

THE EFFECT OF PARENTAL
AND SPECIAL TEACHERS' ATTITUDES ON
ENROLMENT AND PERFORMANCE OF
DEAF AND BLIND CHILDREN
IN SPECIAL SCHOOLS

by

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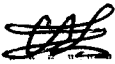
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ABSTRACT

The present study attempted to uncover parental and special teachers' attitudes toward deaf and blind children and toward educating the children in special schools. The children's attitudes toward themselves and toward special schools were also investigated. In this respect, the Parents' Attitude Questionnaire, Special Teachers' Attitude Questionnaire and Children's Attitude Questionnaire were developed and administered to samples of parents of deaf and blind children, special teachers and the children. Comparisons were made between parents of school going children and parents of non-school going children, in regard to their attitudes toward the children. The relationship between parental attitudes and the children's performance on the one hand, and between special teachers' attitudes and the children's performance on the other hand were investigated. The Mann Whitney U test showed that parents of school going children have more favourable attitudes toward deaf and blind children than parents of non-school going children. The Rank Order Correlation obtained between parental attitudes and the children's performance on the one hand, and between special teachers' attitudes and the children's performance on the other hand showed that the children's performance is not significantly correlated to parental attitudes nor to special teacher attitudes. Finally, a comparative analysis of the children's attitudes using the Mann-Whitney U test showed that school going children have more

more favourable attitudes toward themselves and toward special schools than non-school going children. The implications of findings are that:

1. there is considerable need for parents of non-school going deaf and blind children to change their unfavourable attitudes toward the children;
2. parents of non-school going deaf and blind children should enrol their children in special schools in order to enhance their cognitive development and favourable self perception;
3. policies aimed at identifying and changing the unfavourable attitudes held by parents of non-school going deaf and blind children toward the children should be formulated and implemented.

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CHAPTER 1

INTRODUCTION

The present research has been designed in view of the increase in the proportion of non-school going handicapped children coupled with the problem of social acceptance which the children often face in their societies. According to the Committee of Enquiry into the education of the Handicapped in 1967, about one percent of the total population were in need of special education in Zambia. Studies conducted by Fryers (1986), suggest that 1.09 percent of the total population in Zambia consists of handicapped children who are not enrolled in school. However, a survey conducted by the Ministry of General Education and Culture in 1987 revealed that only about 0.03 percent of the handicapped children in Zambia are enrolled in special schools, units or hospital teaching service programs. These statistics have an implication for the need to control the increase in the proportion of non-school going handicapped children.

Studies conducted regarding the attitudes of the able bodied people toward the handicapped (Banker et al., 1953, in Bill R.C., 1960; Committee of Enquiry, 1967; Clerk et al., 1974, and Werner, 1980) have revealed that the latter are often stigmatised as helpless dependent individuals without any abilities. Such misconceptions are detrimental to the integration of the handicapped in society. A handicap is defined as "the disadvantage or restriction in activity caused by disability"

(Flinkelstein, 1990, p.3). Individuals can have various types of handicaps. In this study, we concentrate mainly on those children with defective vision or hearing.

The aims of the present study are four fold namely:

1. To explore the attitudes of parents toward their deaf and blind children.
2. To investigate whether there is a relationship between parental attitudes and the children's performance in Special Schools.
3. To investigate whether special teacher's attitude toward Special education correlates to children's performance.
4. To compare school going children to non-school going children in regard to their self perception and their attitudes toward special Schools.

The significance of the study is that it will help to uncover parental attitudes which may subsequently be used to account for the increase in the percentage of children who are not enrolled in school. In addition, the study will provide the basis for making recommendations aimed at enhancing the education of deaf and blind children in special schools.

The Conference of Executives of American schools for the deaf define a deaf person as "... one whose hearing is disabled to an extent (usually 70 dB or greater) that precludes the understanding of speech through the ear alone without or with the use of a hearing aid" (in Moores, 1978, p.5). However, an individual with reduced hearing acuity is said to be hard of hearing or partially deaf (Streng 1959, in Kirk, 1962). On the other hand, the blind are those people who cannot see at all. Kirk defined the blind as "those who have a visual acuity of 20/200 or less in the better eye after maximum correction..." (Kirk, 1962, p-214). Those with problems with their vision are often referred to as the partially sighted or the partially blind. In the present study, the term 'deaf and blind' is used loosely to refer to children with hearing or visual handicaps irrespective of the severity of the handicap.

Accurate and more current statistics on the population of the deaf and blind in Zambia are hard to come by. Nevertheless, reports by Fryers and Desai (in Naburcka, 1986), based on data generated by the Zambia National Campaign to Reach Disabled Children (ZNCRDC) have estimated that about 0.26 percent of the total population in Zambia are children between 0 and 15 years with serious hearing handicaps, whereas 0.10 percent are children of the same age range with serious visual handicaps.

The causes of blindness in Zambia are quite diverse. They include refractive errors (myopia, hypermetropia and astigmatism), irregular astigmatism, unocular aphakia, congenital

opacity, cataract and glaucoma (Farekh and Serpell, in Nabuzoka, 1986). Other causes of blindness are trachoma, measles, mullu (African medicine) and malnutrition (Committee of enquiry, 1967). On the other hand, deafness is mainly caused by inherited defects, intra-uterine infections (e.g. syphilis or German measles), injury or infections such as meningitis, otitis media, mumps and brain abscess (Committee of Enquiry, 1967). Thus, people need to be well informed about the causes of deafness and blindness and taught how to avoid contracting diseases that may lead to such conditions.

In every society, handicapped children have social as well as educational needs. According to Werner, some of the social needs for the handicapped include "the need to be loved and respected, the need to play and expose their world with other children and adults and the need to feel welcome and appreciated by their family and community" (Werner, 1980, p.402). The children also need to be educated so that they develop into more knowledgeable, skilled and mature adults capable of contributing to the development of their society (Sicault, 1963).

One of the ways through which the handicapped children's educational needs can be met is through special education, defined as a "specially designed instruction that meets the unique needs of an exceptional child" (Hallahan and Kauffman, 1998, p.6). The main objectives of special education are as follows:

1. "....to improve on the techniques and ways of identifying children with disabilities or exceptional children in general;
2. to develop relevant educational programs and related services (e.g. remediation, physical restoration services, developing academic and professional skills and learning to cope with the environment) for the exceptional children and youth;
3. to improve the child's abilities and skills, and
4. to educate parents (e.g. through home intervention programs) how to contribute to their child's total development" (Von Ossol et al., 1982, p.11).

Parents of deaf and blind children have a role to play in meeting their children's educational needs. They are expected to maintain favourable attitudes toward educating their children and are therefore responsible for securing places for their children in special schools or units (i.e. facilities, or classes established in ordinary schools where handicapped children are taught) where special teachers can employ their special skills to educate the children so that they acquire knowledge, skills and be able to assume specific roles in society.

The present research seeks to analyse the attitudes of parents, special teachers and deaf and blind children in regard to education. In this respect, the following aspects are reviewed in terms of the existing literature: Firstly, the concept of attitude is defined and theoretical views on the attitudes and behaviour patterns of the handicapped are analysed. Secondly, the literature on parental and teachers' reactions and attitudes toward the handicapped is reviewed. Finally, the education of deaf and blind children is considered, with major emphasis, among other things, on the findings that relate to parental attitudes toward enrolling handicapped children in school and the attitudes of the children toward special education.

THE CONCEPT OF ATTITUDE

There are a number of definitions of attitudes that have been put forward by different authors (Allport, 1935; Rosenberg, in Insko, 1967; and Katz, in Halloran, 1967). However, a more comprehensive definition of attitudes has been given by Krech, et al., who defined an attitude as "an enduring system of positive or negative evaluations, emotional feelings and pro or con action tendencies with respect to a social object" (in Halloran, 1967, p.21). Krech et al., identify three main components of an attitude to be the cognitive component (i.e. beliefs about an object and evaluation of those beliefs), the affective or feeling component (i.e. the likes and dislikes, affinities for or against an object) and the action component (i.e. the readiness to behave

in a certain way toward an attitude object). In the present study, Kroch et al.'s definition of attitudes is adopted.

THEORETICAL VIEWS ON ATTITUDES AND THE BEHAVIOUR PATTERNS OF THE BLIND

Scott (1969), singled out three main views which have been put forward to explain the attitudes and behaviour patterns of the blind. The three views include the commonsense explanation, the psychological explanation and the stereotyped explanation. It is important to note that these views were developed to explain the attitudes of the blind. It would, however, be interesting if research were to be conducted to determine the possibility of generalising the three explanations to the deaf.

1. Commonsense explanation

The underlying assumption in the commonsense explanation of the attitudes and behaviour patterns of the blind is that "... blind people possess personalities and psychologies that are different from those of ordinary people" (Scott, 1969, p.4). The blind are not able to self actualise and they are assumed to be frustrated because they cannot see. According to this view, the blind are characterised by helplessness, dependency, melancholy, docility, gravity of inner thought and aestheticism. The blind have such type of behaviour characteristics because of their inability to see.

From the explanation provided, this view suggests that a handicap predetermines the behaviour characteristics of blind

people. One of the criticisms of the commonsense explanation is that this view adopts a simplistic explanation in accounting for the behaviour patterns of the blind. In addition, the commonsense view contains a flaw in logic in that lack of vision only imposes one kind of restriction (inability to relate directly to distant physical environment), and "it is therefore illogical to deduce that such things as sadness, spiritual aestheticism or helplessness should follow from blindness itself" (Scott, 1969, p.5).

2. Psychological explanation

Two basic assumptions underly the psychological explanation of attitudes and behaviour of the blind. The first assumption is that the attitudes and behaviour patterns of the blind are diverse; and the second assumption is that the diversity in the behaviour patterns of the blind are patterned in a clear predictable way. According to this view, the patterning is due to "the psychological reactions that all blind people have to becoming blind, and the enduring impact of conditions upon basic components of personality" (Scott, 1969, p.6).

The psychological explanation suggest that people's reactions to the onset of blindness is not functionally invariant. They usually experience shock, grief and depression. Variations in the attitudes, emotions and behaviour patterns among the blind only occur after a stage of adjustment. According to this theory, adjustment is the ability of a blind person

to accept that he is blind, and learn the skills and attitudes which can help him compensate for his inability to see. The argument is that it is only after the blind individual has fully adjusted to his handicap that he can cease to experience the behaviour patterns that are inherent in blindness.

Some of the criticisms of this theory are that the theory is difficult to test, and that it concentrates mainly on the handicapping condition in accounting for the behaviour of the blind (Scott, 1969). The psychological explanation holds that people's reactions to the onset of blindness follows a certain unvarying and predictable sequence, and that the blind people's reactions are merely defensive behaviours. The assertion that any behaviour is defensive does not conform to the behavioural patterns prescribed by the theory, and so it is difficult to test the theory. In addition, the psychological explanation emphasises mainly handicapping conditions (blindness) in explaining the behaviour of the blind and ignores the role that society plays in influencing the behaviour of the blind.

3. Stereotyped explanation

The stereotyped theory attempts to reveal the misconceptions that laymen make about the blind and how the misconceptions affect the behaviour and attitudes of the blind people.

Stereotyped explanation holds that the sighted develop erroneous conceptions about the blind during the process of socialisation. Laymen develop stereotyped beliefs and express

them in terms of their expectations for the behaviour of blind people. Eventually, their expectations about the blind may be adopted by the stigmatised (the blind) people, as they conform to misconceptions held by the sighted. Scott gives an illustration of the way in which stereotyped beliefs are maintained. He points out that "when sighted people continually insist that a blind man is helpless because he is blind, their subsequent treatment of him may preclude his ever exercising the kind of skills that would enable him to be independent" (Scott, 1967, p.7). Thus, the misconceptions acquired by laymen in society, according to stereotyped explanation, influence the attitudes and behaviour of the blind.

Scott has singled out two main advantages for the stereotyped explanation of the behaviour and attitudes of the blind. Firstly, this theory draws our attention to the socialisation of the blind, which is mostly dominated by all sorts of ambiguities, misunderstandings and misconceptions. Secondly the theory helps to explain one of the main paradoxes about people: "that the behaviour of at least some groups of the blind conform to the stereotypes in spite of the fact that there is nothing about the condition of blindness that makes such behaviour necessary" (Scott, 1967, p.9). However, the only weakness of the stereotyped explanation is that it tends to emphasise on beliefs and ignores other factors which influence the reactions of the sighted toward the blind. According to the theory, it is the beliefs

of the sighted person which determine how he reacts to a blind person.

To a large extent, the three explanations of the behaviour patterns of the blind people provide an adequate theoretical framework on the behaviour characteristics of blind people. However, since there seems to be very little consensus in the explanations provided, there is need for a more comprehensive theory which can enable us to understand better the behaviour and attitudes of the blind.

PARENTAL ATTITUDES TOWARD HANDICAPPED CHILDREN

There has been little research done concerning parental attitudes toward handicapped children (Roith, 1974). According to the literature available to the present writer, parental reactions to the presence of a handicapped child in their family tends to be influenced by the following factors:

- a) whether the handicap is evident at birth or becomes evident later in life,
- b) the severity of the child's handicap,
- c) whether the handicap is obvious to other people or not and
- d) the attitudes held by other people, including lay people, teachers, social workers and doctors toward the handicapped (MacKeith, 1974, p.127).

MacKeith has pointed out that when a child is born handicapped, parents often have mixed feelings. Parents whose children have

Down's syndrome, for example, may have feelings of personal inadequacy at reproduction or at rearing the child. In addition, they may also show biological reactions such as protection of the helpless and revulsion at the abnormal. They may also have feelings of bereavement, shock, guilt and embarrassment - which is a social reaction to what they think other people feel about their handicapped child.

Fine (1968), conducted an educational survey on the attitudes of children, parents and teachers with an attempt to uncover what he calls abnormal parental attitudes (i.e. unfavourable parental attitudes) toward blind children. In the survey, 817 blind children were sampled from schools for the blind in England and Wales. The relationship between parents' and children's attitudes were examined with respect to their home environment. The observation made, among other things, was that abnormal parental attitudes range from over-indulgence and over protection to complete rejection. Similar observations have been reported by other researchers (Zuk, 1962; McMichael, 1971; Bentovim, 1974; Altshuler, 1974 and Meadow, 1980).

Reporting on the emotions of parents, Zuk (1962), pointed out that some of the emotional states and feelings experienced by parents when they realise that their child is physically (or mentally) handicapped include disappointment, anger and guilt. He also pointed out that the social and cultural context tends to have a profound effect on the development of disappointment, anger and guilt among parents with handicapped children. Zuk's argument concurs with MacKeith's (1974), notion that social

would encourage independence to their deaf children, Meadow observed that "almost half of the deaf parents and only 35 percent of the hearing parents stated that a deaf child should be allowed to play independently in the immediate neighbourhood before the age of five" (Meadow 1967, in Meadow, 1980, p.78). This observation suggests that hearing parents are relatively more protective and restrictive toward their deaf children compared to deaf parents with deaf children. Thus, in addition to the factors that influence parental reaction to handicapped children already mentioned above (McKeith, 1974), whether a parent is handicapped or not is also an important factor that influence parental reaction to a handicapped child in the family.

Handicapped children tend to face the danger of being rejected by their parents. Whereas some parents may easily adjust to the birth of a handicapped child other parents may not be able to do so depending on the socio-cultural factors (MacKeith, 1974, and Werner, 1930). However, research conducted in Zambia has shown that physically handicapped children seem to be rejected by their parents (MacFarlane, 1982). In her research, MacFarlane was concerned with finding out whether physically handicapped children experience more rejection and over protection than able bodied children. Administering the Parental Acceptance - Rejection Questionnaire and the Overprotection Questionnaire to a sample of fifty children (between 10 and 16 years of age), half of them with physical handicaps, MacFarlane observed that there was no significant difference between

the physically handicapped and the able bodied children in terms of rejection and overprotection.

Parental attitudes toward handicapped children as indicated by the above cited studies vary depending on social factors (Zut, 1967, MacKeith, 1974), the time of onset of the handicap (MacKeith, 1974) and whether the parents are also handicapped or not (Meadow, 1967). Some of the parental attitudes toward handicapped children which have been identified include overprotection, overindulgence and rejection of the children, though in Zambia, as already noted above, physically handicapped children seem not to be rejected by their parents (MacFarlane, 1982).

TEACHERS' ATTITUDES TOWARD HANDICAPPED CHILDREN

Most of the literature on teachers' attitudes toward handicapped children have discussed how mainstream teachers respond to the integration of the handicapped in ordinary classrooms (Johnson et al., 1962, Serpell, 1987 and Center et al., 1987). Very little is known to the present writer about the attitudes of special teachers toward handicapped children because literature on the subject is scarce.

Mainstream teachers' attitudes toward handicapped children tend to be influenced by the type of training and practice they receive and the type of society they belong to. Contributing to a discussion of mainstream teachers' attitudes toward the handi-

capped. Darling et al., pointed out that "through biases in professional training and practice, professionals are ... likely to hold negative attitudes toward the disabled;... such attitudes are also derived from their socialisation in a stigmatised society" (Darling et al., 1982, p.180).

Johnson et al., (1962) have reviewed the literature on the attitudes of mainstream teachers toward children with impaired hearing. They noted that mainstream teachers tend to be more helpful and sympathetic if they are convinced that a child has a significant hearing handicap. Some mainstream teachers, however, feel that hearing impaired children are by nature obstinate and tend to take advantage of their handicap. Other mainstream teachers believe that children with impaired hearing are less intelligent than hearing children. Nevertheless, these allegations of mainstream teachers' attitudes should be treated with caution since they have not been tested by researchers.

Research conducted in the United States on mainstream teachers' perception of children with special needs and their attitudes toward educating them in the mainstream have shown that mainstream teachers have unfavourable attitudes toward integrating the children in the mainstream. In addition, most teachers and professionals tend to have a negative perception of pupils with special needs (Alexander and Strain 1979, Horne 1977, Baker and Gottlieb 1980, in Hegarty et al., 1981). In another development, Tobin (1972, in Hegarty et al., 1981) investigated the attitudes of experienced and trainee mainstream

teachers toward pupils with special needs in Britain. He observed that both trainee and experienced mainstream teachers had unfavourable attitudes toward integrating visually impaired, hearing impaired and maladjusted pupils in their classes.

Serpell (1987), conducted a number of case studies in which he attempted to determine the nature of interaction between home and school in a rural Zambian Community. Among other things, he also investigated the attitudes of mainstream teachers toward children with special needs (physically and mentally handicapped children) in Zambia's Eastern province. Presenting a questionnaire to 55 mainstream teachers drawn from ten different ordinary schools in the province, in regard to how they would react to the integration of children with various types of severe handicaps in their classrooms, Serpell observed that mainstream teachers were willing to accept children with severe movement disabilities. However, they tended to express their inability in teaching deaf and mentally retarded children. The mainstream teachers were also willing to accept children with severe visual handicaps as long as they were assured of special guidance from the inspectorate of special education. It is, however, possible that if mainstream teachers are provided with specialised training and equipment, they would more likely develop positive attitudes toward integrating handicapped children in ordinary schools.

The literature cited above does not provide us with an opportunity to know the attitudes held by special teachers toward handicapped children. However, the information on the attitudes

of mainstream teachers toward integrating handicapped children in ordinary schools provide us with an insight on how special teachers would react to such type of children.

EDUCATING THE DEAF AND BLIND CHILDREN

The government of the Republic of Zambia, through its educational reforms (1977), has stressed the need for educating children with physical as well as mental handicaps. This trend in education is beneficial to handicapped persons since it helps them to participate fully in the economic, social and cultural development of their societies. In this section, an attempt is made to state the available educational opportunities for the deaf and blind in Zambia; the attitudes of parents toward enrolling their handicapped children in school; and the attitudes of handicapped children toward special education.

(a) Educational opportunities for the deaf and blind in Zambia

Parents need to be aware of the existence of a wide range of educational opportunities for deaf and blind children in Zambia. Some pre-schools, primary schools and secondary schools have been established to cater for the education of such type of children. Since the present research has been designed on the basis of primary school education of the children with hearing and visual handicaps it is worth mentioning here that there is quite a considerable number of special primary schools and units for such children in Zambia as indicated by the table below.

Table 1: The total number of special primary schools and units for the hearing and visually impaired children in Zambia in 1987:

	Special Schools				Units			
	No. of schools	No. of children enrolled	No. of classes	No. of teachers	No. of units	No. of children enrolled	No. of classes	No. of teachers
Hearing impaired	5	202	23	30	16	170	23	19
Visually impaired	5	351	39	60	4	23	4	4

Source: Zambia: Ministry of General Education and Culture (MGENC) planning unit. Special schools, units and hospital teaching service programs by province in Zambia, (1987), p.2.

Deaf and blind children can either be enrolled in special schools or units. Opportunities are, however, available to oral children with mild degree of hearing loss or poor vision in the mainstream as long as such type of children are assured of access to specialised equipment such as hearing aids or glasses, and special teachers (Dale, 1967).

Special schools (or units) are best suitable for children with severe or profound handicaps (Werner, 1980; Dale, 1967 and Hathaway, 1957). This is so because such type of children can benefit from the skills of special teachers and specialised equipment. Special teachers in schools for the deaf instruct the children using oral or manual methods of communication, such as sign language, finger spelling, cued speech and lip reading

(Kirk, 1962). Through such means of communication, they can teach various subjects to deaf children such as arithmetic, spelling, reading, speech reading, writing, science and some practical subjects, just as is the case in ordinary schools. However, specialists in the education of the deaf have continued to debate over the best means of communication (manual or oral) through which the deaf can best be instructed (Kirk, 1962; Haffner and Kauffman, 1968). In recent years, however, both oral and manual methods are used in classes for the hearing impaired. Blind children on the other hand are instructed through oral methods and braille. They can as well be taught the various subjects taught to sighted children in the mainstream (Kirk, 1962).

(b) Parental attitudes toward enrolling handicapped children in school

Parents who have handicapped children are expected to look for an appropriate program for their children as they approach school age. Depending on the degree of severity of the child's handicap and the recommendations made by educational specialists, parents may enrol their handicapped child in ordinary schools or in special schools or units.

However, some parents, especially those in rural areas may not send their handicapped child to school due to the "fear that their child will be teased or have too hard a time" at school (Werner, 1980, p.498). Other parents may have negative attitudes toward sending their handicapped children to school if the school

or far away from home. Still, some parents may not send their children to school since "in some places, school directors or teachers refuse to accept even the moderately disabled child..." (Werner, 1980, p.498). In some cases, however, some parents may not enrol their children in school because they are not aware of their children's rights to an appropriate education (Darling et al., 1982).

Parents who are involved in supportive networks such as parents' associations and community organisations are more likely to challenge special education provisions and their child's individual plans. Conducting a research on an American sample of parents who challenged their physically handicapped children's educational plans, Orenstein (1979, in Darling et al., 1982) noted that there are a number of reasons why parents may have unfavourable attitudes toward the plans. Firstly, parents of the handicapped children prefer their child to be enrolled in the mainstream to being enrolled in special classes. Secondly, parents may dislike the quality of education provided to their physically handicapped children in special schools. Finally, parents may be anxious as to whether their handicapped child will be accepted by other children in school.

In a study conducted earlier in Britain (McMichael, 1971), it was observed that parents have a positive attitude toward special education. McMichael interviewed a sample of 50 mothers whose physically handicapped children were excluded from ordinary schools to be enrolled in special schools. In order to obtain

some information on the parents' attitudes toward special schools, he asked mothers whether they were satisfied with the exclusion of their physically handicapped children from ordinary schools and placed in special schools. Results showed that 58 percent of the mothers were satisfied with the move. These findings seem to suggest that British mothers have a favourable attitude toward special education.

Whereas the studies on American samples (Orenstein, 1979, in Darling et al., 1982) have shown that parents have unfavourable attitudes toward special education, previous studies on the subject using British mothers indicate that the latter have positive attitudes toward special education for their physically handicapped children (McMichael, 1971). The difference on the obtained results between the two studies (Orenstein, 1979; and McMichael, 1971), may be due to the fact that parental attitudes differ with the type and severity of the handicap (Mackeith, 1974, p. 127). It is also possible that the differences may be attributed to socio-cultural factors which influence parents' attitudes as noted earlier (Mackeith, 1974 and Werner, 1980). The present writer has not come across any published report on the attitudes of Zambian parents toward enrolling handicapped children in special schools. For this reason, it is difficult to discern parental attitudes toward special schools in Zambia.

c) Attitudes of handicapped children toward special schools

Research on the attitudes of the hearing and visually impaired children toward special schools is not available to the present writer. However, one study has been reported by Werner et al., (1973), in which they tried to investigate the attitudes of children in special classes for the educable mentally retarded, toward special classes. In the study, 369 children in special classes were randomly selected from four districts in the United States. Their IQ ranged from 56 to 74 and chronological age ranged from 8 years 9 months to 17 years 6 months. Each of the subjects was interviewed individually based on the following five questions:

1. Do you like being in a special class?
2. Would you rather be in some other class in this school?
3. Why do you think you are in a special class?
4. What do you like most about being in a special class?
and
5. What do you like least about being in a special class?"

(Werner et al., 1973, p.3).

Results showed that the educable mentally retarded children have a positive attitude toward special class placement.

Although the above cited study shows that mentally handicapped children have a favourable attitude toward special classes, it does not provide us with an adequate basis to infer

the attitudes of the visually and hearing impaired children toward special schools. Hence the need to conduct similar researches using samples of deaf and blind children as is the case in the present research.

HYPOTHESES

The literature reviewed in this chapter in relation to the issues under investigation in the present research have led to the formulation of the following hypotheses:

1. Parents of School going children have more favourable attitudes toward their children than parents of Non-School going children.

In this hypothesis, 'enrolment in School' is the dependent variable and is defined as the registration of the deaf and blind children in institutions which provide special education to the children. Parental 'attitudes' are the independent variable as they precede child enrolment in school and are defined as the parents' beliefs, their likes or dislikes and their affinities for or against the deaf and blind children.

The aim of the above hypothesis was to help provide information on the nature of attitudes held by parents toward their handicapped children and provide the basis

for investigating whether parental attitudes influence the children's enrolment in Special Schools.

2. There is a positive correlation between parental attitudes toward deaf and blind children and the performance of the children in special schools.

In this hypothesis, parental attitudes are defined as the parents' beliefs, their likes or dislikes and their affinities for or against the deaf and blind children. Performance is defined as the total percentage scores of the school going deaf and blind children on special teachers' made tests administered since term I, of the children's current grade.

The above hypothesis was aimed at providing information on the relationship between parental attitudes and the performance of the children in special schools.

3. There is a positive correlation between special teachers' attitudes toward special education and the performance of deaf and blind children in special schools.

In this hypothesis, attitudes are defined as the special teachers' beliefs, their likes and dislikes, and their affinities for or against special education. Special education in this research is defined as a specially designed instruction presented in special schools or units aimed at meeting the

special needs of deaf and blind children. Performance is defined as the total percentage scores of the children on special teachers' made tests administered since term 1, of the children's current grade.

The rationale for the above hypothesis is that the special teachers' attitudes toward their job may influence the quality of instruction presented to the handicapped pupils and this may affect the children's performance.

4. School going deaf and blind children between 9 and 18 years of age have more favourable attitudes toward themselves than non-school going children of the same age range.

The independent variable in the above hypothesis is 'schooling', since a comparison is made between the children in school and those who are not in school. The children's 'attitudes' constitute the dependent measure and the 'age' factor is the control variable in the hypothesis. In this context, attitudes are defined as the children's beliefs, their likes or dislikes and their affinities for or against themselves as handicapped individuals.

The above hypothesis is based on the rationale that special schools provide an opportunity for children to positively adjust to their handicap, develop abilities, skills and knowledge to cope with their environment. The hypothesis

aim at determining the impact that special schools have on children's self perception.

5. School going deaf and blind children between 9 and 15 years of age have more favourable attitudes toward special schools than non-school going children of the same age range.

The rationale for this hypothesis is based on the findings that handicapped children have favourable attitudes toward special schools (Werner et al., 1973). Since Werner et al.'s study was conducted on the educable mentally retarded, the present study based on the above hypothesis will shed more light on the attitudes of the deaf and blind children toward special schools.

The hypotheses formulated in the present research touch on various topics that include, parental attitudes toward their deaf and blind children, the performance of the children in special schools, special teachers' attitudes toward special education and the attitudes of the children toward themselves and toward special schools. More information on these topics will be useful for the formulation or refinement of public educational policy toward the handicapped.

CHAPTER 2

METHODOLOGY

Subjects

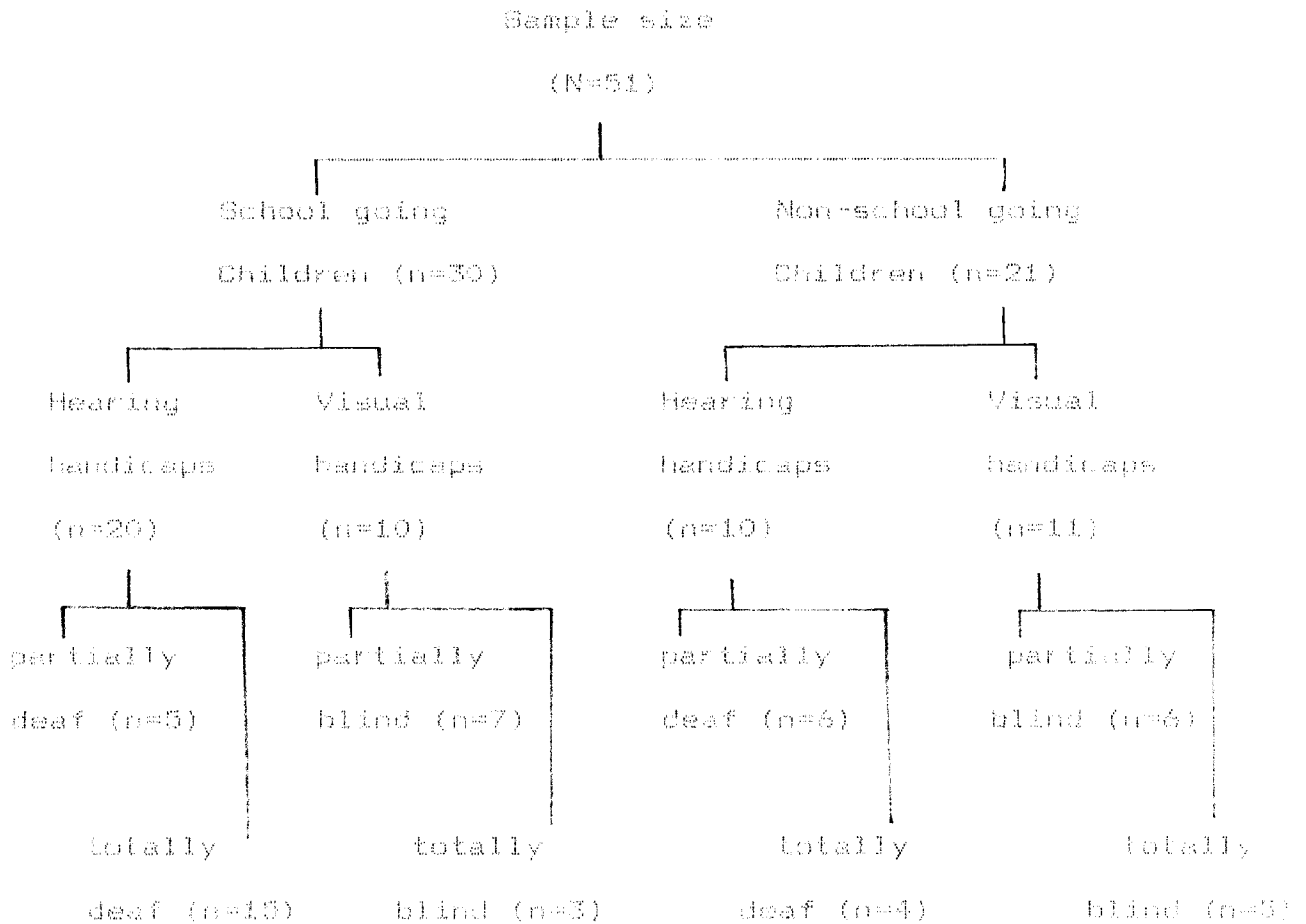
Children with hearing and visual handicaps, their parents or guardians and special teachers served as subjects in the research. Details of the sample and the sampling procedures used are described in the subsections below.

4. Children:

The children sampled for the research were 9 to 18 year olds with handicaps which ranged from partial deafness to total deafness and from partial blindness to total blindness. The age range was chosen so that the children would at least be able to understand and respond to the questionnaire which was to be administered to them.

A purposive sampling procedure was used to identify a total sample of 51 deaf and blind children from Lusaka, Chipata and Katete districts. This type of non probability sampling procedure was used despite its weakness, because of financial and time constraints experienced during the research coupled with difficulties in identifying non-school going deaf and blind children. The sample was composed of 30 children who were enrolled in special schools or units, and 21 children who were not enrolled in school. The characteristics of the sample are as shown in figure 1 below.

Figure 1: Some features of the sample of children in regard to their handicaps



The criteria for sampling school going children were that at least an equal number of male and female children be sampled from grades 3 to 7 in the special school or units considered, and that the parents or guardians for the children be resident within the radius of 200 Km from Lusaka, Chipata and Katete town respectively. The latter criterion was adopted because of the limited funds for the research which could not meet transport costs to more distant residential areas for the children. On the other hand, the sample of non-school going children was drawn

from villages and compounds in the districts mentioned earlier. The children were located by consulting hospital records (at eye clinics), village headmen and Party section chairmen on the prevalence of blindness and deafness in their areas.

8. Parents and Guardians:

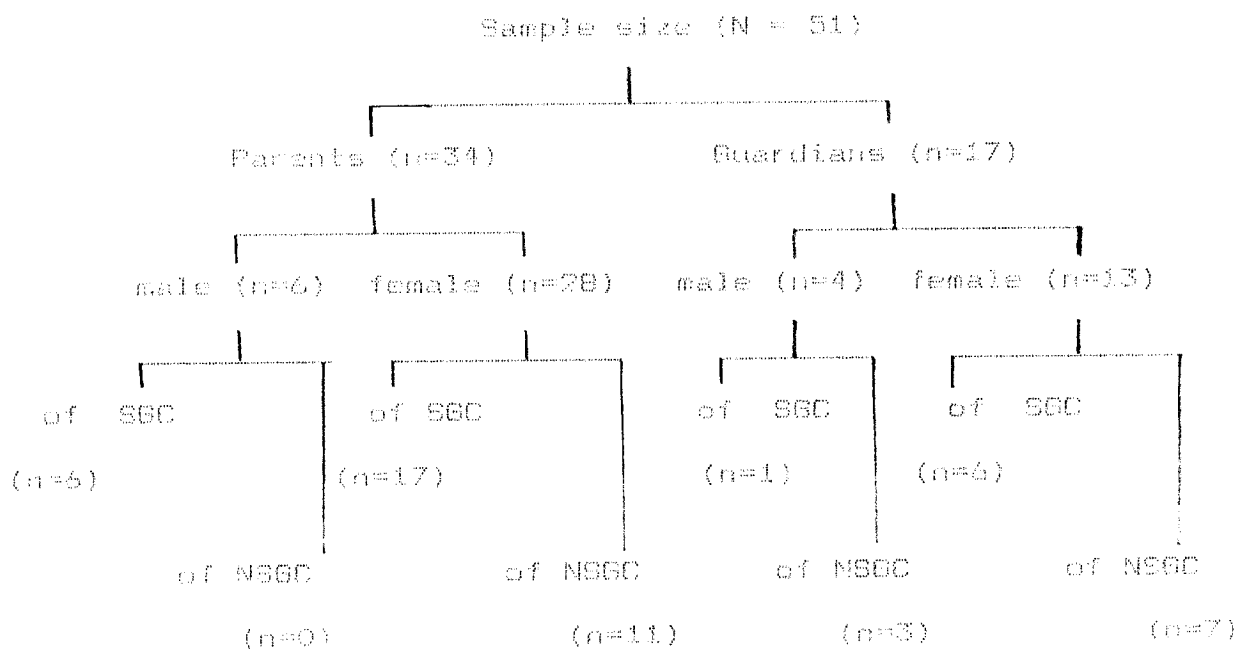
The second category of subjects was composed of 51 parents and guardians whose deaf and blind children were sampled from special schools or units and from compounds and villages. A guardian in this research was defined as uncle or aunt of the deaf or blind child. Guardians were included in the sample for fear of loss of data as some deaf and blind children were kept by their guardians. In this regard, 30 of the parents or guardians had school going children whereas 21 had non-school going children. The sample was mainly composed of mothers (n=41). Fathers or male guardians (n=10) were included in the sample where:

- i. the mother of the child had travelled and was not expected back until after two weeks or later,
- ii. the female parent had stayed with the child for less than three months and
- iii. the mother of the child had been divorced and the child was staying with his or her father or the guardian.

The tendency to have a larger number of mothers in the sample was aimed at eliciting more authentic information in regard to parental attitudes since child care is traditionally usually the responsibility of the mothers.

In the sample, 34 were parents and 17 were guardians. Among the parents, 4 were fathers and 28 were mothers, whereas 4 of the guardians were males and 13 were females. The basic characteristics of the sample are summarised in figure 2 below.

Figure 2: Some features of parents and guardians in relation to their children



- Notes:
- a. All of the 51 parents and guardians in the sample were able bodied.
 - b. SGC = School going children,
NSGC = Non-school going children.

C. Special Teachers:

The special teachers in grades 3 to 7 in special schools or units constituted the third category of subjects. The special teachers were asked to serve as subjects if some of the pupils in their classrooms were sampled as subjects. In the sample, there were thirteen special teachers. Two of the special teachers were females and eleven were males. All of the subjects in the sample were not handicapped except for one male special teacher who was totally blind. Special teachers responded to a scheduled questionnaire which was presented to them.

Instruments

The instruments used included the Children's Attitude Questionnaire, the Parent's Attitude Questionnaire and the special Teacher's Attitude Questionnaire. Each of the questionnaires had a variety of items that included Likert type, true-false, multiple choice and open ended questions (see Appendices A, B and C). It was hoped that the use of a variety of questions would minimise fatigue among the respondents and elicit more authentic information desired for the research.

The three questionnaires were originally developed in English. The Children's and Parent's Attitude Questionnaires were however translated into Ci-Nyanja (a local language) using a process of back translation so as to ensure that all of the items in the two questionnaires retained their meaning after being translated from English into Ci-Nyanja. The translated version of the questionnaires were aimed at ensuring that the children

and some illiterate parents understood and responded to the items on the questionnaires. The Special Teacher's Attitude Questionnaire on the other hand was presented to the special teachers without translation into Ci-Nyanja as all of them could understand English.

In the sub-sections that follow below, the main characteristics measured by each questionnaire, the scoring system, reliability and validity of the questionnaires are discussed.

A. Attitude Questionnaires:

I. The Children's Attitude Questionnaire (CAQ)

The CAQ (see Appendix A), which consists of 64 items measured the following characteristics among deaf and blind children:

1. emphasising abilities rather than disabilities;
2. need for achievement;
3. self esteem;
4. feelings of personal inadequacy;
5. dependency;
6. despair;
7. feelings of rejection;
8. perception of school environment;
9. perception of life opportunities; and
10. lack of interest in schooling.

In relation to hypothesis 4 (see Chapter 1, p.25), the first seven characteristics outlined above indicate the children's attitudes toward themselves, whereas the last three characteristics relate to hypothesis 5 (see Chapter 1, p.27) and were used to elicit the children's attitudes toward special schools.

II. The Parents' Attitude Questionnaire (PAQ)

The PAQ (see Appendix B) contains a total number of 36 items measuring the following characteristics among parents or guardians with deaf and blind children:

1. commitment to the welfare of the child;
2. hope for the child's future;
3. empathy with the child's needs and difficulties;
4. acceptance of the child as a full person;
5. despair;
6. resentment to the child;
7. shame;
8. remorse;
9. rejection of the child; and
10. belief in the efficacy of special schools.

Items 1 to 9 in the above list signify the parents' attitudes toward their children and were used to test hypotheses 1, and 2 (see Chapter 1, pages 24, and 25 respectively).

III. The Special Teachers' Attitude Questionnaire (STAQ)

The STAQ (see Appendix C) has 41 items that measure the following characteristics among special teachers:

1. hope; belief in the potential of the handicapped children;
2. professional commitment;
3. despair;
4. prejudice;
5. knowledge/resourcefulness on child's special needs;
6. belief in the efficacy of special education;
7. interest in special education; and
8. narrow definition of responsibilities.

These characteristics were considered, on the whole, as an indication of special teachers' attitudes toward special education and were used to test hypothesis 3 (see chapter 1, p.25) of this research. Note that the STAQ has a final section which requires special teachers to indicate the performance of pupils in their class tests. This section provided the researcher with information on the overall performance of the pupils taught by each special teacher, and was regarded as an estimate of the dependent measure in testing the hypothesis.

The number of items grouped under each characteristic measured by the questionnaires have been presented in appendices A, B and C.

3. Scoring systems:

Each of the three questionnaires contains four types of questions: Likert type, true-false, multiple choice and open ended questions. The open ended questions were not scored but were included in the questionnaires so as to provide additional information which could help in the discussion of the results.

In all the three questionnaires, Likert type questions were scored on a Likert type five point scale. Whereas positive statements received the highest score of '5' for a Strongly Agree (SA) response and the lowest score of '1' for a Strongly Disagree (SD) response, the scoring of negatively stated items was reversed so that a SA response received a score of '1' and a SD response a score of '5'. The same type of scoring was adopted for true-false items, except that the lowest and highest scores for each item were '0' and '1' respectively.

Multiple choice items were scored on the basis of which alternative response, under each question, had the highest or lowest indication of positive or negative attitude. The alternatives which were positively stated were indicative of positive attitude and received a higher score compared to the alternatives which were negatively stated. Among the multiple choice items, some questions had an alternative designated 'other...'. This alternative was not scored as the respondents were free to give a variety of responses other than those provided on the questionnaires. It was in fact observed that most of the respondents did not present alternative response other than those which were

suggested under each item. The multiple choice items in the CAG had a slightly different scoring system. This was so because the children were asked to respond to each alternative under each item by saying 'Yes' or 'No' to each alternative as applied to their mode of behaviour. Note that such type of multiple choice items were also included in the PQQ. The criterion for scoring such type of items was that an alternative that was positively stated had a score of '1' for a 'Yes' response and a score of '0' for a 'No' response, whereas scoring was reversed for an alternative that was negatively stated. The sum of the scores obtained on each alternative under an item represented the score of the respondent on the item.

C. Reliability and Validity:

The reliability of all the three attitude questionnaires was determined on a sample of subjects drawn for the pilot study. The sample was composed of two male and three female children with hearing or visual handicaps (1 non-school going and 4 school going children), four parents (mothers) of the above mentioned children (3 mothers with school going and 1 mother with non-school going children) and three special teachers drawn from two deaf units in Lusaka. The reliability coefficient of each questionnaire was determined through the odd-even method. The average correlation coefficient obtained on each group of subjects (i.e. children, parents and teachers) indicated the internal consistency of the questionnaire. In this regard, the internal consistency of the CAG was found to be 0.72, that of the

PAQ was 0.42 and that of the STAQ was 0.80. The internal consistency of the PAQ was low as the instrument was recently designed and has not been tested for a period of time.

Face validity was established for each of the three instruments. This was done by presenting the items developed against each characteristic measured by the questionnaire to some authorities who evaluated the items.

Procedure

A. Administration of the questionnaires:

The CAQ was administered to school going children within the special schools, or at their home areas in the case of non-school going children. In both cases, the Ci-Nyanja version of the CAQ was used. Each child was interviewed individually with special teachers serving as interpreters for their deaf and partially deaf pupils, and parents as interpreters for their non-school going deaf and partially deaf children. There was, however, no need for an interpreter in the case of blind and partially blind children as all of them could understand Ci-Nyanja.

In the administration of the CAQ, the researcher started by reading the introductory remarks on the questionnaire and the subsequent instructions (see Appendix A) in each section that the subject was to respond to. The researcher made sure that the subject understood the instructions on how to respond to the questions. In addition, the subject was reminded to choose a

response that represented his or her feelings, expectation, or actions, for each item read to him or her.

After the subject had responded to an item, the researcher recorded the child's response by ticking against the alternative under each item that the child chose. However, in the case of deaf and partially deaf children, the researcher had to rely on the special teacher of the child, who interpreted each item read into sign language (or parent for the child who interpreted the items using gestures) so that the child could understand and respond to the items. The special teacher (or parent) reported the child's response to each item and the researcher recorded the child's response as mentioned earlier.

The PAQ was administered to parents or guardians at their homes. The researcher introduced the topic by reading the introductory remarks on Ci-Nyanja version of the questionnaire. Thereafter, he read the instructions (see Appendix B) under each section and went on to read the items under each section after the subject had understood the instructions. In the case of parents with non-school going children, the administration of the PAQ was followed by an administration of the CAQ to their deaf or blind child. The parent was asked not to intervene when the child was being interviewed except where necessary.

The STAQ was administered to the special teacher after the children sampled from his or her class had responded to the CAQ. Copies of the STAQ were presented to the special teachers whose pupils had been sampled for the research. The special teachers

were told to read the instructions (see Appendix C) on the questionnaire and reminded to indicate the performance of all the pupils in their class on the tests they had sat for in Mathematics and English since the first term of the children's current grade. After the special teachers had responded to the questionnaires, the researcher collected and checked them so as to make sure that all the items were responded to. For the one blind special teacher in the sample, the researcher read the introductory remarks and the instructions under each section of the questionnaire for him and recorded his responses to the items on the questionnaire according to the instructions in each section.

B. Data Analyses:

The data generated through the attitude questionnaires was ordinal in nature since the questionnaires use ordinal scales of measurement (i.e. Likert type 5 point scale, true-false items and multiple choice items scored on an ordinal scale). In addition, the pupils' performance scores were derived on the basis of special teacher's ratings of the children on special teachers' made tests. In this regard, therefore, non-parametric statistics were used to test the hypotheses in this study.

CHAPTER 3

RESULTS

INTRODUCTION

This chapter starts with a presentation of the results on the comparison between parents of school going children and parents of non-school going children in regard to their attitudes toward the deaf and blind children. The findings on the relationship between parental attitudes and the children's performance in special schools on the one hand, and between special teachers' attitudes toward Special Education and the performance of the children in special schools on the other hand, are reported. Finally, the findings on the comparison between school going children and non-school going children in regard to their attitudes toward themselves and toward special schools are also reported.

A. Parental Attitudes toward the Children

In order to test the hypothesis that 'Parents of school going children have more favourable attitudes toward the children than parents of non-school going children', the Mann-Whitney U test was used. The significance of the observed values of 'U' were determined by computing values of 'Z' since n was greater than 20. (see table 2 below).

Table 2: A comparative analysis of Parental Attitudes toward the children:

Characteristics of parental attitudes	X1	X2	value of Z	p
1. Commitment to child's welfare	74.2	55.7	3.7	<.05
2. Resentment to the child	67.6	64.6	0.6	>.05
3. Hope for the child's future	59.2	56.3	2.8	<.05
4. Despair	55.3	35.4	2.7	<.05
5. Empathy with child's needs and difficulties	72.4	60.3	3.6	<.05
6. Shame	70.9	66.0	0.9	>.05
7. Acceptance of the child as a full person	75.6	53.2	3.3	<.05
8. Rejection	83.3	60.5	3.7	<.05

Note: X1 = Mean score for parents with school going children (n1=30).

X2 = Mean score for parents with non-school going children (n2=21).

Table 2 shows that parents of school going children have more commitment toward their children's welfare than parents of non-school going children. The parents of school going children also tend to have relatively more hope for their children, express less despair and have significantly more empathy with their children's needs and difficulties than parents of non-school going children ($P < .05$). The former group of parents have more acceptance and less rejection toward their deaf and blind children compared to the latter ($P < .05$). But the two groups of

parents do not differ significantly in regard to their resentment and feelings of shame toward their deaf and blind children.

On the whole, the results support the hypothesis under consideration in this section, that parents of school going children have more favourable attitudes toward the children than parents of non-school going children.

The parents were asked several open ended questions aimed at investigating why they enrolled or did not enrol their deaf and blind children in school, the problems they face with their children and were also asked to comment on their children. The obtained results (see Appendix E, tables Ia and Ib) were not statistically tested but it was hoped would aid in discussing the present findings.

B. Parental attitudes and the children's Performance

The Spearman's Rank Order Correlation Coefficient was used to test the hypothesis that 'there is a positive correlation between parental attitudes toward deaf and blind children and the performance of the children in special schools.'

The average percentage score of a child in Mathematics and English tests administered by the teachers in special schools represented the child's performance. In this regard, attitudinal scores for the parents with school going children (n=30) were correlated with their children's performance (see table 3).

Table 3: Rank Order Correlation Coefficients obtained between parental Attitudes and the children's performance: (n=50)

Characteristics of Parental Attitudes	Value of r	P
1. Commitment to child's welfare	0.045	>.05
2. Resentment to the Child	0.163	>.05
3. Hope for the child's future	0.313	<.05
4. Despair	0.238	>.05
5. Empathy with the Child's needs and difficulties	0.350	<.05
6. Shame	-0.192	>.05
7. Acceptance of the child as a full person	0.047	>.05
8. Rejection	0.026	>.05

The Spearman's Rank Order Correlation Coefficients computed between parental attitudes and the children's performance (Table 3) show that parental hope for the child's future, and empathy with the child's needs and difficulties are positively and significantly correlated with the children's performance ($P < .05$), the direction of the hypothesis under consideration. But the fact that six of the eight characteristics of parental attitudes did not correlate significantly with the children's performance lead to the conclusion that on the whole, the results did not support the hypothesis under consideration.

C. Special Teacher's attitudes and children's performance

The hypothesis that 'there is a positive correlation between special teachers' attitudes toward special education and the performance of deaf and blind children in special schools' was tested using the Spearman's Rank Order Correlation Coefficient. The obtained results are as shown in table 4.

Table 4: Rank Order Correlation Coefficients obtained between special teachers' attitudes and the children's performances:

Special Teacher's Attitudes	Value of r	P
1. Hope belief in the potential of the children.	0.041	>.05
2. Professional Commitment.	0.071	>.05
3. Knowledge/Resourcefulness on child's needs.	0.363	>.05
4. Prejudice	0.126	>.05
5. Narrow definition of responsibilities.	0.356	>.05
6. Interest in special education.	0.510	<.05
7. Belief in the efficacy of special education.	0.236	>.05

Table 4 shows that special teachers' 'interest in special education' is positively and significantly correlated with the children's performance. But on the whole, the results indicate that there is no significant correlation between special teachers' attitudes and the performance of the children in special schools.

This assertion is supported by the fact that only one characteristic (i.e. Interest in special education) of the seven characteristics of special teachers' attitudes considered in the study correlated positively and significantly with the children's performance. The results obtained did not support the hypothesis under consideration in this study.

D. Children's attitudes toward themselves

The Mann-Whitney U test was used to test the hypothesis that 'School going deaf and blind children between 7 and 18 years of age have more favourable attitudes toward themselves than non school going children of the same age range'. Since n_2 was greater than 20, the significance of the observed values of U were determined by computing 'Z' values (see table 5).

Table 3: A comparison between school going and non-school going children in regard to attitudes toward themselves:

Characteristics of Children's attitudes	X1	X2	Values	P
1. Emphasising abilities rather than disabilities	65.8	68.1	-0.5	>.05
2. Self esteem.	64.7	49.5	2.9	<.05
3. Need for achievement.	55.8	37.3	3.6	<.05
4. Feelings of personal inadequacy.	63.8	54.7	2.0	<.05
5. Dependency.	44.0	31.4	1.8	<.05
6. Despair.	71.2	63.6	2.7	<.05
7. Feelings of rejection.	71.7	39.5	3.7	<.05

Note: X1 = Mean Score for School Going Children (SGC) - N1=30

X2 = Mean Score for Non-School Going Children (nSGC) - n2=31

The results show that school going children (SGC) have significantly more favourable attitudes toward themselves than non-school going children. The School going children have relatively high self esteem ($P<.05$), high need for achievement ($P<.05$), less feelings of personal inadequacy ($P<.05$) low dependence ($P<.05$), low despair ($P<.05$) and less feelings of rejection ($P<.05$) compared to the non school going children. But the two groups of children do not differ significantly in regard to emphasizing their abilities rather than their disabilities. On the whole, the results supported the hypothesis under consideration in this study that school going deaf and blind children

between 9 and 18 years of age have more favourable attitudes toward themselves than non-school going children of the same age range.

E. Children's attitude toward Special Schools

The Mann Whitney U test was also used to test the hypothesis that 'School going deaf and blind children between 9 and 18 years of age have more favourable attitudes toward special schools than non-school going children of the same age range'. The observed values of 'U' were determined by computing the values of 'Z' since n_2 was greater than 20 (see table 6).

Table 6: A comparison between school going and non-school going children in regard to their attitudes toward special schools:

Children's attitudes	X1	X2	Value of Z	P
1. Perception of school environment.	72.5	37.7	4.9	<.05
2. Interest in schooling.	75.8	57.6	3.4	<.05
3. Perception of life opportunities.	75.0	49.0	4.2	<.05

Notes: X1 = Mean score for school going children (SSG) - n=30
 X2=Mean score for non school going children (NSGC)-n=21

Table 6 shows that school going children tend to have significantly more favourable perception of school environment ($P<.05$), and have more interest in schooling ($P<.05$) than non-school going children. The school going children also have relatively more favourable perception of life opportunities

compared to non-school going children. The results confirm the hypothesis that school going children have more favourable attitudes toward special schools than non-school going children.

SUMMARY OF RESULTS

According to the results obtained in this study the following hypotheses were confirmed:

1. 'Parents of school going children have more favourable attitudes toward the children than parents of non-school going children'.
2. 'School going deaf and blind children between 9 and 18 years of age have more favourable attitudes toward themselves than non-school going children of the same age range'.
3. 'School going deaf and blind children between 9 and 18 years of age have more favourable attitudes toward special schools than non-school going children of the same age range'.

The hypotheses which were not confirmed are as follows:

1. 'There is a positive correlation between parental attitudes toward deaf and blind children and the performance of the children in special schools.'

2. 'There is a positive correlation between special teachers' attitudes toward special education and the performance of deaf and blind children in special schools'.

CHAPTER 4

DISCUSSION

The main concern of the present research was to uncover parental attitudes toward their deaf and blind children and to investigate whether parental attitudes influence the children's enrolment and performance in special schools. The study also investigated the relationship between special teachers' attitudes toward special education and the children's performance in the schools. The children's self perception and their attitudes toward special schools were also investigated. In this section, the results are analysed and interpreted in relation with available literature and implications of the findings are presented. The problems encountered in the present research are outlined and directions for future research suggested. Finally, the conclusions based on the research findings are presented.

1. Parental attitudes toward the children

The results obtained on a comparison between parents of school going children and parents of non-school going children suggest that the former group of parents have significantly more favourable attitudes toward their children than the latter. Parents of school going children have significantly more commitment toward their children's welfare, more hope for their children's future, more empathy with their children's needs and difficulties and more acceptance of their children. They also tend to have relatively less despair and less rejection toward

their children) compared to parents who have not enrolled their children in school. But the two groups of parents do not differ significantly in regard to resentment and feelings of shame towards their children (Table 2). This could be due to the fact that in the African tradition guardians assume the role of parents. Guardians are care takers and are expected to have responsibilities and emotions similar to those of parents and we do not expect significant difference between the two groups. The results on the whole supported the hypothesis that parents of school going children have more favourable attitudes toward their children than parents of non-school going children.

The obtained results seem to suggest that there is a considerable need for parents of non-school going children to change their attitudes toward their children. To the extent that parents with school going children manifest more favourable attitudes toward their children than parents of non-school going children, there is a possibility that the latter group of parents may develop more favourable attitudes toward their children when they enrol them in school. This is necessary for the parents in order to help create a favourable environment for their children's cognitive development.

One of the ways through which parents who have not enrolled their children in school may change their unfavourable attitudes toward their children is by organising regular talks between the parents and authorities such as health workers, special teachers,

psychologists, psychiatrists and social workers (Marshall, 1982). The authorities may help the parents by educating them to understand their children's handicaps and by so doing to develop more favourable attitudes toward their children. The parents may develop more favourable attitudes toward their children if they are persuaded to be in frequent contact with other people who have handicapped children (Marshall, 1982). In this way, the parents may realise that the 'problem' of having a handicapped child is not unique to their family and may eventually learn how to cope with their children's handicaps. Finally, as shown by the present findings, the parents may develop more favourable attitudes toward their children if they enrol their children in special schools. However, the effectiveness of this approach as a means of attitude change can only be realised among parents who are willing to enrol their children in the schools. The parents can also be persuaded to enrol their children in schools, to help change their attitude.

2. Parental attitudes and the children's performance

The results obtained on the correlation between parental attitudes toward their children and the children's performance did not support the hypothesis that 'there is a positive correlation between parental attitudes toward deaf and blind children and the performance of the children in special schools. According to the results (Table 3), there is no significant correlation between six of the eight parental variables considered and the children's performance. But two of the

parental variables correlated positively and significantly with the children's performance. The children's performance correlated significantly with parental 'hope for the children's future' ($r=0.313$) and parental 'empathy with the children's needs and difficulties' ($r=0.350$). Despite the latter significant correlations obtained ($P<0.05$) the hypothesis under consideration was not supported, since six of the eight parental variables yielded non-significant correlations.

The significant positive correlations obtained between parental hope for their children's future and the children's performance on the one hand, and between parental empathy with their children's needs and difficulties and the children's performance on the other hand (Table 3) suggest that such type of parental attitudes may influence the performance of deaf and blind children. It is possible that parents who have more hope for their children and understand their children's needs and difficulties would enhance their children's performance in school by providing the necessary support required for the children to excel. Nevertheless, the parents' attitudes singled out above in relation to the children's performance cannot be generalized with confidence due to the high proportion of parental variables which yielded non significant correlations.

The non-significant correlation obtained between parental attitudes and the children's performance could be due to the large number of children sampled from special boarding schools ($n=28$) where they are not in frequent contact with their guard-

lan or parents, thereby rendering parental attitudes to have a non-significant effect on children's performance. This explanation can however be tested by future research to ascertain the relationship between parental attitudes and children's performance, probably using subjects drawn from day schools. The second explanation on the non-significant correlation obtained between parental attitudes and the children's performance could be that performance is influenced by intelligence, degree of handicap and the age at onset of the handicap (Kirk, 1962). These factors were not controlled in the present study due to time constraints, and lack of ready made intelligence tests for deaf and blind children. According to Kirk (1962), intelligence influences a child's ability to learn and generalise what has been learned. The degree of handicap restricts the ability to acquire speech and language among the hearing impaired, or impose restrictions in perception, mobility and cognition among the visually impaired children. These restrictions affect the children's intellectual development. The age at onset of the handicap, on the other hand influences the acquisition of language and speech among the hearing impaired. Children with congenital hearing handicaps experience relatively more retarded progress in language and speech compared to those who develop the handicaps later in life. The slow progress in language and speech acquisition restrict the children's ability to communicate and this in turn affects their intellectual functioning. The effect of age at onset of blindness is not well known (Kirk, 1962). This could therefore be a challenging topic for future research. The third explanation

could be that the PAQ was not adequately refined to capture the parents' attitudes as envisaged by the relatively low internal consistency of the instrument (see Chapter 2). Therefore there is considerable need for refining the instrument to increase its reliability by way of future research if the instrument is to adequately elicit parental attitudes.

3. Special Teachers' attitudes and the Children's performance

According to the present research findings, special teacher's attitudes toward special education is not significantly correlated with the children's performance (Table 4). This assertion is based on the observation that six of the seven special teacher variables considered yielded non significant correlations with the children's performance, and only one of the special teacher variables (i.e. 'interest in special education') correlated positively and significantly with the children's performance ($r = 0.510, P < 0.05$).

The significant positive correlation obtained between special teachers' interest in special education and children's performance suggest that special teachers who have more interest in special education are more likely to enhance better performance among deaf and blind children in special schools. In this respect, special teachers are expected to develop more interest in special education in order to enhance the children's performance. The children also need to work hard in school as this may help to

maintain favourable special teachers' attitudes toward special education.

On the whole however the results obtained on the correlation between special teachers' attitudes toward special education and the children's performance did not support the hypothesis that 'there is a positive correlation between special teachers' attitudes toward special education and the performance of deaf and blind children in special schools'. There are several possible explanations which can be put forward for the observed non significant correlations. Firstly, the sample size of special teachers who participated in the research ($n=13$) was rather small. It is possible that an increase in the sample size could have yielded significant correlations between the variables under consideration. Secondly, as Kirk (1962), pointed out, the educational development of handicapped children is under the influence of factors such as intelligence, degree of physical or mental handicap and the age at onset of the handicap. These factors were not controlled for in the present study due to time constraints and lack of ready made intelligence tests which could easily be administered to deaf and blind children. Future researchers on the subject should therefore control the extraneous variables in order to ascertain the relationship between special teachers' attitudes and children's performance. It is also possible that the non significant correlations obtained between special teachers' attitudes and the children's performance could be that the STAG was not refined enough to capture the special teachers' attitudes adequately. This could be due to

time constraints experienced by the writer which could not allow for testing the instrument over a long period of time to increase its reliability and validity. The researcher would therefore appreciate efforts by way of future research directed at improving the research instrument.

4. Attitudes of deaf and blind children toward themselves

The results obtained on the comparison between school going and non-school going deaf and blind children in regard to the children's attitudes toward themselves, supported the hypothesis that 'school going deaf and blind children between 9 and 18 years of age have more favourable attitudes toward themselves than non-school going children of the same age range.' School going children, as shown in table 5, have significantly high self esteem, high need for achievement and have relatively less despair and less feelings of rejection ($P < .01$); they also have less feelings of personal inadequacy and are relatively less dependent compared to non-school going children ($P < .05$). However, there is no significant difference between the two groups of children in regard to emphasis on their abilities rather than disabilities.

These findings have a considerable implication on the role that special schools play in influencing the children's self perception and their ability to adjust to their handicaps. In regard to the results obtained (Table 5), deaf and blind children

in special schools can be considered to have adjusted more favourably to their handicaps than children who are not in school since they showed relatively more favourable attitudes toward themselves. The more favourable self perception observed among school going children can be attributed to the education offered to the children in special schools. In this regard, therefore, the results seem to reflect the realities of one of the major objectives of special schools which is to ensure that relevant educational programs take effect so that handicapped children can learn to cope with the environment and improve their abilities and skills (Von Osdol et al., 1982).

The present findings on attitudes of deaf and blind children toward themselves partly contradict the position of the stereotyped view (Scott, 1962), that blind people are not able to self actualise and are mainly characterised by helplessness, dependency, sadness and docility. Whereas such type of behaviour patterns could indeed be characteristic of blind children who are not in special schools since they tend to have unfavourable attitudes toward themselves, blind children enrolled in special schools on the other hand are more likely to self actualise and are less likely to exhibit negative behaviour patterns. The high self esteem and high need for achievement (Table 5) among school going children is an indication that deaf and blind children may self actualise as long as they are afforded an opportunity of schooling. In this respect, the writer concurs with the psychological view (Scott, 1962) which holds that the behaviour patterns of the blind may vary as long as the individuals adjust to

their handicap and learn skills and attitudes which can compensate for their inability to see. It is possible that school going children's positive self perception might be carried over into adulthood and in this way, special schools may enhance favourable self perception even in adulthood. However, this assertion can be confirmed or disconfirmed by future research.

5. Attitudes of deaf and blind children toward special schools

Deaf and blind children in special schools have significantly more favourable attitudes toward special schools compared to the children who are not in school. According to the results obtained (Table 6) school going children have significantly high mean scores in regard to their perception of the school environment, interest in schooling and perception of life opportunities compared to non-school going children ($P < .05$). These observations are in support of the hypothesis that 'school going deaf and blind children between 9 and 18 years of age have more favourable attitudes toward special schools than non-school going children of the same age range.'

The present findings on the attitudes of deaf and blind children toward special schools are quite similar to Werner et al.,'s (1973) observations on the attitudes of educable mentally retarded children toward special school placement. Whereas Werner et al., observed that educable mentally retarded children have favourable attitudes toward special school placement, the present study has shown that deaf and blind children in special

schools have favourable attitudes toward the schools. It is therefore quite possible that non-school going deaf and blind children may develop positive attitudes toward special schools if their parents enrol them in the schools.

6. Some distinct problems of parents of deaf and blind children

An additional issue that is worth considering for discussion relates to the problems which parents face with their deaf and blind children. The most typical problems among parents with school going children include the inability to support their children's educational and health needs, and problems in communicating with their deaf and partially deaf children. Similarly, parents with non-school going children seem to have financial problems such that they are not able to meet their children's needs (see Appendix, Tables Ia and Ib).

The problems identified among the parents draw our attention to the need for finding ways of minimising their problems so that educational needs of deaf and blind children can be met fully. The financial problem which restricts some parents from enrolling their children in special school or to support their children adequately when enrolled in special schools may be alleviated through the formation of a financial relief program aimed at supporting the education of deaf and blind children at least in the early grades. Such an approach would motivate parents to enrol their children in special schools and possibly enable their

to develop more favourable attitudes toward their handicapped children. On the other hand, communication problems identified among parents with school going deaf and partially deaf children could be solved by organising regular meetings in special schools aimed at teaching the parents sign language and other forms of manual communication used by their children in special schools. This approach is more likely to enhance the education of the children since parents also have a role to play in educating their children.

7. Problems encountered and directions for future research

The problems which were encountered in this research and could impose some restrictions in the generalisation of the present findings are outlined below and suggestions for future research are presented.

- a) The first problem relates to the sampling procedure used to identify the school going and non-schooling going children. The purposive sampling procedure which was used in this respect has some weaknesses in that it is mainly based on subjective considerations of the researcher. The fact that only those children whose parents were resident within the radius of 200 km from town (see Chapter 2, p.30) could have created biases in the sample. In this regard therefore, future research of this nature should employ random sampling procedures in order to ensure that more representative samples of the children are collected.
- b) The identification of non-school going deaf and blind

children was also a grave problem in the research. This problem was aggravated by the poor financial condition under which the research was conducted. Since the deaf and blind are a much rare population it is essential that adequate funds be made available for research of this nature to succeed.

- c) The sample of special teachers (n=13) used in the present study was quite small and this tends to impose restrictions in generalising the results since such a sample is not likely to be a representative sample. Future research should therefore increase the sample of special teachers substantially so that the observations can be based on more representative samples and increase the chances of making concrete generalisations of the findings.
- d) The fact that non-school going deaf children and their parents do not know sign language imposed a restriction in the use of an interpreter competent in sign language to translate the items on the CAD for the children to understand. For this reason, the researcher had to rely on the parents who often used gestures to translate the items. This imposed a technical problem in that since gestures are a rudimentary form of communication the intended meaning of some of the items could have been misinterpreted or misunderstood by the children. Therefore, future research of this kind should ensure clarity in the items, to minimise such problems.

- c) Finally, although the research instruments used (i.e. P40, C40 and S140) showed considerable amount of internal consistency, there is need for future research to establish the reliability of the questionnaires through the test-retest method which was not possible in this study due to time constraints. The writer would appreciate any effort by way of future research directed at improving the research instruments used in the present study.

8. Recommendations

In regard to the findings of the present research, the following recommendations are made in a bid to enhance the education of deaf and blind children.

- a) There is an urgent need for authorities (e.g. community health workers, special teachers, social workers and psychologists) to co-operate in identifying and locating parents with non-school going deaf and blind children so as to inform them of the importance and advantages of educating their children in special schools. Such co-operative efforts are however more likely to succeed if they are mediated by the Zambia council for the handicapped.
- b) Parents of non-school going children need to be educated on how to adjust to their children's handicaps and develop more favourable attitudes toward the children.

In order to achieve such goals, authorities may consider the

following:

- i) encouraging the formation of interest groups among parents with school going children and those with non-school going children, and
 - ii) Organising regular visits to special schools so as to enable the parents to familiarise themselves with the educational developments occurring in the schools.
- c) The establishment of a financial relief program is a necessary condition which is more likely to motivate parents to enrol their deaf and blind children in special schools. Such a program could be established in conjunction with local or foreign agencies interested in the education of handicapped children. When such a program is in operation, at least in the lower primary grades (e.g. Grade 1 to 4), the parents would expect to provide minimum support to their children once enrolled in the schools. Hence most of them may send their children to special schools. However, once established, such a program should be publicised so that most of the parents with deaf and blind children are aware of its existence.
- d) Finally, there is a need for special teachers to embark on a regular program aimed at teaching manual communication skills such as sign language to parents with school going deaf and partially deaf children so as to ease the problem of communication identified among the parents and their children. As noted earlier, such a program might be

of great benefit to the children since parents have a big role to play in their education.

CONCLUSION

This study was designed to uncover parental and special teachers' attitudes, and investigating whether their attitudes influence the education of deaf and blind children in special schools. The study also investigated the children's self perception and their attitudes toward special schools.

According to the present findings parents with school going children have more favourable attitudes toward their deaf and blind children than parents with non-school going children. The present results imply that there is considerable need for parents of non-school going children to change their attitudes toward their children and enrol them in school in order to enhance their intellectual development. The non-significant correlation obtained between parental attitudes and the children's performance on the one hand and between special teachers' attitudes and the children's performance on the other hand suggest that there is no relationship between children's performance and parental attitudes nor special teachers' attitudes. These findings did not support the present study and have been explained in terms of lack of control of extraneous variables, such as age at onset of the handicap, degree of the handicap and intelligence, among other factors. Another explanation of the non-significant correlations obtained is that the research instruments used (PAG and STAG) have low internal consistency, and did not work as

replicated, as they were designed recently and have not been tested for a long period. In this regard, the present writer would appreciate any effort by way of future research directed at improving the research instruments. The present findings also showed that deaf and blind children in special schools have more favourable attitudes toward themselves and toward special schools than non-school going children. These findings suggest that special schools have positive effects on the children's self-perception. It is therefore in this regard that recommendations are made over the enrolment of the children in the schools. Special schools may help the children to adjust to their handicaps and to enhance their intellectual development.

The unfavourable attitudes among parents with non-school going children in addition to financial problems are some of the factors which could increase the proportion of deaf and blind children who are not enrolled in school. This trend has to be contained in order to enhance the children's intellectual development so that they may contribute effectively to the development of their society. Although there are some limitations to the generalisation of the present findings, the obtained results have considerable implications for parents with non-school going children to change their unfavourable attitudes toward their deaf and blind children. It is upon these results and indeed other related findings that recommendations aimed at enhancing the education of deaf and blind children are made in this study.

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