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SCHOOL OF GRADUATE STUDIES

CLAIMED CAUSAL FACTORS AND THE ASSOCIATED SOCIETAL ATTITUDE TOWARDS MENTAL RETARDATION

ABDU EBRAHIM MOHAMMED

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A THESIS PRESENTED TO THE SCHOOL OF GRADUATE STUDIES
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ABDU EBRAHIM MOHAMMED
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Abstract

This study examines some claimed causal factors of mental retardation, the associated societal attitude towards mental retardation, and its impact on the support systems for persons with mental retardation in the City Administration of Addis Ababa.

The study includes both quantitative and qualitative research designs. A Self-Report Questionnaire was prepared and administered for 142 participants in the three strata (50 parents, 42 special needs teachers, and 50 regular elementary school teachers) for the quantitative interpretation of the data. The data was analyzed through the application of both descriptive (percentage, mean, and standard deviation) and inferential (ANOVA, Chi-square ($\chi 2$), Standardized Residuals (R) and Cramer's Phi (Ø)) statistics.

The specific objective of the qualitative study was to understand the quality, quantity, current situation, and future prospects of the support systems for persons with mental retardation. It was also helpful to understand some claimed causal factors and supplements other findings. Thus, in the qualitative method, individual interview was conducted with 22 participants (7 leaders of special needs unit, 1 leader of ENA/MRCY, 5 school directors, 6 special needs teachers, and 3 government officials) while only eight (4 special needs teachers, and 4 parents) participants were included in the focus group discussions. All the support providing organizations, schools, centers, and units were also visited by the researcher. The main points gathered through this method were explained and discussed briefly.

The researcher found that 80 percent of the total participants were socially interactive (65 percent highly and 15 percent occasionally socially interactive), while the rest 20 percent of them were non-socially interactive individuals with persons with mental retardation. Of all the participants all special needs teachers, 90 percent of parents, and 54 percent of regular school teachers have social interaction with these people. More interesting was that significant differences were observed both in the type and frequency of social interaction among the total participants based on their relationship (parent, special needs teachers, and regular school teacher) and religious affiliation.

The causal factors for mental retardation found to be unknown for most parents of children with mental retardation. Based on the ranking of all the three groups of participants the organic/physiological related causes, accident, and cultural-familial factors were chosen in that respective order. The causal factors related to God, supernatural beliefs and evil spirits got the last priority by each of the three groups and their cumulative participation.

All the three groups of participants have shown positive general attitude towards mental retardation and persons with mental retardation. There were no significant group differences on the general and the four specific dimensions of attitude based on their type of relationship and types and levels of social interaction. Although they have shown good acceptance of the rights of these community and understands better the mediation of mental retardation, they have shown general negative belief and social rejection. The effects of all the four biographic and socioeconomic variables (sex, age, religion, and educational level) both on the general and specific dimensions of the participants' attitude were insignificant.

The current situation of the support systems for children with mental retardation found to be less organized, poor, and limited. The rate of school attendance, catchments, and maintenance on the student population was very low. Higher rate of absence, repetition and dropouts were recorded in the different special needs units. Lack of appropriate school facilities and materials, trained human power, budget, awareness and orientation were also the major setbacks on the developments of the support systems. More worst was that the limited and unevenly distributed support systems increases the burdens of family members of children with mental retardation and facilitate the absence, repetition and dropout rates among these population.

Thus, social integration was the prior recommendation. It should be practiced through awareness and advocacy programs through media. Opening of small centers in every small city administration stratum (kebele, for example) should be implemented. This will lead to the envisioned social integration, eventually of inclusion.

CHAPTER ONE

1. INTRODUCTION

1.1 Background of the Study

We are living in a period of science and technology. A period on which things change early and make information a power on one hand, not only to live in comfort but also to survive. In such a fast bargain having an attribute (or a state) of hard of thinking (i.e., mental retardation) might lead to be abused by others. This is because the problem at hand never considered as a deviation like other impairments or a mercy from God. For this reason people might consider mental retardation as a punishment from God for somebody else's sins in the family

This seemed to be the knowledge base for societal attitude formation towards persons with mental retardation. But, this and similar thoughts in our society seemed to be a result of comparisons of two unique personalities—the mentally retarded on the one hand and the non-retarded on the other.

People consider persons with mental retardation as unfit and who cannot benefit from the general community. This attitude could never be formed in a vacuum and never be a panacea nor a placebo in terms of effect. More amazingly, it becomes a ground for what actions to be done in the future. It has direct and indirect effects on every action taken to understand the problem, to handle the child with the problem, and to find out a treatment or an appropriate training.

As experiences show, the hardships in handling a child with mental retardation might start within the family. The individuals with delayed conceptual development and defective speech have little interaction within the family and with other persons. If the severity

increases the child's physical and motor development also becomes a problem. Such an individual may fail to meet the standards of personal independence and social responsibility expected for his/her age and culture group. Due to social and emotional immaturity, a child with mental retardation may exhibit socially inappropriate behaviors, antisocial behaviors and odd mannerisms. Moreover, the already difficult tasks of meeting daily responsibilities become more frustrating with out appropriate cognitive and motor functioning.

These problems may lead others, even the family members; to reject the child with mental retardation. If the child is mildly retarded, he/she starts living in a new and complicated psychological situation and tends to show lack of intra-familial and interpersonal relationship. He/she feels internally frustrated as he/she cannot possibly interact with others, reach the levels of 'normal' people in his/her attainments, achievements, or even in his/her general behavior.

In developing countries, like Ethiopia, the overall system seemed to be working in favor of the so-called normal individuals, which systematically marginalize and stigmatize the other group of persons with disabilities. To take an example, in our country the educational provision for persons with disabilities, even in the most recent years, is very limited (Adugna 1991). This fact holds true even after the issuance of the 1994 Educational and Training Policy by FDRE's Ministry of Education.

One National Survey that was run by special needs department of MOE in the year 1999/ 2000 revealed that from the total 988,853 persons with disability (CSA 1999) only 3,787 of them (Tilahun 1999/ 2000) have access to education. Specifically, only 481 children with mental retardation could learn in two special day schools and twenty-nine

special classes through out the Country (Ibid). There was also a two-phase survey in the situations of children with mental retardation in the City Administration of Addis Ababa. In this survey129 (76.3%) and 386 (68.3 %) of the participants did not attend any kind of formal education, respectively (SOOM, 1999:9).

It is also necessary to note that educational access by itself does not guarantee success in any educational program. Ministry of Education (MOE) did not prepare curriculum that intends to meet the educational needs of children with mental retardation. Even it did not make the necessary environmental modifications and classroom arrangements to integrate them in ordinary classes. Thus, almost all of the above mentioned centers do not have any organized curriculum, syllabus or module. This being so, all activities of these centers are dependent on the knowledge, interest, and creative abilities of the teachers working there. This by itself is dependent on the quality of teachers' training programs. Teachers' training programs also seemed to be working in favor of 'normal' students, which systematically marginalize the other group of pupils with disabilities.

There is a new trend that intends to give three courses (nine credit hours) on human disability for the 'would be' teachers and school administrators in some teachers' training institutions, colleges, and universities of the country (MOE 2003). If it is realized in all teachers' training institutes the prospect will be brighter enough in integrating children with mental retardation in an ordinary classes.

Even the distribution of this less planned and organized service is very uneven and centered in Addis Ababa and other towns while statistics show a greater number of persons

with disabilities in rural areas of the country (CSA 1999). This is nothing but only a sign of how far we should go in the future.

It seemed to be fair to conclude that the existing attitude and the associated practices with in the family, working governmental systems, and society at large determined the type of services and support systems given to persons with mental retardation. It disturbed their adjustment and endurance/stamina in life. To sum up, even in developed countries the prospects for students with disabilities in general and students with mental retardation in particular have never been brighter (Repp and Coutinho 2002).

Having this background, this study tried to investigate some claimed causal factors and the associated societal attitudes toward mental retardation and persons with mental retardation among the parents of children with mental retardation, special needs teachers for children with mental retardation and other teachers in the ordinary elementary schools.

This study has five chapters. The first chapter shows the direction of the whole study; the second chapter analyses research papers, journalistic accounts, documents, books, etc. on some claimed causal factors and the associated societal attitudes toward persons with mental retardation; the third chapter explains the methods used; the fourth chapter is the very essential part that clearly depicts the analyses of the research data; and gives brief discussions; and the fifth chapter gives brief summary, conclusion and recommendation based on the results of the study. Little researches have been conducted on the issue and this study tried to humbly fill that gap.

1.2 Research Questions

This study will try to find answers for the following questions.

1. Is there an agreement among the designated participants in societal claimed causal factors for mental retardation?
2. What are the attitudes of parents of children with mental retardation, special needs teachers' who are currently teaching children with mental retardation, and other ordinary classroom teachers' towards mental retardation looks like?
3. Is there an attitudinal difference between parents of children with mental retardation, special needs teachers who are currently teaching children with mental retardation, and other ordinary classroom teachers?
4. What are the different variables that affect individuals' attitude toward mental retardation?
5. What are the current situations of support systems for children with mental retardation look like? and
6. What are the appropriate intervention mechanisms that could change the attitudes of parents, teachers, and other segments of the society toward mental retardation?

1.3 Objective of the Study

-General Objective

The main objective of this study is to identify and discuss some claimed causal factors of mental retardation and the associated societal attitude towards mental retardation and its impact on the support systems for these children in the city Administration of Addis Ababa.

-Specific Objectives

This study intends to identify and discuss

1. whether there is a clear agreement among the designated participants in societal claimed causal factors for mental retardation,
2. The attitudes of parents of children with mental retardation, special needs teachers' who are currently teaching children with mental retardation, and other ordinary classroom teachers' toward mental retardation,
3. The attitudinal differences between parents of children with mental retardation, special needs teachers who are currently teaching children with mental retardation, and other ordinary classroom teachers toward mental retardation,
4. the different variables that affect individuals' attitude toward mental retardation,
5. The current situations of supporting systems for children with mental retardation, and
6. To propose appropriate intervention mechanisms in changing the attitudes of parents, teachers and other individuals toward mental retardation.

1.4 Significance of the Study

Individuals' perception in determining the causal factors for mental retardation plays a greater role on their attitude formation. The attitude developed by individuals at different time periods for different reasons have had a great impact in understanding, handling and taking appropriate measures on the problem they faced. Thus timely and clear understanding on the causal factors of mental retardation might be helpful in understanding

the problem, handling the individual in the problem, and taking correct and early measures for the future positive development of the child.

Attitude might differ across the kinds of relationship, the different religions, education, income, sex, age groups and other biographical; and socioeconomic variables. Thus, experience shows that attitude formation is highly dependent on the kind of interaction individuals have had. Having this ground, scholars have reached at a consensus that *it is a society/community that is more disabling than the impairment it self.* Thus, the following are among the main familial, social and psycho-educational values of this study:

a. The finding will hopefully assist parents, teachers, and other members of the society in understanding some of the claimed causal factors, the extent of interaction and other dependent variables, the associated attitude towards children with mental retardation and its impact on the supporting system for these children.

b. It will provide basic information for teachers, counselors, social workers, and other professionals who work directly and indirectly with children with mental retardation , and

c. Finally, it will initiate and serve as a basis for extensive future studies on these less touched but highly important issues in the future.

1.5 Delimitation of the study

This study is undertaken in the City Administration of Addis Ababa. The study encompasses all parents of children with mental retardation, special needs teachers for children with mental retardation who are currently teaching children with mental retardation, and teachers of elementary schools with in the society who have little or no

experience with children with mental retardation in the City Administration of Addis Ababa.

It is simply because of time and financial constraints and because of accessibility of the cases that only the sole representatives of the more socially attached parents, the half or whole day supervisors--special needs teachers, and the far reaching, less experienced and/or less attached ordinary elementary school teachers have been selected and included in the study. The major reason for not including other members of the society is the researcher's intention to indicate a reasonable area of study, which is 'large enough to be significant but narrow enough to permit feasibility.'

Only the effects of the different variables such as Sex, Age, Religion (Islam, Christianity, Protestant and Others), Relationship (Parents, special needs, and ordinary elementary school teachers), Location, Ethnic group, Marital status, Educational levels (Illiterate, primary, secondary, and college), Parental Employment Status, and income/salary on individuals' attitude towards mental retardation were checked.

1.6 Constraints and Limitations of the study

The quantitative part of this study was conducted on 142 participants. It is due to the paucity of the time for the study coupled with some financial problems. The complexity and time-taking nature of the analysis part of the study and lack of information and accessibility of parents of children with mental retardation and Special Needs teachers for children with mental retardation were among other reasons for choosing such a small sample size.

Last, but not least, the current restructuring program in the governmental offices, especially in the Ministry of Education and Labor and Social Affairs Bureau of the City Administration of Addis Ababa, was the other bottle-neck in collecting data.

1.7 Operational Definitions

In this specific study the following terms are used operationally and defined as follows:

- **Claimed causal factors of mental retardation:** refers to both scientifically proven and socially accepted causes of mental retardation.
- **Societal Attitude:** refers to the attitudes of the organized and interdependent community that include parents of children with mental retardation and both regular and special needs teachers.
- **Parent**: refers to both biological mother and father or an individual who has responsibility in upbringing and taking care of a child with mental retardation.
- **Special classroom teachers:** those teachers who are currently teaching children with mental retardation, with or without pre-service training in special needs institutions (children's homes, schools, classes and units) and integrated school settings .
- **Other ordinary classroom teachers:** those ordinary teachers in the government and public elementary schools who have little or no experience with children with mental retardation.
- **Frequent (higher) interaction**: a kind of interaction with a better score (15-20) in the **social interaction Scale**. But, it is not necessarily to say that the individual who scores highest points is the only, sufficient and highly involved person in upbringing children with mental retardation.
- **Occasional (less) interaction**: a kind of interaction with a moderate score (12-14) in the **social interaction Scale**.
- **Minimal /none (not at all) interaction**: a kind of interaction with a minimal score (4-11) in **the social interaction Scale.**

CHAPTER TWO

2. LITERATURE REVIEW

2.1 The Nature of the Problem

Mental retardation is understood differently across the various cultures, periods as well as among the different scholars. Thus, people understanding about the causal factors may also be distorted in one's mind.

Throughout history, different terms were used to describe mental retardation. According to Taylor (1997:4) these words ranged from depreciatory terms such as 'dumb' and 'stupid' to words that were originally used as medical classifications such as idiot and imbecile. During the first half of the twentieth century the term moron widely used to describe people who were considered to be 'high grade defectives.' According to Smith 1985 (cited in Taylor 1997:4) these were people whose retardation was considered to be hereditary. They were also considered as clumsy, drooling, helpless creatures (Hungerford cited in Hallahan and Kauffman 1991:78).

For educational or medical purposes terms such as feebleminded, mentally defective, mentally deficient, and mentally retarded have often been used, until the stigma associated with each became too great. The other synonymous and certain obsolete and derogatory terms include amentia, oligophrenia, and dullards (Cleland 1978, 12). Currently, the term 'Persons with Mental Retardation' instead of mentally retarded individuals is used (Morales and Sheafor 1998:376).

Some others also used the term 'Developmentally Disabled' to address the problem at hand. But, developmentally disabled individuals are those who suffer from chronic disabilities, attributable to mental or physical impairments, or to combinations of these

(Winzer 1990). Thus, this terminology never encompasses the whole populations of persons with mental retardation.

Apart the differences shown in their historic and professional usage, these terminologies also differ in the different culture groups. Mental problem, mental slowness, mental weakness, slowness in learning, mongolism, epilepsy and other expressions equivalent to mental retardation were terms used by educated parents in Pakistan (Miles 1992). In parallel, terms such as dull or idiot (*dedeb*), foolish (*mogne*), sick (*beshitegna*), passive (*fezaza*) and insane (*yeaimiro beshitegna*) are also used in Ethiopia (Tirussew 2000:153, Chernet 1999:60).

It is also worth noting that the historic change in the concept and understanding of persons with mental retardation is very slow but measurable. In 1990, Winzer wrote that the present attitudes toward retarded individuals are strikingly positive when it is compared to even thirty years ago. The writer added that many ancient stereotypes have disappeared and much pejorative terminology had been abandoned (1990:159-60).

DEFINITION AND CLASSIFICATION

Mental Retardation has been defined in different ways even for the last few years. The reasons for such new definitions and revisions might range from the advancement in understanding the problem to the political or social forces. This advancement in changing the definition of mental retardation had great effect in changing individuals' attitude towards mental retardation and persons with mental retardation (Hallahan and Kauffman 1991:78). In 1992 the American Association on Mental Retardation (AAMR) published a revision of its manual on the definition and classification of mental retardation. This revised definition is the most accepted one and reads as follows.

"Mental retardation refers to substantial limitations in present functioning. It is characterized by significantly sub average intellectual functioning, existing concurrently with related limitations in two or more of the following applicable adaptive skill areas: communication, self-care, home living, social skills, community use, self-direction, health and safety, functional academics, leisure and work. Mental retardation manifests before age 18 (AAMR, 1992, P.5.)"

The classification of persons with mental retardation is dependent on the different factors that characterize them such as etiology, level of severity, learning characteristics, intensity of supports needed, the level of adaptive behavior and intelligence measures. Although it is now no longer used, many writers sometimes used to quote the American Clinical Classification that includes the borderline, moron, imbecile and idiot groupings. But, these terminologies carry a very negative connotation and attach negative attitudes towards the individuals entitled for each.

The *etiological classification* consists of two broad groupings—Organic/Physiological and Cultural-familial. The later mentioned grouping refers to the etiological aspects of approximately 75% of all retarded people (most of them are mild cases) for whom there is no specific, identifiable organic or genetic anomalies and their retardation is presumed to be due to psychosocial disadvantages such as relatively poor prenatal care, poor childhood nutrition, and poor educational opportunities (Weisz 1990:137-138; Tirussew 2000:108-112).

The *educational classification* is based on the severity of the problem and the learning characteristics of the retarded child. Thus, it is possible to say that it is based on intelligence measures. It was applied to describe both the anticipated level of educational achievement of students and the corresponding educational placements to which they were assigned (Taylor 1997). In this classification the educable, the trainable, and the sub

trainable or custodial groupings are included. The former group represents students who were expected to be able to learn reading and writing skills at the elementary level, but at a much slower pace than the non-retardates. According to Sattler (1992) it is approximately up to sixth grade level by late teens for the educable and functional academic skills to approximately fourth grade level by the same age range, if given special education, for the trainable group. The last group includes those who were considered to be below the level that made them the true responsibility of schools and special educators (Taylor 1997; Tirussew 2000).

Based on *the performance on intelligence tests* mental retardation has also been classified as mild, moderate, severe, and profound. Psychologists, educators and physicians have commonly used these terms. This classification was also criticized for its use of intelligence tests but it is still remained in use (Taylor 1997). It is also the most generally accepted approach that considered retardation as existing on a continuum or scale of severity. Even the terminologies used are not loaded; but more sensitive and less derogatory that minimizes negative attitudes such as stereotyping, discrimination and stigmatization (Hallahan and Kauffman 1991:78).

Depending on *the intensity of supports provided* for retarded children, Berne-Smith et al. (1994) have classified the needs for support as intermittent, limited, extensive, and pervasive, based on the severity of the problem and their need for support. These support services have to be given for educable/mildly retarded, trainable/moderately retarded, supportable/severely retarded or dependent mentally retarded, and 'life-support'/profoundly retarded children, in that order (Berne-Smith et al. 1994; Taylor 1997; Tirussew 2000).

According to Hallahan and Kauffman (1991:78) in these days professionals are much reluctant to apply the labeling of mental retardation than they once were. Currently, educators develop a non-categorical approach. It is so because they fear that the stigma of such a diagnosis can have harmful consequences for the individuals who are in problem. Labels might have a blinding effect among the investigators and harmed those they have sought to help. It prevents professionals from seeing and treating the people as defined as human beings with feelings, understandings, and needs. Because, when we label people, we lose the ability to empathize with them--to see the world from their point of view (Bogdan and Taylor 1994:222). On this, Bogdan and Taylor (1994:222) have added the following,

> *By abandoning labels, we shift attention from the deficiency of the person to those of the society and service systems. Thus, we cease to ask what is wrong with the person and begin to ask what kinds of environments and services we can create to be able to accommodate all persons in the society, to treat them with respect, and permit them dignity. Most important when we abandoned labels we are forced to listen to those whose perspectives we have ignored and to take what they have to say seriously (p.222).*

Although the abuse of labeling and the dangers of misleading are acknowledged in the field of mental retardation (Edgerton1967, Edgerton and Edgerton 1973,Mercer 1973, Hobbs 1975 cited in Bogdan and Taylor 1994:5) some scholars such as Bogdan and Taylor (1994:5) goes far from the false labeling or mislabeling and dispute the efficacy and validity of the concept *retardation* for any person, including those with the most profound organic neurological impairments, that is the severely or profoundly retarded individuals. For them, mental retardation is a defective concept- a concept conceived in ignorance at a time when our understanding of human beings derived from the supernatural.

Professionals are now focusing on the individual child's needs, rather than on some category of disability. Such an approach may be seen as ways of placing and educating mildly handicapped youngsters that focuses on the behaviors and learning patterns rather than on diagnostic categories (Winzer 1990:98).

In general, professionals recognize that, to a certain extent, mental retardation is a socially constructed condition. In 1973, the sociologist Jane Mercer (cited in Hallahan and Kauffman 1991:78) in focusing on the social system noted that *the individuals' social system rather than the problem at hand, determine whether he/she is retarded.* This is the current issue of integration rather than social segregation, eventually of total inclusion in all aspects of life.

PREVALENCE AND INCIDENCE OF MENTAL RETARDATION

It is difficult to identify and statistically depict the existing possibly identifiable population of persons with mental retardation. This fact even goes worst to the knowledge of incidence and future projection of the more forgotten and the less searched part of the society. On this Cleland (1978:19) correctly concluded that mental retardation is relative, numerically at least, to several issues. It also varies in incidence, on etiological bases and by degree of mental defects.

This great discrepancy in the estimation of *the prevalence and incidence* of this community, their *proportion* from the general population in general and the disabled community in particular and the *future projection* of their total number have given a number of reasons by different scholars at different time periods and places.

For Hallahan and Kauffman (1991:118) it may be due to three factors that include the need for low scores in both the adaptive behavior and IQ tests; school personnel's

reaction in labeling minority children; and parents' and school professionals' preference to have children labeled as 'learning disabled' rather than 'mentally retarded' to reduce the attached meaning (stigma).

For Cleland (1978:19) the prevalence depends on quite a number of issues including the currently accepted definition, the age category of the population surveyed, the degree of complexity among the research areas (urban vs. rural), socio-cultural influences and political propaganda concerns. The following are among the reasons for the differences in detection rates.

The estimation rates of mental retardation in *the newborn to five years age group* may decrease due to the delayed onset of spoken languages and poor cognitive functioning tests. Such tests are poor enough for infants and young children in predicting the later intellectual functioning. At this level only profound or severe cases could be identified. In addition if the parents were quite intelligent perceptive of slowness may help as a sign for detection.

In most cases, the prevalence of mental retardation seems to be greatest at *school age*. It is so because; the school environments and experiences facilitate the detection and identification of children with mental retardation. Those who have learning difficulties are also easy to be suspected and diagnosed as mentally retarded. Their inability to function with in the school environment also increases the probability of the child's meeting diagnostic criteria for mental retardation.

Even the reported rate of mental retardation decreased once individuals reached *post school level or adulthood*. The changing need of academic proficiency to vocational or non-academic requirements, the capability of holding down a variety of jobs especially by

the post school mildly retardates and their blending into the labor force and their passage into normality are among the factors mentioned by Cleland (1978:24).

The other possible explanation is that the mortality rate of the various retarded groups as compared to that of the general population. According to Forssman and Akesson 1970 (cited in Handen: 374) the mortality rate of the mildly and severely retarded individuals is 1.7 and 4.1 times that of the general population, respectively.

Through the passage of time individuals' attitude and professionals' understanding on the issue at hand showed slow but measurable change. The transition from one to two standard deviations, on the normal curve, was seen in *the definition of AAMR (1992)*. This transition by it self reduced the retarded population by 13.6%. In simple terms, it is the elimination of the borderline (i.e., IQ 70-84) category of the retardates. Thus, the definition and current understanding on the issue made a difference (Cleland 1978:20).

The degree of *complexity of the environment* on which detection and identification of retarded children made also determines the differences in detection rates. According to Eaton and Weil (cited in Cleland 1978:24) the simplest the society generally the greater the likelihood of acceptance. Thus, the simplest rural community who expected less intellectual ability but more physical fitness of a child is easy to accept a retarded child than the more active and individualistic society of the urban area.

Although the variation occurred on the estimation of the prevalence and incidence, the proportion from the general population in general and the disabled community in particular, and the future projection of their total number; there is also a possibility to cite rough estimation of statistical facts from different authorities and publications.

The estimation made on the prevalence of persons with disabilities by the World Health Organization (UNICEF 1988) was 10% of the general population through out the globe. This estimation is also under suspicion to increase in developing countries, like Ethiopia, where the disabling factors are rampant. While, the statistical facts in the different survey made in our country revealed one-half to one-third fewer rates of the above estimated value.

There were about four nationwide surveys which have been undertaken by different authorities, agencies, ministry offices and research institutes. According to Tirussew (1995) the first survey was made in 1979-80 by the Ministry of Agriculture in cooperation with Central Statistics Office and the then, Rehabilitation Agency for the Disabled. Although the survey focused only on the 'most obvious' types of disabilities and its geographical coverage excludes Tigray, Assab, the nomadic population and the urban centers where disabled individuals were found, it has estimated the prevalence as 5.48% for the general disabled population and 8.20% for persons with mental disorders which might include persons with mental retardation.

The then, National Children's Commission also undertook the second survey in 1984. In this survey, the prevalence of persons with disabilities accounts for 3.6% of the general population of Ethiopia. The prevalence of persons who are considered as 'mentally ill' rated for 5.5% with whom mentally retarded individuals, most probably the severe cases, suspected to be included.

The third survey, which was undertaken by the Office of the Population and Housing Census of Ethiopia in 1984, revealed a 3.6% prevalence rate of disabled individuals in the country. The office estimated that there were 988,853 (1.9%) disabled

persons of the total Ethiopian population, excluding the homeless groups, with sex ratio of 120 males per 100-females. Mental disorder that could include the retardates found to be at the intermediate position; that is 6.5% (CSA, 1999:60).

Finally, professionals on the area have done the fourth survey, which is the first of its kind, in 1995. It was conducted by Institute of Educational Research, Addis Ababa University and submitted to Support to Special Education in Ethiopia Project, FINNIDA. Although Regions 2 and 5 of the country were excluded and the focus was only on the conventional households that did not include persons living in institutions and those who are homeless, it revealed that prevalence rate of 2.95% of persons with disability. In this specific study, the prevalence of persons with mental retardation was also found to be 6.5%. Even if the contributors attributed the figure to those who are moderately and profoundly mentally retardates, for the detection difficulties of the mild cases, the figure is significantly high when it is compared to the scholars' estimation of 3% retardates of the globe (Weisz 1990; Cleland, 1978:19).

The survey further indicates that the gender differences constitute 55.8% and 44.2% for males and females in that order. When we observe the regional disparity, the highest disability incidence rate; i.e., 17.7% was found in Addis Ababa, the area on which the educational and other support services for the disabled are highly concentrated when compared to the different regions of the country.

From mid June of 1997 to December 1998 the Support Organization of Mentally Handicapped Children (SOOM) conducted a two-phase survey on the situation of children with mental retardation in Addis Ababa, the seat of Federal government offices. The survey included 27 woredas, 281 kebeles within these woredas, and 734 households within these

kebeles (SOOM 1999:3). The results of phase two revealed that mentally retarded population accounts for 87.3% of the identified cases; the rest 13% revealed additional disabilities such as visual impairment (2.7%), hearing impairment (0.6%), physical disability (7.1%) and the rest categorized as 'others' (2.3%)(Ibid 1999:8).

The future projection can not be more than speculation, especially in developing countries where causal factors are extensive, the prevention and early intervention strategies are rarely practices and centered in urban areas, and the progressive medical advancements never existed in operation.

It is two fold for the future generation; the problem of mental retardation will be reduced in number or it became abundant or easily identifiable everywhere. This is so because the progress made in preventable types of mental retardation is offset by the ability of mankind to manufacture yet other ways to maintain or even exceed the existent number of retarded in society. On the other hand, education relative to preventable retardation, genetic counseling and accelerated research into the causation of retardation appear as society's best weapons in efforts to reduce the number of retardates in future generation (Cleland 1978, 21-22).

Although the slow positive attitude changes in the past historic periods have been observed, it is threaten to accept a great number of children with disability, especially in developing countries like Ethiopia. According to Hallahan and Kauffman (1991:32) these days, as compared to a decade or two ago,

- More young children and their mothers are living in poverty, have poor nutrition, and are exposed to environmental conditions likely to cause disease and disability;

- More babies are born to teenage mothers;
- More babies are born to mothers who receive inadequate prenatal care, have poor nutrition during pregnancy and abuse substances that can harm the fetus;
- More babies are born with a low birth weight;
- Environmental hazards, both chemical and social, are increasing;
- More children are subjected to abuse and an environment in which violence and substance abuse are pervasive; and
- Cuts in social programs have widened the gap between needs and the availability of social services.

All these described cultural-familial causal factors of mental retardation are pervasive at least in developing countries, like Ethiopia (Tirussew etal. 1995, Wa'el 2000). Even if the developed countries also tried their best to fight against mental retardation through the different technologies, the response is still insignificant.

2.2 Historical Development and Policy Issues—an Overview

The historic knowledge, attitude and practices toward disability in general and mental retardation in particular are ancient and have been passed through a number of ups and downs. It might be started from the time of the appearance of the first person with disability to earth. Even the policy issues and the different intervention related practices are not new-fangled in the history of human disability. It is so because, every civilization, ancient or modern, have encountered the problem of mental retardation (Cleland 1978:3).

The right to life, the issue of placement that is living in the segregated places and/or within the community, and the intervention related practices had been questioned for

need on the part of the disabled population, the awareness of their need on the medical and education professionals and changing attitudes among the general population (Gearheart, Weishahn, and Gearheart in Tirussew etal. 1995:9).

In 1970's the biological inadequacies of disabled persons was emphasized and the aim of perfecting them through medical intervention emerged in Europe and in America. In this Traditional Medical Model, for the fear of propagating their imperfection, marrying or having children was forbidden for persons with disabilities because they were thought to be innately unproductive and endemically with out worth (Daniel 2000: 19-20).

In general, this second phase of *care taking* (Jonsson 1993) guarantees the institutional era (Bradely in Lipsky and Gartner 1997:81) in which the individuals' pathology became barriers to civil rights and those persons with disabilities need not work but live on charity (Daniel 2000:21). They are often viewed as objects of care with little influence in that care (Jonsson 1993).

The third phase of *rehabilitation* (Jonsson 1993) could be termed as the era of deinstitutionalization (Bradely in Lipsky and Gartner 1997:81) or the social work perspective (Daniel 2000:21). Although it is seemingly intervening in personal problems with out being asked and still breed's dependence in this perspective clients or patients are in prescribed care or treatment plans through professionals' involvement. Here, a group of homes, workshops and special schools settings are adopted with an interdisciplinary team approach working on skills development and change of behavior based on individualized rehabilitation plan of persons with disabilities (Bradely in Lipsky and Gartner 1997:81).

The fourth phase of *integration*, (Jonsson 1993) that had been termed as the era of community membership (Bradely in Lipsky and Gartner 1997:81) or independent living/ minority perspective (Daniel 2000:20) initially led by Lex Frieden, Judy Heuman and Ed Robert. In this phase persons with disabilities are not only cared for; but they are also trained. It is so because they were thought as they can improve and compensate for their disabilities so as to make part in production activities. Here, what persons with disabilities can do is focused (Jonsson 1993).

It is not that persons with disabilities in particular but the society at large that adjusted to them. In simple terms handicap is associated with the society as a whole and its environment rather than considering it as an attribute of a persons with disabilities alone (Jonsson 1993)

This perspective became the foundation of the political process of gaining the civil rights for disabled individuals. It is so because the societal responses and discrimination were the primary barriers to civil right. In this perspective clients are active and responsible consumers as opposed to their passive roles in the former models. It may be for the reason that they retain responsibility over their own lives. They hire or fire professionals for different services as required. Social workers get involved in their matters only upon their request (Daniel 2000:21). The very great roles that played by family members and peer groups also are not yet forgotten in this perspective (Bradely in Lipsky and Gartner 1997:81).

The type and nature of mental retardation determine the indication and contraindications of their employment. Mentally retarded can do their own shopping; cooking, cleaning, and can work in sheltered workshops on payment bases. Even if

they require a long period of vocational rehabilitation and training, under special and careful supervision they can work quite well in the government, metal, chemical, textile, paper and food industries, as experiences of other countries dictates us. Moreover, they can work in fast food restaurants, answering telephones in an office, or doing more advanced work if their abilities allow in the private sectors (Tirussew 1998:12-13).

The selection of work for the retardates should also be made based on their mental ability. Severely retardates may be suitable for very simple repetitive operations, while the mildly retardates are suitable for several operations including large and more complicated work processes in gradual bases. But, extremely heavy work and other jobs involving mental stress and responsibility, toxic elements, noise and excessive hurry should be avoided for both groupings. Beyond all these the life history of the known scientists of Sir Isaac Newton and Charles Darwin dictates us to accept the contribution of the retardates in the scientific contributions (Ibid 1998:12-13).

In 1998, in one local research, parents of the retardates were asked to identify possible jobs that they believe that their children can successfully accomplish (Ibid 1998:12-13). . The following possible future careers were mentioned.

- ✓ Different handicraft skills,
- ✓ Art, painting, music, sport etc.,
- ✓ Continuing with the present job which is a sort of horticulture,
- ✓ Driving, gardening and clerk,
- ✓ Rearing livestock, and
- ✓ Opening one's own shop.

It is one-way progress on the attitudes of parents to understand the working capability of persons with mental retardation. But, it also needs more similar knowledge and understanding in the part of the whole community and the governmental and non-governmental employing agencies.

Concerning the legal issues, in the United States the court is not looking at whether the death penalty for people with mental retardation is constitutional. Thus, the court did decide a jury should consider a person's "mental capacity" before deciding the appropriate sentence. In 1989, only two states banned excruciations of people with mental retardation. Since then, eleven more states have passed similar laws, and several other states are considering bills during the current legislative sessions that would ban the practice (Reynolds 2001).

In general, according to Daniel (2000:18-24), these changes and developments in the public attitude and support systems have gone from the very ancient and early stage of *extermination* to the *neglect or confinement*. Then after, disabled people were considered as object of care for religious and philanthropic reasons (i.e., *Charity*) then to the isolated institutions (*Medical Mode or Institutionalized care*). Next to that, they have been seen as clients of social services (*Social Workers Model*) and finally the professionals' help and consultations are given only *on needed bases* (*Independent Living Model*).

According to him, this continuum goes back and forth every time and everywhere, but the next perspective is still unpredictable. The current situation shows that some societies are stagnant at any stage, some others are very contemporary and the rest, especially the developing countries, are characterized by mixed practices, often not

including the independent living model, of institutionalization and community based rehabilitation programs.

In addition, these changes and developments also have been observed on policy issues. A number of policies, standard rules and strategic plans were developed, published and ratified by international level. . The Romans Laws of Lycurgus that permitted the disabled individuals abandonment is among the ancient examples. It should note that every article of the United Nations Convention on the Rights of the Child (CRC) applies to all children without exception, including the disabled (Jones 2000).

To mention some modern achievements, the year 1981 was declared by the United Nations General Assembly as International Year of Disabled persons with the theme *full participation* of disabled persons in social life and development and of *equality* (IYDP 1980). The periods 1983-92, 1993-2002, and 2000-2009 were declared as The United Nations Decade of Disabled Persons, The Asian and Pacific Decade of Disabled Persons, and The African Decade of Disabled Persons, in that order (ILO 2002). In 1983, ILO issued convention concerning *Vocational Rehabilitation and Employment* (Disabled persons) (ILO 1983). In 1993, UN developed The *Standard Rules for the Equalization of Opportunities for persons with Disabilities* (UN 1993). The 1995 Copenhagen Declaration on Social Development views disability as a form of social diversity and points to the need for an inclusive response, which strives to build a "society for all" (ILO, 1995).

Ethiopia also ratified the international documents and issued labor proclamation *NF* 42 of 1993 on the principle of *non-discrimination* and proclamation No. 101/1994 on *the rights of disabled persons to employment*. In 1971 an order was provided for the establishment of rehabilitation agency for the disabled (Order No. 70/1971). Under the

Ministry of Labor and Social Affairs (MOLSA) Rehabilitation Department was organized to realize rehabilitation, capacity building, and awareness raising (Wa'el 2000). The Constitution of 1994, Article 41, for example, stated as follows.

> *"The state shall, within the limits permitted by the economic capability of the country, care for and rehabilitate the physically and mentally handicapped, the aged, and children deprived of their parents or guardians."*

Although Ethiopia is moving forward, from previously totally excluding disabled children from education system, to accepting that they can be educated "*as the resources of the country permit.*" (Haile and Bogale 1999 cited in Jones 2000), that is, the right to education, it is still a violation of the rights to non-discrimination and the best interest of the retarded child. Similarly, most of the proclamations, rules and policy issues were not that much effective not only in Ethiopia but also in East African Countries like in other parts of the world. For this reason, ILO organized discussion among the representatives of the East African Countries in Geneva, on the impact of legislation on employment of persons with disabilities. On the issue of the necessary needs to improve the existing national laws and their implementation representatives from our country mentioned the following.

- Disability should be provided as one of the grounds of non-discrimination,
- Implementing regulations and directives should be issued,
- Article 3 of proclamation No. 101 provides that 'a disabled person having the necessary qualifications shall, unless the nature of the work dictates otherwise, have the right to compete and to be selected for (a) a vacant post in any office or undertaking through recruitment, promotion, placement or

transfer procedures, (b) a training program to be conducted either locally or abroad.' This gives unlimited power to the employer. This power should be given to a supervising government body (ILO 2002).

Before eight years, the Ethiopian Federation of Persons with Disabilities requested the House of Representatives of the Federal Democratic Republic of Ethiopia for the issuance of implementing regulations and directives for proclamation No. 101/1994 and the implementation of The *Standard Rules for the Equalization of Opportunities for persons with Disabilities* (UN 1993). Again, on its International day of the disabled 2002 the Federation addressed the same issue to Office of the Prime Minister and to the Poverty Reduction Strategy office (EFPD 2002).

According to a Senior Expert from the Ministry of Capacity Building the policies had remained unimplemented mostly due to lack of resources. Lacks of coordination, duplication of activities are also among the major hindrances to provide effective services for persons with disabilities. To solve such problems MOLSA and ILO organized an Ad-hoc committee as a proposal to form a national forum of organization working on disability. On the 26th August 2003 meeting it was recommended that the Ad-hoc committee continue its work and carry out the legal grounds to establish the envisaged forum and come up with a draft constitution (MOLSA 2003: 8-14).

All in all, children with mental retardation who have got the opportunity for education and training are only a few from the possibly large population (Nema 2000). Not more than 0.4% of participation rate was found among the school age children who are under the age of 14. Over 90% of the teachers also did not have disability-specific courses and only a few have participated in short-term trainings abroad. Most of them could not

persons with mental retardation throughout the historical pasts. But, all are responded in accordance with the time's knowledge & understanding of the attributed or claimed causal factors, ways of transmissions and the abilities and potentialities of the retardates.

The ancient Egyptian mummies (Harris and Weeks 1973, cited in Cleland 1978:3) and the writings of the Maya, Inca, and Aztecs and the primitive art objects of the pre-Colombian civilization (Guerra 1971, Posky, Lippman & Overton 1965 cited in Cleland 1978:3) are among such documents for the appearance of mental retardation in the historical pasts.

Early 1900 A.D. to the Present

The change in the understanding and knowledge of human disability, unlikely to the previous periods, is in geometric progression. The initiated issues of formulation and establishments of organizations and associations in the area of human disability also increased with the very fast rate of change. In addition, the ideological changes in the ways of treating (support systems) persons with disabilities in general and persons with mental retardation in particular are attention grabbing.

After the foundation of the National Association for Retarded Children (NARC) in 1950, parents of the retardates united in their efforts to make known the problem of their children everywhere (Cleland 1978:9-10).

Even the two World Wars marked a positive change for persons with disabilities in America and other parts of the world. Although institutionalization was the strategy that increased social isolation in segregated settings in sub human conditions, the United States Federal Rehabilitation Legislation entitled veterans disabled by the war for treatment from public fund. This fact made clear the combination of the critical

detect, diagnose, and understand the nature of the learning characteristics of children, and determine strategies of appropriate educational intervention. The non existence of diagnostic systems of mental retardation was considered as the biggest problem in teaching these children in our country. The non existence of good assessment and diagnostic procedures were the biggest problems for future development (Savolainen 1997:10). To solve such problems the current trend in educating children with mental retardation is towards integrating them with their non-handicapped peers in the ordinary school (MOE 1988 cited in Tirussew 1995). There is also a new trend to give disability-specific trainings in the pre-service teachers training programs (MOE 2003). Although all these efforts have been devoted, the response to the problem is still insignificant (Tirussew 1995).

2.3 Causal Factors

In most cases, the causal factors for mental retardation are not known. According to Tirussew (2000:108) there are three hundred known or suspected causal factors in mental retardation, but such factors account for fewer than 2.5 percent of the retarded population.

For this solid reason, people might attach the causal factors for mental retardation based on their belief and their level of understanding the problem. It revealed that the existence of claimed causal factors within every society might interfere on the treatment issues of the problem.

According to Badr-e- Haram & Edwin (cited in Miles, 1992) uneducated parents in Pakistan associate the causal factors for mental retardation with many things. Many characterize them as *'Given by God'* or *'God's people'*. Because of this belief, they were found to be *hesitant to interference with the divine will by remedial measures to alter their*

child's disability. Similar to our country, many others associate it with 'spirit' (or *djinn*) interferences and wear an amulet to deflect these effects.

Exposure of a pregnant woman to the rays of an eclipse or to the shadow of a corpse; parental sins; possession by evil spirits through passing under a haunted tree or place, and other superstitions were also other hypotheses of causation (Ibid). These and other beliefs existed in our country (Chernet 1999; Daniel 2000) and mixed up with the causes of mental illness (Mesfin 1999).

More specifically, Chernet (1999:50-53) classified the claimed causal factors in to the following four groupings.

a. Causes related to God
    - The will of God,
    - His punishment/curse for the wrong doing-'hatyat' (sin),
    - Gods wrath for missing to celebrate ritual ceremonies (punishment for breaking an important ritual ceremony or ceremonies),
    - For inherited sin in the family,
    - When one doesn't respect the Bible's rules.

b. Supernatural causes (evil spirit)
    - 'Seytan' (Satan/devil),
    - 'Ganen' or 'meganga' (demon or power of evil spirit),
    - 'Buda' (evil-eyes),
    - 'Likift' or 'minamin' (being contaminated by evil-spirits),
    - 'Denkara' (evil spirit-by envious person).

c. Other Beliefs/possible causes

- Contact with (seeing) mentally retarded person during pregnancy,
- New house where animal is not killed (sacrificed),
- Bewitchment or curse by the ancestors/old people,
- When there is disagreement (quarrel) in the family (misbehaving during pregnancy),
- Bad luck (misfortune),
- Accident.

d. Mental retardation is understood and explained as

- A disease,
- Being possessed by devil's power
- Mental illness,
- Foolishness.

The scientifically identified causal factors of mental retardation can be categorized into two broad groupings—Organic/Physiological causes and Cultural –familial causes—as described above. According to Continho and Repp (2002) the following are some of the causal factors of mental retardation.

-- Genetic causes that include:

A. Single- gene defects such as Fragile X syndrome and chromosomal disorders such as Down syndrome.

B. Inborn errors of metabolism; scientists have identified more than 300 gene disorders involving this case. E.g. Phenylketonuria (PKU), Tay-Sachs disease,

galactosemia, homocystinuria, maple syrup urine disease, and biotinidase deficiency.

-- The Non-genetic conditions that occur during pregnancy include: Malnutrition; a mother's use of alcohol or drugs; Environmental toxins such as lead and mercury; viral infections including rubella/German Measles and cytomegalovirus; and untreated diseases such as diabetes mellitus.

-- Peri-natal causes: during birth.

Premature birth, very low birth weight, and stresses to the fetus such as deprivation of oxygen.

-- Post-natal period causes include:

Infectious diseases during childhood, which are easily preventable through immunization that includes measles, chicken pox, and whooping cough --all these may lead to encephalitis and meningitis, which can damage the brain;

-Physical trauma to the brain as a result of accidental blows to the head, near drowning, severe child abuse and childhood exposure to such toxins as lead and mercury; and.

-Poverty and a lack of stimulation during infancy and early childhood.

2.4 Factors Influencing Individuals' Attitude towards Mental Retardation

The associated attitudes toward the retarded have not been fixed historically and have undergone major shifts consistent with social and ideological change as well as fluctuations in popular cult and fashions (Wolman, 1977, VII). In our society, persons in the surroundings consider retarded children as 'fools, sick and insane' and as person who cannot understand and who are possessed by evil spirits (Tirussew, 2000).

There are a number of factors that influence individuals' attitude towards mental retardation. Individuals' perception of the causal factors, level of interaction/relationship, beliefs and/or religions, ethnic lines, educational level, income, sex, and age groups deserve researchers' attention. According to Daniel (2000) the difference in attitudes toward disability appears to be a reflection of a significant difference between men and women, the young and the old, the employed and the unemployed particularly in their level of education.

The *religious background* of parents, and the socioeconomic and intellectual levels of the family/community may be a variable related to the degree of impact in mental retardation on the family/community (Drew et al., 1986). Drew et al. disclosed that although the advent of a retarded child could either weaken or strengthen religious beliefs, the particular faith of the parents might also affect their responses to the event. The parents' religious orientation may be directly related to the degree of acceptance of the retarded child.

Research done by Farber (1959) and Zuk (1959) (cited in Drew et al., 1986) concluded that family /community acceptance of mental retardation may be a function of religious affiliation; acceptance may be more closely related to the theological explanation for the occurrence of the event. This fact even goes far to the treatment strategy. It may even affect the practices of religious counseling (Ibid, 1986) and Qu'ranic therapy (Miles, 1992). According to Chernet (1999) Ethiopian parents of a retarded child have given their own explanations about the mental retardation based on their religions and cultural belief. This fact affects the treatment strategy. Thus, parents require information on the causes and

consequences of mental retardation so that they can know the role they can play to help their children to develop into active members of their community.

Based on their *socioeconomic and intellectual levels*, parents set different goals for their prospective child. Those who are in better socioeconomic and intellectual levels set goals more of cognitive oriented, while the others are physically oriented. Thus, the advent of a retarded child in a better-educated and white-collar employee family may present a greater threat and disappointment to the couples (Drew et al., 1986). In line on this, a research conducted in South Africa revealed that parental education and support is needed around the issue of mental disability. Moreover, some poorly educated parents understand very clearly the conditions for successful inclusion (Nyewe and Green 1999).

The *etiology and age of onset* are also other important variables. Pertaining to this, Drew et al. (1986) pointed that physical traumas that may permanently impair a child who has developed normally may be more debilitating to the parents than congenital retardation.

Even the *interaction* pattern determines one's willpower concerning the causal factors, the treatment strategy and the associated attitudes. Parents, unlike teachers, cannot look weekends or holidays, spring, and summer vacations to escape the reality of having a retarded child. They have the child every day and every night. Thus, they cannot look to a time or date that signals the child's entry into independent living and their freedom from parental responsibilities and obligations (Ibid, 1986). On the other hand, lack of parent-child interaction implies non-existence of learning experience which in turn affects the cognitive, social, emotional, and the language development of the child (Tirussew 1994: 12). It may have a great difference in attitude formation.

In addition, if the labeling of the individual as retarded suggests that he/she cannot be qualified to function adequately within the society, the family may also be perceived, by implication, as deviant because it has failed one of its major functions (Wolman 1977, VII: 201). For this reason, it becomes hard to convince parents that the child would willingly obey if only it were given the time and guidance to learn, by small increments, the skills and tasks they expect (Miles, 1992).

Although these children are less proficient in recognizing emotions, in responding to others' emotions, and in pro-social behaviors (Kasari and Bauminger in Burack, Hodapp, and Zigler 1998) the parent-child interactions further serves as both a context for and a key determinant of socio-emotional developments (Marfo, Dedrick, and Barbour in Burack, Hodapp, and Zigler 1998). But, the impact should be taught as a bidirectional, mutual-effect, rather than traditional unidirectional, parent-control conceptualization (Ibid).

A retarded child's presence in a family may result in discord and conflict. The child may serve as a threat to the parents' self-esteem, feelings of self-worth, and dignity (Drew et al., 1986). In general, parents of disabled children report more stress than parents of children with out human disability (Mines in Burack, Hodapp, and Zigler 1998). As such; the family is the primary social unit for the continuity and transmission of the values of the culture. Mental retardation complicates severely the family's ability to carry through this goal and prepare the child for an acceptable and contributing role in society, especially for the adopted negative and neglecting type of attitude in the society (Wolman 1977, VII).

2.5 Related Psychological Theories

There are a number of relevant theories in child development and societal attitude that could be effectively utilized in human disability related research works. In this

specific study relevant theories that include Ecological Theory, Attachment Theory, and the Theory of Mediational Intervention for Sensitizing Caregivers (MISC) were used. The Attachment Theory and the MISC Theory are the two relevant theories that revolve around a child's very early stages of development for his/her and his/her family members' unpredictable progress in the future. On the other hand, the Ecological Theory is very comprehensive and participatory to change a child's living environment or context. It is the major theory in this specific study.

2.5.1 Ecological Theory

This theory has been developed in 1977, by Urie Bronfenbrnner, utilizing four factors—individual, family, social structural, and socio-cultural that can affect human development. In 1984 Carlson adapted this theory for the problem area of domestic violence as comprised of four different levels or systems (micro-, meso-, exo-, and macro perspectives), each nested within the next. There after, the fifth historical perspective is added and 'socio-cultural' and 'social structural' levels are changed to 'culture' and 'environmental structural' in that order (Morales and Sheafor 1998:245).

The basic assumption of the Ecological theory is based on the notion that the complete understanding of development must consider how the unique characteristics of the child interact with his/her surrounding (Papalia, et al. 1999). It is to mean a child's development takes place at home with the families; at school with classmates and teachers; in the playground with peers; and in a more general way in a larger social and cultural environment (Seifert, 1994). The more specific assumptions also include the following.

- Every human lives in a context different from every other human.
- Each context we experience includes self.
- It is not the actual static objective context, but how we perceive it that affects our development.

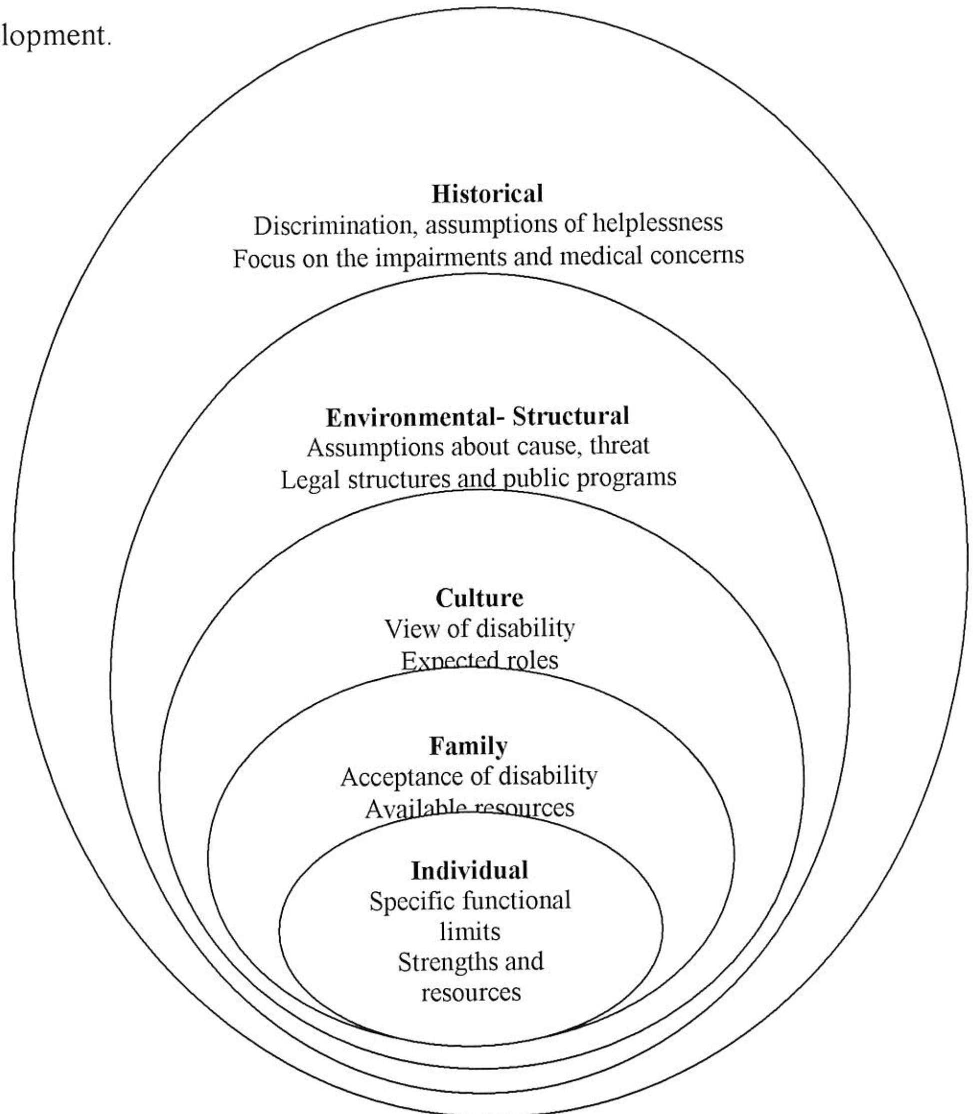

Figure 1
Examples of Ecosystems Model for people with Disabilities.
(Adapted from Morales and Sheafor 1998:391)

It is a comprehensive theory. The history of discrimination, the structural impact of governmental policies, the cultural assumptions what these people can and cannot do, and the impact on the family, as well as the individual psychological and biological specifics could be conceptualized in this theory (Morales and Sheafor 1998:245). In general, it has, see Figure 1 above, four environmental

contexts (systems) and one additional factor that have an influence in the child's development. The brief discussion for each system follows.

a. Individual Level (Micro system)

It is the most immediate and earliest environmental context that emphasized on the *biopsychology endowment* each person possesses. It includes, at least personality strengths, level of psychosocial development, cognition, perception, problem solving skills, emotional temperament, habit formation, and communication and language skills. In addition, it is important to be knowledgeable about the attitudes, values, cultural beliefs, lifestyle, skills, abilities, philosophy of life, and physical and psychological stress coping mechanisms of the individual (Morales and Sheafor 1998:246-247).

The child's day-to-day interaction with his family members, neighbors, peers, and teachers shows his/her direct and active interaction with the social agents in his/her environment

b. Family Level (Mesosystem)

It refers to the interactions, relationships, and connections among two or more Microsystems. It focuses on the nature of family lifestyle, culture, organization, division of labor, sex role structure, and interactional dynamics. Here, the areas of examination include each family member's values, beliefs, emotional support capacity, affective style, Tradition, rituals, overall strengths and vulnerabilities, and internal and external stress management skills. The nature and quality of the spousal relationship and the depth of connectedness to children and extended family are also included (Ibid 1998:247).

c. Culture Level (Exosystem)

It refers to the impacts of social settings, in which the individual has an active role, on the individual. Parents' work place, parents' friends, social welfare services, mass media, city government, and others are included.

The environment, historical and social processes incorporating specific structures such as language, food, kinship styles, religion, communications, norms, beliefs, and values influence the behavioral responses in each culture. Thus, the focus should be on understanding the cultural values, belief systems, and societal norms of the host culture and, in the case of minorities, their original culture (Ibid 1998:247).

d. Environmental-Structural Level (Macro system)

According to this theory many of the problems of affected oppressed groups, including persons with disabilities, are caused by the economic and social structure of their country. The environmental structure imposed upon persons with disabilities with its accompanying positive or negative consequences. Some examples include ethnic heritage, national heritage, economic structure, political governance, and religious tradition.

e. Historical Levels (Chronesystem)

This is additional factor but particularly important for persons with disabilities (Papalia and Olds 1999, Morales and Sheafor 1998:245). It refers to the time dimension and the patterning of environmental events and transitions over the life course and the socio-historical circumstances and conditions. For example, changes in family structure, place of residence, parents' employment, war and economic cycles.

In general, this theory would help to promote professionals' understanding of the psychosocial problems experienced by persons with disabilities as well as the incidence,

prevalence, intensity, and harmfulness of societal negative attitudes and the related noxious forces. It helps Psychologists to consider individual behavior as inseparable from its context, including the interpersonal, social, and physical aspects (Encyclopedia of Psychology V.1 1984, Morales and Sheafor 1998:245).

2.5.2 Attachment Theory

This theory of human development emphasizes on the very early stage of a child's development. It is so because; the attachment relationship develops gradually over the first six to eight months (Grotevant and McRoy cited in Brodzinsky, and Schechter 1990:171).

Its primary function of the attachment relationship is to insure the proximity of the immature infant to its caregiver for provision of safety and food plus the goal of achieving "felt security" through the relationship (Grotevant and McRoy cited in Brodzinsky, and Schechter 1990:170-171). The provision of safety and food are very crucial to the infant's survival. Its basic importance is to keep children alive. It also helps children develop essential social and cognitive skills. They can develop an inner working model of self and others (Owens 1993:380-383).

But, it is important to note that there is a two-way flow of influence between the child and the caregivers. The relationship is an interactive one and harmony depends on the adaptive abilities of both parties. This is to say caregivers must be sensitive to children's proximity-promoting behaviors, and infants must be socially responsive and provide feed back to the caregivers (Owens 1993:380-383).

The implications of this theory for the study of mental retardation are profound, especially for severe or profound cases. Because, abuse or neglect during the first year

could have strongly negative consequences in terms of the child's ability to establish a sense of "basic trust" that is indicated in Erikson's theory.

Attachment relationships in infancy have long-term consequences for the psychological and relational functioning of the individual child. According to Literatures the securely attached infants showed better problem-solving ability and sociability at age 2, more willing to explore a novel physical environment, and more curiosity and flexibility during preschool years. This continuity in behavior from infancy through early childhood is also critical in Freudian and other theories of human development that emphasizes on the early years of human development. According to Freud (cited in Owens 1993:380) *the mother-infant relationship is unique, without parallel, established unalterably as the prototype of all later love relations* (p.45).

2.5.3 The Theory of Mediational Intervention for Sensitizing Caregivers (MISC).

These days there is a growing need of focus on the mental type of starvation which if not dealt with may lead to retardation and waste of human potential almost as painful and tragic to humanity as the loss of lives. To solve such problems there should be a theory that suits cross-cultural adaptation. The MISC theory is one that operates inside the existing child-rearing practices and focuses on cultural re-sensitization and on establishing 'Emotional Literacy' as prerequisite for cognitive development. It is designed to help parents or other caregivers to identify and understand the process through which they affect their child's development and to improve the quality of their relationship. Because, their interaction is a two-way process on which the caregiver affects the child and the child in turn affects the caregiver. This theory has been implemented in our country (Klein 2001).

The importance of this theory in the area of persons with mental retardation is very crucial. Because, the problem of mental retardation was viewed as a punishment from God and thus one has to accept it and not make any attempts to change the situation or help the child reach normal functioning. On the other hand, early intervention can have lasting and valuable effects for these children.

2.6 THEORETICAL MODEL OF THE STUDY

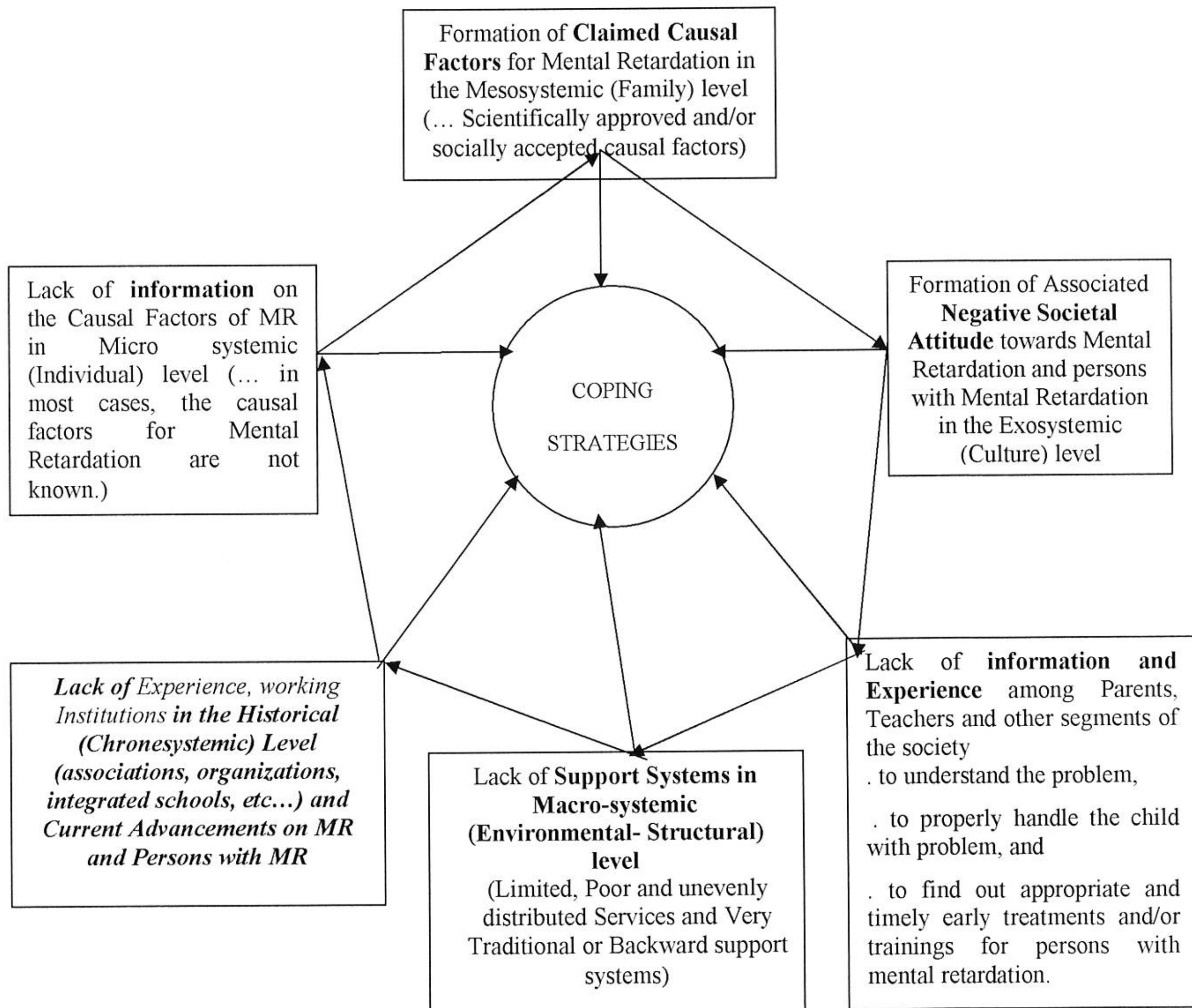

Figure 2: Theoretical Model (the hexagonal circulation of lack of information and formation of Claimed Causal Factors vs. Negative Societal Attitude)

In developing countries, like Ethiopia, the problem of human disability is pervasive for the different correlated factors (UNICEF 1988, Tirussew 1995). In such countries individuals' understanding on the causal factors for any human disability types is the one that facilitates or retards society's response towards persons with mental retardation. Positive understanding and acceptance on the disabling factors helps members of any society to clearly understand the problem, properly handle the child with problem, and find out appropriate and timely early treatments and/or trainings.

Among others, the problem of mental retardation is the one that had not ever been clear in ones mind. Lack of information on the causal factors is the major information gap on our society. This fact is highly supported scientifically through the less identification of the possible causal factors, for the most part due to the complexity of the problem. For the reason at hand most of the causal factors for mental retardation are unknown.

According to Literatures, even the three hundred and more identified possible causal factors (such as single-gene defects, chromosomal disorders, metabolic problems, infectious diseases, and physical trauma to the brain) accounts/signifies only for less than five percent of the problem. Thus, the scientific devotion showed us only the small portion of the very complex problem. It only sparked the light and critically signifies the great danger of cultural-familial causal factors.

It is believed that the cultural-familial originated mental retardation accounts for the lion's share, especially in developing countries like Ethiopia. For all these mentioned reasons some Ethiopians might accept the scientifically revealed possible causal factors.

But, most others accept the culturally formed claimed causal factors. It is so because, in addition to the information gap on the causal factors, the presence of a great number of nations and nationalities in this country supported the formation of culturally accepted claimed causal factors. This fact holds true even in Addis Ababa, the capital city of Ethiopia.

As it is mentioned above and in the literature review part (see pp. 31-32) the very rural and traditional people of Ethiopia, with the problem of lack of information on the issue, accept traditionally formed causal factors for the problem of mental retardation. Such claimed causal factors include the will of God, curse, God's wrath, Inherited sin in the family, 'Ganen' or 'meganga' (demon or power of evil spirit), 'Buda' (evil-eyes), 'Likift' or 'minamin' (being contaminated by evil-spirits), 'Denkara' (evil spirit-by envious person), Bad luck (unfortunate), Accident and others. For this very reason, they understood and explained mental retardation as a disease, possession by devil's power, mental illness, and foolishness.

All the above mentioned claimed causal factors for mental retardation disturbed anybody's thinking on the issue at hand and pushed our society to form strong negative attitude towards mental retardation and persons with mental retardation. This negative attitude and the very shallow understanding of the problem forced a great number of parents of a child with mental retardation to not interfere in the problem through medical treatment. For this reason all segments of the society, even the most concerned bodies such as Parents, Special Needs Teachers and Regular School Teachers, have only very little understanding on the problem at hand. They lack information on the proper handling and early treatments and/or appropriate trainings of the child in problem.

Historically, the Ethiopian Government learned a lot of things on human disability from different Countries and International Conventions. But, very little emphasis was given for persons with disabilities in general and persons with mental retardation in particular. The negative attitude in supporting persons with disabilities is also reflected in the quantity and quality of support systems.

In education area, for example, there is a great gap in the quality education and the rate of increments in the number of students between the regular and special needs programs. Where as, history taught us that only less than a two decade gap (1900-1917 E.C.) was passed between the establishments and initiation of these two programs in the City Administration of Addis Ababa. But, the school attendance rate still showed a great gap.

Because of the limited centers and schools for persons with mental retardation the country lacks experience and information on current advancements on the special needs program. Since the country lacks experience, necessary human and material resources, positive societal attitude and proper government intervention, etc... the *hexagonal circulation of lack of information and formation of claimed causal factors with its associative negative societal attitude* will continue.

This fact still questioned the implementation of the 1994 Educational and Training Policy of the Country that intended the current advancement of integration, eventually of inclusion. Thus, the prerequisites of inclusive education including resource room, inclusive teachers' community, nursery and kindergarten educational centers and vocational centers should be prepared. Societal attitude change, awareness creation and empowerment through advocacy programs on the rights and equal opportunities of

children with mental retardation should be implemented. Empowering parents and other segments of the society with the proper information, training etc. should also be considered.

Having all the above-mentioned problems in mind, in this specific study, the researcher examined some claimed causal factors of mental retardation, the associated societal attitude towards persons with mental retardation, and its impact in the support systems for these children.

CHAPTER THREE

3. METHODOLOGY

In this study, the researcher examined some claimed causal factors of mental retardation, the associated societal attitude towards persons with mental retardation, and its impact on the support systems for these children.

The extent of individuals' attitude towards children with mental retardation and the variation in such attitudes among the interrelated variables were also examined. Such variables include type of relationship and/or social interaction, religion, ethnic lines, location, marital status, parental employment status, education, income, sex, and age groups. The significance of the differences between the attitudes regarding mental retardation and children with mental retardation among parents of children with mental retardation, special needs teachers who are currently teaching children with mental retardation and other ordinary classroom teachers in the society who have little or no experience with children with mental retardation were also checked. Individuals' agreement in ranking some claimed causal factors for mental retardation were analyzed. Finally, the current situations of support systems for children with mental retardation were also discussed.

To address all these issues, a detailed questionnaire was adapted, revised, pilot tested and finally prepared. Guiding questions for interview and focus group discussion were used. Document analysis was also implemented. To this effect, the data was analyzed quantitatively with some qualitative description of data from the natural observations/visit reports, interviews, and focus group discussion, and document analysis.

3.1 Data Sources

As described above, this study encompassed parents of children with mental retardation, special needs teachers who are currently teaching children with mental retardation and have acquired experience in teaching children with mental retardation, and other ordinary classroom teachers in the society who have little or no experience with children with mental retardation with in the society. School directors, government officials and National Association leaders were included.

3.2 Sampling

Stratified sampling technique was used in this specific study. Samples of fifty participants were planned to be randomly selected from each stratum, taking each type of relationship (parent, special needs teachers, and regular school teachers) as a stratum. For the diminished number of special needs teachers for children with mental retardation only forty-two willing participants were included in the main study. As a whole, a total of one hundred forty-two participants were involved in the filling out of the self-report questionnaire. Hundred percent response rates also maintained both in the pilot and main study. About thirty individuals were also participated in the interview sessions, and focus group discussions.

To be specific, the participants that were included in the main study were:

- Fifty randomly selected parents (some responsible parental figures/guardians were also included) of children with mental retardation from the different sub cities,
- Forty-two special needs teachers who are currently working in segregated or integrated (inclusive) classes for children with mental retardation, from the different special needs institutions in the City Adm. of Addis Ababa,

- Fifty ordinary classroom teachers who have little or no experience with children with mental retardation with in the society,
- Seven special needs program leaders, five elementary school directors and/or the deputy directors of these schools, with or without special needs units and/or vocational training centers for children with mental retardation, in the City Adm. of Addis Ababa,
- Three Government Officials (from MOE, Region 14 Education Bureau, and Social and Civil Affairs Bureau of Addis Ababa City Administration), and
- Leader of the Ethiopian National Association (ENA) for Mentally Retarded Children and Youth (MRCY), four parents of children with mental retardation, and ten Special Needs Teachers from the thirteen support organization for children with mental retardation in Addis Ababa City Administration.

The selection was held twice in different settings for the main and pilot studies. About 11% (15 participants) of the main study's sample size participated in the pilot study. The pilot study was conducted in Belay Zeleke number 2 Primary School, Hamle 19/67 Primary School, and the Ethiopian National Association (ENA) for Mentally Retarded Children and Youth (MRCY) in Addis Ababa. All the three groups of individuals proportionally participated from these two schools and the national association.

The former three groups of people participated proportionally in the field study. One hundred forty-two participants from the rest eleven (excluding Belay Zeleke school and ENAMERCY)special needs institutions with two branch offices and five regular schools having no special needs unit (Karamara, Awalia, Arbegnoch, Edget Fana, and Hizbawi

Serawit) were included in the field study. Ten regular school teachers from each school were randomly selected and participated in the filling outs of the self-report questionnaire.

3.3 Instrument Used

In this study the Amharic version of the Self-Report Questionnaire was used as the main instrument in gathering data. The techniques of interview, natural observation/visit and focus group discussion were also used to understand the problem in depth and supplement the questionnaire.

3.3.1 Questionnaire

The questionnaire was designed (especially parts I, II, and IV) and adopted (part II) then pilot tested by the researcher himself. After reviewing previous works and collecting possible items through an open-ended questionnaire, the researcher designed the instrument that was used in this specific study. The questionnaire expected to measure the extent of social interactions, the nature of the associated societal attitudes, and the respondents' level of agreement on the claimed causal factors for mental retardation.

The originally organized Self-Report Questionnaire was administered for five parents and five special needs teachers in the Belay Zeleke number 2 school and Kokeb Vocational training center. Five regular school teachers also participated from Hamle 19/67 elementary school in the pilot study.

The validity and reliability of the tool were checked. The face validity and the Alpha and Split-half reliability methods of the instrument were tested based on the responses given by the fifteen participants of the pilot study.

For these reason the Self-Report Questionnaire includes the following subscales.

I. BIOGRAPHIC AND SOCIO-ECONOMIC INFORMATION that includes Demographic Variables such as the kinds of relationships, religions, ethnic identity, location ,marital status, parental employment, education, income, sex and age groups. The relevant socioeconomic related questions were also supplemented the different scales in the other sections of the Self-Report Questionnaire. All these variables might have an effect in suspecting the causal factors, developing attitudes, and interacting with children with mental retardation. Each was checked in this specific study.

II. LEVELS OF SOCIAL INTERACTION SCALE that includes four relevant items with quantifiable options. According to their scores, participants were classified as persons with frequent, occasional or minimal social interaction with children with mental retardation. In other words, they are categorized as highly interactive, less interactive and non-interactive individuals with persons with mental retardation.

According to the weight for each option given the minimum and the maximum scores any participant could get are 4 and 20, respectively. The sum of the omitted score values for all the items (if it occurs) was 11. Therefore, participants who have scored 4-11 can be categorized as Non-Interactive or persons who have no or too little social interaction with persons with mental retardation. Those who score 12-14 and 15-20 could also be considered as Less-Interactive and Highly- Interactive individuals with persons with mental retardation, in that respective order. But, it should be noted that those who have high social interaction with persons with mental retardation are not the only and

sufficient persons for the positive growth and developments of the child in problem.

In this way the scale was constructed and the researcher's thesis advisor Professor commented on it. In addition, the comments of two Special Needs professionals and Amharic and English language Expertise were also accepted. On the other hand, most of the highly interactive participants did not respond on the fourth item. Similarly, most others write, *"I will never stop our social interaction"* under option 'e' of item number four of the scale.

The Social interaction Scale was reliable both in Alpha (Alpha = 0.6086) and Split-half (Correlation between forms =0.5684; Equal-length Spearman-Brown = 0.7248; Guttmann Split-half = 0.6814; Unequal-length Spearman-Brown = 0.7248) methods of reliability in the main research. It was also found to be reliable both in Alpha (Alpha= 0.7500) and Split-half (Correlation between forms =0.6960; Equal-length Spearman-Brown = 0.8208; Guttmann Split-half = 0.7809; Unequal-length Spearman-Brown = 0.8208) methods in the pilot study.

According to Anastasi (1976) most of the social scales, like this, are moderately reliable. It is so because a measure should be more reliable to make decision about individual than groups. In addition, the instrument could discriminate the participants as follows.

Table 3.1: Levels of Social Interaction of Parents of Children with MR

Types of Social Interaction	Scale Value	Number of Parents	Percentage
Non-Interactive	4-11	1	20
Less-Interactive	12-14	0	-
Highly-Interactive	15-20	4	80
TOTAL		5	100

Table 3.2: Levels of Social Interaction of Special Needs Teachers

Types of Social Interaction	Scale Value	Number of Special School Teachers	Percentage
Non-Interactive	4-11	-	-
Less-Interactive	12-14	-	-
Highly-Interactive	15-20	5	100
TOTAL		5	100

Table 3.3: Levels of Social Interaction of Regular School Teachers

Types of Social Interaction	Scale Value	Number of Regular School Teachers	Percentage
Non-Interactive	4-11	1	20
Less-Interactive	12-14	2	40
Highly-Interactive	15-20	2	40
TOTAL		5	100

Table 3.4: Levels of Social Interaction of All Participants

Types of Social Interaction	Scale Value	Number of all Participants	Percentage
Non-Interactive	4-11	2	13.33
Less-Interactive	12-14	2	13.33
Highly-Interactive	15-20	11	73.33
TOTAL		15	100

Since two-third of the participants (parents and special Needs teachers) have indispensable contact and interaction with persons with mental retardation, it was suspected to get higher rate of highly attached social interaction among the participants. The pilot study shows the same. Therefore, this instrument is found to be valid and reliable to be used.

III. ATTITUDE SCALE: this scale was adopted from the research works of *BASE LINE SURVEY ON DISABILITIES IN ETHIOPIA and ATTITUDES TOWARDS DISABILITY AND THE ROLE OF COMMUNITY BASED REHABILITAITION PROGRAMS IN ETHIOPIA* (Tirussew et al. 1995, Daniel 2000). It has 16 relevant items with appropriate options. The total items were divided in to four specific attitude dimensions.

The scoring procedure followed five point Likert scale techniques. In the pilot survey the instrument tested and was found to be valid and reliable enough to measure parents and teachers (special needs and regular schools) attitudes towards mental retardation and persons with mental retardation.

Its reliability both in the pilot study (Alpha = 0.6435 and Split-half =Correlation between forms =0.7093; Equal-length Spearman-Brown = 0.8299; Guttmann Split-half = 0.7388; Unequal-length Spearman-Brown = 0.8299) and the main study (Alpha = 0.7606 and Split-half =Correlation between forms =0.4907; Equal-length Spearman-Brown = 0.6584; Guttmann Split-half = 0.6536; Unequal-length Spearman-Brown = 0.6584) was agreeable and reliable enough for the study. In supporting the application of this instrument in the field study Anastasi (1976:552) wrote that most attitude scales are moderately reliable.

IV. ***RANK ORDER FOR THE CLAIMED CAUSAL FACTORS OF MENTAL RETARDATION***: Items in this part was constructed in the way that they could be able to provide the religious, cultural, educational, and psychological as well as sociological picture of the individuals' toward claimed causal factors for mental retardation.

Participants were asked to rank the items in accordance with the weights given as causal factor for mental retardation. The ranked causal factors for each

person to each item were summed and the means for an item of all subjects calculated. Finally, the means were re-ranked for all subjects as they weighed each item as claimed causal factors for mental retardation.

First of all, eight items were selected and administered to re-rank each of the items individually. Comments from the researcher's thesis advisor, others professionals on the area, and a rough administration and discussion with some parents dictates the other way to group the causal factors. Thus, the items were grouped into four and pilot tested. These classifications include causes related to God and Evil spirits, Organic-related causes, other beliefs, and cultural-familiar factors. This fact allows the researcher to use the instrument in the field study.

In addition, the attitude scores were analyzed by ANOVA. The association of relationship types to the background variables was also tested by Chi-square (X^2) statistical tests. And other statistic tests such as Percentage, mean, Standard deviation and Cramer's phi (Ø), were also used in the study.

3.3.2 Interview Guide

There were interview sessions with twenty two selected participants (seven special needs program leaders, six special needs teachers, five school directors, and three government officials and one leader of the national association for Mentally retarded children and youth). To this effect, Semi-Structured Interview guide (see Appendix 2) was prepared for gathering supplementary information from the different participants in this specific study. Twenty-two items (ten items for leaders of special needs unit, seven items for special needs teachers, and five items for government and non government officials) were included in the three types of the interview guides. This procedure was

helpful to understand the problem in depth from the selected relevant officials and professionals, especially on the quality and quantity of the support systems for persons with mental retardation.

3.3.3 Focus Group Discussion

The focus group discussion was highly substantial and supplements the information gathered through the self-report questionnaire and the interviews. To make the discussion more interesting and resourceful, four guiding questions were prepared in advance. The focus group discussion participants encompassed four special needs teachers and four parents of persons with mental retardation, a total of eight persons. Regular school teachers were invited to participate in the discussion sessions. But, they fail to share the program.

3.3.4 Document Analysis

Among the members of Ethiopian National Association (ENA) for Mentally Retarded Children and Youth (MRCY) the documents of 233 registered regular members were analyzed. It was to make rough estimation on the distribution of these children among the ten sub cities of Addis Ababa and to observe the professional labeling and certification processes held for their problem. It was also helpful in collecting the possible and/or claimed causal factors of mental retardation and other additional substantial issues for the research. Other essential documents were also analyzed.

3.4 Data Collection and Analysis Procedure

Through the designed instruments the data was gathered. The data was also tabulated, analyzed and interpreted in line with the research questions raised by this specific study.

Generally, the data was analyzed quantitatively with some qualitative description of data from the natural observations/visit reports, interviews, and focus group discussions and document analysis.

CHAPTER FOUR

4. FINDINGS OF THE STUDY

In search of the claimed causal factors, the associated societal attitude towards mental retardation n and its impact on the support systems a Self-Report Questionnaire was administered. It was distributed and filled by Fifty (50) parents of children with mental retardation, Forty-two (42) Special Needs Teachers for children with mental retardation, and Fifty (50) Regular Teachers of the Elementary Schools in the City Administration of Addis Ababa.

The Self-Report questionnaire has four parts. The first part concerns *biographic and socioeconomic information of the participants*. The second part encompasses four items in the *social interaction scale*, the third part comprises twenty-four items in the *attitude scale*, and the fourth part included *four groups of causal factors of mental retardation* for ranking purpose.

The main questions to be answered by this and the forthcoming chapters were the following:

1. Is there an agreement among the designated participants in societal claimed causal factors for mental retardation?
2. What are the attitudes of parents of children with mental retardation, special needs teachers' who are currently teaching children with mental retardation, and other ordinary classroom teachers' towards mental retardation looks like?
3. Is there an attitudinal difference between parents of children with mental retardation, special needs teachers who are currently teaching children with mental retardation, and other ordinary classroom teachers?

4. What are the different variables that affect individuals' attitude toward mental retardation?

5. What are current situations of support systems for children with mental retardation? and

6. What are the appropriate intervention mechanisms that could change the attitudes of parents, teachers, and other segments of the society toward mental retardation?

In general, the causal factors, the associated societal attitudes, and its impact on the accessibilities and developments of support systems for children with mental retardation in the Addis Ababa City Administration were studied. The analyses of all the information gained through the self-report questionnaire, interview sessions, natural observations/visits, and focus group discussions were depicted as follows.

4.1 BIOGRAPHIC and SOCIOECONOMIC INFORMATIONS

Table 4.1.1: Gender Classification of the Respondents

S/N	GROUP	SEX						TOTAL	
		MALE		*FEMALE*		UNIDENTIFIED OTHERS			
		N	%	*N*	%	N	%	N	%
1	Parents	24	17.6	25	17.6	1	0	50	35.2
2	Special Needs Teachers	6	4.2	32	22.5	4	2.8	42	29.6
3	Regular School Teachers	22	15.5	26	18.3	2	1.4	50	35.2
	TOTAL	52	36.6	83	58.5	7	4..9	142	100

In this specific study participants from both sex groups were encouraged. Unfortunately, most (32 or 22.5%) of the special needs teachers who are currently teaching children with mental retardation were found to be females. Only small proportions (6 or 4.2%) of the special needs teachers were males. For this solid reason, the participation of females (83 or 58.4%) overweighs the males (52 or 36.6%). A small number of participants (7 or 4.9%) did not specify their sex type.

Table 4.1.2: Age Group Specification of the Respondents'.

S/N	GROUP	AGE GROUPS					TOTAL
		BELOW 18	*19-35*	*36-55*	*ABOVE 55*	*UNIDENTIFIED*	
1	Parents	7	25	13	5	0	50
2	Special Needs Teachers	0	27	14	0	1	42
3	Regular School Teachers	0	24	23	3	0	50
	TOTAL	7	76	50	8	1	142
	PERCENTAGE	4.9	53.5	35.2	5.6	0.7	100

Most of the participants (76 or 53.52%) were found to be in the age rage category of Adolescence/Early Adulthood (19-35 years old). A significant number of participants (50 or 35.21%) were also found to be in the age range of 36-55. Those participants who are children, according to the WHO's definition (below the age of 18) and old aged (above the age of 55) were found to account only for 4.93% and 5.6%, respectively. Since those who are responsible guardians were included most of them were parent participants. Only one respondent did not respond on the issue.

Table 4.1.3: Participants' Marital Status.

S/N	GROUP	MARITAL STATUS												TOTAL
		SINGLE		*MARRIED*		*DIVORCED*		*WIDOWED*		*OTHERS*		*UNIDENTIFIED*		
		N	%	*N*	%	N	%	N	%	N	%	N	%	N
1	Parents	24	16.8	23	16.1	0	0	4	2.8	0	0	1	0.7	50
2	Special Needs Teachers	17	12.0	22	15.5	2	1.4	0	0	0	0	0	0	42
3	Regular School Teachers	18	12.7	24	16.9	1	0.7	5	3.5	0	0	1	1.4	50
	TOTAL	59	41.5	69	48.6	3	2.1	9	6.3	0	0	2	1.4	142

Those who are single (59 or 41.5%) and married (69 or 48.6%) among the total participants constitute about 90 % of the cases. In this specific study, other cases such as divorced & widowed were found to be insignificant in terms of participation.

When we critically observe the marital status of the specific groups unfortunately most parents of children with mental retardation were found to be single, while most of

the teachers (both regular and special needs) were found to be in the category of married. Since some responsible guardians were included and most are among the poorest of the poor community in this country such marital relation is not obverse.

Table 4.1.4: Religious Background of the Participants.

S/N	GROUP	RELIGION										TOTAL
		ORTHODOX		*PROTESTANT*		MUSLIMS		OTHERS		UNIDENTIFIED		
		N	%	*N*	%	N	%	N	%	N	%	N
1	Parents	40	28.0	5	3.5	2	1.4	1	0.7	2	1.4	50
2	Special Needs Teachers	20	14.1	22	15.5	0	0	0	0	0	0	42
3	Regular School Teachers	35	24.6	4	2.8	11	7.7	0	0	0	0	50
	TOTAL	95	66.9	31	21.8	13	9.2	1	0.7	2	1.4	142

It is simple to understand, from Table 4.1.4 above, that more than half of the participants were found to be from the Orthodox Christianity. The participation rate of respondents from the Protestant Christianity and Islamic religions accounted only for 21.8% and 9.2%, respectively. The participation rate from followers of other religions and/or beliefs was found to be inconsequential. It holds true even more for those who did not specify their affiliation toward any specific belief and/or religion.

Table 4.1.5: Ethnic Group Specification of the Respondents.

S/N	GROUP	ETHNIC GROUP												TOTAL
		AMHARA		*OROMO*		*TIGRE*		*GURAGE*		OTHERS		UNIDENTIFIED		
		N	%	*N*	%	N	%	N	%	N	%	N	%	N
1	Parents	29	20.4	8	5.6	0	0	5	3.5	3	2.1	5	3.5	50
2	Special Needs Teachers	18	12.7	8	5.6	2	1.4	4	2.8	4	2.8	6	4.2	42
3	Regular School Teachers	33	23.2	4	2.8	2	1.4	5	3.5	2	1.4	4	2.8	50
	TOTAL	80	56.3	20	14.1	4	2.8	14	9.9	9	6.3	15	10.6	142

More than half of the participants (80 or 56.3%) of this specific study were found to be from the Amhara Ethnic Group. Participants from the Oromo, Gurage, and Tigre

Ethnic Groups also accounts for 14.1%, 9.9%, and 2.8%, respectively. Participants from other different ethnic groups accounted for 6.3%. 10.6% of the total participants did not specify their ethnic identity. Most of the participants in this category reflect their negative attitude in the differentiation of people based on their ethnic affiliation. Even more, some criticize the newly employed administration division of the country. As a result, they responded that they are Ethiopians, nothing else.

Table 4.1.6: Participants' Distribution in the Ten Sub Cities of Addis Ababa

S/N	GROUPS	SUB CITY											TOTAL
		ARADA	ADDIS KETEMA	LIDETA	CHERK OS	YEKA	BOLE	AKAKI-KALITI	NIFAS ILK-LAFTO	KERANY O	GULELE	Unspecifi ed Others	
1	*Parents*	8	5	4	1	22	1	0	0	0	4	5	50
2	*Special Needs Teachers*	2	1	4	2	3	0	0	9	1	4	15	42
3	*Regular School Teachers*	8	3	7	0	9	1	0	0	5	8	9	50
	TOTAL	18	9	15	3	34	2	0	11	6	16	29	142
	PERCENTAGE	*12.7*	*6.3*	*10.6*	*2.1*	*23.9*	*1.4*	*0*	*7.0*	*4.2*	*11.3*	*20.4*	*100*

The participants' distribution clearly depicts the non participation of parents from the three sub cities (Akaki-Kaliti, Nifasilk-Lafto, and Kolfe-Keranyo sub cities), special needs teachers from two sub cities (Bole and Akaki-Kaliti), and regular school teachers from three sub cities (Cherkos, Akaki-Kaliti, and Nifas Silk-Lafto) of the city. But, a total absence of participation from the three different groups is observed only in Akaki-Kaliti sub city, although special needs teachers from Akaki Government School were included both in the filling out of the self report questionnaire and interview sessions. Because of the newly implemented city administration and sub city categorization significant number of participants (29 or 20.4%) did not respond on the issue. For the most part it occurred for lack of information on the new administrative division/classification of the city. In

this specific study, participants from Yeka sub city accounted for the Lion's share (34 or 23.9%) while participants from Bole sub city constituted the very smallest share (2 or 1.4%).

Table 4.1.7: Educational Background of the Respondents.

S/N	GROUP	EDUCATIONAL LEVEL									TOTAL	
		ILLITERATE	Grade 1-4	Grade 5-8	Grade 9-12	CERTIFICATE	DIPLOMA	DEGREE	OTHERS	UNIDENTIFIED	N	PERCENT
1	Parents	11	7	8	9	2	7	0	3	5	50	35.2
2	Special Needs Teachers	0	0	0	11	22	9	0	0	0	42	29.6
3	Regular School Teachers	0	0	0	3	34	10	2	1	2	50	35.2
	TOTAL	11	7	8	23	58	26	2	4	7	142	100
	PERCENTAGE	7.7	4.9	5.6	16.2	40.8	18.3	1.4	2.8	4.9	100	

Most of the participants (58 or 40.8%) of this study were found to be certificate holders. Those who were Diploma holders (26 or 18.3%) and high-school leavers/dropouts (23 or 16.2%) were also accounted for a significant portion of participation. Only seven of the total participants did not express their level of education. In general, most of the regular and special needs teachers, were certificate holders while most parents of children with mental retardation were found to be illiterate (could not read and write by themselves).

Table 4.1.8: Parental Employment Status.

S/N	*EMPLOYMENT STATUS OF PARENTS*	*FREQUENCY*	*PERCENTAGE*
1	EMPLOYED	9	18
2	UNEMPLOYED	26	52
3	RETIRED	10	20
4	OTHERS	2	4
5	UNIDENTIFIED	3	6
	TOTAL	50	100

Since all regular and special needs teachers were currently at work only the parental employment status was studied. In this way, most of the parents of children with mental retardation (26 or 52%) were found to be unemployed. Small number of parents

(9 or 18%) were found to be in the category of employed and ten (20%) of them were retired. Three (3 or 6%) of the total parent respondents did not express their position concerning their employment.

Table 4.1.9 Monthly Income of the Parents of Children with Mental Retardation

S/N	*MONTHLY FAMILY INCOME OF PARENTS*	*FREQUENCY*	*PERCENTAGE*
1	BELOW BIRR 200	30	60
2	201-350 BIRR	5	10
3	351-500 BIRR	4	8
4	501-650 BIRR	2	4
5	651-800 BIRR	1	2
6	ABOVE 801 BIRR	1	2
7	UNSPECIFIED	7	14
	TOTAL	50	100

Most parents of children with mental retardation (30 or 60%) were found to be poor in terms of economy, at least. Their monthly family income was found to be below two hundred (200.00) Ethiopian Birr. Five of the parent participants also responded as their monthly family income was between 201-350 Ethiopian Birr. Significant number of participants (7 or 14%) also did not react/respond on the issue.

Table 4.1.10: Monthly Salary of Regular and Special Needs Teachers.

S/N	*MONTHLY FSALARY OF REGULAR and SPECIAL NEEDS TEACHERS*	*REGULAR TEACHERS*		*SPECIAL NEEDS TEACHERS*		*TOTAL*	
		N	*%*	*N*	*%*	*N*	*%*
1	BELOW 300 BIRR	0	0	4	4.3	4	4.3
2	301-450 BIRR	10	10.9	6	6.5	16	17.4
3	451-650 BIRR	7	7.6	11	12.0	19	20.7
4	651-800 BIRR	10	10.9	11	12.0	20	21.7
5	ABOVE 801 BIRR	9	9.8	8	8.7	17	18.5
6	UNSPECIFIED	14	15.2	2	2.2	16	17.4
	TOTAL	50	54.3	42	45.6	92	100

No one regular school teacher earns a monthly salary of below three hundred (300.00) Ethiopian Birr. But, four (4.3%) of the total special needs teachers received the identified amount of money as monthly salary. But, in the other salary categorization

mentioned above, in Table , both regular and special needs teachers labeled proportionally. The missing cases in answering this question are significant among the regular school teachers (14 or 15.2%) than the special needs teachers (2 or 2.2%).

4.2 SOCIAL INTERACTION TYPES & LEVELS WITH PERSONS WITH MENTAL RETARDATION

In measuring the participants' type and level of social interactions with children with mental retardation four relevant items were included in part two of the self report questionnaire. After checking the validity and reliability of the instrument in the pilot test it was used in the main (field) study. All the participants have been given the chance to respond on each. The reliability of the instrument was found to be valid both in the pilot and main study.

4.2.1 TYPES (EXTENT/INCIDENCE) OF SOCIAL INTERACTION WITH CHILDREN WITH MENTAL RETARDATION

S/N	GROUP	TYPES OF SOCIAL INTERACTION				TOTAL	
		NON INTERACTIVE		*INTERACTIVE*			
		N	%	N	%	N	%
1	Parents	5	3.5	45	31.7	50	35.2
2	Special Needs Teachers	0	0	42	29.6	42	29.6
3	Regular School Teachers	24	16.9	26	18.3	50	35.2
	TOTAL	29	20.4	113	79.6	142	100

Table 4.2.1: Distribution of Social Interaction Types among the Three Groups.

From the total 142 participants only 29 or 20.4% of them were found to be persons with little or no social interaction with children with mental retardation. The rest 113 (79.6%) of the participants were persons with low or high level of social interaction with these children.

Specifically, all the 42 (29.6%) Special Needs Teachers and 45 (31.7%) of the parents of children with mental retardation constitute the larger rate of social interaction with these children. A good variation was also seen among the regular School Teachers. Half of them, 24 (48%), were found to be non socially interactive with children with mental retardation in terms of social relationships. The rest 26 (52%), on the other hand, were found to be persons with non-social interaction with children with mental retardation.

4.2.2 LEVELS (FREQUENCY) OF SOCIAL INTERACTION WITH CHILDREN WITH MENTAL RETARDATION

S/N	GROUP	LEVEL OF SOCIAL INTERACTION						TOTAL	
		NON INTERACTIVE		*LESS INTERACTIVE*		*HIGHLY INTERACTIVE*			
		N	%	*N*	%	N	%	N	%
1	Parents	5	3.5	2	1.4	43	30.3	50	35.2
2	Special Needs Teachers	0	0	1	0.7	41	28.9	42	29.6
3	Regular School Teachers	24	16.9	18	12.7	8	5.6	50	35.2
	TOTAL	29	20.4	21	14.8	92	64.8	142	100
	Mean Scores	9.79		12.86		17.30		15.11	
	Standard Deviation	1.45		0.91		1.07		3.31	

Table 4.2.2: Participants' Distribution based on Their Level of Social Interaction

Almost all socially interactive Parents and Special Needs Teachers found to be highly sociable with children with mental retardation, whereas, almost all of the Regular School Teachers were found to be individuals with less and/or non social interaction with children with mental retardation. Five parents also showed social rejection and practiced unwanted type of social communication with their children with mental retardation.

As it is discussed above only 29 (20.4%) of the participants were found to be non socially interactive with children with mental retardation. They have a mean score of 9.79 with 1.45 standard deviation. But, 21 (14.8%) and 92 (64.8%) of them were less socially

interactive and highly socially interactive with children with mental retardation, in that respective order.

In general, about 80% of the participants have social relationship with children with mental retardation. The mean and standard deviation statistic values also clearly show this fact by increasing on the value to higher levels. Thus, it is possible to conclude that about 80% of the participants have better social interaction with children with mental retardation.

4.2.3 ASSOCIATIONS OF THE TYPE and FREQUENCY OF SOCIAL INTERACTION TO THE PARTICIPANTS' BACKGROUND VARIABLES

In every society the levels of social relationship with persons with mental retardation differs among the different social and personal variables. Since many of the children with mental retardation have problems in communication, language, self help and daily living skills and most are living in closed doors it is difficult even to meet them in daily living processes.

The parents of children with mental retardation pass almost all the twenty-four hours or the whole day with their child. Since a small number of representatives of these children, especially the mild and moderate cases, are utilizing their right to education, Special Needs Teachers have also the opportunity to pass six hours a day with these children. Whereas, the other segments of the society lack communication with them.

Lack of information coupled with the traditionally and culturally tighten thoughts on the issue at hand also complicated the type and/or levels of social interaction with persons with mental retardation. Education, Living environment/Location, and other demographic variables such as Age, Sex, and Marital Status might make differences on the issue at hand.

Hence, the following are the results of the analyses of the association between the types & levels of social interaction and the ten (10) selected variables: Sex, Age, Religion, Relationship, Location, Ethnic group, Marital Status, Educational Levels, Parental Employment Status, and Income/Salary.

4.2.3.1 TYPES and LEVELS OF SOCIAL INTERACTION and SEX

SEX	Types and Levels of Social Interaction												TOTAL		
	Highly Socially Interactive				Less Socially Interactive				Non Socially Interactive						
	N	%	Mean	Std. Dev.	N	%	Mean	Std. Dev.	N	%	Mean	Std. Dev.	N	Mean	Std. Dev.
Male	31	21.8	17.23	1.09	7	4.9	13.14	0.90	14	9.9	9.93	1.38	52	14.63	3.56
Female	57	40.1	17.37	1.10	12	8.5	12.83	0.94	14	9.9	9.64	1.60	83	15.46	3.16
Missing Items	4	2.8	17.00	.00	2	1.4	12.00	0.00	1	0.7	10.00	0.00	7	14.57	3.10
Total	92	64.8	17.30	1.07	21	14.8	12.86	0.91	29	20.4	9.79	1.45	142	15.11	3.31

Table 4.2.3.1 Types and Levels of Social Interaction and Sex.

About sixty percent of the total participants were female while male participant's accounts only for 37.3%. The proportions of female participants also overweigh the males only on the special needs teachers group. In spite of these variations the results of the participants' type and frequency of social interaction described below.

Out of the total 37.3% male participants about 22% and 13% of them are found to be highly and occasionally socially interactive with children with mental retardation. While, out of 58.3% total female participants about 40% have high social interaction and 13% have less social interaction with children with mental retardation. The rest 10% of the participants from each sex group are found to have insignificant, or very little social interaction with children with mental retardation. The mean and standard deviation statistic values also described the same.

To clearly observe the relationships between the extent and frequency of Social Interaction and Sex Chi-square calculation was in order. Statistical testing of the null hypothesis that could be phrased as *'Is Sex independent of the Participants' types & levels*

of Social Interaction with children with mental retardation, both in extent and frequency?' was also crucial. In testing this hypothesis a nonparametric statistic, that is Chi-square, was calculated and depicted below.

LEVEL OF SOCIAL INTERACTION	SOCIAL INTERACTION			
	Highly Interactive	Less Interactive	Total Interactive	Non Interactive
SEX	N	N	N	N
Male	31	7	38	14
Female	57	12	69	14
Total	88	19	107	28
Chi-Square ($\chi 2$) Value	$\chi 2$= 0.017, df=1 $\chi 2$ (1,0.05)= 3.841		$\chi 2$= 1.96,df=1 $\chi 2$ (1,0.05)= 3.841	

Table 4.2.3.2: Relationship between the Extent and Frequency of Social Interaction and Sex.

Inspection of the calculated Chi-square ($\chi 2$) statistic value, $\chi 2$= 0.017, $P<0.05$ and $\chi 2$= 1.96, $P<0.05$, revealed the non significance and independence of the association of Sex and the extent and frequency of the participants' social relationship with children with mental retardation. Therefore, it is possible to conclude that sex has not yet any effect on the type and frequency of the participants' social interaction with children with mental retardation. If other things were controlled and became equal, both male and female participants could have relatively equal social interaction with children with mental retardation, both in type and frequency.

4.2.3.2 TYPES and LEVELS OF SOCIAL INTERACTION and AGE LEVEL

AGE LEVEL	Types and Levels of Social Interaction												TOTAL		
	Highly Socially Interactive				Less Socially Interactive				Non Socially Interactive						
	N	%	Mean	Std. Dev.	N	%	Mean	Std. Dev.	N	%	Mean	Std. Dev.	N	Mean	Std. Dev.
BELOW 18 YEARS OLD	5	3.5	17.60	1.34	-	-	-	-	2	1.4	11.00	.00	7	15.71	3.40
19-35 YEARS OLD	47	33.1	17.38	1.07	18	12.9	12.83	0.92	11	7.8	9.82	1.40	76	15.21	3.12
36-55 YEARS OLD	32	22.5	17.16	1.11	3	2.1	13.00	1.00	15	10.6	9.53	1.55	50	14.62	3.71
ABOVE 55 YEARS OLD	8	5.6	17.25	0.71	-	-	-	-	-	-	-	-	8	17.25	0.71
MISSING ITEMS	-	-	-	-	-	-	-	-	1	0.7	11.00	.	1	11.00	.
Total	92	64.8	17.30	1.07	21	14.8	12.86	0.91	29	20.4	9.79	1.45	142	15.11	3.31

Table 4.2.3.3: Types and Level of Social Interaction by Age Levels.

Participants in the middle ages such as those who are between the ages of 19-35 (33.10%) and 36-55 (22.54%) have shown highest positive social interaction with children with mental retardation. While, the youngsters and the aged participants accounts only for 3.52% and 5.63% in the highest level of social interaction with children with mental retardation, respectively. The non-socially interactive middle-aged participants those who are between the ages of 19-35 and 36-55 also accounted only for 7.75% and 10.56%, respectively.

In general, the calculated mean statistic values clearly differentiate among the different types and frequencies of the participants' social relationship with children with mental retardation. The aged, those who are above the age of 55 years old, showed highest mean statistic (17.25) even in the general categorization of the participants' levels of social interaction with children with mental retardation.

LEVEL OF SOCIAL INTERACTION	SOCIAL INTERACTION			
	Highly Interactive	Less Interactive	Total Interactive	Non Interactive
AGE	N	N	N	N
BELOW 18 YEARS OLD	5	-	5	2
19-35 YEARS OLD	47	18	65	11
36-55 YEARS OLD	32	3	35	15
ABOVE 55 YEARS OLD	8	-	8	-
Total	92	21	113	28
Chi-Square ($\chi 2$) Value	X2= 8.852, df=3 $\chi 2$ (3,0.05)=7.82		$\chi 2$=6.929, df=3 $\chi 2$ (3,0.05)=7.82	

Table 4.2.3.4: Relationship between Extent and Level of Social Interaction and Age.

In checking the Association between the Types and Levels of Social Interaction and Age Level a series of chi-square calculation was computed. It was helpful in testing the null hypotheses that could be written as 'Is Age Level independent of Social Interaction Types & Levels?'.

The calculated chi-square statistic, $\chi2$=8.852 (df=3), values showed a group difference among the different age groups only in the levels of social interaction with children with mental retardation. Whereas, it is clearly reflected, $\chi2$=6.929 (df=3), $p<0.05$, the independence of the participants' age level to their types of social interaction with children with mental retardation. Thus, age level had an effect only on the levels of social relationship, not in the types of social interaction, among the general participants.

Table 4.2.3.5: Standardized Residuals* for the Levels of Social Interaction and Age Level

Levels of Social Interaction		AGE LEVEL			
		BELOW 18 YEARS OLD	*19-35 YEARS OLD*	*36-55 YEARS OLD*	*ABOVE 55 YEARS OLD*
F1	Highly Interactive	0.4605	-0.8138	0.6565	0.5825
	Less Interactive	-0.9639	1.7034	-1.3741	-1.2193

* Decision Rule: /R/≥ 2.00 is a major contributor to the significance calculated value; where R= o-e/e

From the calculated standardized residuals it is possible to observe that no cell has contributed for the significant group differences in the participants' level of social interaction with children with mental retardation. The calculated Cramer's' phi ($Ø_1$), $Ø_1$ = 0.2799, also shows a lowered strengths of association.

4.2.3.3 TYPES and LEVELS OF SOCIAL INTERACTION and MARITAL STATUS

MARITAL STATUS	Types and Levels of Social Interaction												TOTAL		
	Highly Socially Interactive				Less Socially Interactive				Non Socially Interactive						
	N	%	Mean	Std. Dev.	N	%	Mean	Std. Dev.	N	%	Mean	Std. Dev.	N	Mean	Std. Dev.
SINGLE	39	27.5	17.23	0.90	8	5.6	12.50	0.93	12	8.5	9.58	1.73	59	15.03	3.39
MARRIED	46	32.4	17.35	1.20	12	8.5	13.08	0.90	11	7.8	10.18	0.87	69	15.46	3.02
DIVORCED	3	2.1	17.00	.00	-	-	-	-	-	-	-	-	3	17.00	.00
WIDOWED	4	2.8	17.75	1.50	-	-	-	-	5	3.5	9.40	1.95	9	13.11	4.70
OTHERS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MISSING ITEMS	-	-	-	-	1	0.7	13.00	.	1	0.7	10.00	.	2	11.50	2.12
Total	92	64.8	17.30	1.07	21	14.8	12.86	0.91	29	20.4	9.79	1.45	142	15.11	3.31

Table 4.2.3.6: Participants' Type and Frequency of Social Interaction Distribution by Marital Status.

All divorced (3 or 2.11%) participants and most of the single (39 or 27.46%) and married (46 or 32.39) group members found to have high level of social interaction with

children with mental retardation. Significant number of participants among the single and married groups were also found in the category of less and non levels of social interaction with these children.

The mean score for the total participants (15.11), and for the single (15.03), married (15.46), and divorced (17.00) group members revealed high levels of social interaction with children with mental retardation.

TYPES & LEVEL OF SOCIAL INTERACTION	SOCIAL INTERACTION Highly Interactive	Less Interactive	Total Interactive	Non Interactive
MARITAL STATUS	N	N	N	N
SINGLE	39	8	47	12
MARRIED	46	12	58	11
DIVORCED	3	-	3	-
WIDOWED	4	-	4	5
OTHERS	-	1	1	1
Total	92	21	113	29
Chi-Square ($\chi2$) Value	$\chi2$= 6.0949, df=4 $\chi2$ (4,0.05)= 9.488		$\chi2$= 9.533, df=4 $\chi2$ (4,0.05)= 9.488	

Table 4.2.3.7: Relationship between the Extent and Frequency of Social Interaction and Marital Status.

'Is Marital Status independent of Social Interaction Levels & Types?' were the null hypotheses that urged chi-square calculation. The calculated chi square statistic, $\chi2$=9.533 (df=4), revealed group difference in the participants' type of social interaction and the associated marital status. While, there was no group association differences in the participants' levels of social interaction based on their marital status, $\chi2$=6.0949 (df=4).

Table 4.2.3.8: Standardized Residuals* for the Types of Social Interaction and Marital Status

Levels of Social Interaction		MARITAL STATUS			
		SINGLE	*SINGLE*		*SINGLE*
E_3	Total Interactive Non Interactive	0.0072 -0.0142	0.4172 -0.8235	0.3965 -0.7828	-1.1815 2.3324

* Decision Rule: /R/≥ 2.00 is a major contributor to the significance calculated value; where R= o-e/e

In reference to the calculated standardized residuals for the participants' type of social interaction and Marital Status, the eighth cell, that is the single type of marital status, was highly associated to the types of social interaction with children with mental retardation. But, a lowered strength of association, $Ø_2 = 0.2591$, was observed, in the Cramer's Phi (Ø) statistic, between the two variables.

4.2.3.4 EXTENT and FREQUENCY OF SOCIAL INTERACTION by RELIGION

RELIGION	Types & Levels of Social Interaction														
	Highly Socially Interactive				Less Socially Interactive				Non Socially Interactive				Total		
	N	%	Mean	Std. Devi.	N	%	Mean	Std. Devi.	N	%	Mean	Std. Devi.	N	Mean	Std. Devi.
Orthodox	62	43.7	17.47	1.18	14	9.9	13.07	.92	19	13.4	9.68	1.57	95	15.26	3.42
Protestant	26	18.3	17.00	.69	2	1.4	13.00	1.41	3	2.1	10.33	.58	31	16.10	2.27
Muslims	2	1.4	16.50	.71	5	3.5	12.20	.45	6	4.2	9.67	1.51	13	11.69	2.66
Others	1	0.7	17.00	.	-	-	-	-	-	-	-	-	1	17.00	.
Missing Items	1	0.7	17.00	.	-	-	-	-	1	0.7	11.00	.	2	14.00	4.24
Total	92	64.8	17.30	1.07	21	14.8	12.86	.91	29	20.4	9.79	1.45	142	15.11	3.31

Table 4.2.3.9: Participants' Type and Frequency of Social Interaction by Religion.

More than half (66.9%) of the total participants were followers of the Orthodox Christianity. The followers of Protestant Christianity and Islam also accounted only for 21.8 percent and 9.2 percent, respectively. It is also possible to observe the differences among the groups from their respective mean statistic values. Most of these values fall in the third quarter of the absolute mean score of 20.

In this specific study, most parents were followers of Orthodox Christianity, most special needs teachers were followers of Protestant Christianity, and most Muslim participants were regular schoolteachers.

In spite of this fact and the related education and awareness related differences, almost all followers of Protestant Christianity demonstrated higher level of social interaction with children with mental retardation, with a standard deviation of 0.69. Followers of the Orthodox Christianity follow with 76 (53.6%) socially interactive

participants. Only 7 (4.9%) Muslim participants were found to have social interaction with persons with mental retardation, the rest 6 (4.2%) of them were non-socially interactive individuals with these children.

In need of the necessity of examining group differences on the type and frequency of social interaction with children with metal retardation and religion, a succession of $\chi 2$ (chi-square) analyses were performed. In these statistical comparisons the null hypothesis of 'Is Religion independent of the types and frequencies of Social Interaction with children with mental retardation?' was tested and statistically defined.

Table 4.2.3.10: Relationship between the Extent and Frequency of Social Interaction and Religion.

SOCIAL INTERACTION				
TYPES & LEVEL OF SOCIAL INTERACTION	Highly Interactive	Less Interactive	Total Interactive	Non Interactive
RELIGION	N	N	N	N
Orthodox	62	14	76	19
Protestant	26	2	28	3
Muslims	2	5	7	6
Total	90	21	111	28
Chi-Square ($\chi 2$) Value	$\chi 2$=15.47, df=2 $\chi 2$ (2,0.05)= 5.991		$\chi 2$=8.881, df=2 $\chi 2$ (2,0.05)= 5.991	

Examination of the obtained Chi-square statistic revealed significant differences both in the extent (type) and frequency (incidence/level) of social interaction with children with mental retardation. A significant group difference, $\chi 2=15.47$ (df=2), $p<0.05$, has been observed in the type of individuals' social interaction (Interactive vs. Non-Interactive). The same is true, $\chi 2=8.881$(df=2), $p<0.05$, even in the frequency or level of social interaction (Highly Interactive vs. Less Interactive).

From this it is possible to conclude that there are significant group differences among the different religious groups both in the type and frequency of individuals' social interaction with children with mental retardation. Since it did not clearly show that

which of the religious group has been significantly associated with constructive social interaction with children with mental retardation, the comparisons of standardized residuals were computed.

Table 4.2.3.11: Standardized Residuals* for the Participants' Types & Levels of Social Interaction and Religion

	Types & Levels of Social Interaction	Religion		
		Orthodox	Protestant	Muslims
F2	Highly Interactive	0.0034	0.6926	-1.5429
	Less Interactive	-0.0998	-1.4326	3.1940
E_1	Total Interactive	0.0157	0.6521	-1.0494
	Non Interactive	-0.0312	-1.2984	2.0895

* Decision Rule: /R/≥ 2.00 is a major contributor to the significant calculated value; where R= o-e/e

The calculated Standardized Residuals for the Types & Levels of Social Interaction and Religion clearly show the highest contributors for the significant group differences among the religions. Generally speaking, the present finding implied that the Muslim participants contributed highly for the significant group differences, both in extent and frequency of social interaction with children with mental retardation.

Variable B	Variable A TYPES & LEVEL OF SOCIAL INTERACTION	
RELIGION	Highly Socially Interactive Vs Less Socially Interactive (E2)	Socially Interactive Vs Non-Socially Interactive(E2)
Orthodox Protestant Muslims	$Ø_3 = 0.3700$	$Ø_4 = 0.2501$

Table 4.2.3.12: Measures of the Strengths of Association for all Chi-Square Significant Analyses

'Cramer's phi (Ø)' was computed to check the strengths of association among the significant group differences shown in the Chi-square calculation. The calculated value of Cramer's phi ($Ø_{3\&4}$) measures of association indicated a lowered strength of association between the two variables (Types & Levels of Social Interaction and Religion), both in the incidence and frequency of social association, with children with mental retardation.

4.2.3.5 TYPES & LEVELS OF SOCIAL INTERACTION and ETHNIC GROUP

MARITAL STATUS	Level of Social Interaction												TOTAL		
	Highly Socially Interactive				Less Socially Interactive				Non Socially Interactive						
	N	%	Mean	Std. Dev.	N	%	Mean	Std. Dev.	N	%	Mean	Std. Dev.	N	Mean	Std. Dev.
AMHARA	49	34.5	17.39	1.11	14	9.9	12.93	0.92	17	12.0	9.88	1.32	80	15.01	3.34
OROMO	16	11.3	17.31	1.08	1	0.7	14.00	.	3	2.1	9.33	2.08	20	15.95	3.17
TIGRE	2	1.4	17.00	.00	-	-	-	-	2	1.4	7.50	2.12	4	12.25	5.62
GURAGE	10	7.0	16.50	0.92	2	1.4	13.00	1.41	2	1.4	10.00	1.41	14	15.29	2.79
OTHERS	6	4.2	17.00	.00	1	0.7	12.00	-	2	1.4	10.50	0.71	9	15.00	3.04
MISSING ITEMS	9	6.3	17.67	1.32	3	2.1	12.33	0.58	3	2.1	10.67	0.58	15	15.20	3.34
Total	92	64.8	17.30	1.07	21	14.8	12.86	0.91	29	20.4	9.79	1.45	142	15.11	3.31

Table 4.2.3.13: Participants' Type and Frequency of Social Interaction by Ethnic Group.

Most of the participants in each of the specified ethnic group were found to be highly sociable with children with mental retardation. Amhara was the leading ethnic group both in the interactive (63 or 44.37%) and non-interactive (17 or 11.97%) groups. The Oromos followed with 17 and 3 socially and non-socially interactive participants, respectively. Then after, the Gurages distribution in the high (10 or 7.04%), less (2 or 1.41%) and non (2 or 1.41%) level of social interaction with children with mental retardation was also another information gathered and should be discussed.

The comparisons of the mean in the general social interaction scale value statistics revealed that almost all ethnic groups have shown high level of social interaction with children with mental retardation. Only the Tigres showed less level of social interaction. The Oromos lead the group and revealed better mean score that is 15.95 with a standard deviation of 3.17.

LEVEL OF SOCIAL INTERACTION	SOCIAL INTERACTION			
	Highly Interactive	Less Interactive	Total Interactive	Non Interactive
ETHNIC GROUP	N	N	N	N
AMHARA	49	14	63	17
OROMO	16	1	17	3
TIGRE	2	-	2	2
GURAGE	10	2	12	2
OTHERS	6	1	7	2
Total	83	18	101	26
Chi-Square ($\chi 2$) Value	$\chi 2$= 2.992, df=4 $\chi 2$ (4,0.05)= 9.488		$\chi 2$= 2.8857, df=4 $\chi 2$ (4,0.05)= 9.488	

Table 4.2.3.14: Relationship between the Extent and Frequency of Social Interaction and Ethnic Group.

The calculated chi-square calculation revealed non significant association both in the type, $\chi 2$= 2.8857, df=4, $p<0.005$, and frequency, $\chi 2$= 2.992, df=4, $p<0.005$, of social interaction based on their different ethnic group. Thus, ethnic affiliation did not have any kind of association both in the type and frequency of social interaction with children with mental retardation.

4.2.3.6 TYPE and FREQUENCY OF SOCIAL INTERACTION and LOCATION

SUBCITY	Level of Social Interaction												TOTAL		
	Highly Socially Interactive				Less Socially Interactive				Non Socially Interactive						
	N	%	Mean	Std. Dev.	N	%	Mean	Std. Dev.	N	%	Mean	Std. Dev.	N	Mean	Std. Dev.
ARADA	10	7.0	16.80	0.42	2	1.4	12.50	0.71	6	4.2	9.17	1.60	18	13.78	3.73
ADDIS KETEMA	5	3.5	18.40	1.34	1	0.7	12.00	.	3	2.1	9.33	2.08	9	14.67	4.72
LIDETA	7	4.9	16.71	0.76	3	2.1	13.33	1.15	5	3.5	9.40	2.07	15	13.53	3.58
CHERKOS	3	2.1	17.00	.00	0	-	-	-	0	-	-	-	3	17.00	0.00
YEKA	27	19.0	17.70	1.23	4	2.8	13.00	0.82	3	2.1	10.33	1.15	34	16.50	2.73
BOLE	1	0.7	17.00	.00	0	-	-	-	1	0.7	11.00	.	2	14.00	4.24
NIFASSILK-LAFTO	9	6.3	16.89	0.33	1	0.7	12.00	.	0	-	-	-	10	16.40	1.58
KOLFE-KERANYO	3	2.1	17.00	1.73	3	2.1	12.67	1.15	0	-	-	-	6	14.83	2.71
GULELE	9	6.3	17.00	.00	3	2.1	13.33	1.15	4	2.8	10.00	0.82	16	14.56	3.12
Missing Items	18	12.7	17.39	1.24	4	2.8	13.00	1.15	7	4.9	10.29	1.11	29	15.07	3.34
Total	92	64.8	17.30	1.07	21	14.8	12.86	0.91	29	20.4	9.79	1.45	142	15.11	3.31

Table 4.2.3.15: Participants' Type and Frequency of Social Interaction Distribution by Location.

Participants from Yeka and Nifassilk –Lafto sub cities have better mean and standard deviation statistic values in the general value of social interaction. Most

participants from these two locations were found to be highly socially interactive with children with mental retardation. While, a relatively higher number of non-socially interactive participants were found in the Arada, Lideta, and Gulele sub cities.

In understanding the association between location and the type and frequency of the participants' social relationship style with children with mental retardation, analysis of non-parametric statistic was important. For this reason Chi-square statistic has been computed and the discussion follows.

LEVEL OF SOCIAL INTERACTION	SOCIAL INTERACTION			
	Highly Interactive	Less Interactive	Total Interactive	Non Interactive
SUB CITY	N	N	N	N
ARADA	10	2	12	6
ADDIS KETEMA	5	1	6	3
LIDETA	7	3	10	5
CHERKOS	3	0	3	0
YEKA	27	4	31	3
BOLE	1	0	1	1
NIFASSILK-LAFTO	9	1	10	0
KOLFE-KERANYO	3	3	6	0
GULELE	9	3	12	4
Total	74	17	91	22
Chi-Square ($\chi 2$) Value	$\chi 2$= 7.418, df=8 $\chi 2$ (8,0.05)= 15.51		$\chi 2$= 18.622, df=1 $\chi 2$ (1,0.05)= 15.51	

Table 4.2.3.16: Relationship between the Extent and Frequency of Social Interaction and Location.

The null hypothesis that said *'Is Location independent of Social Relationship Types & Level?'* has been tested through Chi-square ($\chi 2$) analyses. Inspection of the calculated Chi-square ($\chi 2$) statistic clearly depicted the non-significance or independent association between Location and Frequency of social interaction (Highly Interactive vs. Less Interactive). But, there was a significant, $\chi 2$= 18.622, P<0.05, association between Sex and Types of social interaction (Socially Interactive vs. Non socially interactive).

Table 4.2.3.17: Standardized Residuals* for Level of Social Interaction and Religion

Levels of Social Interaction		Sub City								
		ARADA	ADDIS KETEMA	LIDETA	CHER KOS	YEKA	BOLE	NIFASIL K-LAFTO	KOLFE - KERANYO	GULELE
F3	Total Interactive	-0.6555	-0.4635	-0.5983	0.3758	0.6917	-0.4811	0.6861	0.5314	-0.2465
	Non Interactive	1.3331	0.9427	1.2169	-0.7643	-1.4068	0.9785	-1.3953	-1.0808	0.5014

* Decision Rule: /R/≥ 2.00 is a major contributor to the significance calculated value; where R= o-e/e

No sub city has been shown the highest contribution for the significant differences in the type of social interaction with children with mental retardation. Each cell has less than absolute value of two in the standardized residual statistic.

The measure of the strength of association between the type of social relationship and the participants' living environment was also found to be low. It was observed in the calculated Cramer's Phi statistic, $\emptyset_5 = 0.4060$.

4.2.3.7 TYPES and FREQUENCY OF SOCIAL INTERACTION and EDUCATION

EDUCATION	Level of Social Interaction												TOTAL		
	Highly Socially Interactive				Less Socially Interactive				Non Socially Interactive						
	N	%	Mean	Std. Dev.	N	%	Mean	Std. Dev.	N	%	Mean	Std. Dev.	N	Mean	Std. Dev.
ILLITERATE	10	7.0	18.50	1.35	-	-	-	-	1	0.7	9.00	.	11	17.64	3.14
ELEMENTARY 1ST CYCLE	5	3.5	18.20	1.64	1	0.7	14.00	.	1	0.7	11.00	.	7	16.57	3.21
ELEMENTARY 2ND CYCLE	7	4.9	17.00	.00	1	0.7	13.00	.	-	-	-	-	8	16.50	1.41
HIGH SCHOOL	19	13.4	17.21	1.03	3	2.1	12.67	1.15	1	0.7	11.00	.	23	16.35	2.19
CERTIFICATE	28	19.7	17.04	0.84	15	10.6	12.87	0.92	15	10.6	9.73	1.71	58	14.07	3.30
DIPLOMA	-	-	-	-	1	0.7	12.00	.	9	6.3	9.89	1.17	26	14.46	3.68
DEGREE	1	0.7	16.00	.	-	-	-	-	1	0.7	10.00	.	2	13.00	4.24
Missing Items	6	4.2	17.00	.00	-	-	-	-	1	0.7	8.00	.	7	15.71	3.40
Total	92	64.8	17.30	1.07	21	14.8	12.86	0.91	29	20.42	9.79	1.45	142	15.11	3.31

Table 4.2.3.18: Participants' Type and Frequency of Social Interaction Distribution by Education.

Most of the participants of this specific study were high school dropouts and/or students, certificate, and diploma holders that accounts for 16.20%, 40.85%, and 18.31% respectively. The rest constitute illiterates, early elementary graders, second cycle elementary graders, and degree holders that accounts for 7.75%, 4.93%, 5.63%, and 1.41%, in that respective order. Almost all illiterate parents showed a higher level of social interaction with children with mental retardation. With out considering the illiterate groups the type and frequency of social interaction with children with mental retardation increases and became more positive when the participants' grade level increases. A significant number of less (10.56%) and non (10.56%) level of social interaction were

also seen among the certificate holders. But, inspection of the obtained mean statistics of the total participants indicates that the increment in education level results in the lesser the value of the mean statistic value.

For further clear explanation of the association between the type and frequency of social interaction and the participants education background Chi-square ($\chi 2$) statistic was computed.

LEVEL OF SOCIAL INTERACTION	SOCIAL INTERACTION			
	Highly Interactive	Less Interactive	Total Interactive	Non Interactive
EDUCATION	N	N	N	N
ILLITERATE	10	-	10	1
ELEMENTARY 1ST CYCLE	5	1	6	1
ELEMENTARY 2ND CYCLE	7	1	8	-
HIGH SCHOOL	19	3	22	1
CERTIFICATE	28	15	43	15
DIPLOMA	-	1	1	9
DEGREE	1	-	1	1
Total	70	21	91	28
Chi-Square ($\chi 2$) Value	$\chi 2$= 11.786, df=7 $\chi 2$ (7,0.05)= 14.07		$\chi 2$= 45.649, df=7 $\chi 2$ (7,0.05)= 14.07	

Table 4.2.3.19: Relationship between the Extent and Frequency of Social Interaction and education

The null hypotheses that were tested could be written as '*Is education independent of the types and levels of social interaction with children with mental retardation*?' It was statistically tested by chi-square calculation.

The type of social interaction was found to have non-significant differences, while the levels of social interaction was found to have significant difference. In addition, to check the highest contributor for the chi-square significant value of the levels of social interaction and education standardized residual was computed.

Levels of Social Interaction		EDUCATION						
		ILLITERATE	*ELEMENTARY 1ST CYCLE*	*ELEMENTARY 2ND CYCLE*	*HIGH SCHOOL*	*CERTIFICATE*	DIPLOMA	*DEGREE*
E_3	Total Interactive Non Interactive	0.5476 -0.9872	0.2797 -0.5042	0.7611 -1.3720	1.0520 -1.8965	-0.2031 0.3662	-2.4038 4.3335	-0.4281 2.2294

Table 4.2.3.20: Standardized Residuals* for Level of Social Interaction and Education.
* Decision Rule: /R/≥ 2.00 is a major contributor to the significance calculated value; where R= o-e/e

From the calculated standardized residual value both diploma and degree holders' non-interactive participants have been contributed highly for the significant chi-square statistic in the level of social interaction with children with mental retardation.

More interestingly, the measure of the strengths of association for the levels of social interaction was found to be strong. Its calculated Cramer's phi statistic, $Ø_1$ = 0.6194, shown the same.

4.2.3.8 LEVELS OF SOCIAL INTERACTION and RELATIONSHIP

Table 4.2.3.21: Participants' Type and Frequency of Social Interaction Distribution by Relationship.

RELATIONSHIP	Level of Social Interaction												TOTAL		
	Highly Socially Interactive				Less Socially Interactive				Non Socially Interactive						
	N	%	Mean	Std. Devi.	N	%	Mean	Std. Devi.	N	%	Mean	Std. Devi.	N	Mean	Std. Dev.
PARENTS	43	30.3	17.70	1.28	2	1.4	13.50	0.71	5	3.5	10.60	0.89	50	16.82	2.56
SPECIAL NEEDS TEACHERS	41	28.9	17.07	0.61	1	0.7	12.00	-	-	-	-	-	42	16.95	0.99
REGULAR SCHOOL TEAHERS	8	5.6	16.38	0.74	18	12.7	12.83	0.92	24	16.9	9.63	1.50	50	11.86	2.75
Total	92	64.8	17.30	1.07	21	14.8	12.86	0.91	29	20.4	9.79	1.45	142	15.11	3.31

The kind of relationship any individual have might make a difference in the type and frequency of his/her social interaction with children with mental retardation. In this specific study, almost all Special School Teachers (43 or 30.28%) and most Parents (41 or 28.87%) of children with mental retardation were found to be highly socially interactive with these children.

There was a good distribution among the Regular School Teachers in the different levels of social interaction.

From the regular school teacher participants 8 or 5.63% of them were highly interactive with children with mental retardation. 18 or 12.68% and 24 or 16.90% of them were less socially interactive and non-socially interactive individuals with children with mental retardation.

The comparisons of the total mean score also revealed that parents and special needs teachers have shown high level of social interaction while the regular school teachers were found to have very little or non level of social interaction with children with mental retardation.

	SOCIAL INTERACTION			
LEVEL OF SOCIAL INTERACTION	Highly Interactive	Less Interactive	Total Interactive	Non Interactive
MARITAL STATUS	N	N	N	N
PARENTS	43	2	45	5
SPECIAL NEEDS TEACHERS	41	1	42	-
REGULAR SCHOOL TEAHERS	8	18	26	24
Total	92	21	113	29
Chi-Square ($\chi 2$) Value	$\chi 2$=57.31, df=2 $\chi 2$ (2,0.05)= 5.991		$\chi 2$= 37.51, df=2 $\chi 2$ (2,0.05)= 5.991	

Table 4.2.3.22: Relationship between the Extent and Frequency of Social Interaction and Relationship.

'Is the participant's type of relationship with children with mental retardation independent of Social Interaction Types and Levels?' was the null hypothesis that was tested by chi-square calculation.

The calculated chi-square statistic values revealed that there was a significant difference between the participants' type of relationship and the levels and types of social interaction with children with mental retardation. In general, both the type, $\chi2=57.31$, df=2, $p<0.005$, and frequency, $\chi2= 37.51$, df=2, $p<0.005$, of social interactions were found to have significant levels of association with the marital status of the participants.

Table 4.2.3.23: Standardized Residuals* for Level of Social Interaction and Relationship

Levels of Social Interaction		RELATIONSHIP		
		PARENTS	*SPECIAL CHOOL TEACHERS*	*REGULAR SCHOOL TEACHERS*
F1	Highly Interactive	0.1737	0.1990	0.6221
	Less Interactive	-0.7608	-0.8719	2.7253
E_3	Total Interactive	0.1310	0.2566	-0.3466
	Non Interactive	-0.5103	1.0000	1.3503

* Decision Rule: /R/≥ 2.00 is a major contributor to the significance calculated value; where R= o-e/e

From the standardized statistic values the regular school teachers have been the highest contributor for the significant chi-square statistic value of the type of social interaction with children with mental retardation. But, in the frequency of social interaction no cell has been found to be the highest contributors for the significant chi-square statistic.

The measure of the strengths of association was computed. The calculated Cramer's phi statistic was found to be the highest both for the type, $Ø_1 = 0.5140$, and frequency, $Ø_1 = 0.7122$, of social interaction.

4.2.3.9 LEVELS OF SOCIAL INTERACTION and PARENTAL EMPLOYMENT STATUS

PARENTAL EMPLOYMENT STATUS	Level of Social Interaction												TOTAL		
	Highly Socially Interactive				Less Socially Interactive				Non Socially Interactive						
	N	%	Mean	Std. Dev.	N	%	Mean	Std. Dev.	N	%	Mean	Std. Dev.	N	Mean	Std. Dev.
EMPLOYED	8	16.0	17.62	1.19	-	-	-	-	1	2.0	11.00	.	9	16.89	2.47
UNEMPLOYED	23	46.0	17.57	1.12	1	2.0	14.00	-	2	4.0	10.00	1.41	26	16.85	2.39
RETIRED	9	18.0	17.78	1.48	-	--	-	-	1	2.0	11.00	.	10	17.10	2.56
OTHERS	1	2.0	20.00	.	-	--	-	-	1	2.0	11.00	.	2	15.50	6.36
MISSING ITEMS	2	4.0	18.00	2.83	1	2.0	13.00	.	-	-	-	-	3	16.33	3.51
Total	43	86.0	17.70	1.28	2	4.0	13.50	0.71	5	10.0	10.60	0.89	50	16.82	2.56

Table 4.2.3.24: Participants' Type and Frequency of Social Interaction Distribution by Employment Status.

Most of the parents in the different employment status have been found to have social interaction with children with mental retardation. 8 or 16% of the employed, 23 or 46% of the unemployed, 9 or18% of the retired and 1or 2% of other participants were found to be highly socially interactive individuals with children with mental retardation.

The critical observation mean value statistics revealed that almost all of the parents from the different employment status were highly socially interactive with children with mental retardation.

SOCIAL INTERACTION				
LEVEL OF SOCIAL INTERACTION	Highly Interactive	Less Interactive	Total Interactive	Non Interactive
EMPLOYMENT STATUS	N	N	N	N
EMPLOYEED	8	-	8	1
UNEMPLOYED	23	1	24	2
RETIRED	9	-	9	1
OTHERS	1	-	1	1
Total	41	1	42	5
Chi-Square($\chi 2$) Value	$\chi 2$=0.7683,df=3 $\chi 2$ (3,0.05)=7.82		$\chi 2$=3.5559,df=3 $\chi 2$ (3,0.05)=7.82	

Table 4.2.3.25: Relationship between the Extent and Frequency of Social Interaction and Parental Employment Status

The null hypotheses 'Is Parental Employment Status independent of Social Interaction Level?' was tested by chi-square statistics but it could never become significant both for the type and frequency of social interaction with children with mental retardation.

J. LEVELS OF SOCIAL INTERACTION and INCOME/ SALARY

A. Monthly Family Income:

FAMILY INCOME	Level of Social Interaction												TOTAL		
	Highly Socially Interactive				Less Socially Interactive				Non Socially Interactive						
	N	%	Mean	Std. Dev.	N	%	Mean	Std. Dev.	N	%	Mean	Std. Dev.	N	Mean	Std. Dev.
BELOW 200 BIRR	26	52	17.77	1.21	1	2	14.00	.	3	6	10.33	1.15	30	16.90	2.60
201-350 BIRR	4	8	18.25	1.50	1	22	13.00	.	-	-	-	-	5	17.20	2.68
351-500 BIRR	3	6	16.33	0.58	-	-	-	-	1	2	11.00	.	4	15.00	2.71
501-650 BIRR	2	4	17.00	.00	-	-	-	-	-	-	-	-	2	17.00	.00
651-800 BIRR	1	2	19.00	.	-	-	-	-	-	-	-	-	1	19.00	.
ABOVE 801 BIRR	1	2	17.00	.	-	-	-	-	-	-	-	-	1	17.00	.
MISSING ITEMS	6	12	17.83	1.72	-	-	-	-	1	2	11.00	.	7	16.86	3.02
Total	43	86	17.70	1.28	2	4	13.50	0.71	5	10	10.60	0.89	50	16.82	2.56

Table 4.2.3.26: Parents' Type and Frequency of Social Interaction Distribution by Family Monthly Income.

Most of the parent participants in the different monthly income level have been found to be highly interactive with children with mental retardation. It is also simple to understand this fact from the calculated mean statistic values, see Table.

LEVEL OF SOCIAL INTERACTION	SOCIAL INTERACTION			
	Highly Interactive	Less Interactive	Total Interactive	Non Interactive
FAMILY INCOME	N	N	N	N
BELOW 200 BIRR	26	1	27	3
201-350 BIRR	4	1	5	-
351-500 BIRR	3	-	3	1
501-650 BIRR	2	-	2	-
651-800 BIRR	1	-	1	-
ABOVE 801 BIRR	1	-	1	-
Total	43	2	45	5
Chi-Square ($\chi2$) Value	$\chi2$= 3.2096, df=5 $\chi2$ (5,0.05)= 11.070		$\chi2$= 2.1998, df=5 $\chi2$ (5,0.05)= 11.070	

Table 4.2.3.27: Relationship between the Extent and Frequency of Social Interaction and Family Monthly Income.

From the calculated chi-square statistic it was understood that there were no differences among the different family income category groups in the type and frequency of social interaction with children with mental retardation.

B. Teachers' Monthly Salary:

SALARY	Level of Social Interaction												TOTAL		
	Highly Socially Interactive				Less Socially Interactive				Non Socially Interactive						
	N	%	Mean	Std. Dev.	N	%	Mean	Std. Dev.	N	%	Mean	Std. Dev.	N	Mean	Std. Dev.
BELOW 300 BIRR	4	4.4	17.00	.00	-	-	-	-	-	-	-	-	4	17.00	.00
301-450 BIRR	10	10.9	16.50	0.71	2	2.2	13.00	1.41	4	4.4	10.00	1.41	16	14.44	3.03
451-650 BIRR	11	12.0	16.90	0.30	4	4.4	12.00	.00	4	4.4	10.00	0.82	19	14.42	3.10
651-800 BIRR	10	10.9	17.50	1.08	6	6.5	12.83	0.98	4	4.4	10.25	0.96	20	14.65	3.22
ABOVE 801 BIRR	10	10.9	17.00	.00	4	4.4	13.50	0.58	3	3.3	9.00	1.73	17	14.76	3.19
MISSING ITEMS	4	4.4	16.75	0.50	3	3.3	12.67	1.15	9	9.8	9.22	1.92	16	11.75	3.59
Total	49	53.3	16.96	0.68	19	20.7	12.79	0.92	24	26.1	9.63	1.52	92	14.18	3.32

Table 4.2.3.28: Teachers' Type and Frequency of Social Interaction Distribution by Monthly Salary.

The participation rate of the respondents based on their salary level in the different levels of social interaction with children with mental retardation was found to be proportional.

The calculated mean values for the general types of social interaction further show the positive increment on the total social interactive scale value when the salary increases, especially when the salary is above 300 Birr.

SOCIAL INTERACTION				
LEVEL OF SOCIAL INTERACTION	Highly Interactive	Less Interactive	Total Interactive	Non Interactive
MONTHLY SALARY	N	N	N	N
BELOW 300 BIRR	4	-	4	-
301-450 BIRR	10	2	12	4
451-650 BIRR	11	4	15	4
651-800 BIRR	10	6	16	4
ABOVE 801 BIRR	10	4	14	3
Total	45	16	61	17
Chi-Square ($\chi 2$) Value	$\chi 2$= 3.08, df= 4 $\chi 2$ (4,0.05)= 9.488		$\chi 2$=1.4267,df= 4 $\chi 2$ (4,0.05)= 9.488	

Table 4.2.3.29: Relationship between the Extent and Frequency of Social Interaction and Teachers' Monthly Salary.

The null hypotheses 'Is Teachers' Monthly Salary independent of the type and frequency of Social Interaction?' was tested by chi-square statistics. But, both the type and frequency of social interaction were found to be dependent and insignificant. There were no significant differences on the teachers' extent and frequency of social interaction with children with mental retardation because of the differences observed on their monthly salary.

4.3 CLAIMED CAUSAL FACTORS FOR MENTAL RETARDATION

4.3.1 PARENTAL BELIEF ON THE CAUSAL FACTORS OF MENTAL RETARDATION

S/N	*PERCEIVED CAUSES OF MENTAL RETARDATION*	*FREQUENCY*	*PERCENTAGE*
1	*Lack of Medical Treatment*	*2*	*4*
2	*Accident*	*5*	*10*
3	*Disease*	*3*	*6*
4	*Nature*	*4*	*8*
5	*Likift* (being contaminated by evil-spirits)	*2*	*4*
6	*Birth Complication*	*3*	*6*
7	*After Birth*	*1*	*2*
8	*Meningitis*	*2*	*4*
9	*Unknown Cases*	*6*	*12*
10	*Omitted Answers*	*22*	*44*
	Total	*50*	*100*

Table 4.3.1: PERCEIVED CAUSES OF MENTAL RETARDATION

Parents of children with mental retardation were asked why their child became in that way. Most parents (22 or 44%) did not express the causal factor for the problem of mental retardation in their child. Many (6 or 12%) of them did not also know the causal factors. In general, for more than half of the total parent participants the causal factor was unknown.

Among the different perceived causal factors mentioned by the parent participants Accident and Nature accounted for 10% and 8%, respectively. Disease and Birth Complication accounted for 6% each. Luck of Medical Treatment, Likift (being

contaminated by evil-spirits), and Meningitis accounted for 4% each. Finally, postnatal causes accounted for 2%.

4.3.2 RANKING ORDER (PRIORITIZE) THE CAUSAL FACTORS OF MENTAL RETARDATION

HYPOT-HETICAL ORDER	***Claimed Causal Factors***	***Rank Order***							
		PARENTS		*SPECIAL NEEDS TEACHERS*		*REGULAR SCHOOL TEACHERS*		*TOTAL PARTICIPANTS*	
		AVERAGE	*RANK*	*AVERAGE*	*RANK*	*AVERAGE*	*RANK*	*AVERAGE*	*RANK*
A	God's punishment, curse for wrongdoings, inherited sin, and/or Evil eyes.	3.24	4	3.24	4	3.26	4	3.25	4
B	Physical, Physiological, and/or viral origins.	2.26	1	2.07	1	2.02	1	2.12	1
C	Accident.	2.40	2	2.31	3	2.52	2	2.42	2
D	Poverty related problems such as malnutrition, lack of stimulation, etc...	2.58	3	2.14	2	2.56	3	2.44	3

Table 4.3.2: Ranking Orders (Priorities) of the claimed causal factors of Mental Retardation.

All the participants of this study were provided with four groups of claimed causal factors that could be scientifically, culturally, religiously and/or traditionally acceptable by the different social groups. All the items were grouped and prearranged hypothetically into four categories to be re-ranked by each of the participants.

For the total participants and the different groups the items needed re-ranking, especially the causal factors related to God, Supernatural beliefs, and evil spirits. It has changed its hypothetical ranking order and left to the last position. The last three groups never change their original position, except for the special needs teacher participants.

In general, the calculated mean statistic value clearly showed changes on the replacement of ranking orders when it is re-ranked by all the participants. The Organic/ Physiological causes (that is 'physical, Physiological, and/or viral origins') has been approved, as

the first causal factor by parents, special needs teachers, regular schoolteachers and all the participants.

Accident was also approved as the second causal factor by parents, regular schoolteachers, and by all the total participants, except by the special needs teachers. The cultural familial group (that is Poverty related problems such as malnutrition, lack of stimulation, etc...) has been chosen as the second causal factor only by the special schoolteachers, others approved it as the third causal factor for mental retardation.

The causes related to God, Supernatural beliefs, and Evil spirits (God's punishment, curse for wrong doings, inherited sin, and/or Evil eyes) group, on the other hand, has been given the last priority by all the participants.

4.4 ATTITUDES TOWARD MENTAL RETARDATION and PERSONS WITH MENTAL RETARDATION

The instrument used in search of the societal attitude was that first developed by a group of scholars and used both in the base line survey and other studies (Daniel 2000, for example) in the area of human disability. In this specific study it was modified, pilot tested and found to be suitable for the purpose. Its reliability both in the pilot study and the main study was agreeable and reliable enough for the study.

4.4.1 ATTITUDE IN THE SURVEY

S/N	STATEMENTS	ALTERNATIVES							
		STRONGLY AGREE		AGREE		DISAGREE		STRONGLY DISAGREE	
		N	%	N	%	N	%	N	%
1.	Persons with mental retardation are burden to the family.	21	14.8	24	16.9	39	27.5	47	33.1
2.	I could marry a person with mental retardation.	8	5.6	15	10.6	57	40.1	47	33.1
3.	Persons with mental retardation are hostile and aggressive.	13	9.2	12	8.5	62	43.7	45	31.7
4.	I am willing to work with Persons with mental retardation.	44	31.0	63	44.4	25	17.6	13	9.2
5.	The fate of Persons with mental retardation is to look alms	7	4.9	7	4.9	41	28.9	72	50.7
6.	Persons with mental retardation should participate in community affairs such as 'idir' and 'iqub'.	46	32.4	52	36.6	24	16.9	13	9.2
7.	Persons with mental retardation are submissive and conformist.	23	16.2	41	28.9	50	35.2	19	13.4
8.	Persons with mental retardation should have equal chance to education and employment.	61	43.0	49	34.5	17	12.0	7	4.9
9.	Persons with mental retardation are unable to lead an independent life.	16	11.3	43	30.3	52	36.6	20	14.1
10.	Persons with mental retardation should be provided with special residential quarters.	10	7.0	7	4.9	42	29.6	75	52.8
11.	Persons with mental retardation are possessed by evil spirits.	11	7.7	3	2.1	36	25.4	78	54.9
12.	Persons with mental retardation can be educated and trained.	56	39.4	53	37.3	21	14.8	8	5.6
13.	Mental retardation is a curse or punishment by God.	7	4.9	3	2.1	32	22.5	86	60.6
14.	Mental retardation is something inherited from parents or ancestors.	7	4.9	16	11.3	39	27.5	70	49.3
15.	Mental retardation is something acquired by accident or disease.	57	40.1	44	31.0	16	11.3	13	9.2
16.	Mental retardation is something contagious.	4	2.8	3	2.1	32	22.5	92	64.8

Table 4.4.1: Societal Attitude towards Mental Retardation and persons with Mental Retardation (Percentage)

The societal attitude on the general attitude scale value was computed. The value for each item was calculated by percentage calculation. On the life of persons with mental retardation 60.6% of the total participants reflect their disagreement on the statement that persons with mental retardation are burden to their family. 79.6% of them disagree to consider their fate as to look alms. 50.7% of the total participants also

accepted their capability to lead independent life. In this way they might understand the capabilities and potentialities of these children.

In the social life of persons' with and with out mental retardations 75.4% of the respondents never believed that persons with mental retardation are hostile and aggressive. A little more respondents did not agree that they are submissive and conformist. 75.4% of them were found to be willing to work with these persons. 69.0% of them approved their participation in the community affairs, such as Idir and Iqub. 77.5% of them accepted the rights of education and training opportunities for these children. In general, 82.4% of the respondents never agreed on the provision of special residential quarter for them. For this reason it is possible to conclude that most of the respondents understand the capabilities of persons' with mental retardation to live with in the society.

Based on their knowledge and understanding concerning the causes and mediation of mental retardation 80.3% of the respondents did not accept the concept of possession by evil sprits on the life of children with mental retardation. 83.1% of them did not considered mental retardation as a curse or punishment by God. 76.8% of them did not accept the traditional mediation of mental retardation through inheritance from the ancestors. 87.3% of them understood the non-contagious nature of mental retardation. And 71.1% of them accepted the causal factors of accident and disease for mental retardation.

Although most of the participants (73.2%) never agreed to marry persons with mental retardation, they have appropriate and enough information concerning the independent and social lives of persons with mental retardation. They were knowledgeable enough on the causal factors and meditation of mental retardation. They

believe on the abilities and capabilities of these community. It helps them to understand their ability to lead independent and social life.

In search of the general attitude of the total participants the mean statistic was computed on the bases of their relationship with children with mental retardation, see Table below.

RELATIONSHIP	PARENTS		SPECIAL NEEDS TEACHERS		REGULAR TEACHERS	
Types & Levels of Social Interaction	N	Mean	N	Mean	N	Mean
Non Socially Interactive	5	55.00	-	-	24	58.42
Less Socially Interactive	2	49.00	1	58.00	18	60.06
Highly Socially Interactive	43	60.65	41	61.07	8	59.75
Total	50	59.62	42	61.00	50	59.22

Table 4.4.2.: General Attitude Values by Types of Relationship & Types and Levels of Social Interaction.

In the general attitude values special needs teachers leads the group with a mean score of 61.00. Parents and regular school teachers also follows with a mean score of 59.62 and 59.22 in that respective order.

Table 4.4.3: ANOVA Summary Table for the Over-all Attitude Values

		Sum of Squares	df	Mean Square	F	Sig.
RELATIONSHIP	Between Groups	37.516	34	1.103	1.890	.007
	Within Groups	62.484	107	.584		
	Total	100.000	141			
LEVELS OF SOCIAL INTERACTION	Between Groups	31.688	34	.932	1.625	.032
	Within Groups	61.362	107	.573		
	Total	93.049	141			

The calculated One-way ANOVA statistic values showed non significant differences among the participants both in the types of relationship, F (34,107) =1.890 sig.0.007, and types & levels of social interaction, F (34,107) =1.625 sig. 0.032, based on their attitude values.

4.4.2 SPECIFIC FINDINGS

4.2.1 GENERAL NEGATIVE BELIEFS

The following items in the attitude scale were designed to measure the general negative attitudes of the participants.

1. Persons with mental retardation are burden to the family.
2. The fate of persons with mental retardation is to look for alms.
3. Persons with mental retardation are unable to lead an independent life, and
4. Persons with mental retardation are possessed by evil spirit.

The highest and lowest score values for each in the five-point Likert scale, were given for strong negative and positive responses, respectively. Thus, the highest mean scores are the more positivist ideas while the lowest mean scores reflect the negative attitudes.

Relationship	PARENTS		SPECIAL NEEDS TEACHERS		REGULAR TEACHERS		TOTAL PARTICIPANTS	
Types & Levels of Social Interaction	N	Mean	N	Mean	N	Mean	N	Mean
Non Socially Interactive	5	12.40	-	-	24	12.42	29	12.41
Less Socially Interactive	2	13.00	1	19.00	18	13.78	21	13.95
Highly Socially Interactive	43	14.35	41	15.29	8	13.13	92	14.66
Total	50	14.10	42	15.38	50	13.02	142	14.10

Table 4.4.4: General Negative Beliefs by the Types & Levels of Social Interaction.

The mean differences in the general negative beliefs differed both in the participants' type and level of social interaction with children with mental retardation. General increment in the mean statistic values have been clearly seen when the levels of social interaction increases. It ranged from 12.41 (for non socially interactive participants) to 14.66 (for highly socially interactive participants) mean statistic values.

There were also mean differences in the general negative attitude among the three groups. The special needs teachers (15.38) scored greater mean statistic value than the parents (14.10). The regular school teachers (13.02) also scored the lowest mean statistic value.

The face value and rough comparisons of the mean values might lead to make weak conclusion. Thus, the F statistic of One-way ANOVA has been computed for further significant explanation of the differences.

Source	SS	df	MS	F	Sig.
Between Groups	19.533	2	9.766	.712	.496
Within Groups	644.967	47	13.723		
Total	664.500	49			

Table 4.4.5: ANOVA Summary Table for the Parents' General Negative Beliefs.

The calculated ANOVA analysis, F (2,47)=0.712, sig. 0.496, showed that the mean differences in the general negative beliefs among parent participants, with the three levels of social interaction, were statistically non or less significant. Therefore, they did not differed on the general negative beliefs concerning mental retardation and children with mental retardation. Similarly, the calculated ANOVA analyses values for Regular School Teachers, F (2,47)=1.349, sig. 0.269, revealed insignificant attitude mean value. It was also insignificant for the Special Needs Teachers, F (2,47)=0.209, sig. 0.0.650. Thus, no significant attitudinal difference had been observed on the parents', special needs teachers', and regular school teachers' type and level of social interaction with children with mental retardation.

There were also a non significant difference, F(2,139)=5.150, sig. 0.007, on the mean statistic values of the total participants' in the different types and levels of social interaction with children with mental retardation. Therefore, it is possible to conclude that no significant difference have been observed on the total participants' types and levels of social interaction with children with mental retardation.

4.2.2 SOCIAL REJECTION

The items that were included in the social rejection category include the following.

1. I could marry a person with mental retardation, and
2. I am willing to work with a person with mental retardation.

The statements were phrased positively so that the scoring procedure could follow the rate of increment in the different levels of the five-point Likert procedure. Thus, the highest mean scores showed social acceptance, rather than social deprivation and rejections.

Relationship	PARENTS		SPECIAL NEEDS TEACHERS		REGULAR TEACHERS		TOTAL PARTICIPANTS	
Types & Levels of Social Interaction	N	Mean	N	Mean	N	Mean	N	Mean
Non Socially Interactive	5	5.20	-	-	24	5.75	29	5.66
Less Socially Interactive	2	6.00	1	3.00	18	6.22	21	6.05
Highly Socially Interactive	43	6.72	41	5.73	8	5.50	92	6.17
Total	50	6.54	42	5.67	50	5.88	142	6.05

Table 4.4.6: Social Rejection by the Types & Levels of Social Interaction.

Here, also there were clear mean differences among the different participants based on their level of social interaction with children with mental retardation. It increased from the smallest mean statistic value of 5.66, for the non socially interactive participants, to the highest 6.17, for the highly socially interactive group members.

But, there were no significant differences in the calculated ANOVA calculation on the social rejection mean statistic values for parents, F (2,47)=1.658 sig. 0.201,special needs teachers, F (2,47)=2.511 sig. 0.121, regular school teachers, F (2,47)=0.733 sig. 0.486, and the total participants, F (2,139)=0.971 sig.0.381.

Therefore, there were no significant mean statistic difference in all the three different groups of participants and their general collection both in the type and frequency of social interaction with children with mental retardation.

4.2.3 POSITIVE ACCEPTANCE OF RIGHTS

The items on the positive acceptance of the rights of children with mental retardation include the following.

1. Persons with mental retardation should participate in community affairs such as "Idir" or "Equib",
2. Persons with mental retardation should have equal chance for education and employment, and
3. Persons with mental retardation could be educated and trained.

Relationship	PARENTS		SPECIAL NEEDS TEACHERS		REGULAR TEACHERS		TOTAL PARTICIPANTS	
Types & Levels of Social Interaction	N	Mean	N	Mean	N	Mean	N	Mean
Non Socially Interactive	5	10.80	-	-	24	12.04	29	11.83
Less Socially Interactive	2	7.50	1	4.00	18	12.50	21	11.62
Highly Socially Interactive	43	12.88	41	10.88	8	11.75	92	11.89
Total	50	12.46	42	10.71	50	12.16	142	11.84

Table 4.4.7: Positive Acceptance of Rights by the Types & Levels of Social Interaction.

On the positive acceptance of the rights of children with mental retardation parents (12.46) scored better mean statistic value than the special needs teachers (10.71) and regular school teachers (12.16). But a critical observation on the levels of social interaction revealed that minor and loose mean differences have been observed on these three sequential categories.

In general, there were differences in the mean statistic values of the participants based on their type of relationship with children with mental retardation. But, the types and levels of social interaction have not yet any effect on their positive acceptance of the rights of children with mental retardation.

To check the significance of this rough conclusion the F statistics of One-way ANOVA has been computed. But, it was found to be insignificant for Parents, $F_{(2,47)}=6.762$ sig. 0.003, special needs teachers, $F_{(2,47)}=1.036$ sig. 0.315, regular school teachers, $F_{(2,47)}=0.523$ sig. 0.596, and total participants $(2,139)=0.94$ sig. 0.911.

As a whole, no significant difference has been observed on the participants' mean statistic values on their positive acceptance of the rights of children with mental retardation.

4.2.4 TRADITIONAL BELIEFS ON MEDIATON OF MENTAL RETARDATION

The attitude measuring items that were included in the self-report questionnaire to measure traditional beliefs on the mediation of mental retardation include the following:

1. Mental retardation is genetic or something inherited from parents or ancestors,
2. Mental retardation is contagious, and
3. Mental retardation is a curse or punishment from God.

Relationship	PARENTS		SPECIAL NEEDS TEACHERS		REGULAR TEACHERS		TOTAL PARTICIPANTS	
Types & Levels of Social Interaction	N	Mean	N	Mean	N	Mean	N	Mean
Non Socially Interactive	5	12.60	-	-	24	11.94	29	12.07
Less Socially Interactive	2	9.00	1	15.00	18	11.50	21	11.43
Highly Socially Interactive	43	12.51	41	13.34	8	12.00	92	12.84
Total	50	12.38	42	13.38	50	11.80	142	12.47

Table 4.4.8: Traditional Beliefs on Mediation of Mental Retardation by the Types & Levels of Social Interaction

Individual's belief on the mediation and transmission of mental retardation might differ greatly for several reasons. To check such variations on the participant's attitude the above mentioned three relevant items were included in the attitude scale.

The comparisons of the mean statistic values of these items showed differences among the participants based on their type of relationship with children with mental retardation. Special needs teachers (13.38) have been found to have better mean statistic value than the parents (12.38) and regular school teachers (11.80). Generally speaking, differences in the mean statistic values were seen in the different groups of participants based on their relationship, but not in their level of social interaction.

The calculated One-way ANOVA results also revealed insignificant mean differences among the Parents, F (2,47)=1.498 sig. 0.234, special needs teachers, F

(2,47)=0.750 sig. 0.392, regular school teachers, F (2,47)=0.280 sig. 0.280, and all the participants, F (2,139)=3.560 sig. 0.031, as a whole.

In conclusion, the types of relationship and the types and levels of social interaction have not yet significant effect on the participant's attitude on the mediation of mental retardation.

4.4.3 ATTIUDE MEASUREMENT AGAINST THE DIFFERENT VARIABLES

4.4.3.1 ATTITUDE and GENDER

Relationship	GENERAL NEGATIVE BELIEFS		SOCIAL REJECTION		POSITIVE ACCEPTANCE OF RIGHTS		TRADITIONAL BELIEFS ON MEDIATON OF MENTAL RETARDATION	
	N	Mean	N	Mean	N	Mean	N	Mean
Male	52	13.73	52	6.21	52	12.17	52	11.69
Female	83	14.34	83	5.89	83	11.60	83	12.93
Missing Items	7	14.00	7	6.71	7	12.14	7	12.86
Total	142	14.10	142	6.05	142	11.84	142	12.47

Table 4.4.9: Attitudinal Differences by Gender.

In their attitude towards mental retardation and persons with mental retardation the mean statistic values of the participants were compared based on their sex. Females have better mean statistic values on the general negative beliefs and traditional beliefs on the mediation of mental retardation than males. On the other hand, males scored a little higher mean statistic values on the social rejection and positive acceptance of the rights of persons with mental retardation. Males were found to be better in their social acceptance and acceptance of the rights of children with mental retardation than females. Females were found to have better understanding on the problem of mental retardation and its possible mediation.

In proving the significance of the above mentioned loss conclusions the F statistic of One-way ANOVA were computed. But, the differences in all the four attitude types such as general beliefs, F (2,139)=0.510 sig. 0.602, social rejection, F (2,139)=1.070 sig.

0.346, positive acceptance of the rights, F (2,139)=0.825 sig. 0.440, and traditional beliefs of mediation, F (2,139)=4.517 sig. 0.013, were found to be insignificant. Thus, sex has no significant effect on the participants' attitude in all the four types.

4.4.3.2 ATTITUDE and AGE

Relationship	GENERAL NEGATIVE BELIEFS		SOCIAL REJECTION		POSITIVE ACCEPTANCE OF RIGHTS		TRADITIONAL BELIEFS ON MEDIATON OF MENTAL RETARDATION	
	N	Mean	N	Mean	N	Mean	N	Mean
BELOW 18 YEARS OLD	7	15.14	7	7.14	7	12.43	7	10.14
19-35 YEARS OLD	76	13.93	76	6.18	76	11.87	76	12.72
36-55 YEARS OLD	50	13.96	50	5.70	50	11.38	50	12.16
ABOVE 55 YEARS OLD	8	16.13	8	6.00	8	14.25	8	14.38
Missing Items	1	10.00	1	6.00	1	9.00	1	10.00
Total	142	14.10	142	6.05	142	11.84	142	12.47

Table 4.4.10: Attitudinal Differences by Age.

Parents who were above the age of 55 years old were found to have better mean value on their general belief (16.13), positive acceptance (14.25), and belief on the mediation of mental retardation (14.38). They were more positive on these issues. The adolescents (19-35 YEARS OLD) also have more positive social acceptance (6.18) of children with mental retardation.

But, the general attitude differences on the general beliefs, F (4,137)=1.320 sig. 0.266, social rejections, F (4,137)=1.311 sig. 0.269, positive acceptance of the rights, F (4,137)= 2.638 sig. 0.037, and traditional mediation of mental retardation, F (4,137)=3.857 sig. 0.266, found to have insignificant One-way ANOVA statistic values. For this reason, it could be concluded that age has no effect on the participants' different types of attitude.

4.4.3.3 ATTITUDE and RELIGION

Relationship	GENERAL NEGATIVE BELIEFS		SOCIAL REJECTION		POSITIVE ACCEPTANCE OF RIGHTS		TRADITIONAL BELIEFS ON MEDIATON OF MENTAL RETARDATION	
	N	Mean	N	Mean	N	Mean	N	Mean
ORTHODOX	95	14.00	95	6.15	95	11.99	95	12.38
PROTESTANT	31	14.90	31	6.06	31	11.32	31	13.06
MUSLIMS	13	12.31	13	5.23	13	12.38	13	11.62
OTHERS	1	17.00	1	7.00	1	13.00	1	15.00
Missing Items	2	16.50	2	6.00	2	8.50	2	12.00
Total	142	14.10	142	6.05	142	11.84	142	12.47

Table 4.4.11: Attitudinal Differences by Religion.

Although there is one participant in the 'other beliefs and/or religions' category, better mean statistic have been observed in the four different types of attitudes. On the other hand, the mean value of Muslim participants was found to be relatively lower than the followers of other religions and/or beliefs.

The calculated ANOVA statistic for the general beliefs, F (7,134)=1.836 sig. 0.125, social rejection, F (7,134)=0.859 sig. 0.490, positive acceptance of the rights, F (7,134)=1.432 sig. 0.227, and traditional belief on the mediation of mental retardation, F (7,134)=1.219 sig. 0.306, were found to be insignificant. Like other variables religion has not yet significant effect on the participants' different types of attitude.

4.4.3.4 ATTITUDE and EDUCATIONAL LEVEL

Relationship	GENERAL NEGATIVE BELIEFS		SOCIAL REJECTION		POSITIVE ACCEPTANCE OF RIGHTS		TRADITIONAL BELIEFS ON MEDIATON OF MENTAL RETARDATION	
	N	Mean	N	Mean	N	Mean	N	Mean
ILLITERATE	11	11.36	11	6.45	11	13.09	11	11.45
ELEMENTARY 1ST CYCLE	7	15.43	7	8.14	7	12.57	7	11.71
ELEMENTARY 2ND CYCLE	8	14.25	8	6.38	8	11.88	8	12.25
HIGH SCHOOL	23	15.30	23	5.87	23	11.04	23	13.43
CERTIFICATE	58	14.10	58	5.84	58	11.95	58	12.47
DIPLOMA	26	13.92	26	5.96	26	11.69	26	12.88
DEGREE	2	11.00	2	6.00	2	11.00	2	11.50
Missing Items	7	14.43	7	5.57	7	11.57	7	10.71
Total	142	14.10	142	6.05	142	11.84	142	12.47

Table 4.4.12: Attitudinal Differences by Educational Levels.

No ascending or descending level of increment has been observed on the mean statistic values of the participants based on their educational level. The increments and

decrements showed no pattern. Furthermore, no significant mean difference have been observed on the general beliefs, F (7,134)=1.934 sig.0.069, social rejection F (7,134)=1.869 sig.0.079, positive acceptance of rights, F (7,134)=0.818 sig.0.574, and traditional beliefs on the mediation of mental retardation, F (7,134)=1.656 sig.0.125, attitude types.

4.5 SUPPORT SYSTEMS FOR PERSONS WITH MENTAL RETARDATION IN ADDIS ABABA

4.5.1 Support Systems

In the historical pasts, there was no comprehensive strategy on the support systems for children with mental retardation implemented by the Addis Ababa City Administration. It seemed that the responsibility was given to individuals, religious institutions, and non governmental relief organizations. The government's responsibility also seemed to be ratifying international rules, regulations, conventions and/or preparing policy issues.

Even the supports given to children with mental retardation focused only on late rehabilitation, by misunderstanding the benefits of preventive and early intervention strategies. It is based on direct charity and could not be sustainable. It never helps the child in problem to be independent and self-reliant when the support ceased.

The government tried to give institutionalized services and job opportunities to other disability groups. They have organized national associations. The Ethic-craft workshop (est. in1966) and the United Abilities Company (est. in1964) were opened for this purpose by the Government of Ethiopia with the ILO's technical support (Burress, 1980). Such initiatives seemed to ignore persons with mental retardation. With respect to

associations Support Organization of the Mentally Handicapped (SOOM) which was formed in 1994 has been transformed in to the Ethiopian National Association (ENA) for Mentally Retarded Children and Youth (MRCY) only in the year 2003.

Let alone the invisibly personal and religious charity strategies, the historic growth and implementation of support systems for children with mental retardation in the city administration of Addis Ababa followed the international trends, both in type and kind. It has passed through more or less similar history with the advancements shown in science and technology.

The gravest issue here is that the first initiation in supporting children with mental retardation was seen only in 1984. Missionaries of Charity Brothers, under Mother Theresa Foundation, saw the first non-governmental initiation through the opening of the first and the only residential home for orphaned mentally retarded children. Then after EECMY, under its Children and Youth Care Program (CYCP), started educational (Special School) program for these children in 1986. The first Special Class in Government schools was not seen until the program started in Kokebe Tsebah School in 1988/89 (1980 E.C.). It came true through the great devotion of Miss Jounce, the Britain. After a year, at the end of 1988/89 (1981 E.C.), the second special needs unit for children with mental retardation has started its operation in Yekatit 23 school.

The opening of Special Classes in four primary schools in 2001/2002 (1994 E.C.) was the third great initiative on the part of the Ethiopian Government. It was opened in Belay Zeleke, Sibisti Negasi, Lideta Selam, and Akaki Government Schools.

The other voluntary initiatives include Kokeb Vocational training center and Yeka sub city Kebele 01 and 02 Disability Association under SOOM (Support Organization for

Mentally Handicapped Individuals), Lideta sub city Kebele 09 and 10 kindergartens under IHAUDP (Integrated Holistic Approach Urban Development Program), Vocational Training Center for the disabled in Addis Development Vision, Special Class for children with mental retardation in Saint Mary's School and Joy Autistic Center.

In comparison with the ordinary schools and the great number of children with mental retardation in the waiting lists of most of the above mentioned schools and vocational centers, let alone less identification of these children, the support system is found to be very limited, poor, and unevenly distributed. Most of these schools and vocational training centers lack the necessary human and material resources. It also followed very traditional or backward support systems.

Similar to the experiences of other countries, it starts in the city of Addis Ababa with the opening of the first institutionalized center in 1984. There after, the opening of full day special schools, eventually of integrated classes has been observed in the history of support systems for children with mental retardation.

In June 2001, Ministry of Social and Labor Affairs has prepared and published *National Strategic Plan for the Rehabilitation of Persons with Disabilities* hoping that it will organize the rehabilitation services for the disabled at the national level. It was prepared to implement the United Nations' conventions, rules and regulations and the national social policies. The main objectives were to prevent disabilities, rehabilitate persons with disabilities and facilitate equalizations of opportunities on the national resources through community participation. The strategy was designed on the way that all Ministry Offices (such as MOLSA, MOE, MOH, MOJ, MOA, Ministry of Communication and Information, Ministry of Transport and Communication, Ministry of

Finance and Economic Development), EFPD, Administrative Regions, NGOs, Community Associations, etc... could work together.

Currently, the *Department of Social and NGO Affairs*, under the city Administration of Addis Ababa Social and Civil Affairs Bureau, facilitating the implementation of the *National Strategic Plan for the Rehabilitation of Persons with Disabilities* in region 14. The department organized implementing Councils in the City Administration, Sub city Administration, and Keble Administration levels. According to the information gathered from the different government officials in the department the activities in all levels will start soon.

4.5.2 Current Situations of the Support Systems:

Based on the information gathered through document analysis, interviews, natural observations/visit and focus group discussions the following data might describe the current situations of support systems for children with mental retardation in the Addis Ababa City Administration.

S/N	SUBCITY	No. of Identified Households *	Name of Schools for Children with Mental Retardation	No. of Students with Mental Retardation.	No. of Special Needs Teachers
1	Arada	30	--	--	--
2	Addis Ketema	13	Yekatit 23 School,	17	3
3	Lideta	06	Kebele 09 and 10 kindergartens under IHAUDP and Lideta Selam School	28+6	4+1
4	Cherkos	38	EECMY-Kazanchis Branch and Addis Dev. Vision's (ADV) Voc. Training center	116+1	7+1
5	Yeka	68	Kokebe-Tsebah Sch. and Kebele 01 & 02 Disability Asso.	55 (19 integrated)+4	4+0
6	Bole	46	Kokeb Voc. Training Center	80	5
7	Akaki-Kaliti	03	Akaki Gov. School	15	2
8	Nifasilk-Lafto	10	Sibisti Negasi School and EECMY-Mekanisa Branch.	11+224	2+20
9	Kolfe-Keranyo	09	--	--	--
10	Gulele	10	Belay Zeleke School, Missinary Brothers Home, and St. Mary's School	34+63+15	3+2+2
	TOTAL	233	13	669	56

* Based on the results of the document analysis of 233 members of the Ethiopian National Association (ENA) for Mentally Retarded Children and Youth (MRCY).

Table 4.5.1: Distribution of Services for Children with Mental Retardation in Addis Ababa.

In the City Administration of Addis Ababa there are thirteen service providing institutions with two branch centers and two referral hospitals (Black Lion and Emanuel Specialized Hospitals) for the assessment and certification services. Based on the ownership classification only six of them were founded and run by the city government of Addis Ababa. The other seven institutions with two branch centers are the properties of local and international NGOs and the community at large.

Based on their service provision strategy one is boarding school with full institutionalized services for the orphans, the other one with branch center that is run by IHAUDP is a full day kindergarten, the other is the St. Mary's full day Montessori Class. Six of them are half day government schools among which Kokebe Tsebah could teach nineteen children with mental retardation in integrated classes from grade two up to grade six. The two branches (Mekanissa and Kazanchis) of EECMY projects are also full day school with different additional programs such as early care, vocational training, and CBR programs. The other two are vocational training centers—Kokeb and ADV vocational centers. But, the vocational training center that is run by ADV planned not to accept children and youth with mental retardation, believing that even the trained groups were not successful enough. Finally, the Yeka sub city Kebele 01 & 02 Disability Association is working on awareness raising and equalization of the opportunities of education and other services for children with mental retardation. Currently, four of the total twenty eight members have got free education in the extension/night programs of Miazya 23 Government School.

4.5.3 Problems and Prospects

There is no specially designed Curriculum, Syllabus, and/or Modules for children with mental retardation in the City Adm. of Addis Ababa. More devastatingly most of the teachers who are currently working in the area are not well trained and lack the necessary knowledge on Individualized Educational Program (IEP), Montessori Methods of Teaching and other conceptual issues.

Concerning the Training Institutions and Trained Manpower there is only one special needs teachers' training institute around the city Administration of Addis Ababa—the Sebeta Merha Ewran. The institute has been given training for those who are special needs teachers in the government schools through out the country. These teachers have got only one year certificate program. For this and other related issues both the trainers and the trainees still lack the necessary knowledge, despite their diminished quantity for the great needs of the area and the successes of the dreamed vision of inclusion.

From the currently working special needs teachers only one is trained in the Montessori Method of teaching in the Wolayta Training Institute. After getting her certificate with one year training she has started teaching children with mental retardation. With five years practical application of the subject matter and recurrent refreshing courses she has pursued her Diploma. In addition to the real implication of the method, such training strategy should be implemented in the other institutions.

Although most of the schools are still running by local and international NGOs the opportunity for teachers' training on the area is solely given for the government institutions. The NGOs used to organize experience sharing programs, workshops, and small scale in service training programs for the training needs of their staffs. The

Ministry of Education also has been arranging similar programs for such institutions occasionally. Therefore, the teachers' training programs lack a lot of components so that students pass the daily hours with out getting the necessary skill and vocational trainings.

The distribution of services for children with mental retardation was found to be unfair and uneven. These children could not easily reach these centers. In addition to the lack of awareness, negative societal attitude, and tiredness & boredom in the quality of services given for these children, and lack of transportation could be mentioned for the low attendance and high dropout rates of these children. Currently, the ratio of special needs teachers (56) to students with mental retardation (669) was found to be 1:12 (see Table 4.5.1).

Although the ratio was found to be reasonable if we consider it as the capacity of our nation, the fate of those who are under the waiting list in the different schools is still under question. To take examples, from the information gathered through semi-structured interview and physical observation/visit, more than 67 children with mental retardation are under the waiting list at Akaki Gov. School. The same is true for more than twenty students in Kokebe Tsebah, and more than thirty students in EECMY-center for Mentally Retarded Children (CMRC), Mekanisa and Kazanchis Branches.

In the working special needs classes of the government schools, children with different disabilities (the mentally retarded and the deaf, for example) and severity levels (the mild, moderate, and severe cases) are grouped to learn in a small classroom together—the educable in one corner, the trainable in the other, and even the new comers in the other. In some schools the three years attendant and the newly joined students are learning in the same classroom. Teachers in these classrooms tried to teach one group at

a time, with out considering the needs of the other group because of technical and methodological problems. Therefore, the services should be accessible enough, both in quality and quantity, to catch and retain more numbers of children with mental retardation.

Let alone the problems faced by children with mental retardation and their family members, special needs teachers also have faced a number of personal and professional problems in teaching children with mental retardation. They lack the opportunity for appropriate pre-service trainings, in service training, refreshment courses, and further education. Their monthly salary is very low but they are still evaluated like other ordinary school teachers for promotion and increment in the monthly salary. There is no evaluation strategy that could suffice the needs of special needs education. In addition, they have got a problem in getting friends, even marital relatives, both in and out side of the school environment for the attached negative attitude.

Therefore, the over all problems in the quality and quantity of services, the training related problems, the curriculum, the lack of appropriate evaluation, the attitudes of ordinary classroom teachers, students, family members and the society at large should be managed properly for the future envisioned needs of integration, eventually of inclusion.

The following are among the major problems, ways and means both for special needs teachers and students that were mentioned by parents, special needs teachers, and other officials who are working in the governmental and non governmental organizations.

- Major Problems Observed on Children with Mental Retardation
  - Problems in Intelligence and Adaptive/ self-help/ home-living Skills,
  - Behavioral problems such as disciplinary problems, tiredness, boredom, hostility, and restlessness,
  - Physiological and Communication Problems like forgetfulness, speech, hearing, memory, attention, eye-hand coordination, self-confidence, psychosocial, and balance problems,
  - Dependence on others for help and supports and great needs on repetition,
  - Environmental and Material Problems that includes problems in teaching facilities and materials, classrooms, recreational centers, etc…,
  - Higher number of students with different levels of mental retardation and varying needs in a class and high teacher-student ratio,
  - Higher rates of absence, repetition, and drop out, and problem in proceeding in academic education after elementary classes,
  - Family economic problem and lack of basic necessities,
  - Lack of professional assessment and early intervention,
  - Lack of parental participation in awareness raising programs and government support for the issue at hand,
  - Toileting, cleanliness, and general sanitary problems, and

    - General societal (including government officials') negative attitudes due to lack of information.

- Means and Ways to Solve the Problems of Children with Mental Retardation.
    - Arranging the necessary educational facilities and materials,
    - Understanding the individual needs of each student and applying different methods like repetition, rewarding, and encouragement,
    - Preparing Individualized Educational Programs (IEP) for each student and following daily, weekly, monthly, and yearly progresses with great participation of family members,
    - Creating professional networks especially among psychiatrists, psychologists, and social workers,
    - Opening different special needs classes/units and vocational training centers in the government schools in the different areas of the city to ensure accessibility,
    - Awareness raising programs for parents, teachers and other segments of the society,
    - Facilitating vocational trainings,
    - Reducing the number of students in each classrooms and assigning two teachers for a class, and
    - Government follows ups on the sustainability of the programs and arranging job opportunities for children with mental retardation.

- Major Problems faced by Special Needs Teachers
    - Lack of appropriate training (pre-service, in-service, etc.) on the area,
    - Lack of teaching aids and updated information,
    - General negative societal (including government officials') attitude,
    - Budget, near family follow ups, and societal rejection problems,
    - General absence of curriculum, syllabus and/or modules for Special Needs education and absence of general directives & systems on the area,
    - Professional crises, social rejection, and belittling Special Needs Teachers, and
    - Low salary and lack of evaluation criteria that suffices the needs of the program.
- Means and Ways to Solve the Problems of Children with Mental Retardation.
    - Preparation of curriculum, syllabus, and/or module,
    - Arranging appropriate pre-service and in-service training programs, workshops, continuing education, experience sharing programs, etc... and getting timely information,
    - Utilizing mass media for awareness raising and the general advocacy programs,
    - Professional assessment programs and networking,
    - Reducing number of students and assigning assistant teacher, and
    - Adjusting the rate of salary, allowance, and evaluation strategies.

4.6 DISCUSSION

A critical observation on the general results of the findings has shown relevant similarities with the hypotheses on which this research has been conducted. All the findings resulted in the expected conclusions. For the details of each the discussion follows:

Types and Levels of Social Interaction

Although the types and levels of social interaction are the determinant factors for one's willpower concerning the causal factors, the treatment strategies and the associated attitudes (Drew et al., 1986), we don't have research works in the area. This paper may be the primer, especially in the quantitative method of research activities for the betterment of generalization.

Types of Social Interaction:

In studying the participants' social interaction types and levels three different groups were identified. The parents and special needs teachers were expected to represent the more socially attached social elements while regular school teachers represents the less socially attached social groups in the social lives of children with mental retardation. It is so because these children have daily contact with parents and special needs teachers for mutual benefit. The parents' input and involvement highly supports the daily professional and personal labor of special needs teachers for the improvements of these children (Drew et al. 1986, Winzer 1990).

In this specific study more than ninety percent of the parents and special needs teachers and only half of the regular school teachers were found to have social interaction with children with mental retardation. In general, eighty percent of the total participants

were found to have better social interaction with children with mental retardation, while the rest twenty percent of the participants have very little or no social interaction with these children.

Since the parents have participated in the different awareness raising programs in the school of their child and the national association, the finding resulted in the expected conclusion. The remarkable successes of the CBR projects on the community attitude, especially on parents, also considered (Daniel 2000).

Levels of Social Interaction with Children with Mental Retardation:

All the socially interactive special needs teachers and more than ninety-five percent of the parents have had higher level of social interaction with children with mental retardation. But, only about thirty percent of the socially interactive regular school teachers showed higher level of social interaction with these children.

Among the occasionally socially interactive participants, parents and special needs teachers accounted only for 4.8 percent and 9.5 percent, respectively. But, the regular school teachers contributed for eighty-six percent of the participants in this specific category.

In general, about sixty-five percent and fifteen percent of the total participants were highly and occasionally socially interactive individuals with children with mental retardation, respectively. The rest twenty percent were also non-socially interactive individuals with children with mental retardation.

Associations of the Types and Levels of Social Interaction to the Background Variables:

There might be several demographic and socioeconomic variables that have direct and/or indirect effect on the individuals' types and levels of social interaction with children with mental retardation. These variables might also make a difference on the individual's attitude towards mental retardation and children with mental retardation (Drew et al. 1986, Tirussew 1994).

In this specific study the effects of ten of such variables have been tested. These variables include: Sex, Age, Religion, Relationship, Location, Ethnic groups, Marital status, educational levels, Parental Employment status, and Income/Salary.

The comparisons of the mean statistic values for the highly socially interactive groups revealed that a little higher mean statistic value of female participants than the males. On the other hand, males scored better mean statistic both in the less and non levels of social interaction groups. But, females' mean statistic value was found to be greater than the males in the general social interaction values. As a whole, the general mean statistic value categorized the females and the males in the category of highly and less socially interactive groups, respectively. But, these differences shown in the mean statistic values, both in the type and frequency of social interaction, were found to be statistically less or non significant. It was clearly shown in the calculated chi-square statistic values.

The participants' social relation types with children with mental retardation based on their age was another phenomenon for discussion. The early and late adolescent (19-55 years olds) participants have shown better positive social relationship with these

children than those who were in their childhood and old age periods. They accounted for 65% and 15% of highly and less socially interactive participants with good mean and standard deviation statistic values, in that respective order. The non-socially interactive participants accounted only for 20% of these groups.

But, in the calculated chi-square statistic values non significant differences between the two types (Socially Interactive vs. Non Socially Interactive) and significant differences between the two levels (Highly Socially Interactive vs. Occasionally Socially Interactive) of social interaction were observed. Although there were significant association between the three groups of participants, based on their type of social interaction, the contributor for the difference was unknown and the association was ($Ø_1$ =0.2799) also found to be much unfastened.

Based on their marital status participants have shown differences both in their type and level of social interaction with children with mental retardation, as it were observed in the calculated descriptive (percentile, mean, and standard deviation) statistics. But, these differences were not found to be significant on the levels of the participants' social interaction with these children. Whereas, the single type of marital status was the main contributor for the significant differences based on the participants' type of social relationship. But, its association ($Ø_2$=0.2591) was still poor.

Religion was found to be the best variable in differentiating the participants' based on their type and level of social relationship with children with mental retardation. It has direct impact on the acceptance of the child with mental retardation (Drew et al. 1986) and affects the treatment strategy (Chernet 1999, Drew et al. 1986).The differences in the type and level of social interaction were found to be statistically significant. The Muslim

participants were found to be the major contributors for these significant differences. But, the strengths of the associations were still lower.

The participant's type and level of social relationship with children with mental retardation also differed based on their ethnic affiliation, parental employment status, and income/salary levels on their percentage, mean, and standard deviation statistic values. But, it was found to be statistically non significant on the calculated chi-square statistics. Thus, ethnic affiliation, parental employment status, and income/salary level did not have any significant effect on the participants' types and levels of social relationship with these children.

Although all the participants were living in the same city, they have shown differences on their type and level of social relationship with children with mental retardation based on their location. The percentage, mean, and standard deviation statistic values revealed the same while the chi-square statistic values made little differences. In reference to the calculated chi-square statistic value location could differentiate between the participants' types, not levels, of social relationship with these children. But, the strength for this relationship was found to be low ($Ø_2$=0.4060).

Education could make a difference on individuals' thinking ability, attitude, eventually of behavior. Especially, education that facilitates divergent, not convergent, thinking could work a lot on the participants' positive acceptance, type and levels of social relationship with children with mental retardation.

More important to note in this specific study was that related knowledge on the causal factors, ways of mediation, and natures of mental retardation should be addressed to improve the type and frequency of social relationship with children with mental

retardation. It was clearly observed on the decrement of the mean value as the participants' education level increases in all types and levels of social relationships.

As it was understood from the calculated chi-square based on their educational level the participants' differed significantly on their type, not level, of social interaction with these children. The Diploma and Degree holders were the major contributors for the significant differences. Even more, the strength of the association on the participants' types of social interaction was strong ($Ø_2$=0.6194).

The other variable that was tested for its effect on the participants' type and level of social interaction with children with mental retardation was relationship. It was clear that parents and special needs teachers have good type and level of social interaction as it was observed from the percentage, mean and standard deviation statistical values (Drew et al., 1986). The calculated chi-square statistic values also revealed significant differences among the participants both in their type and level of social interaction. Regular school teachers were found to be the main contributors for the significant differences in the type of social interaction. In reference to the calculated Cramer's phi statistic values the strength of the association, both in the types and levels of social interaction was found to be strong ($Ø_5$=0.5140 and $Ø_6$=0.7122, respectively).

In general, among the ten biographic and socioeconomic variables sex, ethnic identity, parental employment status, and income/salary had no effect both in the type and levels of social relationship with children with mental retardation among the participants. But, age level in the levels of social interaction and marital status, location, and education in the types of social relationship had significant impacts in differentiating the participants. On the other hand, religion and relationship had significant potentiality

in differentiating the participants, both in the types and levels of social interaction. The strength of association was also strong especially for the variable of relationship.

CAUSAL FACORS FOR MENTAL RETARDATION

Parental Beliefs on the Causal Factors of Mental Retardation

For most parents the causal factors of mental retardation were unknown (Tirussew 2000, Hallahan and Kauffman 1991). It was unknown and unspecified almost for about half of the total participants. Even those who wrote the claimed causal factors specify general statements with out specification. Such claimed causal factors include accident, nature, disease, birth complication, lack of medical treatment, likift (being contaminated by evil-spirits), meningitis, and postnatal causes were mentioned in that respective order. This result was in line with the extant literatures (Tirussew 2000, Daniel 2000, Chernet 1999, and Miles 1992).

Four groups of causal factors were provided to be re-ranked by all the participants. In reference to the re-ranked scores and its respective mean values the following order was found to be the final rearranged value.

1. Physical, Physiological, and/or viral origins.
2. Accident
3. Poverty related problems such as malnutrition, lack of stimulation, etc....
4. God's punishment, curse for wrongdoing, inherited sin, and/or Evil eyes.

For the reasons that one-third of the participants were parents who have tested the problem of mental retardation in their daily hours and got information on the area from their child's school, CBR programs, and the national association. And two-third of the total participants was teachers, from whom almost half were special needs teachers for children with mental retardation, who have tested the same professionally. The response specially on the positive and professionally accepted causal factors was highly expected.

For this group of the community the very traditionally accepted group of claimed causal factor that is related to God, Supernatural beliefs, and Evil Spirits got the last priority. For the mentioned reasons the result was different from the findings of Daniel (2000) on the general human disability and Chernet (1999) on some selected parents of children with mental retardation. It is also different from the extant literatures (Mesfin 1999, Miles 1992).

ATTITUDES TOWARD MENTAL RETARDATION and PERSONS WITH MENTAL RETARDATION

GENERAL FINDINGS

Only on their marital proposal with persons with mental retardation most participants agreed upon the other/negative side. About 73.2% of them reject such proposals. But on the other fifteen attitude items most of the respondents responded positively. This showed that participants have had previous knowledge and understanding on the causal factors, ways of mediation, and the capabilities and potentialities of children with metal retardation.

The results of this specific study revealed that most of the participants have better understanding on the nature and mediation of mental retardation and accept children with similar problems socially and professionally. They accept the abilities and capabilities of these children and allowed them to participate on the rule of equalization of opportunities in education, employment, etc... within the society, with out social rejections and segregations. Although there were differences in mean and standard deviation values among the three groups, its non significance were observed from the One-way ANOVA

calculations. Thus, participants did not show significant group differences on their general attitude values.

Unlike the results of the base line survey (IER 1995), the current findings revealed general positive attitude towards mental retardation and persons with mental retardation among the participants. Great differences have been observed on seven of the attitude items. In this specific study, participants did not consider persons with mental retardation as burden to the family, hostile and aggressive, beggars, and dependent. They show positive acceptance to work and live with them. Even more they did not relate mental retardation with curse and/or punishment from God. It may be due to the differences in the population, time, and location between the two studies.

SPECIFIC FINDINGS

The general attitudes of the participants' were classified into four specific attitude dimensions. These include the general negative beliefs, social rejection, positive acceptance of the rights of persons with mental retardation, and the traditional belief on mediation of mental retardation. All the four specific attitude dimensions were studied based on the participants' type of relationship and their types and levels of social interaction with persons with mental retardation. The variations in the attitudinal differences of the participants' based on their sex, age, religion, and educational levels were also checked.

The mean statistic values for all the four specific attitude dimensions among the three groups of participants (parents, special needs teachers, and regular school teachers) showed clear differences. But, the mean values of all the participants, in the different

types and levels of social interaction, were only half of the absolute values, especially in the general negative beliefs and social rejection attitude dimensions.

The overall mean scores of the participants on the positive acceptance of the rights of children with mental retardation and traditional belief on mediation of mental retardation were in better position, which is in the third quarter. The comparisons of these mean values by One-way ANOVA statistics revealed insignificant differences for each. Thus, there were no significant attitude differences among the three groups of participants based on their types and levels of social interaction with children with mental retardation. On the other hand, all the participants based on their types of relationship and types and levels of social interaction showed diminished mean scores in the general negative beliefs and social rejections while all the mean differences were found to be insignificant in all the cases understudy.

Although the mean score differences were observed on the four specific attitude dimensions among the different participants based on their sex, age, religion, and education levels, all the mean differences were insignificant. They did not show significant mean differences in the selected biographic and socioeconomic variables.

Unlike the results of this study, the differences in the attitude of the respondents were mainly due to the effects of the educational factor (Daniel 2000). Similar to this study, the insignificant effect of gender on the individuals' attitude and a good understanding about the causes or sources of disability among the participants were observed (IER 1995).

In conclusion, all the participants in all the different groups have shown better attitude values both in the general and specific attitude dimensions, except in the general

negative beliefs and social rejection areas. Although they have shown general negative belief on the problem of mental retardation and social rejection among this community, they have knowledge on the causes and mediation of mental retardation and accept the rights of children with mental retardation positively. But, their group difference goes down to the minimum and became statistically insignificant. The effects of all the four biographic and socioeconomic variables (sex, age, religion, and educational level) both on the general and specific attitudinal dimensions were also found to be insignificant.

Support Systems for Persons with Mental Retardation

The historic development of support systems in Ethiopia, like other countries, started on institutionalization. And then special schools, special needs classes/units, and integrated classes followed. The CBR programs also progressed (Daniel 2000). But, the growth, development, and advancements were found to be very slow (Adugna 1991) and all kinds of support systems are existing in current times. We experienced CBR programs and integrated classes without deinstitutionalization processes. It is great to experience the oldest institutionalization and the timely integrated classes in the envisioned inclusive society, the one added in the quantity of the other.

In general, the current situation of support systems for children with mental retardation in the City Administration of Addis Ababa is found to be poor both in quality and quantity with several opportunities for future progress. The system lacks professional plans, directives and programs; trained human power and the necessary facilities; appropriate awareness raising and advocacy programs; professional assessment and timely information; even more good government participation. For all these reasons, the implementing support systems seemed to be supplementary charity, rather than signifying

the rights of children with mental retardation to education, job and other individual and social benefits.

The inclusion of about nine credit hours disability-specific courses on the National Curriculum for Pre-service Teachers Education Programs (MOE 2003) is the first opportunities for the future visional integrated education, eventually of inclusion. The other opportunities include the decentralization of the implementations and follow-ups of support systems and the implementation of the National Strategic Plan for the Rehabilitation of Persons with Disabilities (MOLSA 2002). The dreamed National Forum of Organization working on Disability (MOLSA 2003), the currently progressed CBR networks, the establishments and active roles of the Federation and the National Association (ENA-MRCY), and the practical implications of Montessori Method of teaching and Vocational Trainings in some schools are also among other opportunities to be mentioned.

Although the historical past and current progressions and developments of the support systems are found to be very poor, there is still bright future prospect on the area. All the above mentioned newly proposed and implemented programs kindled the futurity of children with mental retardation. All such programs directed toward physical/location, social, and functional integration, eventually of inclusion. It will be cost effective and will solve not only the problem of the child with mental retardation but also the problems of his/her family members and the society at large.

CHAPTER FIVE

5. SUMMARY, CONCLUSION, and RECOMMENDATIONS

In this study, the claimed causal factors of mental retardation, the associated societal attitude, and its implication on the support systems for children with mental retardation were studied. One hundred forty two (50 parents, 42 special needs teachers, and 50 regular school teachers) and some other officials, teachers, directors, etc... in the governmental and non governmental organizations participated in the filling outs of the Self-Report Questionnaire, interview sessions, focus group discussions, and physical observations/visits.

5.1 SUMMARY

The results of this specific study can be summarized as follows.

Types of Social Interaction with Children with Mental Retardation.

1. There were differences among the three groups of participants in their types of social interaction with children with mental retardation. About 80 percent of the participants were found to have social interaction with these children. The rest twenty percent of the participants were non socially interactive participants.
2. More specifically, almost all of the special needs teachers, above 95 percent of the parents, and about half of the regular school teachers were found to have social interaction with children with mental retardation.

Levels of Social Interaction with Children with Mental retardation

1. Among the total participants about 15% and 65% of them were found to be occasionally and highly socially interactive individuals with children with mental retardation.

2. Parents, Special needs teachers, and Regular School Teachers accounted for 30%, 29%, and 6% of the total participation rate in the higher level of social interaction, respectively. While, in the occasional (less) level of interaction regular school teachers accounted for 15% of the total participants. Parents and special needs teachers each accounted only for 1% of the total participation rate in the less social interaction level.

Associations between the Type and Frequency of Social Interaction and Biographic and socio-economic variables

1. Among the ten biographic and socioeconomic variables tested in this study four of them (sex, ethnic identity, parental employment status, and income/salary) had no significant implication in the types and levels of social interaction with children with mental retardation.
2. The participants' age level had an effect only on their levels, not types, of social interaction with children with mental retardation. While, their marital status, location, and educational levels affect their types, not levels, of social interaction with these children.
3. On the other hand, significant differences both in the types and levels of social interaction among the participants were observed in the other two variables (religion and relationship).

Causal Factors for Mental Retardation

1. parents were asked and wrote a number of claimed causal factors for the problem of mental retardation on their child. These include accident, nature, disease, birth complications, lack of medical

treatment, likift (being contaminated by evil spirits), meningitis, and postnatal causes.

2. But, about 56% of the parents did not know the causes why their child became in that way.
3. The hypothetical pre-arranged causal factors changed their position in the way that the scientifically accepted causes (organic/physiological related causes, accident, and cultural-familial causes) in the first three positions and the traditionally claimed causes (causes related to God, Supernatural beliefs, and Evil spirits) in the last position, for all the three different groups of participants and the general population as a whole.

Attitude toward Mental Retardation and Persons with Mental Retardation

1. In the general attitude items most of the participants (Parents, Special Needs Teachers, and Regular School Teacher) showed more of positive attitude value, except in the statement that requested marital proposal with persons with mental retardation. They have been found to have positive general attitude toward mental retardation and persons with mental retardation.
2. But, the mean attitudinal values of the different groups in their types of relationship and types and levels of social interaction revealed diminished values. It was only in the third quarter of the absolute value of 80. It was not more of positive as such. All the group differences were also found to be insignificant. Thus, there were no significant

group differences shown on the general attitude towards mental retardation and persons with mental retardation.

3. In the specific attitude dimensions, the mean differences revealed that parents and teachers were found to have more positive attitude in their positive acceptance of the rights of children with mental retardation and traditional beliefs on mediation of mental retardation. On the other hand, they showed diminished mean values in the general beliefs of mental retardation and social rejection of children with mental retardation.
4. But, there were no significant group differences shown among the population in the four specific attitude dimensions.
5. The effects of all the four biographic and socioeconomic variables (sex, age religion, and educational level) both on the general and specific dimensions of the participants' attitude were insignificant.

Support Systems for Children with Mental Retardation

1. The growth and developments in the support systems for children with mental retardation in the city Administration of Addis Ababa have followed similar pattern in progress like other foreign countries. It started with Institutionalized service and observed the current progress in the Community Based Programs with in the community and Integrated Classes at schools. But, it is still poor and retained all the programs, with out updating the previous systems.

2. The system lacks professional plans, directives and programs; trained human power and the necessary facilities; appropriate awareness raising and advocacy programs; professional assessment and timely information; even more good government participation.
3. The current situation of the support systems for children with mental retardation is found to be less organized, poor, and limited. Lack of appropriate school facilities and materials, trained human power, budget, awareness and orientation were also the major setbacks on the developments of the support systems. More worst was that the limited and unevenly distributed support systems increases the burdens of family members of children with mental retardation and facilitate the absence, repetition and dropout rates among these population.
4. The current teacher-student ratio was found to be 1:12. But, the rate of catchments and maintenance on the student population were found to be minimal. Higher rates of absence, repetition, and dropouts were recorded in the different special needs units.
5. The opportunities for future great advancements and developments on the special needs program also reported. The pipeline projects implemented by MOLSA, MOE, and other governmental and non-governmental organizations revealed bright futurities in the area.

5.2 CONCLUSION

In this study, the claimed causal factors of mental retardation, the associated societal attitude, and its implication on the support systems for children with mental retardation were studied. Therefore, the following conclusions were made.

Based on their relationship parents, special needs teachers, and regular school teachers have shown differences. Parents and special needs teachers of children with mental retardation have revealed good social interaction, both in type and level, with children with mental retardation. While the types and levels of social interaction appealed to discriminate among the regular school teachers significantly.

The impacts of biographic and socioeconomic variables on the types and levels of social interaction were also studied. Some variables (sex, ethnic identity, parental employment status, and income/salary) have no effect; others (age level) have impact only on the levels while some more others (marital status, location, and educational level) could make differences on the types of social interaction. But, religion and relationship have power to discriminate the society both in frequency and type of social interaction with children with mental retardation.

The claimed causal factors seemed to be many in number but the causal factors for their child's problem were unknown for most parents. Some mentioned both scientifically approved and traditionally accepted causal factors for mental retardation. Although it was unknown for most parents, all the participants were found to have positive understanding and attitude on the causal factors and mediation of mental retardation.

In the ranking of the causal factors, the pre-arranged groups of causal factors changed their position as the participants' reacted differently. The organic related causal factors got the first priority by all the three groups of the community. Causes related to other beliefs (accident) and cultural-familial problems became the second and third ranked causes of mental retardation. But, the causes related to God, Supernatural beliefs, and Evil Spirits were the last chosen factors for mental retardation by all the participants.

All the three groups of participants (Parents, Special Needs Teachers, and Regular School Teachers) have shown positive general attitude towards mental retardation and persons with mental retardation. There were no significant group differences in the general and the four specific dimensions of attitude based on their types of relationship and types and levels of social interaction. Although they have shown good acceptance of the rights of these community and understands better the mediation of mental retardation, they have shown general negative belief and social rejection. The effects of all the four biographic and socioeconomic variables (sex, age, religion, and educational level) both on the general and specific dimensions of the participants' attitude were insignificant.

The current situation of the support systems revealed lack of government involvement on the area. This is the reflection of neglect and ignorance of the rights and equal opportunities on resources for children with mental retardation. Parents and Special Needs Teachers have shown better interaction with these children. Although their personal and professional involvement was found to be promising, the parental and professional lobby with the government on the issue at hand was insignificant.

Finally, the type and level of social interaction coupled with related knowledge on mental retardation resulted in the positivist idea on the causes and mediation of mental

retardation. Even more, it goes to the positive acceptance of the rights of children with mental retardation. But, it could not change the general negative attitude and social rejection. It also had impact on the implementations and advancements of support systems for these children.

5.3 RECOMMENDATIONS

In light of the evidences that have been mentioned in the previous chapters and their many dimensional threats and coercion the following general and specific recommendations are in order.

Short- term Recommendations:

1. Social inclusion shall be the first priority. As it was observed the differences both in types and levels of social interaction among the population based on their relationship the closed in-doors and segregated children with mental retardation should be integrated physically (in location), socially, and functionally in the general population. It should be included in every national policy, rules, regulations, directives, and their implementation.
2. Offer appropriate information to parents in simple and understandable language. Since most parents of children with mental retardation lack information on the causal factors and mediation of mental retardation and they have, like other member of the society, general negative beliefs and social rejections toward mental retardation and persons with mental retardation there should be awareness raising and advocacy programs

through mass media. Artistic and thoughtful awareness raising and advocacy programs should be in order.

3. Offer appropriate Support Systems that shall be the responsibility of the Federal and Regional governments, lower administrative bodies, Parental Organizations, and the Society at large. The government's participation in the support systems for children with mental retardation is minimal. The gap is observed not only in directing the program but also in direct implementation of special needs programs. The quality, quantity, and distribution of support systems in the Addis Ababa City Administration were found to be poor, and uneven. It waits for the participations of government and non government organizations' through opening special needs units, facilitating integrated classes, and implementing for the future inclusive society. For its practicality parental and professional lobby with the government should be implemented.

Long- term Recommendations:

1. Redefining Training Programs for Special Needs Teachers. Since most of the programs are implemented by non-governmental organizations, Addis Ababa University and Ministry of Education Special Needs Programs should give teachers' training opportunities, continued and sustainable trainings (pre-service trainings, in-service trainings, workshops, seminars etc.) for teachers working in such organizations. Special Needs Teachers' should be equipped with the necessary teaching methods.

2. Revisiting the Special Needs Programs for Persons with Mental Retardation. The special needs program should be furnished both in the necessary material and human resources. It should have curriculum, syllabus, and/or module. The teachers should be trained on the necessary Individualized Educational Programs (IEP) and/or Montessori Methods of teaching. It should have the necessary teaching facilities and materials.
3. Practical Implementation on the standard rules, regulations, conventions, and constitutions. The government of Federal Democratic Republic of Ethiopia should activate its pipeline projects that includes:
    a. the National Strategic Plan for the Rehabilitation of Persons with disabilities (MOLSA 2001),
    b. the National Curriculum for Pre-service Teachers' Education Programs (MOE 2OO3), and
    c. National Forum of Organizations Working on Disability (MOLSA 2003).
4. More intensive researches on the area should be undertaken.

Appendices

Appendix A: References

Appendix B: Self-Report Questionnaire

Appendix C: Guiding Questions of the Interviews and Focus Group Discussions

Appendix A: References

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Appendix B: Self-Report Questionnaire (for Parents of Children with Mental Retardation).

Code - P

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
DEPARTMENT OF EDUCATIONAL PSYCHOLOGY
(SPECIAL NEEDS EDUCATION)

Your information will be kept confidentially!

A QUESTIONNAIRE REGARDING
MENTAL RETARDATION AND
PERSONS WITH MENTAL RETARDATION

The aim of this questionnaire is to obtain some information about mental retardation and persons with mental retardation in the Addis Ababa City Administration. Each data collected through this instrument will be absolutely used only for research purposes. The information provided will be kept confidential and no one will be affected by it. The researcher assures the respondents that no one will ever know the specific responses given. For this reason your name and specific addresses should not be written in any place in the questionnaire. Therefore, be kind enough to spare some time to answer all the questions and items frankly and honestly. Your frank and honest response will be thankful and highly appreciated.

Thank you very much for
your cooperation in advance!

The Researcher

Your information will be absolutely used only for research purposes!

Appendix B: (Continued)

PART ONE: ***BIOGRAPHIC AND SOCIO-ECONOMIC INFORMATION***

DIRECTION: Please fill in the following blank spaces and mark (√) in the boxes that corresponds the right information.

1. Address: Addis Ababa Sub city: ______ Kebele: _________
2. Sex: a. Male ☐ b. Female ☐
3. Age: a. up to 18 years ☐ b. 19-35 years ☐ c. 36-55 ☐ d. above 56 ☐
4. Religion: a. Orthodox ☐ b. Protestant ☐ c. Catholic ☐ d. Muslim ☐ e. others (specify) _____________
5. Marital Statues: a. Single ☐ b. Married ☐ c. Divorced ☐ d. Widowed ☐ e. Others ___________________
6. Ethnic Group: _______________
7. Educational Background: a. Illiterate ☐ b. Elementary ☐ c. Secondary ☐ d. Certificate ☐ e. Diploma ☐ f. Degree ☐ g. Others (specify) _______________
8. Employment Statues: a. Employed ☐ b. Unemployed ☐ c. Retired ☐ d. Others (specify)

   If you are employed, please indicate

   a. your job title __________________________

   b. monthly income of your family a. below **200** birr ☐ b.**201-350** birr ☐ c.**351-500** birr ☐ d. ከ**501-650** birr ☐ e. ከ**651-800** birr ☐ f. above **801** birr ☐
9. Is there a mentally retarded person (s) in your family? a. Yes, ☐ b. No, ☐ c. Others_______

   If yes, A/ How many?________ B/ What is the cause? _________________

   C/ What is your relation with him/her or them? a. Own child ☐ b. Relatives' child ☐ c. Spouse (husband or wife) ☐ d. Parent (father or mother) ☐ e. Sibling (brother or sister) ☐ f. Grandparent (grandmother or father) ☐ g. Others_____

   B/ Where did he/she or them reside/live? a. in your family ☐ b. with near relatives ☐ c. on the street ☐ d. in institutions or boarding schools ☐ e. other (specify) _____
10. Is there a mentally retarded person (s) in your village and/or working area?

    a. Yes, ☐ b. No, ☐ c. Others________________
11. Do you think that mental retardation can be cured? a. Yes ☐ b. No, ☐ c. Others_______

    If yes, what kind of treatment (s) is effective? (You can choose more than one items from the following, if you need.) a. Medical professionals' treatment ☐ b. Traditional healers' treatment ☐ c. Taking to mosque/church/holy water ☐ d. Simply sit and pray at home ☐ e. Others (specify)

Appendix B: (Continued)

12. Do you think that the effect of mental retardation could be minimized and the individual (s) with mental retardation could utilize their optimal functioning if they get rehabilitation services?

a. Yes, ☐ b. No, ☐ c. Others________________

If yes, what kind of rehabilitation service (s) do you think is/are effective? (You are free to choose more than one item) a. Nursery and Preschool education ☐ b. Home-based intervention ☐

c. School- based intervention through Guidance and Counseling service ☐

d. Taking to boarding school/institution ☐ e. Others (specify) _____________

13. Did you incur additional expenses as the result of the retarded individual (s) in your family?

a. Yes, ☐ b. No, ☐ c. Others ___________

If yes, A/ For what purpose? (You are free to choose more than one item from the following, if you need.) a. for clothing and shoes ☐ b. for medication ☐ c. for attendant/care takers ☐

d. for transportation ☐ e. others (specify) __________________

B/ What kind of support do you need for the upbringing of the retarded individual (s) in your family? (Feel free to choose more than one item from the following, if you need.) a. Money ☐ b. Material Support ☐ c. Medication ☐

d. Education/training ☐ e. Guidance & Counseling service ☐ f. Others (specify)

C/ What kinds of method(s) do you used to cover the additional expenses related to the problem of mental retardation.

a. Assistance from close relatives ☐

b. Assistance from humanitarian & welfare association or organizations ☐

c. Reducing personal expenses ☐

d. Giving priority to the problem ☐

e. Siblings labor ☐

f. Government support ☐

g. Others (specify) __________________

14. In which of the following do you think that persons with mental retardation could learn/train and will become successful?

a. In Special Day Schools and/or Training centers ☐

b. In Special Residential/Boarding Schools and/or Training Centers ☐

c. In Special Classes in the Regular Schools and/or Training Centers ☐

d. In Integrated Classes with Ordinary students in the Regular Schools and/or Training Centers ☐

e. Others (specify) ______________________

PART TWO: ***LEVEL OF SOCIAL INTERACTION SCALE***

DIRECTION: Please read carefully each of the following items and circle the letter of your choice on the bases of your level of interaction with persons with mental retardation. Please, be open and honest.

1. Do you have social interaction (eating together, shaking, playing, teaching, talking, etc.) with persons with mental retardation?
   (a) Yes, I socially interact with persons with mental retardation and still do.
   (b) I had social interaction with persons with mental retardation, but no longer want to do
   (c) I do not want to do, but sometimes I encountered with these people.
   (d) No, Never!

2. Do you consider yourself as a regular observer; care taker, teacher, friend or partner of persons with mental retardation?
   (a) Yes.
   (b) No.
   (c) Others ________________.

3. If you have social interaction (eating together, shaking, playing, teaching, talking, etc.) with persons with mental retardation, how often do you interact with them?
   (a) Daily.
   (b) Several time a week.
   (c) Once a week.
   (d) Once or twice a month.
   (e) Less often or less than once a month.

4. If you had social interaction (eating together, shaking, playing, teaching, talking, etc.) with persons with mental retardation, but no longer you want to do, how long has it been since you stopped social interaction with these people?
   (a) One day.
   (b) More than a day but less than a week.
   (c) More than a week but less than a month.
   (d) More than a month, but less than six months.
   (e) More than six months.

Appendix B: (Continued)

PART THREE: ***ATTITUDE SCALE***

DIRECTION: The following are statements that have no right or wrong answers for each. Like other people, you can have different options about each item. So, feel free in expressing your degree of agreement or disagreement in each of the statements. Please, put a tick or check mark (√) on your degree of agreement or disagreement to each item on the basis of your experience with persons with mental retardation and on what you feel, think, act and see the actual life situation of persons with mental retardation.

S/N	*STATEMENTS*	*ALTERNATIVES*			
		STRONGLY AGREE	*AGREE*	*DISAGREE*	*STRONGLY DISAGREE*
1.	Persons with mental retardation are burden to the family.				
2.	I could marry a person with mental retardation.				
3.	Persons with mental retardation are hostile and aggressive.				
4.	I am willing to work with Persons with mental retardation.				
5.	The fate of Persons with mental retardation is to look alms				
6.	Persons with mental retardation should participate in community affairs such as 'idir' and 'iqub'.				
7.	Persons with mental retardation are submissive and conformist.				
8.	Persons with mental retardation should have equal chance to education and employment.				
9.	Persons with mental retardation are unable to lead an independent life.				
10.	Persons with mental retardation should be provided with special residential quarters.				
11.	Persons with mental retardation are possessed by evil spirits.				
12.	Persons with mental retardation can be educated and trained.				
13.	Mental retardation is a curse or punishment by God.				
14.	Mental retardation is something inherited from parents or ancestors.				
15.	Mental retardation is something acquired by accident or disease.				
16.	Mental retardation is something contagious.				

Appendix B: (Continued)

PART FOUR: ***RANK ORDER FOR THE CLAIMED CAUSAL FACTORS OF MENTAL RETARDATION.***

DIRECTION: The following items are some of the claimed causal factors for mental retardation. Please, prioritize the reasons by writing number 1 in front of what you have chosen as the 1st reason, number 2 in front of what you have chosen as the 2nd reason, number 3 in front of what you have chosen as the 3rd reason, and number 4 in front of what you have chosen as the 4th reason for mental retardation (You can put a tick mark (√) as your response to indicate priorities).

	Claimed causal factors	*Rank*			
		1	*2*	*3*	*4*
A	God's punishment, curse for wrongdoing, inherited sin and/or Evil eyes.				
B	Physical, Physiological, and/or viral origins.				
C	Accident				
D	Poverty related problems such as malnutrition, lack of stimulation, etc…				

Appendix B: Self-Report Questionnaire (for Special Needs Teachers of Children with Mental Retardation).

Code-SST

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
DEPARTMENT OF EDUCATIONAL PSYCHOLOGY
(SPECIAL NEEDS EDUCATION)

Your information will be kept confidentially!

A QUESTIONNAIRE REGARDING
MENTAL RETARDATION AND
PERSONS WITH MENTAL RETARDATION

The aim of this questionnaire is to obtain some information about mental retardation and persons with mental retardation in the Addis Ababa City Administration. Each data collected through this instrument will be absolutely used only for research purposes. The information provided will be kept confidential and no one will be affected by it. The researcher assures the respondents that no one will ever know the specific responses given. For this reason your name and specific addresses should not be written in any place in the questionnaire. Therefore, be kind enough to spare some time to answer all the questions and items frankly and honestly. Your frank and honest response will be thankful and highly appreciated.

Thank you very much for
your cooperation in advance!

The Researcher

Your information will be absolutely used only for research purposes!

Appendix B: (Continued)

PART ONE: ***BIOGRAPHIC AND SOCIO-ECONOMIC INFORMATION***

DIRECTION: Please fill in the following blank spaces and mark (√) in the boxes that corresponds the right information.

1. Address: Addis Ababa Sub City: ______ Kebele: _________
2. Sex: a. Male ☐ b. Female ☐
3. Age: a. 19-35 years☐ b. 36-55 years☐ c. above 56 year ☐
4. Religion: a. Orthodox ☐ b. Protestant ☐ c. Catholic ☐
   d. Muslim☐ e. others (specify) ______________
5. Marital Statues: a. Single☐ b. Married ☐ c. Divorced ☐ d. Widowed☐ e. Others___
6. Ethnic Group: _______________
7. Educational Background a. Secondary☐ b. Certificate ☐ c. Diploma ☐
   e. Degree☐ f. Others (specify) _______________
8. Do you have had any experience with persons with mental retardation?
   a. Yes, ☐ b. No, ☐ c. Others (specify) _______________

   If yes, please specify

   a. your job title _______________________________ Where____________________
   b. how long did you work with persons with mental retardation?___________________
9. Do you have any related training in the area? a. Yes, ☐ b. No, ☐ c. Others __________

   If yes, please specify

   a. the type of training __________________________ Where____________________
   b. the duration _________________ the certificate/diploma granted ______________
   c. Your Monthly Salary? a. below 300 Birr☐ b. 301-450 Birr ☐ c. 451-650 Birr ☐
      d. 651-850 Birr☐ e. above 851 Birr ☐
10. Are you willing to continue in teaching children with mental retardation?
    a. Yes☐ why? ______________ b. No, ☐ why? ____________c. Others (specify) _______
11. Is there a mentally retarded person (s) in your family? a. Yes,☐ b. No, ☐ c. Others ________

    If yes, A/ what is your relation with him/her or them? a. Own child☐ b. Relatives' child ☐
    c. Spouse (husband or wife)☐ d. Parent (father or mother)☐ e. Sibling (brother or sister) ☐
    f. Grandparent (grandmother or father) ☐ g. Other (specify) ________________

    B/ Where did he/she or them reside/live?

    a. in your family ☐ b. with near relatives ☐ c. on the street ☐
    d. in institutions or boarding schools☐ e. other (specify) ____________

Appendix B: (Continued)

12. Do you think that mental retardation can be cured? a. Yes ☐ b. No, ☐ c. Others_______

If yes, what kind of treatment (s) is effective? (You can choose more than one items from the following, if you need.)

a. Medical professionals' treatment ☐ b. Traditional healers' treatment ☐

c. Simply sit and pray at home ☐ d. Taking to mosque/church/holy water ☐

e. Others (specify) _____________

13. Do you think that the effect of mental retardation could be minimized and the individual (s) with mental retardation could utilize their optimal functioning if they get rehabilitation services?

a. Yes, ☐ b. No, ☐ c. Others _____________

If yes, what kind of rehabilitation service (s) do you think is effective? (You are free to choose more than one item) a. Nursery and Preschool education ☐

b. Home-based intervention ☐

c. School- based intervention through Guidance and Counseling service ☐

d. Taking to boarding school/institution ☐

e. Others (specify) _____________

14. In which of the following do you think that persons with mental retardation could learn/train and will become successful?

a. In Special Day Schools and/or Training centers ☐
b. In Special Residential/Boarding Schools and/or Training Centers ☐
c. In Special Classes in the Regular Schools and/or Training Centers ☐
d. In Integrated Classes with Ordinary students in the Regular Schools and/or Training Centers ☐
e. Others (specify) ____________________

15. Is there disability club in your school? a. Yes, ☐ b. No, ☐ c. Others___________

If yes, A/ when it did organized _____________ B/ by whom ______________

C/ which of the following are included in the membership of the disability club?

a. Regular Teachers ☐ b. Special Needs Teachers ☐ c. Students ☐

d. Parents ☐ e. Others (Specify) _________________

D/ what are the major activities of the club in and out of school?

a. ______________________ b. ________________________

c. ______________________ d. ________________________

e. ____

E/ Do the club has regular program in the school mini media?

a. Yes, b. No, c. Others _______________

If yes, a. by how much time gap in a week __________

b. for how much minutes _________________

Appendix B: (Continued)

16. As a teacher in a school for mentally retarded, please answer the following questions.

16.1 What are the FIVE major problems that you have observed among the mentally retarded students in the teaching-learning process?

A. ______________________________

B. ______________________________

C. ______________________________

D. ______________________________

E. ______________________________

16.2 Please give FIVE ways and means in which the problems of the mentally retarded students in the teaching-learning process could be solved.

A. ______________________________

B. ______________________________

C. ______________________________

D. ______________________________

E. ______________________________

16.3 What kind of personal and professional problems do TEACHERS of students with mental retardation faced? Write the five MAJOR problems.

A. ______________________________

B. ______________________________

C. ______________________________

D. ______________________________

E. ______________________________

16.4 How do you think that the personal and professional problems of TEACHERS of student with mental retardation could be solved? Write the major five means and way do you need.

A. ______________________________

B. ______________________________

C. ______________________________

D. ______________________________

E. ______________________________

Appendix B: (Continued)

PART TWO: ***LEVEL OF SOCIAL INTERACTION SCALE***

DIRECTION: Please read carefully each of the following items and circle the letter of your choice on the bases of your level of interaction with persons with mental retardation. Please, be open and honest.

17.Do you have social interaction (eating together, shaking, playing, teaching, talking, etc.) with persons with mental retardation?
(a) Yes, I socially interact with persons with mental retardation and still do.
(b) I had social interaction with persons with mental retardation, but no longer want to do
(c) I do not want to do, but sometimes I encountered with these people.
(d) No, Never!

2. Do you consider yourself as a regular observer; care taker, teacher, friend or partner of persons with mental retardation?
(a) Yes.
(b) No.
(c) Others ________________.

3. If you have social interaction (eating together, shaking, playing, teaching, talking, etc.) with persons with mental retardation, how often do you interact with them?
(a) Daily.
(b) Several time a week.
(c) Once a week.
(d) Once or twice a month.
(e) Less often or less than once a month.

4. If you had social interaction (eating together, shaking, playing, teaching, talking, etc.) with persons with mental retardation, but no longer you want to do, how long has it been since you stopped social interaction with these people?
(a) One day.
(b) More than a day but less than a week.
(c) More than a week but less than a month.
(d) More than a month, but less than six months.
(e) More than six months.

Appendix B: (Continued)

PART THREE: ***ATTITUDE SCALE***

DIRECTION: The following are statements that have no right or wrong answers for each. Like other people, you can have different options about each item. So, feel free in expressing your degree of agreement or disagreement in each of the statements. Please, put a tick or check mark (√) on your degree of agreement or disagreement to each item on the basis of your experience with persons with mental retardation and on what you feel, think, act and see the actual life situation of persons with mental retardation.

S/N	*STATEMENTS*	*ALTERNATIVES*			
		STRONGLY AGREE	*AGREE*	*DISAGREE*	*STRONGLY DISAGREE*
1.	Persons with mental retardation are burden to the family.				
2.	I could marry a person with mental retardation.				
3.	Persons with mental retardation are hostile and aggressive.				
4.	I am willing to work with Persons with mental retardation.				
5.	The fate of Persons with mental retardation is to look alms				
6.	Persons with mental retardation should participate in community affairs such as 'idir' and 'iqub'.				
7.	Persons with mental retardation are submissive and conformist.				
8.	Persons with mental retardation should have equal chance to education and employment.				
9.	Persons with mental retardation are unable to lead an independent life.				
10.	Persons with mental retardation should be provided with special residential quarters.				
11.	Persons with mental retardation are possessed by evil spirits.				
12.	Persons with mental retardation can be educated and trained.				
13.	Mental retardation is a curse or punishment by God.				
14.	Mental retardation is something inherited from parents or ancestors.				
15.	Mental retardation is something acquired by accident or disease.				
16.	Mental retardation is something contagious.				

Appendix B: (Continued)

PART FOUR: ***RANK ORDER FOR THE CLAIMED CAUSAL FACTORS OF MENTAL RETARDATION.***

DIRECTION: The following items are some of the claimed causal factors for mental retardation. Please, prioritize the reasons by writing number 1 in front of what you have chosen as the 1st reason, number 2 in front of what you have chosen as the 2nd reason, number 3 in front of what you have chosen as the 3rd reason, and number 4 in front of what you have chosen as the 4th reason for mental retardation (You can put a tick mark (√) as your response to indicate priorities).

	Claimed causal factors	*Rank*			
		1	*2*	*3*	*4*
A	God's punishment, curse for wrongdoing, inherited sin and/or Evil eyes.				
B	Physical, Physiological, and/or viral origins.				
C	Accident				
D	Poverty related problems such as malnutrition, lack of stimulation, etc…				

Appendix B: Self-Report Questionnaire (for Regular Elementary School Teachers).

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
DEPARTMENT OF EDUCATIONAL PSYCHOLOGY
(SPECIAL NEEDS EDUCATION)

Code-RST

Your information will be kept confidentially!

A QUESTIONNAIRE REGARDING MENTAL RETARDATION AND PERSONS WITH MENTAL RETARDATION

The aim of this questionnaire is to obtain some information about mental retardation and persons with mental retardation in the Addis Ababa City Administration. Each data collected through this instrument will be absolutely used only for research purposes. The information provided will be kept confidential and no one will be affected by it. The researcher assures the respondents that no one will ever know the specific responses given. For this reason your name and specific addresses should not be written in any place in the questionnaire. Therefore, be kind enough to spare some time to answer all the questions and items frankly and honestly. Your frank and honest response will be thankful and highly appreciated.

Thank you very much for
your cooperation in advance!

The Researcher

Your information will be absolutely used only for research purposes!

Appendix B: (Continued) PART ONE: ***BIOGRAPHIC AND SOCIO-ECONOMIC INFORMATION***

DIRECTION: Please fill in the following blank spaces and mark (√) in the boxes that corresponds the right information.

1. Address: Addis Ababa Sub City: ______ Kebele: _________
2. Sex: a. Male ☐ b. Female ☐
3. Age: a. 19-35 years ☐ B. 36-55☐ c. above 56☐ e. Others____________
4. Religion: a. Orthodox ☐ b. Protestant ☐ c. Catholic ☐
   d. Muslim☐ e. others (specify) _____________
5. Marital Statues: a. Single☐ b. Married ☐ c. Divorced☐ d. Widowed☐ e. Others___
6. Ethnic Group: _______________
7. Educational Background a. Secondary☐ b. Certificate ☐
   c. Diploma☐ d. Degree☐ e. Others (specify) _______________
8. Do you have had any experience with persons with mental retardation?
   a. Yes,☐ b. No, ☐ c. Others_______________
   If yes, please specify A/ the job title ___________________________ where? _________
   B/ how long did you work with persons with mental retardation? ____
9. Do you have any related training in the area? a. Yes,☐ b. No, ☐ c. Others __________
   If yes, please specify
   A/ the type of training __________________________ where ______________________
   B/ the duration ________________ the certificate/diploma granted ______________
   d. C/ Your Monthly Salary? a. below 300 Birr☐ b. 301-450 Birr☐ c. 451-650 Birr☐
   d. 651-850 Birr☐ e. above 851 Birr☐
10. Is there a mentally retarded person (s) in your family? a. Yes☐ b. No☐ c. Others ________
    If yes, A/ what is your relation with him/her or them? a. Own child ☐ b. Relatives' child ☐
    c. Spouse (husband or wife)☐ d. Parent (father or mother)☐ e. Sibling (brother or sister) ☐
    f. Grandparent (grandmother or father)☐ g. Other (specify) _________________
    B/ Where did he/she or them reside/live?
    a. in your family ☐ b. with near relatives☐ c. on the street ☐
    d. in institutions or boarding schools☐ e. other (specify) ____________
11. Is there a mentally retarded person (s) in your village and/or working environment?
    a. Yes, ☐ b. No, ☐ c. Others________________
12. Do you have any direct contact with parents/teachers of the mentally retarded children?
    a. Yes, ☐ b. No, ☐ c. Others________________

Appendix B: (Continued)

13. Will you be willing to be a 'teacher' for mentally retarded children?

a. Yes,☐ b. No,☐ c. Others________________

14. Do you think that mental retardation can be cured? a. Yes, ☐ b. No, ☐ c. Others________

If yes, what kind of treatment (s) is effective? (You can choose more than one items from the following, if you need.) a. Medical professionals' treatment☐ b. Traditional healers' treatment☐ c. Simply sit and pray at home ☐ d. Taking to mosque/church/holy water ☐

e. Others (specify) ____________________

15. Do you think that the effect of mental retardation could be minimized and the individual (s) could utilize their optimal functioning if they get rehabilitation services?

a. Yes☐ b. No☐ c. Others ______________

If yes, what kind of rehabilitation service (s) do you think is effective? (You are free to choose more than one item) a. Nursery and Preschool education ☐

b. Home-based intervention ☐

c. School- based intervention through Guidance and Counseling service☐

d. Taking to boarding school/institution ☐

e. Others (specify) ______________

16. In which of the following do you think that persons with mental retardation could learn/train and will become successful?

a. In Special Day Schools and/or Training centers☐

b. In Special Residential/Boarding Schools and/or Training Centers☐

c. In Special Classes in the Regular Schools and/or Training Centers ☐

d. In Integrated Classes with Ordinary students in the Regular Schools and/or Training Centers☐

e. Others (specify) ______________________

17. Is there disability club in your school? a. Yes, ☐ b. No, ☐ c. Others____________

If yes, A/ when it did organized _____________ B/ by whom ______________

C/ which of the following are included in the membership of the disability club?

a. Regular Teachers ☐ b. Special Needs Teachers ☐ c. Students ☐

d. Parents☐ e. Others (Specify) __________________

D/ what are the major activities of the club in and out of school?

a. ________________________ b. ________________________

c. ________________________ d. ________________________

e. ____

E/ Do the club has regular program in the school mini media?

a. Yes☐ b. No,☐ c. Others _______________

If yes, a. by how much time gap in a week __________b. for how much minutes ______

Appendix B: (Continued)

PART TWO: ***LEVEL OF SOCIAL INTERACTION SCALE***

DIRECTION: Please read carefully each of the following items and circle the letter of your choice on the bases of your level of interaction with persons with mental retardation. Please, be open and honest.

1. Do you have social interaction (eating together, shaking, playing, teaching, talking, etc.) with persons with mental retardation?
   (a) Yes, I socially interact with persons with mental retardation and still do.
   (b) I had social interaction with persons with mental retardation, but no longer want to do
   (c) I do not want to do, but sometimes I encountered with these people.
   (d) No, Never!

2. Do you consider yourself as a regular observer; care taker, teacher, friend or partner of persons with mental retardation?
   (a) Yes.
   (b) No.
   (c) Others _________________.

3. If you have social interaction (eating together, shaking, playing, teaching, talking, etc.) with persons with mental retardation, how often do you interact with them?
   (a) Daily.
   (b) Several time a week.
   (c) Once a week.
   (d) Once or twice a month.
   (e) Less often or less than once a month.

4. If you had social interaction (eating together, shaking, playing, teaching, talking, etc.) with persons with mental retardation, but no longer you want to do, how long has it been since you stopped social interaction with these people?
   (a) One day.
   (b) More than a day but less than a week.
   (c) More than a week but less than a month.
   (d) More than a month, but less than six months.
   (e) More than six months.

Appendix B: (Continued)

PART THREE: ***ATTITUDE SCALE***

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Appendix C: Guiding Questions of the Interviews and Focus Group Discussions.

KEY INTERVIEW QUESTIONS

(With Leaders of Special Needs Unit and Teachers)

With Leaders of Special Needs Unit

1. When did the program started for children with mental retardation?
2. What are the programs do you have for children with mental retardation?
3. Who was the responsible government and/or non-government body(s) for the opening and implementation of the program? In what way the program started?
4. How do you have the budget for the implementation of the program?
5. How was the societal attitude (students, teachers, parents, and other school communities) in the opening and implementation of the program?
   How's currently it looks like?
6. How looks like the rate of intake, drop out, and absence of the student population (statistics) in the history of the program? What are the reasons behind do you think?
7. What are the major problems do you faced in implementing the program?
8. How do you follows-up and evaluate the activities of special needs teachers?
9. What are your future plans?
10. What looks like the sustainability and future prospects of the program?

With Special Needs Teachers

1. What kind of professional trainings (pre-service, in-service, continued education, etc…) do you got in the area? Where? How do you evaluate it?
2. What differences do you have observed between students with and with out mental retardation?
3. How do you express
   a. The causes of mental retardation?
   b. The societal attitudes towards mental retardation and persons with mental retardation?
   c. The successes and developments in the program for children with mental retardation?
   d. The current situations of support systems for children with mental retardation?
   e. The future prospects of the program?
4. What are the major personal and professional problems do you faced in teaching children with mental retardation?
5. What looks like the involvements and contributions of parents, governmental and non governmental organizations in the program?
6. What methods do you apply to raise the awareness of school and out side school communities and change the societal attitude towards mental retardation and children with mental retardation? (What kind of awareness programs do you have?)
7. What are the major problems for students' absence, repetition eventually of school drop outs?

Appendix C (Continued)

KEY INTERVIEW QUESTIONS

(With Government Officials)

1. Would you tell me the historic growth and developments on the support systems for children with mental retardation?
2. What looks like the current situations and strategies of support systems for children with mental retardation?
3. What are the duties and responsibilities of your organization in helping children with mental retardation?
4. How do you compare services given for children with and with out mental retardation in the organization and country level? Why differ?
5. How do you summarize the successes and future prospects of services given for children with mental retardation?

KEY QUESTIONS FOR FOCUS GROUP DISCUSSION

(With Parents and Special Needs Teachers)

1. Why these children became in this way? What do you believe the causes of mental retardation?
2. How do you express the societal attitudes towards mental retardation and persons with mental retardation? Why do they think the problem in this way?
3. Do you believe that the societal attitude has impact on the services given for children with mental retardation? Why? How?
4. How do you find the current situations of support systems and services for children with mental retardation?