implications in as far as education of children with mild mental retardation and their ordinary class peers is concerned.

First, the results (see Figures 1& 2) do generally indicate that both groups of children did display acceptable and unacceptable aspects of behaviour in both the classroom and playground settings. As is shown in Figure1, inappropriate classroom behaviours recorded for both groups of children included disruptive and aggressive behaviour, while on the playground children either remained unoccupied or watched others when they were supposed to be engaged in class work or play activities. The results in Figure 1&2 do indicate that there are similarities in behaviour patterns between children with mild mental retardation and those without disabilities. However, the two groups of children did show varying levels of inappropriate behaviour in the classroom and play ground environments. The results in Figures 1 and 2 in particular show that the frequencies of inappropriate behaviour were low and did differ across the two groups of children. The most serious behaviour of concern in the classroom is that of inattention (see Figure 1). Though children with mild mental retardation did not engage in more serious levels of disruptive or aggressive behaviour than their peers they never-the-less showed difficulties of attending to learning tasks during class work. Cognitive theorists such as Ashman & Conway (1997) have long regarded attention as one of the pre-requisites to effective learning. Going by this view it can therefore, be said that children who lacked attention ability at the study school performed poorly in academic tasks. This ought to be verified by future research. However, since subjects with mild mental retardation in this study lacked strategic behaviour for spending more time on a learning task, they would need to be taught self-regulatory behaviour. If this could be achieved through changes to classroom instructional strategies to facilitate independent problem solving, children with mild mental retardation would be assisted to cope with the academic demands of an integrated classroom. Such a move would also help children without disabilities to perceive their disabled peers as being better able to participate in group learning tasks.

children with mild mental retardation have social deficits which hinder them to interact with others in a 'normal' way.

It is reasonable to mention that children with mild mental retardation chose to engage in certain negative interactional behaviours (e.g. solitary play) because they may have viewed solitary play as a less threatening option than attempting to mix with other children who were more established and cognitively competent than them. An issue worth noting here is that children with mild mental retardation who participated in this study had on average 3.4 years of integration, while their ordinary peers had an average of 5.6 years of learning experience in an ordinary classroom. One would assume that 3 years of integration would have given children with mild mental retardation the advantage of mixing with their peers. This did not seem to be the case, and instead, it was children without disabilities who seemed to have the advantage of interacting consistently with same peers. The behaviour of children with mild mental retardation could be said to be similar to pupils who are new to a class or school.

Researchers such as Roberts and Zubrick (1992 (cited by Salend & Duhancy, 1999) have provided evidence to show that children with mild disabilities are less often accepted and more often rejected than their non- disabled peers. These researchers have also provided evidence that indicates that the social rejection and acceptance of children with mild disabilities is related to their peers' perceptions of their disruptive behaviours. The results of this study seem to provide support to this view. The evidence presented in Table 5 suggests that both teachers and peers perceived disruptive behaviour, failing to obey rules of a game, negative interactions and failing to talk to others as some of the behaviours that can lead to social rejection, while behaviours such as positive peer interaction, attending to group tasks, sharing things, and assisting one another as behaviours that can facilitate acceptance. The present data suggest that integrated children at the study school were engaged in disruptive behaviour and other forms of negative behaviour.

Therefore, on the basis of this finding, it is highly probable that children with mild disabilities were experiencing some forms of social rejection inflicted by their ordinary class peers. The above findings also seem to reinforce the view that social rejection and acceptance of children with mild mental retardation at the study school, were related to their peers' perceptions of their inappropriate behaviour both in the classroom and on the

The results in Figure 2 indicate that there were many similarities in behaviour patterns between children with mild mental retardation and those without disabilities on the playground. As shown in Figure 2, both groups of children were engaged in antisocial behaviours which included on looker behaviour, unoccupied behaviour, solitary behaviour and parallel play. Both groups of children displayed low levels of inappropriate or anti social behaviour on the playground. However, children with disabilities were observed to engage in more solitary play and on looker behaviour when not interacting with their peers and teachers. This finding is contrary to Herink and Lees' (1985) findings, which indicated that primary school children with disabilities initiated twice as many positive interactions with adults as did their peers. Instead, the results of this study (see Figures 3 & 4) indicate that children without disabilities initiated twice as many positive interactions with teachers and others than did their peers with disabilities.

However, inappropriate behaviours such as solitary play and on looker behaviours which children with disabilities engaged in have implications for this social acceptance in an integrated classroom. Results of other studies on social acceptance and social behaviours in children without disabilities (e.g. Coleman & Minnett, 1992) closely resemble those of neglected children. This finding suggests the need for teachers to coach children with disabilities in the area of social interaction and acceptance. The integrated classroom is the ideal place for practicing and prompting social interaction skills.

Some previous studies reported in the literature review section (e.g. Gresham, 1982) have provided evidence that suggests that children with mild mental retardation do have social deficits which make it difficult for them to socially interact in a meaningful way with their non-disabled peers. The findings of this study seem to support this view. First, as noted above, children with mild mental retardation were more often seen to engage in onlooker behaviour and solitary play than their ordinary class peers on the playground (see Figure 2). Second, the results of this study (see Figure 3, 4 and 5) show that the frequencies of negative interactional behaviour in classroom and playground environments were higher for children with mild mental retardation than for children without disabilities. Moreover, the results in Figure 3, 4 and 5 clearly confirm this difference between children with mild mental retardation and those with disabilities in their child/peer initiation patterns. This evidence seems to support Gresham's findings, that

playground. However, since no firm conclusion can be made about the relationship between peers' perceptions of behaviours and social acceptance/ rejection, this can be a matter for future research.

The justification for integrating children with mild mental retardation into ordinary classrooms has always been based less on possible academic gains for children with disabilities and more on the potential social benefits for all children that would result from such a practice (Coleman & Minnett, 1992). Thus, it can be expected that creating a single social group would enhance the social competence of children with mild mental retardation. However, the present data seem to suggest that integration is not achieving this aim at a rate that can be appreciated. As noted above, children with mild mental retardation engaged in disruptive or negative behaviour than did their peers. They were seen to be interacting with peers on the playground 33 percent (33%) of the time sampled compared to 55 percent (55%) in the non disabled group (Figure 2) and their patterns of initiation and response with peers did differ from that of children without disabilities (see Figures 4 and 5 above). Differences in behaviour patterns were observed in peer interactions on the playground and attending behaviour in the classroom (see Figure 1 & 2).

One point must be made. That is, we must learn more about children with mild mental retardation who, despite their academic difficulties, have the potential to succeed in the social main stream of ordinary education. It seems unlikely that teachers will be able to completely eliminate the academic difficulties encountered by children with mental retardation. Studying children who are socially competent seems a profitable way to identify social skills that may be useful to children with mild mental retardation.

Generally, the results of this investigation seem to suggest that it is not just a question of integrating children with mild mental retardation in ordinary classrooms, and expect to form a dynamic social group, but rather observing how opportunities for developing intergroup social interaction can be initiated and carried out so that they are seen to benefit the intended groups of children.

CONCLUSION

In this study, the writer has examined and compared behaviours of children with mild mental retardation with that of their ordinary class-peers in both the classroom and on the

playground environments. In general, the findings of this study have several implications for the learners and the teachers as well as the whole school policy.

First, this study has established that since the publication of the education policy (MOE, 1996), integration of children with mild mental retardation has been recognized as a viable alternative to segregated aspects of schooling. It has been established in this study that it is not sufficient to provide contact between children with and without disabilities and expect children to socially interact. If the aim of integration is to facilitate social interaction, then opportunities for social interaction should be carefully planned. In the same vein, there is need to determine the roles of teachers and ordinary class-peers as this may help to utilize human resources for the benefit of all children, disabled or not.

Second, this study has established that there are many similarities and differences in behaviour pattern between the two groups of children. A clear difference that has come out in this study is that children with mild mental retardation remain on academic tasks for a far shorter time than their ordinary class-peers. Attending behaviour is a critical factor in the learning process. Given that children with mild mental retardation have learning difficulties which require them to remain or spend more time on learning tasks, there is dire need for teachers to utilize instructional strategies that would help children to develop efficient problem solving skills.

Finally, it must be mentioned that, it is hard to make any firm conclusions based on this study about social behaviours of children with mild mental retardation and their ordinary class peers. A note of caution needs to be addressed regarding the size of the sample. For example, only one school and a small sample size (30) of children was involved, hence the question of generalizability arises. For this reason, it is hard to generalize the findings of this study to other institutions of learning.

RECOMMENDATIONS

A look at the present data, shows that although the study school has been integrating children with mild mental retardation for some years, there are several issues which need to be addressed if this concept has to work in favour of the affected groups of children. In the light of this observation, the following recommendations are made:

1. In order for integration to work in favour of children with social skills deficits such as those with mental retardation, there is need for the Ministry of Education through the Lusaka District Education Board (DEB) to organize sensitization seminars and workshops for teachers and other stakeholders. The focus of such seminars and workshops would be to strengthen inclusion and social integration of children with mental retardation.
2. At the moment, there is very little research activity on social integration. There is, therefore, need to encourage teachers and schools in general to carry out research so that a district data base centre can be created. Such data could be utilized by education/ curriculum planners as well as teacher training institutions by using action research for planning of appropriate learning experiences for teachers and children.
3. Since the results of this study show that children with mild mental retardation interacted less with their peers, there is need for the concerned teachers to develop programmes that facilitate intergroup social interaction.e.g. sports in action inclusive sports activities.
4. Children with mild mental retardation were observed to be off- task during academic work. For these children to learn to spend more time on learning tasks, there is dire need for teachers to expose their children to instructional procedures that would promote independent problem solving skills. In this vein, cognitive instructional strategies would be very useful to children with mild mental retardation.
5. Considering that only children with mild mental retardation were the only ones who were integrated at the study school it would be ideal to embark on research that

should aim at establishing the effects of integrating children with moderate and severe forms of disabilities as well.

6. In order to provide uniform policy on social integration of children with disabilities the District Education Board (DEB) in Lusaka should appoint a task force to formulate standard procedures for integration. This will help to avoid a situation whereby there are varied ways of integrating children in ordinary classroom. This should be the case for other districts else where in the country.

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CLASSROOM AND PLAYGROUND OBSERVATION SCHEDULE

Name of child:..... Name of observer

Date of birth: Date:

Grade:

Lesson Observed :

Behaviour category	Time in seconds													
	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Unoccupied behaviour														
Solitary play														
On looker behaviour														
Parallel play														
Interactive play														
Any other useful comments														

CLASSROOM AND PLAYGROUND OBSERVATION SCHEDULE

Name of child:..... Name of observer

Date of birth: Date:

Grade:

Lesson Observed:

Behaviour category	Time in seconds											
	20	20	20	20	20	20	20	20	20	20	20	20
Unoccupied behaviour												
Solitary play												
On looker behaviour												
Parallel play												
Interactive play												
Any other useful comments												

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OBSERVATION SCHEDULE

Name of Child:

School:

Subject:

Age:

Setting: Classroom or Playground

[illegible]

Instructions

The questions that follow have statements about behaviours of children with and without special needs. Please indicate to what extent these statements apply to children by placing a tick in the appropriate place

Key to the responses

- Agree A
- Strongly Agree S A
- Disagree D A
- Strongly Disagree S D A
- Not sure N S

How strongly do you agree and disagree with the the following statements?

Peers may not like a child who is	A	S A	D A	S D A	U
Being helpful to peers					
Talking in Turns					
Starting out of the window when he/she should be working with a group					
Attending to groups tasks					
Games with other children					
Throwing things at other children?					
Cooperating in play situations					
Shouting when he/she is supposed to be quiet?					
Finishing assigned group work					
Sustaining attention when doing group work					
Getting involved in fights with other children					
Swearing at others					
Isolating self from other children					
Playings with different children					
Moves aimlessly in classroom					
Initiating unpopular games					
Waiting for his/her turn to play a game					