

**ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES**

**THE ATTITUDE OF SPECIAL AND REGULAR CLASS
TEACHERS TOWARDS THE INCLUSION OF INDIVIDUALS
WITH MENTAL RETARDATION**

BY: TEFAYE AMENU



June, 2005
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A Thesis

Submitted to The

School of Graduate Studies

Addis Ababa University, Department of Psychology

In Partial Fulfillment of the Requirements for the
Degree of Master of Arts in Special needs Education

By: Tesfaye Amenu

June, 2005
Addis Ababa

ACKNOWLEDGEMENTS

My deepest and heartfelt gratitude is due to My advisor Dr. R. Sreevalsa Kumar for his constructive criticisms, insightful comments, and unreluctant follow up right from the inception of the study until its completion. Besides, had it not been without his fatherly treatment, constant encouragement and involvement through many of the unusual bureaucratic hurdles faced by the present research by work in such a sensitive area, this thesis would have not been a success.

I am especially grateful to Oromia Region Education Burea, West Hararghe and Kuni Woreda Education office for giving me an opportunity to study for MA. degree.

I would like to express my special thanks to Ato Hailu Geletu, Teshome Negassa, Taye Atlabachew, Solomon Sebro, W/o, Fatuma Ibrahim, and W/t Tigist Ayele whose assistance is unquantifiable

Last but not least I also express my appreciations to my wife Senait Gonfa for her continuous encouragement and support. I also appreciate my daughter Firaol Tesfaye and son Gemechis Tesfaye for their unflinching support extended till I completed my work.

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ACRONYMS

AAMR ... American Association on Mental Retardation

AAMD ... American Association on Mental Deficiency

DTE-MOE ... Department of Teacher Education-Ministry of Education

FDRE ... Federal Democratic Republic of Ethiopia

SPSS ... Statistical Package for Social Sciences

TGE ... Transitional Government of Ethiopia

UNICEF ... United Nation International Children's Emergency Fund.

ABSTRACT

Teachers' attitude towards the inclusion of individuals with mental retardation is recognized as crucial for its implantation. So, it was a felt necessity to study teachers' attitude towards the inclusion of individuals with mental retardation. Their commitment to the process of inclusion of the mentally retarded can go a long way in its efficacy.

The objectives of the study could be compiled under three parts. First, an effort was made to examine what attitude do regular and special class teachers have towards teaching the mentally retarded in inclusive classes. Second, a comparison was done between regular and special class teachers to see if there is difference in attitude in them towards the inclusion of individuals with mental retardation. Third, to see whether teachers' variables such as sex, age, teaching experience, training and qualification influence their attitude towards the inclusion of individuals with mental retardation, a detailed sub-sample analysis was done by categorizing teachers on those variables.

Samples of the study consisted of 35 special class and 55 regular class teachers drawn from Kokebe Tsibah primary school from Addis Ababa and Adama number 2 primary school from East Shoa.

An attitude scale consisting of 47 items were developed to collecting the data. To analyze the obtained data descriptive statistics such as means, standard deviations and percentage of variables were used extensively. T-tests were done to see whether or not there is a significant difference between different groups of teachers' classified according to various variables.

The result of the study indicated that both special class a mean score value of 133.77 ($t= 2.69 > 1.69$) and regular class teachers a mean score value of 130.43 ($t=2.68 > 1.68$) which too is statistically not significant at 0.05 level. Thus, teachers in this study have negative attitude towards the inclusion of individuals with mental retardation.

The t-test done to find out whether there is a statistically significant difference between the special class and regular class teachers indicating no statistically significant difference at 0.05 level. The sub-sample analysis also indicated that there was no statistically significant difference between the groups of teachers categorized based on the variables such as sex, age, teaching experience, training and qualification. However, statistically significant difference could be observed between the groups of special class teachers with an experience from 1 to 15 years and 16 to 35 years.

Based on the observations and findings a set of recommendations have been put forth

CHAPTER ONE

Introduction

1.1. Background of the Study

Education for individuals with disability including the mentally retarded has vastly changed since 1970s. Before then, especially, prior to 1800, individuals with disability were not seen as human beings and were feared, ridiculed, abandoned or simply ignored (Salend, 1994). This is true in Ethiopia too. Even there exists a belief that having children with disabilities in general and mental retardation in particular, is a punishment from God for ones sins and considered as Shame (Tirussew, et al., 1995). Moreover, in Ethiopia the mentally retarded were considered as passives, inattentive, slow, dumb, solitary, insecure and careless (Chernet, 1999). The prevailing of such concepts about the mentally retarded in the community in Amharic language were described as, “Dedebi, Kilakil, Mogne, fezaza, and etc” which literally mean idiot, imbecile, dunce, fool were used. This is to say, those who can not understand or do not at all understand. This highlight that, the public at large is not aware of the possibility of mentally retarded to be taught in schools. 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.

In the late 1700s, the concept about persons with disabilities began to change with emphasis on providing special education for individuals with mental retardation, hearing impairment and visual impairments. With the passage of time, residential schools, special schools, special classes and inclusion have been adopted as modalities of education in special education (Gearhart and Weishahn, 1992; Salend, 1994).

Tirussew (1999), argues that inclusion is a move towards schools that are structured around pupils' diversity and can accommodate many different ways of organizing pupils for learning to attain excellence in diversity. This is in line with the Salamanca statement and frame for Action on special Needs Education (UNESCO, 1994, cited in

Tirussew, 1999) that provides the clearest and most unequivocal call in articles 2 and 7 respectively as follows:

Article 2 states

... that ordinary schools should accommodate all children, regardless of their physical, intellectual, emotional, social, linguistic or other requirements. It further states that all educational policies should stipulate that children with disabilities attend their neighborhood school.

Article 7 also states

... that all children should learn together, wherever possible, regardless of any difficulties or differences they may have. Inclusive schools must recognize and respond to the diverse needs of their students, accommodating both different styles and rates of learning and ensuring quality education to all through appropriate curricula, organization arrangements, teaching strategies, resource use and partnerships with communities.

Indeed, there are some children with severe disabilities or whom it would be extremely difficult to create a truly inclusive educational environment; it would neither benefit the child nor others in the setting. However, this does not mean that the child should be segregated and isolated from all life in the community. Furthermore, through research it has been proven that children develop better physically, psychologically and socially if they learn together with other children (Claesson, 1995), Cited in Tirussew (1999). Therefore, the need to make a shift to inclusive education in Ethiopia is a logical choice to overcome practical problems faced in educating children with disabilities including the mentally retarded in the country (Tirussew, 1999).

The constitution of the Federal Democratic Republic of Ethiopia (FDRE) under article 90, declared that "to the extent the country's resources permit, policies shall aim to provide all Ethiopians access to public health and education" (FDRE, 1995, P. 13). In addition to what has been stated in the constitution the Education and Training Policy (1994) too favours special education. In this policy, emphasis is given to the provision of education both to the handicapped and to the gifted "in accordance with their potential and needs".

As a matter of fact, though efforts are made to formulate new educational policy that allows equal access to all citizens, the number of children with special needs who benefit from special education are insignificant. This is may be due to the negative

attitude of society including teachers toward disability including mental retardation and educating the disabled.

According to Moberg (1997) cited in Tirussew (1999) teachers' attitudes are the decisive factors, for successful inclusion. Inclusion has been based on the assumption that teachers are willing to admit students with disability including the mentally retarded in the inclusive classes and be responsible for meeting their needs.

Sharing the same view, Turnbull and Carpenter (1991) affirmed that "teachers attitude have been identified as being crucial to the success of any mainstreaming program". It is further pointed out that teachers' attitudes have been considered as one of the major affecting factors guaranteeing the success of inclusion of students with special education needs.

To materialize inclusion as an effective educational practice in the Ethiopian context, teachers should develop positive attitude towards teaching the mentally retarded in inclusive classes. Therefore, it is highly important to assess the attitude of special and regular teachers towards the inclusion of individuals with mental retardation to come up with information which may be helpful for designing better academic

1.2 Related Research Evidences

1.2.1 History of Mental Retardation

Historically, mental retardation has existed in all societies and socioeconomic strata irrespective of race and sex throughout human history. The recorded history of mental retardation shows that the Greeks in 1552 BC and the Romans in 449 BC were among the first to officially recognize people as mentally retarded (Heward et al., 1988).

Persons with mental retardation have experienced the hazardous effect of social stigma attached to them. As such the mentally retarded people were common, superstition and myths developed, derogative words like idiot, imbecile and dunce were used. Giving birth to a child with mental retardation was viewed as a punishment from God for the parents' evil deeds or so. There was also economic influence on the people with mental retardation. For instance the unproductive members of the

primitive society like the sick, physical and mental defects were abandoned, or sometimes even killed, because they were sharing the minimum what they have to eat, contributing nothing for the attainment of the survival of the social group. In this regard, the people (the Greeks and the Romans) used to send the mentally and physically defectives to place far away from the community, where they would perish by their own (Heward et. al, 1988).

Further, Heward et al., (1988) stated that, during the middle age, as religion become a dominant force, society's level of understanding of the condition and attitudes of persons towards retardation has relatively been changed. More humanitarian views and positive attitudes were developed; asylums and monasteries were erected to care for the mentally retarded persons.

Itard's effort to train the wild boy of Aveyron happened to be the noticeable turning point to change the attitude of people towards the possibility of training the mentally retarded persons and understanding of the possible potential they have. In this regard Samuel Gridley Howe, cited in Heward et al., (1988) also devoted much of his life to the education of handicapped persons.

Gearheart and Litton (1975) cited in Heward et al., (1988) characterized the early history of mental retardation (prior to the 1800s) consisting primarily of suppression and extermination; the 19th century as the era that produced institutions for mentally retarded persons; the 20th century as the era of public school classes; the 1950s and 1960s as the era of legislation and national support; and the 1970s as the era of normalization, child advocacy, and litigation.

These vividly describe of some of the changing attitudes and significant events that have affected the manner in which persons with mental retardation have been treated over the years.

However, since the beginning of the 20th century, the efforts made to open public school classes for the mentally retarded children and promotion of better awareness among the society led to the beginning of special class movement. This resulted in the growth and development of special education and enrollment rate of the mentally

retarded children (Heward et al., 1988). In the same document what this group of authors further in education and care of mentally retarded children, reads as follow:

Today, we are witnessing a move away from total reliance on the large state institution and the self-contained special class. The trend is toward more normalized, community-based facilities and education in the least restrictive environment, which includes the regular classroom for a significant number of mentally retarded children (p. 83).

Moreover, mental retardation in Ethiopian context has passed through similar pattern of development as has been discussed earlier. For instance, in its earliest stage of development, people used to view mental retardation or having given birth to a child with mental retardation as punishment from God for the evil deeds of the individual or his/here parents or ancestors (Chernet, 1999). In addition to this, a strong negative attitude was attached to giving birth to a child with disability, particularly with metal retardation.

Indeed it has been a source of painful feelings; which has been reflected in isolation of the parents and siblings of the retarded child as well as hiding the child with mental retardation from the community they live in. The family unit has to suffer a lot from the social stigma vested upon them and their children and the economic problems that have direct relation with caring for these children (Mekdes, 2000). In fear of the social stigma attached to the condition, parents and sibling of retarded sometimes were involving themselves in the rejection, disguising and hiding the child behind doors (Tirussew, 1999).

However, according to Nema (2000), the following evidence could be cited to elaborate the commencement of education of the mentally retarded in Ethiopia. Thus, with the introduction of the religious donor agents like, Mekaneyesus church, the Brothers' and sisters' home, etc. the awareness about educating the mentally retarded, of some parents and families got increased. As a result there appeared some change in the attitude and philosophy of some people. The awareness such families got could influence some parents and families to accept the condition as it is. This also gave some way to avert the condition through opening of institutions that care for the

retarded children. This resulted in the establishment of the first schools for the mental retarded children namely, the "Kassanchiz and Mekanisa schools for the mentally retarded", started in Addis Ababa, in 1986 by Mekaneyesus church. From the late 1988 the official introduction of the education for the mentally retarded persons to the Ethiopia education system has been stressed (Department of Teacher Education- Ministry of Education - DTE- MOE, 1991).

Attention was given to the,

- Orientation and training of teachers,
- Development of curriculum materials and
- Opening of special education units in the regular, government primary schools as well as promotion of awareness about the condition to the society at large.

At this stage, some encouraging efforts are being made. To mention some:

- Orientation was given to some primary school teachers for about 3-6 months on theoretical concepts of mental retardation and proper handling of the child with mental retardation,
- Enrollment of some children under consideration,
- Erecting a training center for special educators at certificate and first degree level,
- Starting training program for special educators at MA level, etc.

Moreover, some curricular materials like the teachers' manual on proper handling and training the child with mental retardation and on cognitive development have been prepared based on the need assessment survey on the enrollment of children with mental retardation. Various workshops were also conducted to promote awareness about mental retardation to the respective people (teachers, parents/ care takers, and educational personnel of various levels, etc.) from different regions. Since 1995, four regions (Addis Ababa City Government, Amhara, Oromiya, and Southern Nations, Nationality and Peoples Regions) have started special education programs for children with mental retardation.

Initiative has already been made to implement the concept of inclusion in educating the mentally retarded children with differing degrees of retardation. Even though there is encouraging practices in the country, the development of education of the

mentally retarded is extremely limited. Highlighting this, the 1994 population and housing census of Ethiopia states that there were 64,081 persons with mental retardation, out of these only 481 could learn in twenty-nine special education units those were attached to regular government primary schools, two special schools run by Mekaneyesus Church.

In addition to this, 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 the teachers’ training institutions, colleges, universities of the country (MOE, 2003). Therefore, the prospect will be brighter enough in the inclusion of the mentally retarded in regular classes.

1.2.2. The Concept of Mental Retardation

The concept of mental retardation has been viewed differently by different scholars and associations. Consequently, the term mental retardation has been given different definitions by various people at various times with a diversity of views, perceptions and attitudes. For instance, Tredgold (1937) cited in Smith, et al., (1994) refers mental retardation as:

A state of incomplete development of such a kind degree that individual is incapable of adapting himself to the normal environment of his fellows in such a way to maintain existence independently of supervision, control or external support (P. 63).

Doll (1941) in Winzer (1990:161) wrote six criteria to define the concept of mental retardation as basic social and occupational in competency; inability to manage affairs at the adult level; mental sub-normality; intellectual retardation from an early age; intellectual retardation during maturity; and incurability. These definitions, which emphasized the internal determination of defective intelligence, were widely accepted until recently. They saw mental retardation as a condition existing in an individual at birth, although one hindered by negative environmental factors.

The American Association on mental deficiency (AAMD, 1961) in Winzer (1990:161) refer mental retardation to sub-average general intellectual functioning resulting in, or associated with, impairments in adaptive behaviour, and manifested during the development period.

Grossman (1983), AAMR (1983) cited in Heward et al., (1988), and William (1991), Kirk et al., (1993), refer mental retardation as significantly sub-average general intellectual functioning, existing concurrently with deficits in adaptive behavior and manifested during the developmental period.

The most recent definition accepted by the American Association of Mental Retardation, reads:

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 (Smith, et al., 1994:75).

On commenting this definition, Smith, et al., (1994) have pointed out that the definition of mental retardation depending on a persons functioning in a daily life, through conceptual, practical and social intelligence. The definition focuses on relationships between capabilities-cognition, learning and adaptive skills, environments and functioning. The definition also stressed that mental retardation is the outcome of disabling circumstances. Accordingly, retardation is no longer to be viewed as being the characteristics of individual. It is instead the product of interactions between a person and the nature and demands of the person's environment including the attitude of teachers towards the inclusion of the mentally retarded in regular classes.

1.2.3. Causes of Mental Retardation

Many Social and Medical Scientists have conducted a lot of research to know more about the causes of mental retardation. Over 70% of the causes of Mental retardation are not known. For the known 30%, various explanations are given. These are chromosomal malformation and congenital factors in the prenatal stage, birth trauma and environmental factors after birth (Smith, et al., 1994; Salend, 1994; Zigler and Hodapp, 1986).

1.2.3.1. Chromosomal Malformations

At the time of conception, the two parental chromosomes X and Y meet each having 23 chromosomes and forming a pair of two in the normal condition. Sometimes instead of two pairs a single chromosome or a three chromosome pairs can happens usually causing Downs Syndrome (Davison and Neale, 1998).

1.2.3.2. Genetic Errors. "These conditions occur as the result of inheritance factor involving specific genes. Such disorders are rather understood poorly" (Drew, et al, 1988), Phenylketonria is one of recessive genetic deficits. Researches are trying to improve recessive defects in the early years of the child. Phenylketonria is usually a case in mild mental retardation level (Holmes, 1994).

1.2.3.3. Congenital Factors. Mental retardation caused by this factor can be traced back when the child is in the prenatal stage due to problems occurred in the interaction process between the mother and the child. Such factors include maternal infection and drug. Infections include measles and other diseases the mother contracts and transmit to the fetus in the early periods of pregnancy. Malnutrition of the pregnant mother also another factor for low birth weight and low brain weight (Drew, et al., 1988; Davison and Neale, 1998).

1.2.3.4. Birth Trauma: Birth trauma is the most common cause of brain. Despite the plasticity of the child's brain at birth, prolonged labor, sever physical stress or pressure, or the use of instruments may cause serious brain injury. The causes of birth trauma are: Asphyxia (lack of oxygen), injuries to the cerebrum, peripheral nerve injuries, fractures, soft tissue damage and injuries to the viscera (Smith, et al., 1994). Postnatal causes include severe malnutrition and disease such as meningitis.

1.2.4. Classification of Mental Retardation

Mental retardation covers a broad range of individuals who differ from one another in the severity of developmental delay and in the special educational strategies that have been designed for them (Kirk, et al., 1993). Thus, to understand the diversity of individuals who are identified as having mental retardation, professionals have had to

develop classification system which include different sub-groups or categories based on severity or degree (Taylor, et al., 1995).

The most prominent classification which is based on the severity of retardation is that proposed by the American Association of Mental Retardation (AAMR) which classifies mental retardation into four groups with IQ level and with acceptable terminology.

AAMR Classification	IQ level	Corresponding educational classification
• Mildly mentally retarded	50-70	Educable
• Moderate mentally retarded	35-49	Trainable
• Severely mentally retarded	20-30	Severe
• Profoundly mentally retarded	below 20	Profound

Source: Winzer, M. (1990). Children with exceptionalities a Canadian perspective pp. 163-165

Today, on the basis of the severity of retardation and adaptive behavior educators focus on normalization, mainstreaming, integration and inclusion and require the mentally retarded to receive educational services. Accordingly, they prescribe mildly retarded attend regular classes with necessary support, and moderately retarded attend regular class and receive special help in resource room or learn in self-contained class and integrated for some non-academic subject like physical education, music and art. They need severely and profoundly retarded children to learn in special classes and schools or institutions or homes (Winzer, 1990:197).

1.2.5. Historical Background of Inclusion

Reynolds (1988) uses the term "progressive inclusion" to describe the evolution of services to those with various disabilities including the mentally retarded. Accordingly, in the early 1800s, residential institutions, or asylums, began to emerge in order to accommodate those with hearing, visual, mental, or emotional impairments. Although access to those facilities was far from universal, such institutions remained the primary educational option for the disabled until special day schools come into fashion

in the early 1900s. These allowed greater, more localized access and somewhat better services to individuals with disabilities.

During the 1950s and 1960s, parents of children with disabilities organized to pressure courts and legislatures for changes in educational services available to their children. They began to seek access to public schools as an issue of civil rights for those with disabilities. Among the results of these efforts was The Education for All Handicapped Children Act of 1975 (PL 94-142), which mandated that all children, regardless of disability, had the right to a free, appropriate education in the least restrictive environment. As a result, resource rooms and self-contained classrooms for those with disabilities expanded in public schools. PL 94-142 was updated in 1991 by the Individuals with Disabilities Education Act (IDEA).

1.2.6 Concept of Inclusion

Inclusion is not a new concept in education. Related terms with a longer history include mainstreaming, integration, normalization, least restrictive environment, deinstitutionalization, and regular education initiative. Some use several of these terms interchangeably; others make distinctions. Admittedly, much of the confusion over the issue of inclusion stems from the lax usage of several of these related terms when important differences in meaning exist, especially among the most common—mainstreaming, integration, inclusion, and full inclusion Tilahun (1991 E.C).

Mainstreaming and other, older terms are sometimes associated primarily with the physical assimilation of students with disabilities with their non-disabled peers. This may be more a matter of “connotative baggage” rather than intent. Nevertheless, mainstreaming assumes that students with disabilities may share the same physical space (classroom, playground, etc.) with those who have no disabilities only when they are able to do the same activities as everyone else with minimal modifications. Further, the primary responsibility for these students’ education remains with their special education teacher. (Hocutt, et al., 1990) cited in Tibebe (1995).

Integration is carry-over from the civil rights/racial desegregation legislation of the 1960s and before consequently; integration is primarily a legal term. In school level it seeking ways of fostering social and academic interactions. Just as in racial

desegregation, the term "Integration", as used by special educators, conveys the idea that students with disabilities ought to be desegregated from "pull-out" programs, self-contained classrooms, special schools, or institutions, and integrated into the realm of regular classrooms. Further, this change is meant to be not only in terms of physical proximity, but of academic and social integration as well (Bowed, 1992) cited in Tibebu (1995).

Inclusion is a somewhat more values-oriented term than integration, its legal counterpart. "The true essence of inclusion is based on the premise that all individuals with disabilities have a right to be included in naturally occurring settings and activities with their neighborhood peers, siblings, and friends" (Millward and Dyson, 1995 p. 22).

"Inclusion" in its widest usage entails the action of including some body or some things or of being included. As used in special education, it refers to welcoming all children, without discrimination, in to regular or ordinary schools. It calls for a respect of difference. Indeed, it is focus on creating environments responsive to the differing developmental capacities, needs, and potentials of all children. Inclusion means a shift in services from simply trying to fit the child in to 'normal', it is a supplemental support for their disabilities or special needs and promoting the child's overall development in an optimal setting (Evans, 1998) cited in Tirussew (1999).

According to Claesson (1995) cited in Tirussew (1999) inclusive education implies that education is about learning to live and learn together with each other. Similarly, Johnson et al., (2002) stated that inclusion for the disabled means the absence of segregation, social acceptance being able to be treated like every body else, right to work... to be educated with one's non-handicapped peers" (P.28).

1.2.7 The Needs for Inclusion

An inclusive education is an instrument for promoting human rights and promoting and reinforcing principles spelled out by international convention and other key documents such as the 1994 Salamanca Declaration.

Through research it has been proven that children develop better physically, psychologically and socially if they learn together with other children (Claesson, 1995) Cited in Tirusew (1999). No child, with disability or without, is good at every thing or bad at every thing. This means that all children have the opportunity to help their classmates and also to receive from them.

Scholars like Gottlieb (1981); Barclay and Kehle (1979);Gresham (1982); Shristopolos and Renz (1969) cited in Schmid, et al., (1983:6) placing the handicapped including the mentally retarded in inclusive education has the following advantages:

1. Mainstreamed handicapped children including the mentally retarded will perform academically at least as well, and possibly better than, their handicapped peers in special classes. Gottlieb (1981), stated that academic skill development is the first objective of education. However, interest in the development of social-affective skills is also seen as valid even when not directly taught. Barclay and Kehle (1979), noted that results of research involving large numbers of students and classrooms clearly indicated a substantial portion of the variance attributed to academic achievement may be explained by social interaction variables.
2. Mainstreamed handicapped children will improve in social skills and in self-esteem; and adjust better in adulthood than their self-contained peers. One of the underlying assumptions made by supporters of mainstreaming is that physical placement of exceptional children in regular classes will result in the development of more appropriate social skills as the result of the presence of better models. It has been anticipated that the handicapped child will imitate the acceptable behaviors, social and academic, of non handicapped classmates (Gresham, 1982).
3. Non handicapped students will become more accepting and tolerant of handicapped individuals, especially those who are mainstreamed. Christopolos and Renz (1969) expressed the hope that frequent interaction in the regular classroom between exceptional and regular students would result in increased social interaction and familiarity. Increased familiarity would in turn lead to improve social status for handicapped students among the entire school population. An increased social acceptance of handicapped students by their non-handicapped classmates would result in the previously mentioned increased self esteem.

Similarly, Smith, et al., 1983; Gearheart, et al., 1988; Heward and Orlansky, 1988; Ysseldyk and Algozzine, 1995) cited in Tirussew (1999) state that placing children with disabilities including the mentally retarded in inclusive class has many advantages i.e.; it is the first step to include them in to the community; it help children to adapt to ordinary living, and it save the cost of separate classes. Other researches also revealed that pupils do better academically when working in inclusive setting. And the social benefits of inclusion are:

- Daily opportunities to mix with typical developing peers provide models for normal and age-appropriate behavior.
- Pupils have opportunities to develop relationship with others from their local community.
- Attending mainstream school is a key step towards inclusion in the life of the community and society as a whole.
- Successful inclusion is a key step towards preparing pupils with special education needs to become full and contributing members of the community, and as such society as a whole benefits.
- Typically developing peers gain an understanding about disability, about tolerance and how to care for and support other pupils with special needs.

On the contrary, separate special education systems have obviously lead to social segregation and isolation of people with mentally retarded in adult life: separate worlds were created from the start. In the inclusive setting, the special support children with disabilities including the mentally retarded require in the classroom may range from minor modification such as altering seating arrangements to major adaptations and considerable assistance (Smith, et al., 1983; Gearheart, et al; Heward and Orlansky, 1988; Ysseldyk and Algozzine, 1995) cited in Tirusew (1999)

1.2.8 Role of Special Education Teachers in an Inclusive School

Special education teachers as a group must increasingly see themselves as members of the regular education teachers and work toward more effective inclusion of special and regular education (Lilly, 1987; Gartner and Lipsky 1987, 1989; Hahn, 1989; Stainback and Stainback, 1989) cited in Miron (1994). The resources that are tied up in special

schools and the skills that specialist teachers and other professionals possess are too valuable to disregard. However, the development of more inclusive system means, over a period of time, they have to change the focus of their work so that they can support children in their regular schools. Studies show that the inclusion of students with mental retardation in to regular classes is successful when special education teachers find new ways to contribute to students' success. They may team-teach with regular teachers or they may become a support teacher (Steenlandt, 1995).

Similarly, Leyser and Tappendorf (2001:17) cited in Olsen (2004) found it was useful if special education and general education teachers trained together in in-services or pre-services so they could share ideas and learn skills on how to effectively collaborate, team and teach together.

So that, when regular class teachers have this kind of support on day-to-day basis, they can be much more successful in meeting the needs of the mentally retarded in inclusive classroom.

1.2.9 Role of Regular Teachers in Inclusive Classes

It is the fact that regular schools and regular classroom environment often fail to accommodate the educational needs of many students, not in the least those of the disabled. This is the reason so many pupils with disabilities do not attend regular schools. Until regular schools have developed a capacity to cater to them, it is difficult to argue for inclusion. One of the major challenges to achieve this lies in the changing task of the regular classroom teacher (Steenlandt, 1995).

As Drew, et al., (1984:262) reported that, the regular classroom teacher is responsible for any adaptation that may be necessary for student's success in this environment, consequently, this teacher must have the skills to develop and adapt curricula to meet individual needs. Necessary skills for the regular classroom teachers include an understanding of how handicapping condition can affect the ability to learn academic skills or to adapt in social situation.

According to Rädde Barnen (1995) cited in Abate (2001), it is unrealistic and unfair to expect that the ordinary class teacher would be able to include children with

disabilities including the mentally retarded in the ordinary classroom without first receiving adequate training. Ordinary teachers must be provided with the training and resources they need to meet children's specific learning and behavioral needs. This implies that the regular school teacher will have to develop a greater knowledge and responsiveness with respect to special learning needs in the classroom and should form part of teacher education programs, both at the initial level and as part of in service training. Similarly, Drew, et al., (1984) reported that the regular classroom teacher must be able to participate as a member of a multidisciplinary team involved in planning appropriate educational services for the child.

Moreover, the concern is not merely how a good education can be ensured for pupils with disabilities, for all pupils. The challenge is to find ways to help teachers in regular schools respond to the diversity of the children in their classroom, accommodate their different styles and rates of learning, meet their specific needs and ensure quality of education for all. Teachers should be prepared to modify curriculum content and teaching approaches as to give access to large numbers of pupils. Teachers should continue to have primary responsibility for the education of all children in their classes (Safford, Spodek and Saracho, 1994). If teachers are committed and willing to do, they are far better in identifying educational needs of their students (ICDR, 1999).

1.2.10 Attitude and Its Measurement

Many definitions of attitude have been offered by different researchers in terms of people's evaluation of entities. Kalat (1986), defined attitude as "the evaluative feeling that a given object evokes "or" a learned predisposition to respond to something positively or negatively". This notion implies that an attitude is a stable state of mental action to evaluate a person, thing or idea either as relatively good or relatively bad. It is also defined as "a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour" (Hilgard, 1996). According to them, the psychological tendency refers to a state that is internal or within the individual person. Hence attitude as a tendency implies that attitude is an internal state that lasts for at least a short time. They further explained that evaluating refers to something is to evaluate it favorable or unfavorably.

As Eagle and Chaiken (1993), cited in Chernet (1999:25) mentioned an attitude object can be anything that is discriminate or that becomes in some sense an object of thought. Attitude is crystallized as a result of feeling, for instance, loving or hating of the attitude object. This also indicates that an attitude is any behavior which is expressed in a particular manner, to a given attitude object.

Other scholars like Kundu, C. and Tuto, D. (1988), cited in Abate (2001), also defined attitude as follows: "it is a mental set or readiness to respond." By attitude we mean, broadly speaking, how one feels about thing or people. Not only what we do, but also how we feel about what we do is important.

Since attitude includes feelings, beliefs, convictions, and opinions that people have it implies that attitude affects the way an individual perceives, judges, interprets and reacts to issues. Thus the study of attitude is important because there is a general belief that human behavior and actions are influenced by our attitudes, where by attitudes are seen as the cause and behavior as the effect. In relation to this, Eagly and Chaiken (1993) cited in Chernet (1999) state that:

Attitudes are such an important area because they influence so much of our personnel and social lives. Attitudes include beliefs, convictions, desires, feelings, hopes, judgments, opinions sentiment and wishes people have on specific issues (P. 25).

Studies indicated that attitudes are necessarily developing from evaluative responding to an attitude object. Thus, individuals' do not have an attitude until they first encounter the object of attitude and respond evaluative to it on affective, cognitive, or behavioral basis (Gilbert et al., 1988; Dwortzky, 1988; Reardon, 1991; cited in Tsigie, 2004). The idea that attitudes develop on the basis of evaluative responding implies that an attitude involves the direct and indirect experiences that a person has with the object of attitude. As these positive and negative experiences become attached to the object of attitudes in the perceivers' minds, these perceivers would acquire mental associations.

According to Rogan (1987), cited in Chernet (1999) many researchers, regardless of their bias, agree that attitudes are learned from a very young age. He further mentioned that when a category of people or behavior of people have been frequently

associated with positive or negative events, the person learns attitude toward the category of behavior reflecting events. In other words, one can develop or form attitude towards an attitude object depending on his/her learning knowledge about the attitude object. One can get this knowledge through culture, religion, superstitious beliefs etc (Hegarty and Pocklington, 1988).

Attitude consists of three components cognitive, affective and behavioral Yuker, 1998; Henerson et.al., 1987; Rogan 1987; Rajeki; 1990; Oppenheim, 1992 cited in Chernet (1999). The cognitive components reflects thought (knowledge) about the attitude objects; the affective component refers to feeling and emotions associated with attitude objects; and behavioral component expresses a set of belief or behavioral values attached to an attitude objects, or a set of behavior associated with liking or disliking the other object.

When an attitude changes the overall nature of these components may change. These distinctions of attitude have an impact on measuring attitudes which usually involve self report or observation of behaviour, projective methods and attitude scale (Rogan, 1987) cited in Chernet (1999).

Individual attitudes are frequently organized into a value system. Attitude systems and value systems have the same structure and can be measured in similar ways. Although direct measurement of attitude is impossible, it can be done indirectly through asking different questions but some problems of truthfulness may arise. Moreover, the scientific study of attitude also indicates that people's evaluation of a given attitude object can be quantified by using different techniques which vary from simple to very complex. For instance, according to Morgan, et al., (1986:384) the simplest technique permits us to place concepts, thing, or people in to a "favorable" or "unfavorable" category.

The simplest and the most frequently used in measuring attitudes nowadays is the likert scale. The scale attempts to obtain a precise measure of people's attitudes and its accuracy can be measured by using many items that are related to the same issue. The items that are constructed need to be ranked from strongly agree to strongly disagree and in administering, the scale subjects are asked to indicate their agreements as well

as disagreements, and even their uncertain feelings by putting check marks. (Brehm and Kassin, 1990:40).

To sum up, attitude is a point of view that some one holds towards an idea or object in his/her every day life. Any one can develop a positive or negative attitude toward the object or idea. In any case, to do a given task effectively, there is a need to have a positive attitude toward it. Teachers may develop either positive or negative attitude towards teaching the mentally retarded in inclusive classes. Of course, developing either positive or negative attitudes may depend up on several factors: their awareness about the right of students with mental retardation, wrong conception of the mentally retarded, lack of exposure to the meaning and advantages of inclusion, etc.

1.2.11 Significance of Attitude

Studies indicated that the attitude that a person has about other people can be a powerful influence in social situations. A social attitude is a relatively enduring system of feelings, beliefs and behaviors with respect to a person with mental retardation would include your feelings and thoughts about that person and your behaviors toward the person that have been generated by the feeling and thoughts (Dworetzky, 1988; Baron and Byrne, 1997), cited in Tsigie (2004). According to Webster and Wood (1995:27) for inclusion to be well perceived by the mentally retarded and non-retarded, and by the staff who teach them, certain conditions including the existence of positive attitudes have to be met. Otherwise, as noted by Turnbull and Carpenter (1991), "positive social inclusion of non-handicapped and handicapped children... is unlikely to occur spontaneously in mainstreamed classrooms" (P.413). In other words social inclusion, similar to academic matters, demand a system approach to intervention. On this same issue, Turnbull and Carpenter (1991) has stated the following: "They (teachers) know a student's level of performance, particular disability, the student as an individual and furthermore, to find joy and naturalness in the relationship" (P.416).

Moreover, by emphasizing the impact of attitude on inclusion, Sarason and Doris (1979), as cited by Padeliadu and Lampropoulou (1997:173), noted that "the effectiveness of any program is dependent on the attitudes of the people" taking part

in its implementation. This appears true mainly due to the fact that individuals with positive attitudes will be willing to invest their effort depending on how much they positively value the program and how they think it is going to be functional.

To sum up, to maintain the positive impact of attitude on the inclusion of the mentally retarded, school as a social environment should have the concern to fulfill the necessary precondition that will allow the mentally retarded to attend their education with the natural peers.

1.2.12 Teachers Attitude toward the Inclusion of the Mentally Retarded in Regular Classes

The issue of inclusion and its implication for education have been under scrutiny during the past thirty years. Today, societies have become increasingly concerned with ensuring the educational rights of all children in disregarding severity of disabilities. As a result, the inclusion of students with disabilities including the mentally retarded into the regular educational setting as regular class students has become the concern of educators, governments, and the society at large (Millward and Dyson, 1995).

As a matter of fact, several studies conducted so far have failed to produce a clear cut picture of the most appropriate educational placement of students with disabilities.

According to Padeliadu and Lampropoulou (1997) "one of the major arguments that has often been used in the debate about the integration/inclusion of students with special needs has been the attitudes of teachers towards the inclusion/integration of students with special needs." It further pointed out that teachers' attitude have been considered as one of the major affecting factors guaranteeing the success of integration of students with special education needs.

Referring to the effect of teacher's attitude on students perception, Turnbull and Carpenter (1991) further declared that teachers attitude "not only set the tone for the relationship between teachers and handicapped students, but they also substantially influence the attitude of non-handicapped classmates".

Similarly, Tirussew (1995) and Schulz, (1991) described that teachers views of disabled students including the mentally retarded are a strong force on determining the nature

of the interaction between themselves and students and in turn, the student achievement. Based on comprehensive literature review of teachers attitude toward handicapped students Schulz, (1991) concluded that teachers typically are uncomfortable with handicapped students and have negative attitude about their placement in regular classes.

On other hand, Millward and Dyson (1995), reported that, maintaining students with special needs including the mentally retarded in regular education depends crucially on the attitudes and the actions of the regular teachers which include the special education teacher and the school team". They further noted that, although organization, financing, regulation, teachers training and so on can all play their own part to facilitate/enable inclusion, the placement of students with special needs in regular setting will remain problematic unless teachers actively, support the effort to achieve inclusion.

In the Ethiopian context, researches conducted concerning the attitudes of teachers towards the inclusion of mentally retarded into regular classrooms appears to be very scarce. The study conducted by Tibebe (1995), revealed that the special and regular teachers have a means below the neutral value, thereby indicating their negative attitudes towards the integration of children with disabilities. Similarly, from the discussion held with school personnel, special class teachers in Ethiopia, it has been reported that some school principals and some special education teachers were not in favor of integration principle (Tilahun, 1991, E.C).

1.2.13 Variables for Successful of Inclusion

There are a multitude of variables behind the success of inclusion. The research reviewed indicates that many of the negative attitudes held by special and regular teachers towards teaching the mentally retarded in regular classrooms could be changed to a more positive outlook if some factors were considered. Among the several variables, time, training, number of students in a classroom, experience, and availability of supportive resource are discussed below.

1.2.13.1 Variables Related to Time

Schools are very busy places and teachers often may find it difficult to find time to complete even their basic every day duties (Jones, et al., 2002 cited in Olson, 2004). So that, time plays a significant role in carrying out teaching learning process where the retarded and the non-retarded students are mixed up. In such a classroom since the teachers are required to meet the needs of each student he/she needs adequate time.

Supporting this view Sip, (1995) says:

Sufficient time to instruct students with special needs is no doubt an important factor in integration. Enough time to gain success in the education of special needs students in regular class may well lead to a positive attitude and to a willingness to take responsibility for education of the students (P.62).

This implies that a regular class teacher needs a lot of time to make his/herself to satisfy the desires of various individuals with diversified of needs.

1.2.13.2 Variables Related to Training

The majority of literature reviewed such as Mcleskey and Waldron (2002), D'Alonzo, Giordano, and Vanleeuwen (1997), and Shade and Stewart (2001), cited in Olson (2004), reported general education teachers stated they need extra training in the area of teaching students with special needs in order to be adequately prepared. One study by Gearheart, et al., (1992), stated that the results in 10 survey indicated that, overall, 29.2 percent of 2900 respondents agreed that general education teachers have sufficient training for mainstreaming and 22.8 percent of 355 special education teachers had sufficient training.

According to Holman (1950), leaders in the field of education are agreeing on the following points as to what qualities are essential for successful teaching.

The teacher's professional equipment, knowledge of the child and society, the purpose, methods, materials, and outcome of education are some of the important qualities serving as a starting point without which no one can hope to be successful in teaching (P.41).

One the other hand, Hegarty (1994), reported that in order to deliver a high quality education for students with disabilities teachers should get initial training which help

them be equipped with a range of strategies and skills suitable for a wide range of abilities which enable them to identify pupils with special educational needs. These strategies and skills are very capable of evoking positive attitudes in teaching the mentally retarded in regular classrooms.

1.2.13.3 Variables Related to Number of Students

The number of students served in a classroom where inclusion takes place has also a profound influence on teacher's attitude. The greater the number of students in a class, the more probable a teacher develop negative attitude and the less the number, the more problem the teacher builds positive attitude toward the inclusion. Hegarty (1994), for instance, reports, "In Italy, a class containing handicapped pupil may not have more than twenty pupils in total and no class may have more than two handicapped pupils" (P.127).

In addition to this, Azeb (1984) states that:

Providing equality of educational opportunities to students at the classroom level is realized when the teacher realizes and act accordingly that each students is entitled to the teacher's attention, help and guidance according to their needs (P.68).

This statement implies that in order that teacher recognizes individual differences among the students in a classroom and assist them according to their ability, minimum number of student population in classroom is a very important factor for effective teaching learning process to take place.

1.2.13.4 Variables Related to Experience of Working

A teacher's experience of working with disabled and their inclusion into regular classroom setting has a significant impact on the teacher's attitudes. Concerning this issue Perry (1960) states that: when a teacher works with the same trainable children a period of years... she/he has an opportunity to study each child to know him well, and to build a good relationship with him. She/he may receive more than the usual amount of love and respect from her/his pupils because of their greater dependence (P.24).

Similarly, experience has shown that continuous, school based teacher development programs involving the whole school are much more relevant than one short training course (Steenlandt, 1995).

On the other hand, Padeliadu and Lampropoulou 1997, pp.180-181) noted that as teachers get older or gain more experience in teaching they “become more intolerant towards disabled students.

To this extent literature indicates that the prolonged relationships between the disabled children and the teacher fosters their acceptable reactions toward each other.

1.2.13.5 Variables Related to Availability of Support

Availability of support both from internal and externally sources obviously affect teachers attitude toward inclusion at large. The existences of resource room, school psychologist, etc enhance the favourable attitudes of teacher toward inclusion. Frequent assistance from external bodies like itinerant teacher social workers might contribute much to the development of improved reactions of the teachers toward mainstreamed classroom setting (Salend,1994). Unavailability of assistance from these bodies, in most cases, will affect attitudes the other way round.

Similarly, Voltz, et al., (2001) cited in Olson (2004), pointed out that the entire school staff should collaborate and work together to meet the needs of all students and should not leave special educators alone or as experts in the move toward more inclusive classes.

1.3 Statement of the Problem

Studies suggest that among the various modes of educational deliveries for persons with mental retardation, inclusive education is found to be ethically acceptable, pedagogically sound, psychologically commendable and cost effective in contrast with special school provisions (UNESCO, 1994) cited in Tirussew (1999). Further UNESCO (1994) cited in Tirussew (1999) considers inclusion to be the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all. Today efforts have been made in various countries to practice it. However, it is not fully achieved for diversity of reasons, among which one is the reaction of teachers toward inclusion. In Ethiopia, let alone inclusion, the practice of special education itself is bounded with innumerable problems. It lacks proper facilities and services. Adequate trained manpower to run it

appropriately is not available. The reactions of people toward the disabled particularly toward the mentally retarded appear to be unfavorable. Teachers as a part of society may also share similar reaction toward the mentally retarded or they may develop favorable behaviors toward them as they are the concerned professionals to alleviate their problems. Without positive attitudes toward the children, with mental retardation it is unconceivable to build welcoming reactions toward their inclusion into regular classes. For the effective implementation of inclusion, therefore, systematic assessment in the area of teacher's attitudes toward inclusion becomes considerably essential.

Thus, bearing this in mind, the purpose of this study is to examine teachers' attitude towards teaching individuals with mental retardation in inclusive classes. More specifically, the study tries to find out answers for the following basic research questions.

1. What attitude do regular and special class teachers have towards the inclusion of the mental retardation?
2. Is there an attitude difference between regular class and special class teachers?
3. Whether there would be significant difference between male and female teachers on their attitude towards the inclusion of individuals with mental retardation?
4. Whether there would be significant difference between teachers whose ages fall between 21 and 35 and 36 and 60 on their attitude towards the inclusion of individuals with mental retardation?
5. Whether there would be significant difference between teachers with 1 and 15 years and 16 and 35 years of teaching experience on their attitude towards the inclusion of individuals with mental retardation?
6. Whether there would be significant difference between teachers with and without special education training on their attitude towards the inclusion individuals with mental retardation?
7. Whether there would be significant difference between teachers who are diploma holders and non-diploma holders on their attitude towards the inclusion of individuals with mental retardation?

1.4. Objectives of the Study

The study has the following general and specific objectives:

1.4.1. General Objective

- To examine the attitudes of special class and regular class teachers towards the inclusion of individuals with mental retardation.

1.4.2. Specific Objective

- To identify the attitudes of special and regular teachers towards teaching the mentally retarded in inclusive classes.
- To compare the attitude of special class and regular class teachers towards teaching the mentally retarded in inclusive classes.
- To identify whether there would be significant difference between male and female teachers on their attitude towards the inclusion of the mentally retarded children in regular classrooms.
- To identify whether there would be significant difference between teachers whose ages fall between 21 and 35 and 36 and 60 on their attitude towards inclusion of the mentally retarded children in regular classrooms.
- To identify whether there would be significant difference between teachers with 1 and 15 years and 16 and 35 years of teaching experience on their attitude towards the inclusion of individuals with mental retardation.
- To identify whether there would be significant difference between teachers with and without special education training on their attitude towards inclusion of individuals mental retardation.
- To identify whether there would be significant difference between teachers who are diploma holders and non-diploma holders on their attitude towards the inclusion of individuals with mental retardation.
- To suggest possible means to the improvement of attitude towards inclusive education.

1.5. Significance of the Study

Studying attitude of teachers towards teaching the mentally retarded in inclusive classes can play an important role in the process of designing and implementing intervention of educational programs. In explaining the importance of studying attitudes Gottlieb, 1975; Rogan, 1987, cited in Chernet (1999) stated as follows:

... a knowledge of attitude is of importance in providing clues as to way certain programs exist how professional services are delivered, what legislation becomes enacted, and generally, how the retarded person's life style is affected (P.8).

The underling assumptions are that, when attitude toward teaching the mentally retarded are favorable, more enlightened treatment of them will ensure, when attitude are not favorable, the retarded will continue to suffer, as they have in the past, and remain in a more unenviable position in society than may be necessary.

Therefore, based on the above assumptions the result of the study will expected to:

- Provide the necessary information for the regional teacher training institutes to design effective training that are pertinent to the needs of special and regular teachers towards teaching the mentally in inclusive classes.
- Provide basic information for the concerned bodies like local school boards, local woreda educational Bureau and interested groups for funding purposes, planning effective in-service training, and to realize and overcome barriers, which associated with attitudes of special and regular teachers towards teaching the mentally retarded in inclusive classes.
- Provide first hand information for interested researchers in the field area and initiate for further studies.

1.6. Delimitation of the Study

It is said that the success of inclusive education requires conviction, commitment and good will of the individual who constitute any society. Although it is necessary to study the attitude of teachers, parents, students and other segments of the society, this study gives priority to assess only the attitude of special and regular teachers of two schools:

Kokebe Tsibah Primary School in Addis Ababa and Nazareth number 2 primary school in East Shoa Zone.

1.7. Limitation of the Study

For practical reasons, only two schools with special units were purposely selected as a study sites. Limited numbers of participants are also included in the study. Therefore, a better picture would have been obtained if more schools and participants had been included in the study.

Special education, itself, is a relatively new phenomenon in Ethiopia. Hence the locally written literature particular on attitudes of teachers towards the inclusion of individual with mental retardation is scarcely available. The researcher therefore, feels that sufficient evidences were not presented to supplement the study in the Ethiopian context.

1.8. Operational Definitions of Terms

Attitude:- ... an opinion which represents a person's overall inclination towards an object, idea or institution (Child, 1993).

Inclusion:- refers to the situation where the mentally retarded and non-retarded are placed together in the same classroom to attend their education.

Inclusive Education:- means the process of addressing all learners' needs within the mainstream school and utilization of all available resource to create opportunities for learning in preparation for life (American Journal of Special Needs Education, 1999).

Regular Classes:- are classes where the non-mentally retarded children attend their general education.

Special Classes:- are classes located within the general schools set up where the mentally retarded are attending their education.

Mental Retardation:- refers to a developmental delay, which involves significantly sub average intellectual functioning and limitations in two or more adaptive behavior skills (Winzer, 1990).

Special teacher: is a teacher who has been assigned to teach students with special needs in special unit in the two selected governmental primary schools with or without training on special education.

Regular teacher: is a teacher who has been assigned to teach students with mental retardation with their peers or only the non-retarded in regular classes in the two selected government primary schools with or without training on special education.

CHAPTER TWO

METHODOLOGY

This chapter presents the method used, the samples drawn with the selection techniques employed, the instrument used, and the data collection and data analysis procedures.

2.1 Method

This study is aimed at examining the attitude of special and regular class teachers towards the inclusion of individuals with mental retardation. To identify, whether there is a positive or negative attitude, descriptive survey of quantitative research methods were applied to carryout the study.

2.2 Population

The target population of this study was consisted of special and regular class teachers who are teaching in the two selected governmental primary schools. The schools chosen as study cite are Kokebe Tsibah Primary school in Addis Ababa and Adama number two primary school in East Shoa.

These schools were purposely selected as the research cites for their typical importance in it's their long experience in educating students with mental retardation.

The total number of regular teachers working in the two schools were 83, (male= 45, female=38) and the number of special class teachers were 35, (male=19, female=16).

2.3 Sampling

In both schools there were male and female teachers and hence, it was taken as two strata. For the selection of sample, stratified random sampling technique was employed. For each stratum, the required sample was drawn by using simple random sampling for regular class teachers and available sampling method for special class teachers. Available sampling was employed as the available number of special teachers in both schools was very small. Thus, the sample of regular class teachers constitutes 55 (male =30 female=25) subjects and 35 (male =19 female: 16) of special class

teachers. This means about 67.3% of regular teachers and 100% of special teachers out of the target population have participated in the study.

Table 1: Special and regular class teachers by school and sex

School	Special class Teachers			Regular Class Teachers		
	M	F	T	M	F	T
Kokebe Tsibah Primary School	9	9	18	14	14	28
Adama No. 2 Primary School	10	7	17	16	11	27
Total	19	16	35	30	25	55

2.4 Instruments

Toward the beginning of the scale a questionnaire section was included to collect the personal data about the respondents. The scale was aimed to collect data about the respondents' attitude towards the inclusion of individuals mental retardation. This part contains 47 items in the form of statements reflecting once attitude towards individuals mental retardation. Towards the end of each item a response category, namely, SD (strongly disagree), D (disagree), U (undecided), A (agree) and SA (strongly agree) was included.

Among these 47 items, 30 items were positively stated the scoring adopted for a positive item was 1=strongly disagree (SD), 2=disagree (D), 3= undecided (U), 4= agree (A) and 5= strongly agree (SA).

On the other hand, for the 17 negatively stated items, the scoring was reversed, i.e., 5=strongly disagree (SD), 4= disagree (D), 3= undecided (U), 2 = agree (A) and 1= strongly agree (SA).

To the end the open ended questions was develop in order to give the respondents opportunity to raise issues not covered by the attitude scales.

2.4.1 Tool Development

2.4.1.1 Formation of item pool and selection of items for draft version

The items reflect both positive and negative attitudes towards the inclusion of individuals with mental retardation in regular classes. The items were developed from literature review, which identified common attitudes of teachers towards the individuals mental retardation and factors behind positive and negative attitudes.

The followings sequence of activities depicts are stages of tool development:

1. The questionnaire was prepared in English by the researcher and given to the academic advisor for approval.
2. The questions in English were translated in to Amharic by the researcher.
3. Both the Amharic and the English preliminary version were given to Amharic language expert for correction of the flows that were committed in the first translation. This expert then made all the necessary thematic and grammatical inspections and corrections
4. This Amharic version of the instrument was given to an English language expert to translate it back into English.

Finally, the researcher took the necessary notes during the translation and then made appropriate modification on the instruments.

2.4.1.2 The pilot study

To finalize the final version of the tool, a pilot study was conducted at Yekatit 23 primary school which is located in Addis Ababa.

This school is purposely selected as the center for pilot study because of its typical importance in accommodating the mentally retarded children in special class.

The total number of participants in the try out study was 20 (male= 10, female=10). Of this, 9 (male =5, female = 4) were special class teachers and 11 (male = 6, female =5)

were regular class teachers. Although were randomly selected from each group the proportion of male and female maintains relatively equal. After administering the instrument, some participants were asked for feedback and hence unclear items were modified accordingly to minimize item ambiguity.

Furthermore, some items were modified (fore example item N^o 2 and 5) and not relevant (item N^o 9) and repetitive items were dropped out from the questionnaire.

2.5 Procedures

Contact has been made with the school principals and unit coordinators in order to establish a smooth relationship as well as to achieve the purpose of the study.

First, after explaining the objectives of the study, the Amharic version of the tool was distributed to 35 special class teachers and to 55 regular class teachers as scheduled for each school. For ensuring transparency, a page of written brief was attached to tool as its covering page. The scale was collected back in seven days. Only one regular class teacher did not choose to complete item number 42. Thus, the total number of regular class teachers completed item 42 was 54. No further difficulty was encountered in the administration of the questionnaire.

2.6 Data Analysis

To examine the attitudes of the respondents towards the inclusion of the mentally retarded in regular classes and to see the difference of some demographic variables with attitudes, appropriate statistical methods were employed. After collecting questionnaires, the responses were coded on designed coding sheet. The result of each question was tabulated, summed up and treated using statistical analysis such as mean score, percentage and standard deviation.

Moreover, t-test was used to see whether there are mean differences between special class versus regular class teachers in their attitude towards the inclusion of individuals with mental retardation. Further, the samples were divided into various groups and compared using t-tests for all the statistical analyses SPSS was used.

CHAPTER THREE

RESULTS

In an attempt to examine the attitude of special and regular class teachers towards the inclusion of individuals with mental retardation, an attitude scale containing 47 items with five-point response category was administered on a total of 90 (male 49, Female 41) participants. Out of these, 35 (male 17, female 18) were special class teachers and 55 (male 32, female 23) were regular class teachers.

3.1 Background characteristics of the respondents

The following data depicts the background characteristics of regular class and special class teachers.

Table 2: Background Characteristics of Respondents

Gender	Age	Qualification	Teachers Group			
			Special class teacher		Regular class teacher	
			No	%	No	%
Male	21-35	10 or 12+TTI	12	34.3%	1	1.8%
		10or 12+diploma	2	5.7%	9	16.4%
	36-60	10or 12+TTI	3	8.6%	10	18.2%
		10or 12+diploma	2	5.7%	10	18.2%
Female	21-35	10or 12+TTI	8	22.9%	3	5.5%
		10or 12+diploma	1	2.9%	4	7.3%
	36-60	10or 12+TTI	5	14.3%	13	23.6%
		10or 12+dimplma	2	5.7%	5	9.1%
Total			35	100%	55	100.0%

As indicated in table 2 above, 19(54%) of special class teachers and 30 (54.6%) of regular class teachers are male whereas 16(45.9%) of special class teachers and 25(45.5%) of regular class teachers are female.

The age of both special class and regular class teachers ranges from 21 to 60 years. The age of more than half of the regular class teachers (69.1%) was found to be greater than 35, whereas almost half of the special class teachers (65.8%) aged between 21 to 35.

In terms of their qualification, out of 35 special class teachers 28(80.0%) were below diploma level and the rest 7(20%) were diploma holders. Also, out of 55 teachers of the regular class, 27 (49.1%) of them are below diploma level and the rest 28 (50.9%) were diploma holders.

Table 3: Work Experience

No	Characteristics	Teachers group			
		Special class teacher		Regular class teacher	
		No	%	No	%
1	Total year of teaching experience				
	a) 1 to 15 years	14	40%	18	32.7%
	b) 16 to 35 years	21	60%	37	67.3%
	Total	35	100.0%	55	100.0%
2	Experience in teaching the mentally retarded in regular classes				
	a) Not experienced	27	77.2%	41	74.5%
	b) 1-4 years	4	11.4%	9	16.4%
	c) 5-8 years	4	11.4%	5	9.1%
	Total	35	100%	55	100.0%
3	Experience in teaching as regular class teacher				
	a) 1-15 years	18	51.5%	18	33.4%
	b) 16-35 years	17	48.6%	36	66.7%
	Total	35	100.0%	55	100.0%
4	Experience in teaching as special class teacher				
	a) Not experienced	-	-	54	98.2%
	b) 1-8 years	29	82.9%	1	1.8%
	c) 9-16 years	6	17.1%	-	-
	Total	35	100.0%	55	100.0%

In relation to work experience of special and regular class teachers, as table 3 shows 21 (60%) of special class teachers and 37 (67.3%) of regular class teachers were having to be greater than 16 years, whereas 14 (40%) of special class teachers and 18 (32.7%) of regular class teachers' experience ranges from 1 to 15 years.

As regards to experience in teaching the mentally retarded in regular classes, 4 (11.4%) of special class and 9 (16.4%) of regular class teachers had 1 to 4 year of experience,

whereas 4 (11.4%) of special class and 5 (9.1%) of regular class teachers had experience which ranges 5 to 8 years in teaching the mentally retarded in regular classes.

On the other hand, 17 (77.2%) of special class and 41 (74.5%) of regular class teachers are not experienced in teaching the mentally retard in regular classes.

Concerning experience in teaching as a regular classes, 18(51.5%) of special class teachers and 18(33.4%) of regular class teachers' had experience ranges from 1 to 15 years, whereas 17(48.6%) of special class and 36(66.7%) of regular class teachers' experience ranges from 16 to 35 years.

In terms of experience in teaching in special classes, the majority 29(82.9%) of special class teachers and insignificant 1(1.8%) of regular class teacher have 1 to 8 years of experience whereas 6(17.1%) of special class teacher have experience from 9 to 16 years in teaching as special class teacher.

On the other hand, 54 (98.2%) of regular class teacher respondents are not experienced in teaching as special class teacher.

Table 4: Teachers Training

No	Statements	Teachers group			
		Special class		Regular class	
		No	%	No	%
1	Training on teaching mentally retarded students in inclusive classes.				
	a) Yes	23	65.7%	8	14.5%
	b) No	12	34.3%	47	85.5%
	Total	35	100.0%	55	100.0%
2	Type of training you do have				
	a) Summer program	-	-	1	1.8%
	b) Short workshop/seminar (less than 3 months)	23	65.7%	7	12.7%
	c) No training	12	34.3%	47	85.5%
	Total	35	100.0%	55	100.0%

Table 5: Number of students and periods weekly they teach.

No	Statements	Teachers group			
		Special class		Regular class	
		No	%	No	%
1	Number of students taught				
	a) < 45				
	b) 45-65	25	71.5%	1	1.8%
	c) 66-85	10	28.6%	21	38.2%
	c) Above 85	-	-	10	18.2%
		-	-	23	41.8%
	Total	35	100.0%	55	100.0%
2	Number of periods taught weekly				
	a) < 15	2	5.7%	5	9.1%
	b) 16-24	16	45.7%	28	50.9%
	d) 25-30	17	48.6%	22	40.0%
	Total	35	100.0%	55	100.0%

As indicated in table 5, all teachers of special class 35 (100%) teach less than 65 students in a class. On the contrary, more than half 33(60%) of regular class teachers teach more than 65 students in a class.

As far as the number of weekly periods concerned, 16(45.7%) of special class teachers and 28(50.9%) of regular class teachers teach 16 to 24 periods whereas 17(48.6%) of special class teacher and 22(40%) of regular class teacher teach 25 to 30 periods in a week.

3.2 Results on Attitudes Towards Inclusion of individuals with mental retardation

On the basis of the participants' responses to each item percentages, means and standard deviations were computed in order to describe the position of the participants along the continuum on their attitude towards the inclusion of individuals with mental retardation.

Consequently, the mean difference on teachers' variables and attitude between special and regular class teachers and within group was computed using t-test.

More specifically, mean difference on age categories (21-35 and 36-60 years), sex (male and female), qualification (below and above diploma level), training (with and

without training) and teaching experiences (1-15 and 16-35 years) and attitude between and within group was computed.

Table 6: Composite Summary of the Attitude of special and regular class teachers towards inclusion of individuals with mental retardation.

Item No	Teacher Group							
	Special class				Regular class			
	N	Sum	Mean	Std. Deviation	N	Sum	Mean	Std. Deviation
1	35	150.00	4.2857	.9873	55	205.00	3.7273	1.3257
2	35	81.00	2.3143	1.2781	55	137.00	2.4909	1.3176
3	35	48.00	1.3714	.5470	55	80.00	1.4545	.8124
4	35	94.00	2.6857	1.2312	55	172.00	3.1273	1.3201
5	35	110.00	3.1429	1.2401	55	152.00	2.7636	1.3189
6	35	127.00	3.6286	1.2853	55	199.00	3.6182	1.4206
7	35	99.00	2.8286	1.4849	55	171.00	3.1091	1.3006
8	35	119.00	3.4000	1.1428	55	174.00	3.1636	1.2585
9	35	86.00	2.4571	1.1718	55	143.00	2.6000	1.2413
10	35	122.00	3.4857	1.2689	55	159.00	2.8909	1.2718
11	35	105.00	3.0000	1.1632	55	153.00	2.7818	1.1971
12	35	116.00	3.3143	1.1574	55	166.00	3.0182	1.1465
13	35	109.00	3.1143	1.3454	55	159.00	2.8909	1.1812
14	35	112.00	3.2000	1.3890	55	155.00	2.8182	1.1071
15	35	111.00	3.1714	1.2945	55	165.00	3.0000	1.4011
16	35	91.00	2.6000	1.2175	55	151.00	2.7455	1.1421
17	35	107.00	3.0571	1.1868	55	146.00	2.6545	1.2205

Contd ...on p. 39

Table 6: (Continued)

Item No	Teachers Group							
	Special class				Regular class			
	N	Sum	Mean	Std. Deviation	N	Sum	Mean	Std. Deviation
18	35	110.00	3.1429	1.3316	55	123.00	2.2364	1.3328
19	35	102.00	2.9143	1.4011	55	116.00	2.1091	1.2274
20	35	84.00	2.4000	1.1167	55	142.00	2.5818	1.2721
21	35	99.00	2.8286	1.2001	55	155.00	2.8182	1.3890
22	35	91.00	2.6000	1.2649	55	119.00	2.1636	1.2136
23	35	102.00	2.9143	1.2689	55	139.00	2.5273	1.1031
24	35	124.00	3.5429	1.2682	55	177.00	3.2182	1.2866
25	35	83.00	2.3714	1.2148	55	146.00	2.6545	1.2652
26	35	89.00	2.5429	1.1205	55	135.00	2.4545	1.0684
27	35	94.00	2.685	1.1574	55	171.00	3.1091	1.1812
28	35	115.00	3.2857	1.3842	55	160.00	2.9091	1.4308
29	35	92.00	2.6286	1.0870	55	162.00	2.9455	1.2826
30	35	94.00	2.6857	.9632	55	142.00	2.5818	1.0308
31	35	87.00	2.4857	1.2919	55	144.00	2.6182	1.2980
32	35	107.00	3.0571	1.3491	55	171.00	3.1091	1.1168
33	35	103.00	2.9429	1.2353	55	147.00	2.6727	1.1065
34	35	84.00	2.4000	1.2175	55	145.00	2.6364	1.2673
35	35	124.00	3.5429	1.2448	35	177.00	3.2182	1.0486
36	35	128.00	3.6571	1.3921	55	188.00	3.4182	1.2574
37	35	101.00	2.8857	1.3009	55	134.00	2.4364	1.1826
38	35	103.00	2.9429	1.2589	55	152.00	2.7636	1.3047
39	35	133.00	3.8000	1.3240	55	190.00	3.4545	1.1990
40	35	107.00	3.0571	1.2353	55	177.00	3.2182	1.1335
41	35	88.00	2.5143	1.2217	55	167.00	3.0364	1.3328
42	35	62.00	1.7714	1.1653	54	111.00	2.0556	1.0888
43	35	70.00	2.0000	1.2127	55	130.00	2.3636	1.2377
44	35	75.00	2.1429	1.1152	55	152.00	2.2727	1.2975
45	35	98.00	2.8000	1.3460	55	169.00	3.0727	1.3451
46	35	86.00	2.4571	1.4821	55	164.00	2.9818	1.4206
47	35	60.00	1.7143	1.1000	55	109.00	1.9818	1.2692

The attitude of regular and special class teachers towards the inclusion of individual with mental retardation were determined by individuals means score value. Accordingly, from the responses given to statements, individuals mean score was computed. Those individuals with mean score value of greater or equal 141 were considered as having positive attitude, and those with mean score value of less than 141 were considered as having negative attitude towards the inclusion of individuals with mental retardation.

The result indicates that special class teachers and regular class teachers have a mean score value of 133.77 ($t=2.08 > 1.69$) and 130.45 ($t=2.68 > 1.68$) respectively (please see appendix B). This means that the mean scored by both special and regular class teachers is below the neutral value and this consequently indicates that teachers have negative attitude towards the inclusion of individuals with mental retardation.

As to the attitude towards inclusion of students with mild mental retardation in regular classroom, (item No. 1...) 74.5% of regular class teachers and 85.7% of special class teachers respectively replied that students with mild mental retardation can be educated in regular classes.

In contrary, 53.7%, 72.6% of special class teachers and 51%, 70.9% of regular class teachers respectively replied that students with moderate and severe mental retardation could not be educated in regular classes (item No. 3 and 4).

Concerning the principle attending regular classes should be the educational right of the mentally retarded, (item No. 4) 62.5% of the regular class teachers and 53.7% of special class teachers have expressed positively.

Another reaction was the perceived effect of inclusion on academic achievement of the mentally retarded students (item No. 7). The result shows that, 56.6% of the special class teachers and 62.2% of regular class teachers believed that inclusion helps to improve the academic achievement of the mentally retarded in regular classes.

Further, 60% of regular class teachers and 63.4% of special class teachers believed that the inclusion of the mentally retarded in regular classroom (item No. 15) has a valuable effect in developing social life, feeling of independence and self confidence.

On the item intended to evaluate the attitude towards the psychological advantages of inclusion for students with mental retardation, (item No. 10) 69.7% of special class teachers and 57.8% of regular class teachers agreed that inclusion has psychological advantages for students with mental retardation.

Regarding item 9, students with mental retardation lack skills needed to master the regular course content and as such they should not be mixed with regular class students, 49.1% of special class teachers and 52% of regular class teachers supported that the mentally retarded students lack skills need to master the regular course content and as such they should not be mixed with regular classes.

On the other hand, concerning item No. 47, 34.3% of special class teachers and 39.6% of regular class teachers suggested that it is preferable to teach the mentally retarded students in separate classes but more than half of the respondents from both groups did not accept this idea.

As to the nature of classroom discipline, owing to the inclusion of the mentally retarded in regular classes, (item No. 17) 53.1% of regular class teachers and 61.1% of special class teachers accepted that educating the mentally retarded students in regular classroom is disruptive to other students.

3.2 Comparison of Special Class and Regular Class Teachers towards the Inclusion of individual with mental retardation.

The following section presents the result of t-test between special class and regular class teachers on their attitudes towards the inclusion of individual with mental retardation. Also t-test results between relevant teachers' variables and attitude will be presented.

Table 7: Data and result of t-test between special and regular class teachers on their attitude towards the inclusion of individual with mental retardation.

Respondents	N	Mean	SD	Mean diff.	SED	df	t-calculated
Special class teachers	35	133.77	20.57	3.33	5.67	88	.58 [⊗]
Regular class teachers	55	130.43	29.26				

[⊗]Not significant at 0.05 level.

As indicated in table 7 above, the mean score of special and regular class teachers are 133.77 and 130.43 respectively with standard deviations of 20.57 and 29.26 respectively. The observed t-value for the difference between means is .58 which was not significant at 0.05 level.

Hence there is no a statistically significant difference in attitude between special and regular class teachers towards the inclusion of the mentally retarded in regular classes

Table 8: Data and result of t-test between male and female teachers on their attitude towards inclusion of individuals with mental retardation in regular classrooms

Respondents	N	Mean	SD	Mean diff	SED	Df	t-calculated
Special class teachers				1.42	7.08	33	.201 [⊗]
Male	16	133	19.97				
Female	19	134.42	21.59				
Regular class teachers				8.79	7.90	53	1.11 [⊗]
Male	30	134.43	29.33				
Female	25	125.64	29.03				

[⊗]Not significant at 0.05 level.

As seen in table above, the mean scores of male and female are 133 and 134.42 respectively with standard deviations of 19.97 and 21.59 respectively. The observed t-value for the difference between mean is 0.201 which is not significant at 0.05. Hence,

there is no statistically significant difference in attitude between male and female teachers of special class teachers towards the inclusions of individuals with mental retardation

On other hand, the mean scores of male and female are 134.43 and 125.64 respectively with standard deviations of 29.33 and 29.03 respectively. The observed t-value for the difference between means is 1.11 which too is not statically significant at 0.05 level. Hence, there is no statistically significant difference in attitude between male and female teachers of regular class teachers towards the inclusion of individuals with mental retardation. This implies that sex may not act as a variable which influences attitude towards the inclusion of individuals with mental retardation.

Table 9: Data and result of t-test between teachers ages of 21 and 35 and 36 and 60 teachers on their attitude towards inclusion of individuals with mental retardation in regular classroom

Respondents	N	Mean	SD	Mean diff	SED	df	t-calculated
Special class teachers (21-35 years)	13	127.38	13.08	10.16	7.08	33	1.43 [⊗]
Special class teachers (36-60 years)	22	137.55	23.39				
Regular class teachers (21-35 years)	17	127.88	29.08	3.69	8.47	53	.43 [⊗]
Regular class teachers (36-60 years)	38	131.55	29.66				

[⊗]Not significant at 0.05 level.

In table above, the means scores of special class teachers whose ages are 21 and 35 years and 36 and 60 years are 127.38 and 137.55 respectively with standard deviation of 13.08 and 23.39 respectively. The observed t-value for the difference between mean is 1.43 which is not significant at 0.05 level. Hence, there is no statistically significant difference in attitude between special class teachers of age 21 and 35 and 36 and 60 years.

On the other hand, the mean scores of regular class teachers with 21 and 35 years of age and 36 and 60 years are 127.88 and 131.57 respectively with standard deviations of

29.08 and 29.66 respectively. The observed t-value for the difference between mean is .43 which too is not significant at 0.05 level. Hence there is no statistically significant difference between regular class teachers with age ranges of 21 and 35 and 36 and 60 years.

Table 10: Data and result of t-test between teachers with 1 to 15 years and 16 to 35 years of experience on their attitude towards the inclusion of individuals with mental retardation

Respondents	N	Mean	SD	Mean diff	SED	df	t-calculated
Special class teachers							
1 to 15 years	14	124.17	13.09	15.09	6.70	33	2.25 ^{⊗⊗}
16 to 35 years	21	139.81	22.63				
Regular class teachers							
1 to 15 years	18	128.17	26.68	3.37	8.47	53	.39 [⊗]
16 to 35 years	37	131.54	30.73				

⊗⊗ Significant at 0.05 level.

⊗ Not significant at 0.05 level.

Table 10 above show, mean scores of special class teachers who have 1 to 15 years and 16 to 35 years of teaching experience are 124.71 and 139.81 respectively with standard deviation of 13.09 and 22.63 respectively. The observed t-value for the difference between the means is 2.25 which are significant at 0.05 level. Hence, there is statistically significant difference in attitude between the two groups towards the inclusion of individual with mental retardation.

Means scores of regular class teachers who have served 1 to 15 years and 16 to 35 years in teaching are 128.17 and 131.54 respectively with standard deviation of 26.68 and 30.73 respectively. The observed t-value for the difference between means is 0.39 which is not significant at 0.05 level. Hence, no statistically significant difference in attitude between the two groups towards the inclusion of individual with mental retardation could be found. As the mean scores in table 10 show, the attitude of special and regular class teachers towards the inclusion of individual with mental retardation increases as their teaching experience increases.

Table 11: Data and result of t-test between teachers with and without special training on their attitude towards the inclusion of individual with mental retardation

Respondents	N	Mean	SD	Mean diff	SED	df	t-calculated
Special class teachers	23	136.86	21.35	9.03	9.03	33	1.24 [⊗]
With training	12	127.83	18.47				
With out training				4.17	4.17	55	.37 [⊗]
Regular class teachers with training	8	134	23.65				
With out training	47	129.83	30.29				

[⊗]Not significant at 0.05 level.

As table 11 displays, mean scores of those who got the training and those who did not have training are 136.86 and 127.83 respectively with standard deviations of 21.35 and 127.83 respectively. The observed t- value for the difference between means is 1.24 which is not significant at 0.05 level. Therefore, there is no statistically significant difference in attitude between special class teachers who got special education training and those who did not get the training.

On the other hand, the mean scores of regular class teachers who got the training and those who did not get the training are 134 and 129.83 respectively, with standard deviations of 23.65 and 30.29 respectively. The observed t-value for the difference between means is 0.37 which is again not significant at 0.05 level. Hence, no statistically significant difference exists in attitude between regular class teachers who got special education training and those who did not get.

Table 12: Data and result of t-test in qualification among teachers on their attitude towards the inclusion of individuals with mental retardation

Respondents	N	Mean	SD	Mean diff	SED	df	t-calculated
regular class teacher (Below Diploma)	27	131.44	31.97	1.93	7.96	53	.24 [⊗]
Regular class teacher (Diploma)	28	129.46	26.95				
special class teacher (Below diploma)	28	131.33	19.54	10.66	8.53	33	1.25 [⊗]
Special class teacher (Diploma)	8	142	23.15				

[⊗]Not significant at 0.05 level.

As it can be seen vividly in Table 12, the mean scores of regular class teachers below diploma and diploma holders are 131.44 and 129.46 respectively with standard deviations of 31.97 and 26.95 respectively. The observed t-value for the difference between mean is .24 which is not significant at 0.05 level. Accordingly, it can be said that there is no statistically significant difference in attitude between regular class teachers who are diploma holders and who have below diploma backgrounds.

On the other hand, the mean scores of special class teachers below diploma level and of diploma level are 131.33 and 142 respectively with standard deviation of 19.54 and 23.15. The observed t-value for the difference between mean is 1.25 which is not statistically significant at 0.05 level. Thus, there is no statistically significant difference in attitude between special class teachers who have diploma and those who are below diploma.

CHAPTER FOUR

DISCUSSION

In this section, major findings of the present study would be discussed in line with the main research questions raised:

- 4.1 What attitude do regular and special class teachers have towards the inclusion of individual with mental retardation?
- 4.2 Is there an attitude difference between regular class and special class teachers?
- 4.3 Whether there would be significant difference between male and female teachers on their attitude towards inclusion of individual with mental retardation?
- 4.4 Whether there would be significant difference between teachers whose ages fall between 21 and 35 and 36 and 60 on their attitude towards inclusion of individual with mental retardation?
- 4.5 Whether there would be significant difference between teachers with 1 to 15 years and 16 to 35 years of teaching experience on their attitude towards inclusion of individual with mental retardation?
- 4.6 Whether there would be significant difference between teachers with and without special education training on their attitude towards inclusion of individual with mental retardation?
- 4.7 Whether there would be significant difference in qualification between teachers who are diploma holders and non-diploma holders on their attitude towards inclusion of individual with mental retardation?

4.1 The Attitude of Regular and Special Class Teachers towards the Inclusion of individual with mental retardation.

The attitude of regular and special class teachers towards the inclusion of individual with mental retardation were determined by individuals means score value. Accordingly, from the responses to statements, individuals mean score was computed. Those individuals with mean score value of greater or equal 141 were considered as having positive attitude, and those with mean score value of less than 141 were

considered as having negative attitude towards the inclusion of individual with mental retardation.

The result indicates that special class teachers and regular class teachers have a mean score value of 133.77 ($t=2.08>1.69$) and 130.43 ($t=2.68>1.68$) respectively which too is statistically significant at 0.05 level. (Please see appendix B). This means that the mean scored by both special and regular class teachers is below the neutral value and this consequently indicates that teachers have negative attitude towards the inclusion of individual with mental retardation.

Padeliadu and Lampropoulou, (1997) noted that teachers' attitude have been considered as one of the major factors guaranting the success of integration of students with special needs.

The possible reasons that made teachers to hold negative attitude towards the inclusion of mentally retarded children in regular classes could be lack of experience lack of appropriate training (awareness about students with special needs in general mental retardation in particular), lack of human support, insufficient time, large class size, and teaching load in regular classrooms (please, see table 2,3,4 & 5)

Concerning the open-ended items out of 90 teachers of respondents 50 regular and 35 special class teacher respondents added additional comments about the inclusion of mentally retarded in regular classes. These comments are related with one of the reasons why both groups of respondents retreat from developing positive attitude towards the inclusion of the mentally retarded in regular classes. One of the reasons was that the majority of regular class teachers and some of the special class teachers did not have any training that enables them to teach students with mental retardation in regular class.

It is worth mentioning here that, 23 (65.7%) of special class teachers and 8 (14.5) of regular class teachers have taken only short-term workshops or seminars (less than 3 months). Whereas, 12 (34.3%) of special class teachers, and 47 (85.5%) of regular class teachers have no training on teaching mentally retarded students. Therefore, if teachers are not skilled, they may not want to teach students with mental retardation in regular classes. This idea was emphasized by Radda Barnen (1995) cited in Abate

(2001), it is unrealistic and unfair to expect that ordinary class teacher would be able to include children with disabilities including the mentally retarded in the ordinary classroom without first receiving adequate training.

Similarly, Drew et al., (1984) reported that the regular classroom teacher is responsible for any adaptation that may be necessary for student's success, consequently, this teacher must have the skills to develop and adapt curricula to meet individual needs.

These implies that the regular class teacher will have to develop a greater knowledge and responsiveness with respect to special learning needs in classroom and should form part of teacher education programs, both at the initial level and as part of in service training.

Other reasons why teachers have negative attitude toward the inclusion of the mentally retarded in regular classes could be lack of experience, lack of support, insufficient time, large class size and large teaching load in regular classrooms. Different writers support these points. For example, Azeb (1984) states that:

Providing equality of educational opportunities to students at the classroom level is realized when the teacher realizes and act accordingly that each students is entitled to the teachers' attention help and guidance according to their needs (p. 68).

This implies that minimum number of student population in classroom is very important factor for effective teaching-learning process to take place in order that teacher recognizes individual differences among the students in a classroom and assist them according to their ability.

On the other hand, experience has shown that continuous school-based teacher development programs involving the whole school are much more relevant than one short training course (Steenlandt, 1995).

Perry (1960), regarding experience, reported that when a teacher works with the same trainable children for a period of years... she/he has an opportunity to study each child, to know him well, and to build a good relationship with him, she/he may receive

more than the usual amount of love and respect from her/his pupils because of their greater dependence.

To this extent literature indicates that the prolonged relationship between disabled children and the teacher fosters their acceptable reactions toward each other.

As to lack of support in regular classes in which inclusion of the mentally retarded takes place, Voltz, et al., (2001) cited in Olson (2004), reported that the entire school staff should collaborate and work together to meet the need of all students and should not leave special educators alone or as experts in the move toward more inclusion classes.

All these implies that training, experience, availability of support, minimum number of student population in a classroom and sufficient time in inclusive classes to teach the mentally retarded students are key points for the development of positive attitude toward the inclusion of individual with mental retardation.

Moreover, the respondents said that if the major problems given above will be satisfied, the implementation of inclusion of the mild mentally retarded in regular classes is not difficult and much effort may not be needed. They can cope with other students with simple assistance. Studies also show that the special support to children with disabilities including the mentally retarded require in the classroom may range from minor modifications such as altering seating arrangements to major adaptations and considerable assistance (Smith et al., 1983; Gearheart et al., 1988; Heward and Orlansky, 1988; Ysseldyk and Algozzine, 1995) cited in Tirussew (1999).

Therefore, without adequately addressing the existing major problems, it would be very difficult to think of the inclusion of individual with mental retardation. So that, winning more positive attitude for the inclusion of individual with mental retardation by removing the hurdles is highly pertinent to promote their successful inclusion.

More specifically, as seen from the given responses, item 7, 56.6% of of the special class teachers and 62.2 of regular class teachers assured that inclusion helps to improve the academic achievement of the mentally retarded in regular classes.

Similar research finding by Barclay and Kehle, (1979) cited in Schmid, et al., (1983:6) stated that mainstreamed handicapped children including the mentally retarded will perform academically at least as well and possibly better than, their handicapped peers in special classes.

Here, it can be deduced that special and regular class teachers perceived that the academic achievement of the mentally retarded has been promoting in regular classes.

The other point to be treated within (item 15) is related to educating the mentally retarded students in regular classroom which enables them to develop social life, feeling of independence and self-confidence. The obtained result indicates that 60% of regular class teachers and 63.4% of special class teachers believed that the inclusion of mentally retarded in regular classroom has a valuable effect to develop social life, feeling of independence and self-confidence.

In relation to this, the survey conducted by Gresham, (1982) cited in Schmid, et al., (1983:6) has indicated that mainstreamed mentally retarded improve in social skills and in self-esteem; and adjust better in adulthood than their self contained peers.

Similarly, Johnson et al., (2002) stated that:

“inclusion for the disabled means that absence of segregation, social acceptance being able to be treated like every body else, right to work ... to be educated with one’s non-handicapped peers” (p. 66).

This implies that the position taken by special class and regular class teachers appeared to be in line with the above different authors. This positive response is expected to create a healthy environment which can promote closer social and physical proximity between the mentally retarded and non-retarded students as well as self-confidence.

The mean score on the psychological advantages the inclusive education has for students with mental retardation (item 10) has been 69.7% for special class teachers and 57.8% for regular class teachers.

Similarly, the study conducted by Claesson, (1995) cited in Tirussew, (1999) reported that children with disabilities including the mentally retarded develop better physically, psychologically, and socially if they learn together with non-retarded students.

This shows that special and regular class teachers have better understanding that inclusive education has psychological advantages for mentally retarded in regular classes.

Concerning the principle, attending regular classes should be the educational right of the mentally retarded, 62.5% of the regular class teachers and 53.7% of special class teachers have expressed positive attitude.

Similar to this it is advocated by several organizations about the right of handicapped children. For example, the Salamanca statement on inclusive education (UNESCO, 1994), cited in Tirussew, (1999) provides the clearest and most unequivocal call in article 7 as follows:

... all children should learn together, wherever possible, regardless of any difficulties or differences they may have.

This implies that both groups of respondents perceived inclusion as educational right for mentally retarded students.

Regarding (item 9), i.e., students with mental retardation lack skills needed to master the regular course content and hence they should not be mixed with regular class students, was supported by 49.1% of special class teachers and 52% of regular class teachers. This goes with the conclusion made by Schulz, (1991) on teachers' attitude toward handicapped students that says: teachers typically are uncomfortable with handicapped students and have negative attitude about their placement in regular classes. Therefore, it can be deduced that nearly half of both groups have perceived that mentally retarded students did not have skills to master the regular course content.

On the perceived effect of inclusion on classroom discipline, 53.1% of regular class teachers and 61.1% of special class teachers accepted that educating the mentally retarded students in regular classroom is disruptive to other students.

On item 47, 34.3% of special class teachers and 39.6% of regular class teachers suggested that it is preferable to teach the mentally retarded students separately in their own special class. However, more than half of the two groups did not accept the idea.

4.2 Is there an attitude difference between special class and regular class teachers?

As indicated in table 7 an attempt was made to compare attitude of special and regular class teachers towards the inclusion of individual with mental retardation by using a t-test as statistical model. The mean score of special and regular class teachers were found to be 133.77 and 130.43 respectively with standard deviations of 20.57 and 29.26 respectively. The observed t-value for the difference between means is .58 Which was not significant at 0.05 level. Hence there is no statistically significant difference in attitude between special and regular class teachers towards the inclusion of individuals with mental retardation.

This may show that the type of training offered on mental retardation and inclusion to special class teachers was not sufficient enough to attitudinal changes (See table 4) among these group which the suggestion given by the subjects confirmed to be true.

4.3 Sub-Sample Analysis

4.3.1 Sex and Attitude

As seen in Table 8 the mean scores of male and female special teachers are 133 and 134.42 respectively with standard deviations of 19.97 and 21.59 respectively. The observed t-value is 0.201 which is not significant at 0.05. Hence, there is no statistically significant difference in attitude between male and female teachers of special class teachers towards the inclusions of individuals with mental retardation.

On other hand, the attitudes of male and female teachers of regular classes were also compared. As it is indicated in table 8, the mean scores of males and females are 134.43 and 125.64 respectively with standard deviations of 29.33 and 29.03

respectively. The observed t-value is 1.11 which too is not statically significant at 0.05 level. Hence, there is no statistically significant difference in attitude between male and female teachers of regular class teachers towards the inclusion of individuals with mental retardation. This implies that sex may not act as a variable which influences attitude towards the inclusion of individuals with mental retardation.

In this study, sex has no significant relationship with teachers' attitude. This finding seems to contradict with the study by Kuester (2000) cited in Millward and Dyson (1995) which reveals that attitude of teachers may be related to gender of teachers.

4.3.2 Age and attitude

The attitude of special class teachers between the ages of 21 and 35 and 36 and 60 were compared by using t-test. Means scores of special class teachers whose ages are 21 and 35 years and 36 and 60 years were 127.38 and 137.55 respectively with standard deviations of 13.08 and 23.39 respectively. The observed t-value for the difference between mean is 1.43 which is not significant at 0.05 level. Hence, there is no statistically significant difference in attitude between special class teachers of age 21 and 35 and 36 and 60 years.

On the other hand, the attitude of regular class teachers with age ranges of 21 and 35 and 36 and 60 years were also compared. The mean scores of those 21 and 35 years of age and 36 and 60 years were 127.88 and 131.57 respectively with standard deviations of 29.08 and 29.66 respectively. The observed t-value is .43 which too is not significant at 0.05 level. Hence there is no statistically significant difference between regular class teachers with age ranges of 21 and 35 and 36 and 60 years.

Although attitude of special class and regular class teachers towards the inclusion of individual with mental retardation seems to increase as their age increase, there is no significant difference between teachers' age and attitude.

Regarding the contribution of age towards inclusion, Padeliad and lampropulou (1997 pp. 180-181) noted that as a teacher get older he/she "become more intolerant towards disabled students".

But, the result of this study does not confirm the argument stated above. This could be pertaining to culture difference between the respective study groups.

4.3.3 Teaching Experience and Attitude

The attitudes of special class teachers who have served from 1 to 15 years and from 16 to 35 years in the teaching profession were compared. Mean scores of special class teachers who have 1 to 15 years and 16 to 35 years of teaching experience are 124.71 and 139.81 respectively with standard deviation of 13.09 and 22.63 respectively. The observed t-value is 2.25 which is significant at 0.05 level. Hence, there is statistically significant difference in attitude between the two groups towards the inclusion of individual with mental retardation.

Means scores of regular class teachers who have served 1 to 15 years and 16 to 35 years in teaching are 128.17 and 131.54 respectively with standard deviation of 26.68 and 30.73 respectively. The observed t-value is 0.39 which is not significant at 0.05 level. Hence, no statistically significant difference in attitude between the two groups towards the inclusion of individual with mental retardation could be found. As the mean scores in table 10 show, the attitude of special and regular class teachers towards the inclusion of individual with mental retardation increases as their teaching experience increases.

Regarding the contribution of total year of experience towards integration/ inclusion, Padeliadu and Lampropoulou, (1997, pp.180-181) noted that as teachers gain more experience in teaching, they "become more intolerant towards disabled students". However, except the special class teachers the result of this study did not confirm this fact for total year of experience of teachers appeared to have no statistically significant difference on attitude towards the inclusion of individual with mental retardation.

4.3.4 Training on Special Education and Attitude.

In order to check the effect of special education training on the attitude of teachers, comparison was made between teachers who have been trained and who have not been trained on special education. In the case of special class teachers, mean scores of

those who got the training and those who did not have training are 136.86 and 127.83 respectively with standard deviations of 21.35 and 18.47 respectively. The calculated t-value is 1.24 which is not significant at 0.05 level. Therefore, there is no statistically significant difference in attitude between special class teachers who got special education training and those who did not get the training.

On the other hand, the attitude of regular class teachers who got special education training and those who did not was compared. The mean scores of regular class teachers who got the training and those who did not get the training are 134 and 129.83 respectively, with standard deviations of 23.65 and 30.29 respectively. The observed t-value 0.37 which is again not significant at 0.05 level. Hence, no statistically significant difference exists in attitude between regular class teachers who got special education training and those who did not get.

Studies by Leyser of and Tappendorf (2001) cited in Olson (2004) found that it was useful if special education and general education teachers set trained together in services or pre-services so they could share ideas and learn skills on how to effectively collaborate, team and teach together.

4.3.5 Qualification and Attitude

The attitude of regular class teachers who have below diploma qualifications and those who hold diploma were compared. The mean scores of those teachers with below diploma qualification and diploma holders are 131.44 and 129.46 respectively with standard deviations of 31.97 and 26.95 respectively. The observed t-value is .24 which is not significant at 0.05 level. Accordingly, it can be said that there is no statistically significant difference in attitude between regular class teachers who are diploma holders and who have below diploma backgrounds.

On the other hand, the attitudes of special class teachers who hold diploma qualifications and others with diploma level of qualification were also compared. Table 12, presents the mean scores of special class teachers with below diploma level and of diploma level are 131.33 and 142 respectively with standard deviation of 19.54 and 23.15. The observed t-value is 1.25 which is not statistically significant at 0.05 level.

Thus, there is no statistically significant difference in attitude between special class teachers who have diploma and those who are below diploma.

This may show that both groups who have diploma level of qualification are not possess' adequate knowledge on mental retardation and inclusion (please, see table 2).

CHAPTER FIVE

Summary, Conclusion and Recommendation

5.1 Summary

The main purpose of this study was to examine the attitude of special class and regular class teachers towards the inclusion of the mentally retarded in regular classes. To this effect, the following basic questions were formulated to carry out the study.

- 5.1 What attitude do regular and special class teachers have towards the inclusion of individual with mental retardation?
- 5.2 Is there an attitude difference between regular class and special class teachers?
- 5.3 Whether there would be significant difference between male and female teachers on their attitude towards inclusion of individual with mental retardation?
- 5.4 Whether there would be significant difference between teachers whose ages fall between 21 to 35 and 36 to 60 on their attitude towards inclusion of individual with mental retardation?
- 5.5 Whether there would be significant difference between teachers with 1 to 15 years and 16 to 35 years of teaching experience on their attitude towards inclusion of individual with mental retardation?
- 5.6 Whether there would be significant difference between teachers with and without special education training on their attitude towards inclusion of individual with mental retardation?
- 5.7 Whether there would be significant difference in qualification between teachers who are diploma holders and non-diploma holders on their attitude towards inclusion of individual with mental retardation?

In order to deal with these basic questions, related literature was properly reviewed, and attitude scale was prepared to assess the attitude of special class and regular class teachers towards the inclusion of individual with mental retardation.

Concerning the subjects of the study, 55 regular class teachers were selected by employing random sampling technique while 35 special class teachers were also selected by purposive sampling technique.

Sample teachers involved in the study were divided into two strata: Male and female who were teaching in primary schools. For this purpose stratified random sampling technique was employed.

The attitude scale was administered on all the samples to collect data the major method of analysis employed in this study as descriptive statistics such as percentage, mean, and standard deviations. T-test was also used at the appropriate places.

5.2 Conclusion

The conclusions arrived at are presented bellow:

1. Both, the special class a mean score value of 133.77 ($t=2.68 > 1.69$) and regular class teachers a mean score value of 130.43 ($t=2.68 > 1.68$) which too is statistically significant at 0.05 level. Thus, teachers in this study have negative attitude towards the inclusion of individual with mental retardation.

The possible reasons that made teachers to hold negative attitude towards the inclusion of individuals with mental retardation could be lack of experience, lack of appropriate training (awareness about students with special needs in general mental retardation in particular), lack of human support, insufficient time, large glass size, and teaching load in regular classrooms (see table 2, 3, 4 and 5).

2. There is no statistically significant difference in attitude between special class teacher and regular class teachers towards the inclusion of individuals with mental retardation. The possible reasons could be the type of training offered on mental retardation and inclusion to special class teachers was not sufficient enough to bring attitudinal changes (see table 4) among this group which the suggestion given by the subjects confirmed to be time.
3. There was no statistical significant difference between male and female teachers in each group on their attitude towards the inclusion of individuals with mental retardation.

4. No statistically significant difference between special and regular class teachers with age range of 21 and 35 and 36 and 60 years could be established on their attitude towards inclusion.
5. There is statistically significant difference between special class teachers who have 1 to 15 years and 16 to 35 years of teaching experience. However, no statistically significant difference between regular class teachers who have 1 to 15 years and 16 to 35 years of teaching experience.
6. There is no statistically significant difference between teachers who had special education training and those who did not have any training in both groups.
7. No statistically significant difference could be observed in attitude between regular class and special class teachers with below diploma qualifications and diploma level of qualification.

In sum, one can say safely that there is mean difference between both groups and within each group on teachers' variables and attitude towards the inclusion of individuals with mental retardation. However, there is no statistically significant difference between both groups and within each group on these variables and the attitude under consideration, except the within group difference registered among special class teacher as the factor of teaching experience.

5.3 Recommendations

The way teachers perceive the implementation of inclusion of individuals with mental retardation coupled with the prevailing condition with in the school set up can hinder the promotion of inclusion. Therefore, effective measures need to be taken to tackle the prevailing problems that work against the inclusion of individuals with mental retardation.

The following measures are recommended:

1. The school should create and raise awareness among school community about the nature of mental retardation and the potentialities to be cultivated in mentally retarded students through discussions training workshops, seminars by inviting professionals in the field and through experience sharing from

similar but better schools available. So that the school community have better understanding to promote inclusion of individuals with mental retardation.

2. The school should reduce class sizes to ensure fair class enrollment, and effort should be made toward constructing additional classrooms.
3. The school administration should be able to provide support to teachers in the way minimizing teaching load, so that the teachers would have sufficient time and strive to meet the needs of individuals with mental retardation.
4. It is advisable that special and regular class teachers continue to collaborate to ensure that needs of individuals with mental retardation are being met both in and outside their classrooms
5. There is a need to give incentives and encouragement for teachers and material assistance for schools currently exercising inclusion of individuals with mental retardation by Woreda Education Office.
6. Future research is suggested with a large sample to investigate the attitude of regular and special class teachers towards the inclusion of individuals with mental retardation.

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Dear colleague:

You have been selected to participate in a study designed to collect information on the attitudes of special and regular class teachers towards teaching the mentally retarded in inclusive classrooms. To be specific, the term "inclusive classrooms" is defined as any regular classroom setting where students with mental retardation are educated either on a part time or full-time basis with their normal peers.

I would kindly like to ask you to share me your experiences and views. Please take a minute out of your busy schedule to complete the scale comprising of a few statements and a few open ended questions. Your opinions are very important because you represent many other teachers who have similar experiences. To this end, your honest impressions, opinions, whether favorable or unfavorable are quite necessary to ensure the quality of the research as well as to bring about possible solution to the problems.

Please be assured that I will treat your responses confidently and will not be used for any other purpose than research.

Thank you very much

Sincerely

Tesfaye Amenu

Part One: personal Data

Direction: Please circle or fill in the blanks with appropriate information.

1. Sex _____ Age _____ (Years)
Qualifications _____
2. Name of the School _____ -
3. Your position in the School
 - A. Special Education teacher
 - B. Regular Education teacher
4. How many years of experience do you have in non-teaching profession?

5. For how many years have you been teaching altogether? _____
 - 5.1 In teaching the mentally retarded in regular classes
_____ years/months
 - 5.2 As a regular class teacher _____ years/months
 - 5.3 As a special class teacher _____ years/months
6. Have you had any training on teaching students with mental retardation in inclusive classes
 - A. Yes
 - B. No
7. If your answer to item number "5" is "Yes" what type of training did you receive?
 - A. Summer program
 - B. Short work shop/seminar
 - C. Others (specify) _____
8. What are the duration of training indicated in number 6? _____
9. The number of students you teach in a class
 - A. < 45
 - B. 45-65
 - C. 66-85
 - D. above 85
10. The number of periods you teach in a week
 - A. <15
 - B. 16-24
 - C. 25-30
 - D. above 30

Part Two: Section One

Direction: The following are 47 statements which reflect your attitudes towards the inclusion of the mental retarded children in regular classrooms. Against each item these is a response category, namely, SD (Strongly Disagree), D (Disagree), U (Undecided), A (Agree) and SA (Strongly Agree). Please circle the most appropriate response from the response category that best describes your Attitude.

No	Items	Response Category				
		Strongly Disagree (SD)	Disagree (D)	Undecided (U)	Agree (A)	Strongly Agree (SA)
1	Students with mild mental retardation can be educated in regular classrooms	SD	D	U	A	SA
2	Students with moderate mental retardation can be educated in regular classrooms	SD	D	U	A	SA
3	Students with severe mental retardation can be educated in regular classrooms	SD	D	U	A	SA
4	Attending regular classes should be the educational right of the mentally retarded	SD	D	U	A	SA
5	Inclusion is a desirable educational practice for children with mental retardation	SD	D	U	A	SA
6	Students with mental retardation always deserve an intensified support and follow up from teachers in regular classes	SD	D	U	A	SA
7	Educating students with mental retardation in the regular classroom would show improvement in their academic performance	SD	D	U	A	SA
8	Inclusive education enables students with mental retardation and non-retarded students to live together, share their experience, and respect one another	SD	D	U	A	SA
9	Students with mental retardation lack skills needed to master the regular classroom course content and as such they should not be mixed with regular class students.	SD	D	U	A	SA

No	Items	Response Category				
		Strongly Disagree (SD)	Disagree (D)	Undecided (U)	Agree (A)	Strongly Agree (SA)
10	Inclusive education has psychological advantages for students with mental retardation	SD	D	U	A	SA
11	If the large teaching load in the regular classrooms is reduced, inclusion of the mentally retarded children can be effectively implemented.	SD	D	U	A	SA
12	Teaching the mentally retarded and non-retarded students in the same class will help to avoid social stigma attached to the mentally retarded	SD	D	U	A	SA
13	I am willing to change my teaching methods to accommodate children with mental retardation in inclusive classes	SD	D	U	A	SA
14	Inclusion of students with mental retardation with their peers in regular classroom can provide an opportunity for collaborative work.	SD	D	U	A	SA
15	Educating students with mental retardation in the regular classroom enables them to develop social life, feeling of independence and self-confidence	SD	D	U	A	SA
16	If the mentally retarded are placed in regular classes they can more actively participate in classroom activities with their peers.	SD	D	U	A	SA
17	Educating students with mental retardation in regular classroom is disruptive to other students	SD	D	U	A	SA

No	Items	Response Category				
		Strongly Disagree (SD)	Disagree (D)	Undecided (U)	Agree (A)	Strongly Agree (SA)
18	I feel inadequate in my professional skill to teach students with mental retardation if they are assigned in regular classes	SD	D	U	A	SA
19	Educating the mentally retarded in regular classrooms will hinder their education	SD	D	U	A	SA
20	Teaching a student with mental retardation in a special class has a negative effect on the social and emotional development of them and as such they should be educated in regular classroom.	SD	D	U	A	SA
21	Inclusion of the mentally retarded children into regular classes will hinder regular students education	SD	D	U	A	SA
22	Teaching the mentally retarded in inclusive classes waste my teaching time	SD	D	U	A	SA
23	Special class teachers provide educational support for students with mental retardation and their normal peers in inclusive classes, inclusion can be made productive.	SD	D	U	A	SA
24	I am willing to develop skills for managing the behavior of children with mental retardation in regular classes	SD	D	U	A	SA
25	The achievement of both the mentally retarded and the normal peers would deteriorate if thought in inclusive classes	SD	D	U	A	SA
26	All students in the inclusive classes benefit from the instructional change when I change my instruction to accommodate students with mental retardation	SD	D	U	A	SA

No	Items	Response Category				
		Strongly disagree (SD)	disagree (D)	Undecided (U)	Agree (A)	Strongly agree (SA)
27	In inclusive classes the mentally retarded can not improve on their education whatever support provided for them	SD	D	U	A	SA
28	Students with mental retardation do not have the required mental strength and hence, they can not be educated in regular classes.	SD	D	U	A	SA
29	As the non-retarded students have positive out look towards the inclusion of the mentally retarded in regular classes inclusion should strengthened	SD	D	U	A	SA
30	I have sufficient time and willingness to undertake the responsibility of educating students with mental retardation in inclusive classes	SD	D	U	A	SA
31	The presence of students with mental retardation in regular classroom will lower the academic performance of regular class teachers.	SD	D	U	A	SA
32	Special class teachers have sufficient administrative support in planning and preparing to meet the needs of students with mental retardation in the regular classes, inclusion has to be encouraged	SD	D	U	A	SA
33	As students with mental retardation positively perceive their inclusion in regular classes, the provision of their inclusion should made mandatory	SD	D	U	A	SA

No	Items	Response Category				
		Strongly Disagree (SD)	Disagree (D)	Undecided (U)	Agree (A)	Strongly Agree (SA)
34	Regular class teachers have the necessary skills to teach students with mental retardation in inclusive classes	SD	D	U	A	SA
35	Inclusive education saves students with mental retardation from isolation	SD	D	U	A	SA
36	It is the responsibility of special class and regular class teachers to create atmosphere for children with mental retardation and their normal peers to be helped and loved one another	SD	D	U	A	SA
37	I feel confident in assessing the mentally retarded in regular classes	SD	D	U	A	SA
38	As special class teachers collaborate have good with regular class teachers in order for inclusion of the mentally retarded to be successful inclusion has to be encouraged	SD	D	U	A	SA
39	I like to assist students with mental retardation when they need help in regular classroom	SD	D	U	A	SA
40	Teaching students with mild mental retardation together with their normal peers in regular classes give pleasure	SD	D	U	A	SA
41	Student with mental retardation do not benefit from inclusion	SD	D	U	A	SA
42	The problem behavior of child with mental retardation can not managed by regular classroom teachers and as such the mentally retarded children should not include in regular classes.	SD	D	U	A	SA

No	Items	Response Category				
		Strongly Disagree (SD)	Disagree (D)	Undecided (U)	Agree (A)	Strongly Agree (SA)
43	I don't like to see students with mental retardation in regular classes	SD	D	U	A	SA
44	The inclusion of student with mental retardation adversely affect the teaching learning process	SD	D	U	A	SA
45	As regular class teachers have sufficient administrative support in planning and preparing to meet the needs of students with mental retardation in the regular classes, inclusion has to be encouraged	SD	D	U	A	SA
46	I don't want to give special treatment for students with mental retardation alone, because all are equal to me in regular classes	SD	D	U	A	SA
47	I firmly suggest that the mentally retarded should be educated in separate special classes	SD	D	U	A	SA

Part II Section 2(open-ended items)

Direction: answer the following questions briefly

1. What extra things would need in order to make your responses more positive?

2. What needed to be done/change
 - a) in the classroom

- b) at the whole school level

Appendix-B

Responses of special and regular class teachers towards the attitude scale items

Subject	Total score of regular class teacher			Subject	total score of special class teacher
	Score	Subject	Score		
1	95	40	123	1	181
2	106	41	75	2	172
3	107	42	127	3	147
4	108	43	218	4	110
5	110	44	148	5	128
6	91	45	129	6	184
7	104	46	77	7	118
8	113	47	177	8	140
9	107	48	154	9	120
10	110	49	128	10	120
11	105	50	143	11	135
12	122	51	175	12	125
13	158	52	170	13	132
14	129	53	104	14	179
15	126	54	153	15	137
16	174	55	105	16	162
17	179	sum mean	=7174	17	122
18	185		130.43	18	133
19	161		$\frac{\text{Max. score} + \text{Min. score} = 47 \times 5 + 47 \times 1}{2}$	19	138
20	133	expected mean	=281 = $\frac{2}{2}$	20	114
21	79		$t = \frac{\bar{x} - \mu}{s_x}$	21	138
22	164		$s_x = \frac{s_0}{N}$	22	141
23	158		$s_x = 3.94$	23	150
24	87		$t = \frac{130.43 - 141}{3.94}$	24	139
25	140			25	118
26	138		$t = \frac{10.57}{3.94}$	26	112
27	130		$t = 2.68$	27	119
28	149			28	114
29	122			29	125
30	120			30	135
31	122			31	127
32	140			32	115
33	132			33	123
34	132			34	124
35	119			35	104
36	128			Sum mean	=4682 133.77
37	124			expected mean	$\frac{\text{Max. score} + \text{Min. score} = 47 \times 5 + 47 \times 1}{2}$
38	128				=281 = $\frac{141}{2}$
39	133				

$$t = \frac{\bar{x} - \mu}{s_x}$$

$$s_x = \frac{s_0}{\sqrt{N}}$$

$$s_x = 3.47$$

$$t = \frac{133.77 - 141}{3.47}$$

$$t = 2.08$$

Declaration

This thesis is my original work and has not been presented for a degree in any other university and that all source of materials used for the thesis have been dully acknowledge



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