

PARENTAL INVOLVEMENT AND EXPECTATIONS IN PROMOTING SOCIAL AND PERSONAL SKILLS OF MENTALLY CHALLENGED CHILDREN

Thesis submitted to the
University of Agricultural Sciences, Dharwad
in partial fulfilment of the requirements for the

**Degree of
Master of Home Science
in
HUMAN DEVELOPMENT**

**By
VINEETA KUMARI**

**DEPARTMENT OF HUMAN DEVELOPMENT
COLLEGE OF RURAL HOME SCIENCE, DHARWAD
UNIVERSITY OF AGRICULTURAL SCIENCES,
DHARWAD - 580 005**

JUNE, 2009

ADVISORY COMMITTEE

DHARWAD
JUNE, 2009

(PUSHPA B. KHADI)
MAJOR ADVISOR

Approved by :
Chairman :

(PUSHPA B. KHADI)

Members :

1. _____
(SARASWATI HUNSHAL)

2. _____
(V. S. YADAV)

3. _____
(UMA HIREMATH)

CONTENTS

Sl. No.	Chapter Particulars	Page No.
	CERTIFICATE	
	ACKNOWLEDGEMENT	
	LIST OF TABLES	
	LIST OF FIGURES	
	LIST OF APPENDICES	
1	INTRODUCTION	
2	REVIEW OF LITERATURE	
	2.1 Concepts and definitions	
	2.2 Skills of mentally challenged children	
	2.3 Factors influencing acquisition of skills	
	2.4 Parental involvement	
	2.5 Factors influencing parental involvement	
	2.6 Parental expectations	
	2.7 Factors influencing parental expectations	
	2.8 Parental attitudes towards inclusive education	
	2.9 Parental satisfaction with school services	
3	MATERIAL AND METHODS	
	3.1 Research design	
	3.2 Population and sample	
	3.3 Research tools used for the study	
	3.4 Variables selected and quantification	
	3.5 Data collection procedures	
	3.6 Statistical analysis	
	3.7 Operational definitions	
	3.8 Hypothesis set for the study	
4	RESULTS	
	4.1 Characteristics of children	
	4.2 Social and personal skills of Mentally Challenged children	
	4.3 Parental involvement in promoting social and personal skills of children	

Contd.....

Sl. No.	Chapter Particulars	Page No.
5	4.4 Parental expectations regarding social and personal skills of children	
	4.5 Interrelations between social and personal skills of children, parental involvement and parental expectations.	
	4.6 Hierarchial influence of significant factors on parental involvement and social and personal skills of children	
	DISCUSSION	
	5.1 Social and personal skills of mentally challenged children	
	5.2 Factors influencing social and personal skills	
	5.3 Parental involvement in promoting social and personal skills of mentally challenged children	
	5.4 Factors influencing parental involvement	
	5.5 Parental expectations regarding acquisition of social and personal skills of mentally challenged children	
	5.6 Factors influencing parental expectations	
6	5.7 Interrelations between Social and personal skills of mentally challenged children, parental involvement and parental expectations	
	SUMMARY AND CONCLUSIONS	
	REFERENCES	
	APPENDICES	

LIST OF TABLES

Table No.	Title	Page No.
1	Percentage distribution of children's characteristics and factors associated with disability and special education	
2	Parental and familial characteristics of children selected for study	
3a	Percentage distribution of children by level of social skills	
3b	Percentage distribution of children by level of personal skills	
3c	Percentage distribution of children by level of social and personal skills	
4.1	Influence of child's characteristics on social and personal skills of children	
4.2	Comparison of social and personal skills of children by gender and age	
4.3	Influence of factors associated with disability and special education on social and personal skills of children	
4.4	Comparison of social and personal skills of children by gender and degree of disability	
4.5	Comparison of social and personal skills of children by gender and associated disability	
4.6	Comparison of social and personal skills of children by gender and age at identification of disability	
4.7	Comparison of social and personal skills of children by gender and degree of constraint	
4.8	Influence of parental characteristics on social and personal skills of children	
4.9	Influence of familial characteristics on social and personal skills of children	
5a	Percentage distribution by level of parental involvement in promoting social skills	
5b	Percentage distribution by level of parental involvement in promoting personal skills	
5c	Percentage distribution by level of parental involvement in promoting social and personal skills	
6.1a	Qualitative analysis of parents with low involvement in promoting social and personal skills of children	
6.1b	Qualitative analysis of parents with high involvement in promoting social and personal skills of children	

Contd.....

Table No.	Title	Page No.
6.2a	Qualitative analysis depicting schools with low involvement in promoting social and personal skills of children	
6.2b	Qualitative analysis depicting schools with high involvement in promoting social and personal skills of children	
6.3a	Qualitative analysis of joint responsibility of parents and schools with low involvement in promoting social and personal skills of children	
6.3b	Qualitative analysis of joint responsibility of parents and schools with high involvement in promoting social and personal skills of children	
7.1	Influence of child's characteristics on parental involvement	
7.2	Comparison of parental involvement by child's gender and age	
7.3	Influence of factors associated with disability and special education on parental involvement	
7.4	Comparison of parental involvement by child's gender and degree of disability	
7.5	Comparison of parental involvement by child's gender and associated disability	
7.6	Comparison of parental involvement by child's gender and age at admission to special school	
7.7	Comparison of parental involvement by child's degree of disability and age at admission to special school	
7.8	Comparison of parental involvement by child's gender and degree of constraint	
7.9	Influence of parental characteristics on parental involvement	
7.10	Influence of familial characteristics on parental involvement	
8a	Percentage distribution by level of parental expectations regarding social skills	
8b	Percentage distribution by level of parental expectations regarding personal skills	
8c	Percentage distribution by level of parental expectations regarding acquisition of skills	
9.1a	Qualitative analysis of low parental expectations of children's social and personal skills	
9.1b	Qualitative analysis of high parental expectations of children's social and personal skills	
9.2	Expectations opined by parents regarding social and personal skills of children	

Contd.....

Table No.	Title	Page No.
9.3	Qualitative analysis of parental expectations with parental involvement	
9.4	Qualitative analyses of parental expectations with school involvement	
9.5	Qualitative analysis of parental expectations with child's involvement	
9.6	Qualitative analyses of joint involvement of parents and schools	
9.7a	Satisfaction of parents with education/training provided by school	
9.7b	Reasons opined by parents regarding satisfaction with education of school	
9.8a	Attitude of parents regarding mainstreaming	
9.8b	Reasons opined by parents regarding mainstreaming	
9.9	Expectations of parents regarding child's academic achievement	
9.10a	Expectation of parents regarding child's occupation	
9.10b	Types of job aspired by parents for their children	
9.11	Parental expectations about adult role of children	
10.1	Comparison of mean scores of parental expectations by child's characteristics and factors associated with disability and special education	
10.2	Comparison of parental expectations by child's gender and ordinal position	
10.3	Comparison of mean squares of parental expectations by parental and familial characteristics	
10.4	Comparison of parental expectations by child's gender and father's occupation	
11a	Interrelation between parental involvement and social and personal skills of children	
11b	Interrelation between parental expectations and social and personal skills of children	
11c	Interrelation between parental involvement and parental expectations	
12a	Regression analysis of significant factor on parental involvement	
12b	Hierarchical influence of significant factors on social and personal skills of children	

LIST OF FIGURES

Figure No.	Title	Page No.
1	Flow chart depicting sample selection for the study	
2	Social and Personal Skills of children, Parental Involvement and Parental Expectations by Child's age	
3	Social and Personal Skills of children, Parental Involvement and Parental Expectations by Child's Degree of Disability	
4	Social and Personal Skills of children, Parental Involvement and Parental Expectations by Child's Degree of Constraint	
5	Social and Personal Skills of children, Parental Involvement and Parental Expectations by Child's gender	
6	Percentage distribution of mentally challenged children by Social and Personal skills, Parental Involvement and Parental Expectations	

LIST OF APPENDICES

Appendix No.	Title	Page No.
I	General information schedule	
II	Behavior assessment scale	
III	Parental involvement schedule	
IV	Parental expectation schedule	
V	Sibling constellation	
VI	Types of associated disability	
VII	The castes under each category are given as per Karnataka Gazette 1994	
VIII	Qualitative analysis of tasks performed by children, involvement of parents, school, children themselves, and interaction between all three	
IX	Qualitative analysis of tasks expected by children, expectations from parents, school, children, and interaction between all three	

1. INTRODUCTION

Mental retardation (MR) is not a disease. It is a condition of mental deficiency, a state of incomplete mental development of such a kind and degree that the individual is incapable of adapting himself to the normal environment of his fellows in such a way as to maintain existence independently of supervision, control or external support (Tredgold, 1937).

Mental retardation begins in childhood or adolescence before the age of 18. In most cases, it persists throughout adult life. A diagnosis of mental retardation is made if an individual has an intellectual functioning level well below average, as well as significant limitations in two or more adaptive skill areas.

Intellectual functioning level is defined by standardized tests that measure the ability to reason in terms of mental age (intelligence quotient or IQ). Mental retardation is defined as an IQ score below 70–75. The mentally handicapped are those who, because of impaired general intelligence, often have difficulties in coping with some life situations which require adjustments. The extent of their coping or adaptive difficulty is primarily related to the degree of intellectual backwardness, though it is also affected by society's general attitude towards persons with limited intelligence. For individuals with relatively mild deficits, the impact may be largely confined to poor academic achievement during schooling and to lower levels of job aspirations in adulthood. At more severe levels of deficit, virtually every aspect of living is affected rendering the person incapable of assuming the normal degree of independence expected of an adult in any society.

Prevalence figures for MR vary depending upon the definition used, methods utilized to identify MR, and type of population is being considered. If one uses the DSM-IV definition for MR, 3 percent of the population has mild MR, 0.4 percent has moderate, and 0.1 percent has severe MR. No Nation can claim to be free from the problem of mental retardation. Epidemiological studies in India also indicate that 2-3 per cent of children in India suffer from MR according to Mental Retardation in India, the report of the First All India Conference on Mental Retardation (1966) and Kuppaswamy (1968). According to Madhav (2001) the prevalence of mental retardation was observed to have a national rate of 4.2 per 1000 population. The prevalence of mental disability was found to be 2.3 per cent in rural community of Karnataka. (Kumar *et al.*, 2008).

Mental retardation is a term used when a person has certain limitations in mental functioning and in skills such as communicating, taking care of him or herself, and social skills. These limitations will cause a child to learn and develop more slowly than a typical child. Children with mental retardation may take longer to learn to speak, walk, and take care of their personal needs such as dressing or eating. They are likely to have trouble learning in school. They will learn, but it will take them longer and there may be some things they cannot learn. The performance and behavior of a normal person or even a mentally retarded person is never dependent only on his or her intellectual capacity, but on many other factors like emotional maturity, education, training and the social and cultural environment.

Parents share the responsibility of bringing up their children in a manner so that as adults they become effective members of the respective society. Parents play a crucial role in the growth and development of their children, because children spend most of their time with their parents and they imitate and learn from them. So, for the normal development and social competence, parenting is very important.

According to socio-cultural theory of Vygotsky, growth depends on children's interaction with those around them. Their interactions with adults emphasize the things of cultural values.

Skinner's theory of operant conditioning, demonstrates that the environment has a great influence on learning and behavior. Reinforcement has proven to be powerful tool in developing, shaping and control of behavior. Bandura's social learning theory believes that people acquire a wide range of behaviors, thoughts and feelings by observing others behavior and these observations play an important role in life long learning. In spite of the mental deficiency children observe and imitate their family members more so parents.

Bronfenbrenner's ecological theory emphasizes environmental context for the development of the child. Microsystem i.e. parents, siblings and family members influence

most and have direct interactions with social agents and have long term effect on the child. Hence parents are the most important people in the lives of their children, giving love, care and belongingness.

The birth of a child begins a period of adjustment for all families. The birth of a child with a disability, however, is often an unexpected unpleasant event that requires considerable adjustment by the family. The diagnosis of mental retardation produces an intense emotional shock wave in the family, with a gamut of feelings ranging from disability to despairing anguish.

Parenting of a child with mental retardation is not an easy job, as the presence of mentally retarded child in the family leads to greater burden on the family (Peshawaria *et al.*, 1995). As the child grows, the physical demands placed on parents may increase. The time and physical energy required for positioning, toileting, bathing, eating and dressing may place an additional burden on parents and other family members. Parents face many problems related to social, marital, and psychological problems. If the parents do not have adequate knowledge regarding mental retardation then they may face even more problems because the state of knowledge of parents and society, in the field of mental retardation also influence the way in which mentally handicapped persons are treated by family and society. The interaction of family with a mentally retarded member will depend to a great extent on the severity of the condition.

The usual parental reactions about their mentally retarded child was given by the psychologist Rosen (1955) who classified the process of acceptance of the child into five successive stages that may take place rapidly or last many years.

- 1) Awareness that a serious problem exists.
- 2) Recognition of the retardation for what it is.
- 3) A search for the cause
- 4) A search for a solution.
- 5) Acceptance of the condition.

Studies have shown that parents of mentally retarded have many sources of anxiety and embarrassment (Begab, 1966 and Donovan, 1988). Mahoney *et al.* (1998) observed that as parental stress levels increased, the quality of interactions with the child decreased.

Mentally retarded children at homes are life long stressors for parents. But proper handling and treatment can make them to live self sufficiently. The interactions of parents with their children with disabilities can have a profound impact on the development and progress of the child. The exposure of the child to an environment comprised of a variety of stimulation, encouragement, verbalization, provides chances for exploration and gives ample opportunities for manipulating objects. Again, if the experience is rewarding, the child is expected to develop relatively a rich repertoire of information in contrast to a child who has been denied all such stimulations (Sen, 1992). To find a trained teacher for every mentally handicapped person in India may definitely be a fantasy. But considering that every mentally handicapped child does have two parents who fortunately in India, are naturally involved with their child, and if they could be appropriately trained and involved early in the management of their child, this could build up natural permanent constructive resources for mentally handicapped persons in our country (Peshawaria, 1988).

It is widely assumed that involving parents will effect changes in the child directly as a result of enhancing parental management of skills or indirectly improving family functioning. Some advantages to involve parents are: i) Economical ii) Generalization and maintenance iii) Prevention of future problems and iv) Effectiveness of training

Parent's participation is expected to benefit the child, parent and family and society at large. The different way of viewing parent involvement, however is that in reducing stress, increasing family coping and improving relationships within the family. The methods of involving parents could be: i) Parent training programs ii) Encouraging formation of parent groups iii) Involving parents in the training programs and iv) Increase participation of parents in the education system.

Parental expectations may be viewed as a dimension of the home environment that directly as well as indirectly influence children's behavior and achievement. Several studies report that parent's developmental expectations are associated with outcomes for their children both with and without developmental delays. Parents also adjust their expectations overtime as a child's abilities and functioning become apparent. Very high parental expectations may have more difficulty interacting with their child. Parents of children with developmental delays have also been described as possibly overestimating their children's abilities or not adequately preparing their children to cope with their disabilities in adulthood (Zedin and Turner, 1984).

Schneider and Gearhart (1985) suggested that mothers may underestimate their children with delays and do not challenge them enough. Some researcher have suggested that parents inaccurate estimations of their children's capacities may negatively influence children's development by limiting parents ability to create an optimally challenging environment (Miller, 1986). Thus, parents should know what to expect from the child and how they can involve themselves in providing the assistance in helping their children availing special education and to learn adaptive skills. Parents and family members are critical partners, along with school district personnel in the training and education of their children. Parental involvement in the education of handicapped children depends upon a number of factors e.g. the progress of a handicapped child is often reflected in feelings of competence on the part of his care-giver. As a child advances developmentally, the possibility for communication and exchange becomes greater and so the child becomes more rewarding to his or her care-giver. A developing child encourages involvement and efforts to pursue training and education. Thus, it sets up a positive cycle of interaction. Like the general education, it is known that the communication between the teacher and parents is also important. The two parties can share their methods and programmes and revise the developmental progress of the child, thus increasing the likelihood of success. Parents provide essential information to teachers and administrators play an important role in decisions making for the betterment of their children and can be a key to supporting high expectations for their children during their school years. Parent's participation and involvement in the education, and training of child increases hopes of improvements for the child and increases the possibilities for functional ability, mobility, self care and social skills.

Buck (1950) wrote, "The test of civilization of any country is the measure of consideration and care it gives to its weakest members." A civilized society is always keen to see that it's most humble member, with severe shortcomings, be it physical or mental, finds a place in it, without unduly living a parasitic life. In this context, scientific enquiry is of utmost importance to tap the abilities and limitations of the less fortunate inhabitants. Dimensions of thrust area for research on mental retardation mainly centre around the problems of training, education and rehabilitation of the handicapped.

Training and care of mentally handicapped persons in India is a serious challenge for those who are connected in any way for planning, financing or providing services for mentally handicapped persons and their families. In the present given time it is estimated that services do not reach more than even one percent of mentally handicapped persons and their families. Considering the magnitude of the problem in our country that nearly two percent of the general population who are mentally handicapped requires services and along with the serious shortage of trained personnel, how really is the solution to the problem addressed? The answer is not all that simple. However attempts could be made to tap the so far untapped human resources of our country.

It is interesting to observe how the pendulum has been swinging in the western countries as to how the professionals viewed the parents. Earlier parents were considered as part of the problem. Presently they are considered as part of the solution and concerted efforts are being made, now, to involve the parents in the training and management of their mentally handicapped persons.

Parent involvement has been an increasingly important topic in education. The individual with Disabilities Act Amendments of 1997 reestablishes and enhances parent participation in eligibility and placement decisions. Functional skills for children and adolescents are viewed as essential activities required naturally in home, school and the community. Many essential activities of daily life are common to all children and adolescents such as communication, social interaction, personal care, manipulation, ambulation and

transfers. The successful integration of the child and adolescent into school, home and community environment often depends upon the child's ability to perform essential functional activities independently in a safe and timely manner. Contextual issues deal with the influence of environmental and social issues on the child's function. Environmental and social variables have a profound effect upon the functional performance and are considered a potentially important influence on functional outcomes. The child's performance is embedded in a rich social context and the functional outcome of the child cannot be captured realistically without considering this context. In the natural contexts of a child, the joint management of functional tasks by adult and child is accepted as the normative pattern. Functional outcome measures must have some way of recognizing the participation of other people in facilitating this process. There are so many factors that may influence the parental involvement and expectations like degree of disability of children, associated handicap with mental retardation, age at identification, age at admission to special schools, years of schooling, family size, family type, socio-economic status, education of parents, occupation of parents etc. So, there is a need to know, to understand the extent of involvement and expectations of parents in the training, education of mentally challenged children. Because the social and personal skills are of prime importance in the development of mentally challenged children to lead an independent life in the society, this study is planned to investigate the parental involvement and expectations in promoting the social and personal skills of mentally challenged children, with the following objectives:

- 1) To assess the social and personal skills of mentally challenged children studying in special schools.
- 2) To study the extent of involvement of parents in developing social and personal skills of mentally challenged children.
- 3) To know parental expectations regarding social and personal skills of mentally challenged children.
- 4) To determine the influence of child's characteristics, factors associated with disability, special education, parental and familial factors on social and personal skills of mentally challenged children, parental involvement and parental expectations.

2. REVIEW OF LITERATURE

The performance and behavior of a person whether a normal or mentally challenged never dependent only on his or her intellectual capacity, but on many other factors like emotional maturity, education, training, social and cultural environment. Parents as a closest person play a very important role in the training of children. Hence, studies on skills of mentally challenged children, parental involvement, parental expectations are reviewed and presented in this chapter under the following headings.

2.1 Concepts and definitions

2.2 Skills of mentally challenged children

2.3 Factors influencing acquisition of skills

2.4 Parental involvement

2.5 Factors influencing parental involvement

2.6 Parental expectations

2.7 Factors influencing parental expectations

2.8 Parental attitudes towards inclusive education

2.9 Parental satisfaction with school services

2.1 Concepts and definitions

Concepts and definitions related to study are presented as follows

2.1.1 Mental retardation

Historically, mental retardation had been defined in terms of social competence. In medieval times, the test of mental retardation centered round the work situation. Benda *et al.* (1963) stated that 'a mentally deficient person is a person who is incapable of managing himself and his affairs, or being taught to do so and who requires supervision, control and care for his own welfare and the welfare of the community'.

The World Health Organization (WHO) Expert Committee (1968) reported different grades of retardation in conjunction with social factors and has provided a classification scheme of mental retardation in terms of IQ ranges – mild, moderate, severe and profound categories of retardation.

The American Association on Mental Deficiency (AAMD, 1973 revised) defined it as 'significantly sub-average general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period'.

Corbett (1977) defined mental handicap as 'that condition where intellectual deficit is associated with social, physical or psychiatric handicap, and requires special care or treatment'.

More recent definitions are: Mental retardation is a disability characterized by significant limitations both in intellectual functioning and in adapting behavior as expressed in conceptual, social and practical adaptive skills (American Association on Mental Retardation, 2002). An accurate diagnosis of mental retardation requires three components:

- a) An IQ score of approximately 70 or below.
- b) A determination of deficits in adaptive behavior.
- c) Origins of the disability prior to age 18.

The AAMR classification system focuses on the capabilities of the retarded individual rather than on his or her limitations. The categories describe the level of support required. They are: *intermittent support*; *limited support*; *extensive support*, and *pervasive support*. Intermittent support is support that is needed only occasionally, perhaps during times of stress or crisis for the retarded person. It is the type of support typically required for most

mildly retarded people. At the other end of the spectrum, pervasive support, or life-long, daily support for most adaptive areas, would be required for profoundly retarded persons.

The American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, (DSM-IV – TR, 2008), defines Mental Retardation as a central nervous system dysfunction producing an IQ below 70; which results in significant deficiencies in two or more life skills, such as self-direction, academic skills, social skills, communication, health and work. *DSM-IV-TR* classifies four different degrees of mental retardation: mild, moderate, severe, and profound.

2.1.2 Adaptive skills

Adaptive skills are the skills needed for daily life and include the ability to produce and understand language (communication); home-living skills; use of community resources; health, safety, leisure, self-care, and social skills; self-direction; functional academic skills (reading, writing, and arithmetic); and work skills. (AAMR, 2002)

2.1.3 Social skills

Social skills are often defined as complex set of skills that include communication, problem-solving and decision making, assertion, peer and group interaction, and self management (Haager and Vaughn., 1995).

These skills are “competitive necessary for students to initiate and maintain positive social relationships with peers, teachers, family and other community members.” (Quinn *et al.* 1995)

2.2 Skills of mentally challenged children:

All people need to master certain skills before they can function appropriately in society. Good skills require that good behavior management skills have been mastered. Acquisition of skills not always depends on the IQ level but also depend on the training and stimulating environment.

DSM-IV-TR classifies four different degrees of mental retardation: mild, moderate, severe and profound, based on the person's level of functioning.

- i. Mild mental retardation- IQ score ranges from 50–70, and persons can often acquire academic skills up to about the sixth-grade level. They can become fairly self-sufficient and in some cases live independently, with community and social support.
- ii. Moderate mental retardation- Persons has IQ scores ranging from 35–55. They can carry out work and self-care tasks with moderate supervision. They typically acquire communication skills in childhood and are able to live and function successfully within the community in such supervised environments as group homes.
- iii. Severe mental retardation- Persons has IQ scores of 20–40. They may master very basic self-care skills and some communication skills. Many individuals are able to live in a group home.
- iv. Profound mental retardation- Individuals have IQ scores under 20–25. They may be able to develop basic self-care and communication skills with appropriate support and training and need a high level of structure and supervision.

Dunlap (1987) carried out a study on “A functional classification of independent living for the mentally retarded”. The sample comprised of 106 mentally retarded persons. The results indicated a meaningful classification of mentally retarded persons using independent living skills variables rather than degree of mental retardation.

The reviews related to skills of mentally challenged children are presented under following sub-headings.

2.2.1 Adaptive skills

2.2.2 Social skills

2.2.3 Motor skills

2.2.4 Cognitive skills

2.2.5 Risk behaviors

2.2.1 Adaptive skills

Adaptive behavior is the collection of conceptual, social and practical skills that have been learned by people in order to function in their everyday lives. Studies related to adaptive skills are reviewed and presented below.

Ando *et al.* (1980) study on “Effects of age on adaptive behavior levels and academic skill levels in autistic and mentally retarded children”. Subjects were 47 autistic and 128 mentally retarded children from a special school. The findings revealed that the levels of toilet training, eating skills, participation in group activities, number concepts and self-control in the autistic children improved significantly with age. However, these adaptive and academic levels were in general significantly lower than those of the mentally retarded children.

Rodrigue *et al.* (1990) designed a study to compare between the adaptive behaviors of 20 autistic, 20 Down syndrome, and 20 developmentally normal children by using the Vineland Adaptive Behavior Scale. Findings revealed that, relative to children with Down syndrome or normal development, autistic children displayed significant and pervasive deficits in the acquisition of adaptive social skills, and greater variability in adaptive skills. Children with Down syndrome better performed in adaptive social skills.

Schatz and Hamdan-Allen (1995) performed a study on “Effects of age and IQ on adaptive behavior domains for children with autism” on sample of 72 children and adolescents with autism and 37 non-autistic children and adolescents with mental retardation by using Vineland Adaptive Behavior Scale (VABS). Age and IQ were positively related to each of the Vineland domains. Children with autism had lower scores in the socialization domain. An interaction was present between Performance IQ and group: With increasing IQ, children with autism showed smaller increases in social functioning than children with mental retardation. A similar trend was present for daily living skills. Results suggested that (a) the relationship between the two groups' adaptive behavior profiles is stable from preschool age through adolescence, and (b) increasing IQ is associated with less of an increase in certain adaptive skills for children with autism.

Schwartz (1995) conducted a study on “Assessing levels of personal autonomy among Israeli adults with intellectual disabilities living in group homes and apartment settings” on 120 Israeli adults with intellectual disabilities. The results explored significant difference between residents of group homes and apartments in respect to independence in domestic-centred routines, money handling skills and in using communication skills. Residents in apartments were more independent and had significantly more opportunity to choose on everyday issues, regardless of their previous residence. The fact that the two groups did not differ in respect to residents' personal characteristics such as age, gender, level of intellectual disabilities and severity of impairment, with no effects attributable to their previous placement, indicates that the variation between the residents is probably traceable to the type of facility in which they live.

Mervis *et al.* (2001) studied “Adaptive behavior of 4- through 8-year-old children with Williams Syndrome”. Result identified that the domains of socialization and communication had relative strengths, whereas daily living skills and motor Skills had relative weaknesses. Socialization Skills were more advanced than communication skills and that within the socialization domain, interpersonal skills were stronger than play/leisure or coping skills. Adaptive behavior standard score was not related to chronological age.

Bruschini *et al.* (2003) conducted a study on “Development of bladder control in mentally handicapped children”. The parents and relatives of 100 consecutive mentally handicapped patients (age range 7 to 37 years) were inquired by a personal interview. Results found all profound and severe patients presented leakage episodes regardless of the age. The mild and normal inferior value acquired progressive urinary control with aging, and 33% still remain with urinary symptoms above 16 years old.

Bloom and Zelko (2006) studied “Variability in adaptive behavior in children with developmental delay”. Subjects were 117 children aged 9 to 11 months who had significant intellectual delay. All subjects were administered the Developmental Profile II (DPII), a parent-

report measure of functional and adaptive skills. Seventy-nine per cent of the children with mild intellectual delay obtained Self-Help age scores on the DPII and 74.2 per cent Social Age scores that were within broad chronological age expectations. A surprising percentage of children with moderate and severe intellectual delays also obtained adaptive age scores at this level.

Stein *et al.* (2006) conducted a study on "Adaptive Skills Dysfunction in ADD and ADHD Children". Adaptive functioning was examined in children with Attention Deficit Hyperactivity Disorder (ADHD), Attention Deficit Disorder (ADD), and a psychiatric comparison group of children with pervasive developmental disorders or mild mental retardation (PDD/MR). As assessed with the Vineland Adaptive Behavior Scales, adaptive functioning was well below average for all three clinic groups. The PDD/MR group had the lowest adaptive functioning scores, although not statistically different from the other groups. However, the level of adaptive functioning relative to IQ in the areas of socialization, communication and daily living was significantly higher for the PDD/MR group in comparison to ADD and ADHD groups.

From above studies it can be noted that mentally challenged children had low adaptive skills, with increase in the severity of condition children become more dependent. But in comparison to autistic children they have better skills.

2.2.2 Social skills

Studies related to social skills, communication skills are reviewed and presented below

Ando and Yoshimura (1979) carried out a study on "Speech skill levels and prevalence of maladaptive behaviors in autistic and mentally retarded children". Forty-seven autistic and 128 mentally retarded children, (ages 6 to 14) from a special school were assessed in terms of nine maladaptive behaviors and speech skill levels. The results indicated that the group of the mentally retarded children with withdrawal had significantly lower speech skill levels than the group of those without withdrawal, and the group of the autistic children with self-injury had significantly lower speech skill levels than the group of those without self-injury.

Wilkinson and Ronski (1995) studied "Responsiveness of male adolescents with mental retardation to input from nondisabled peers". Sequential analyses of dyadic interactions examined the effects of input by 32 normally developing adolescents on responses by male subjects with mental retardation whose communication modes included augmented communication. Results suggested that verbal prompts in the form of questions were significantly more likely to receive responses from subjects with mental retardation than directive prompts.

Gomez and Hazeldine (1996) conducted a study on "Social information processing in mild mentally retarded children" and examined the social information processing (SIP) skills of mild mentally retarded (MR) children using Dodge's model and compared to non-retarded groups matched for chronological age and mental age on these variables. Compared to both non-retarded groups, the MR group was less accurate in interpretation of accidental cues and more hostile in their responses to the ambiguous cues.

Graham (2007) reported that there were no differences between the groups on both social skills and feeding skills, in his study on "Deficits in social skills and Feeding behaviors associated with adults diagnosed with autistic disorder living in an institutionalized setting. The participants consisted of three groups of individuals with MR: a group diagnosed only with autistic disorder, a group diagnosed with some form of psychopathology other than autistic disorder, and a group without any additional diagnoses with 15 in each group.

Contrary to this, Wilkins (2008) performed a study on "A comparison of social skills profiles in intellectually disabled adults with and without asd (Autism Spectrum Disorder)" on 72 participants in each group viz. Intellectually disabled adults with autism and PDD-NOS adults with ID only, 64 of whom were diagnosed with profound ID, 4 with severe ID, and 4 with ID severity unspecified. Results revealed individuals with autism showing the greatest deficits in the area of positive social skills, both verbal and nonverbal, and the presence of

negative nonverbal social behaviors (e.g., isolates self) followed by those with PDD-NOS and then controls. Group with only mental retardation had better social behavior.

Verdonschot *et al.* (2008) studied "Impact of environmental factors on community participation of persons with an intellectual disability: A systematic review". A systematic literature search was conducted for the period of 1996–2006 in Pubmed, Cinahl and Psycinfo. Out of 236 initial hits, 9 quantitative studies and 2 qualitative studies met the predefined selection criteria and were included in the study. The review allowed the identification of a number of environmental factors positively affecting participation: opportunities to make choices; variety and stimulation of the environment of facilities; opportunities for resident involvement in policy making; small residential facilities; opportunities for autonomy; vocational services; social support; family involvement; assistive technology; and positive staff attitudes. A number of identified environmental factors negatively affecting participation were: lack of transport and not feeling accepted.

Lippold and Burns (2009) carried out a study on "Social support and intellectual disabilities: a comparison between social networks of adults with intellectual disability and those with physical disability". Two groups of participants were recruited; 30 people with mild ID and 17 people with PD. Social and functional support networks were assessed, in addition to life experiences. Results revealed adults with ID had more restricted social networks than PD, despite being involved in more activities. Social support for adults with ID was mainly provided by family and carers and few relationships with non-disabled people were identified. In contrast adults with PD had larger social networks than had been reported in the mainstream literature and had a balance of relationships with disabled and non-disabled people.

From all the above studies it can be concluded that children with mental retardation have restricted social networks and it worsen when it is associated with other disability.

2.2.3 Motor skills

The recent studies regarding to extent of motor abilities, fine and gross motor skills of mentally challenged children are presented below

Wuang *et al.* (2008) study on "Profiles and cognitive predictors of motor functions among early school-age children with mild intellectual disabilities", with the sample of 233 children with mild intellectual disability (ID) aged 7 to 8 years. Results revealed that children with mild ID had weaker fine motor skills than gross motor skills. Sensory integrative functions were only mildly impaired. Total IQ substantially predicted overall performance on each motor test. Specifically, verbal comprehension and processing speed indexes were significant predictors of gross and fine motor function. Thus, Sensorimotor dysfunctions were found to be very frequent in children with mild ID.

Zingerevich *et al.* (2008) carried out a research on "Motor abilities of children diagnosed with fragile X syndrome with and without autism". Sample included 48 children, ages 12–76 months diagnosed with FXS were assessed with the Mullen Scales of Early Learning, and the Autism Diagnostic Observation Schedule. Their parents were interviewed with the Autism Diagnostic Interview-Revised. Children with FXS with autism and PDD-NOS had lower fine motor scores than those without. However, there was no significant association between degree of motor impairment and communication and social impairments after controlling for cognitive level, indicating that cognitive level contributes to impaired motor abilities of children diagnosed with FXS and autism, more than the severity of autism symptoms.

Carvalho and Almeida (2009) conducted a study on "Assessment of postural adjustments in persons with intellectual disability during balance on the seesaw" on six individuals with Down syndrome (DS) and six control group individuals (CG). Both groups maintained their balance mainly at the ankle joint. Contrary to the CG, the individuals with DS adopted a pattern of co-contraction and were not able to modulate the magnitude of postural response with the seesaw's degree of instability.

Thus from above stated studies it can be inferred that Sensorimotor dysfunctions were found to be very frequent in children with mental retardation and having less control over fine motor skills than gross.

2.2.4 Cognitive skills:

Recent studies regarding cognitive skills of mentally challenged children in India and abroad are reviewed and presented below

Behera (2001) study on "The effectiveness of cognitive skill training on performance in dressing in the mentally retarded". Samples were 15 children (males-10 and females-5) of age group 5-8 yrs with moderate retardation (IQ-35-49). Results identified that cognitive skills viz. body image, size, color concept are significantly correlated with self help skills (dressing skills). But spatial orientation does not show significant correlation. The therapy was found to be effective. But the child, who had scored less in cognitive areas during pre therapy assessment, scored less in dressing skill in the post therapy assessment.

Su *et al.* (2008) conducted a study on "Neuropsychological predictors of everyday functioning in adults with intellectual disabilities". People with ID (n = 101; ages 19-41 years; mean education = 11 years; 41% with mild ID) completed a comprehensive neuropsychological battery grouped into four cognitive domains: processing speed, verbal memory and comprehension, visual perception/constructive function, and executive function. The findings of the study reported that both general cognitive dysfunction and specific verbal memory and comprehension deficit impair daily functions in people with ID.

Frenkel and Bourdin (2008) study on "Verbal, visual, and spatio-sequential short-term memory: Assessment of the storage capacities of children and teenagers with Down's syndrome". Three span tasks were used (auditory word span/visual patterns test/Corsi blocks task) with 54 children and teenagers with Down's syndrome and 54 typically developing children as control group. Participants were matched according to their cognitive level. Results revealed that for the auditory word span task, participants with Down's syndrome obtained performances significantly lower than those of the typically developing participants. On the other hand, compared with typically developing children, children and teenagers with Down's syndrome have a spatio-sequential span significantly higher for the lowest developmental ages. No significant differences were found for visual span.

Thus it can be concluded that general cognitive dysfunction impair daily functions in people with intellectual deficient.

2.2.5 Risk behaviors

Risk behaviors, maladaptive behaviors, behavioral problems which worsen the condition in family and influencing factors are reviewed and presented below

Saroj and Draughn (1979) designed a study on 52 MR children (mean age= 10.46) and 54 normal children (mean age= 11.04). Mentally retarded children as a group, when compared with normal peers, measured to be of a less conforming type, do not exhibit adequate and appropriate sex related role behaviors, are less mature, exhibit either more aggressive or inhibitive abnormal level of psychosomatic tendencies.

Dykens and Kasari (1997) studied maladaptive behavior of 43 children with Prader-Willi syndrome which was compared to age- and gender-matched children with Down syndrome and with nonspecific mental retardation. The Prader-Willi group showed more frequent and severe internalizing, externalizing, and total problem behaviors on the Child Behavior Checklist.

Bhatia *et al.* (2007) conducted a study on "Behavioral problems in children with Down syndrome". Behavior Screening Questionnaire (BSQ) was used to screen the groups of 40 consecutive children with Down syndrome as well as their siblings and control group for behavioral problems. 55 per cent children with Down's syndrome showed behavioral problems as compared to 12.5 per cent in control group. Children with Down's syndrome showed behavioral problems related to all the spheres (feeding, socialization, toilet training and sleep) as compared to control group. There is higher prevalence of psychiatric disorders in children with Down's syndrome and their siblings.

Koskentausta *et al.* (2007) carried out a study on "Risk factors for psychiatric disturbance in children with intellectual disability". Subjects comprised of 75 children with ID aged 6-13 years. Result identified the risk of psychopathology was most significantly increased by moderate ID, limitations in adaptive behavior, impaired language development,

poor socialization, living with one biological parent, and low socio-economic status of the family.

Cooper *et al.* (2008) performed a study on "Adults with intellectual disabilities: Prevalence, incidence and remission of aggressive behavior and related factors" on sample of 651 adults with ID. The factors independently associated with aggressive behaviors were lower ability, female gender, not living with a family carer, not having Down syndrome, having attention-deficit hyperactivity disorder and having urinary incontinence.

2.3 Factors influencing acquisition of skills in mentally challenged children

Reviews related to factors influencing acquisition of skills in mentally challenged children are presented under the subheadings of children's characteristics, factors associated with disability, parental and familial characteristics

2.3.1 Children's characteristics

Studies related to effect of children's characteristics viz. age, gender on the acquisition of skills are reviewed and presented below

i) Age:

Ando and Yoshimura (1979) reported that on "Effects of age on communication skill levels and prevalence of maladaptive behaviors in autistic and mentally retarded children". 47 autistic and 128 mentally retarded children in a special school were subjects. Researcher found that the skills of comprehension and conversation in autistic children improved significantly with age, and speech improved somewhat. In spite of this improvement in communication skills, maladaptive behaviors in the autistic children other than hyperactivity did not change significantly with age. Withdrawal improved significantly with age in the mentally retarded children but not in the autistic children.

Saroj and Draughn (1979) also suggested that the older the retarded girl the better the understanding of sex appropriate role behaviors.

Ando *et al.* (1980) suggested that the levels of toilet training, eating skills, and participation in group activities, number concepts and self-control in the autistic children improved significantly with age.

Schatz and Hamdan-Allen (1995) revealed age was positively related to each of the Vineland domains viz. socialization and daily living skills. Similarly Ly (2008) reported that mothers perceived older children have higher ability.

However, Figen *et al.* (2008) did not found impact of age on acquisition of self help skills includes hand washing and soiling skills among children after training in a study of learning assessment of personal hygiene skills of mentally retarded individuals in drop-in day care services. The study was conducted on 30 participants with mental retardation who were classified within the teachable and trainable limit receiving care and special education at the drop-in day care/special education service.

From all the studies it can be concluded that age is positively related to acquisition of skills in mentally challenged children, as age increases they develop better skills.

ii) Gender

Saroj and Draughn (1979) revealed that mentally retarded boys seemed to be underdeveloped in the sex appropriate role behaviors in comparison to girls.

However, Nourani (1998) conducted a study on "Social skills and adaptive behavior of Iranian preschoolers: Teachers' and parents' ratings". Modified forms of the Social Skills Rating System (SSRS) and the Vineland Adaptive Behavior Scales (VABS) were used to explore the social skills adaptive and behaviors of 207 Iranian preschoolers aged 3 to 5 years. Results examined that gender differences were not significant in acquisition of social and personal skills. Same result was also reported by Figen *et al.* (2008).

2.3.2 Factors associated with disability

Reviews on factors associated with disability such as degree of disability, associated disability their influence on acquisition of skills in mentally challenged children are presented below

i) Degree of disability

Schatz and Hamdan-Allen (1995) reported that IQ was positively related to each of the Vineland domains. An interaction was present between Performance IQ and group: With increasing IQ, children with autism showed smaller increases in social functioning than children with mental retardation. A similar trend was present for daily living skills.

Similarly as quoted earlier study by Bruschini *et al.* (2003) found that severe and profound mentally retarded patients had lower bladder control than mild and moderate.

However Figen *et al.* (2008) reported no difference in the pre-post training self help skills with respect to etiology of mental retardation, IQ value, and other health problems.

Thus it can be concluded from above stated studies that IQ is positively related to behavior development in mentally challenged children.

ii) Associated disability:

Bolte and Poustka (2002) found the influence of associated disability over the performance in his study on "The Relation between general cognitive level and adaptive behavior domains in individuals with autism with and without co-morbid mental retardation". Sample of 67 subjects were assessed by using the screening version of the Vineland Adaptive Scales and the Wechsler Intelligence Scales. Regression models revealed a higher correlation between IQ and single adaptive behavior domains in the non-mentally retarded participants. Similarly Wilkins (2008) found social skills deficits was more in case mental retardation with autism or with PDD-NOS than only mental retardation children.

Whereas Graham (2007) showed that associated disability did not contribute to the development of social and feeding skills, because groups did not differ significantly on the variables of level of MR, or verbal ability.

From all studies it can be noted that associated disability worsen the condition of mentally challenged children in acquisition of daily living skills.

2.3.3 Parental characteristics

A decadal comparison on effect of parent's education on the acquisition of skills are presented below

Parent's education:

Nourani (1998) reported that in case of preschooler, children of less educated families were rated significantly lower on Assertion, Cooperation, and, responsibility and higher on Internalizing in the domain of social skills while scored lower on all adaptive behavior domains than children of families with more education.

Similarly Figen *et al.* (2008) explored that behavior of hand washing differed significantly after training in mentally retarded persons with respect to the educational status of the caregiver.

2.3.4 Familial characteristics

Influence of familial characteristics viz. family size, family income and socio-economic status on the development of skills in mentally retarded children are reviewed and presented below

i) Family size

Figen *et al.* (2008) identified no difference in pre- and post-training self help skills among mentally retarded person in relation to family size.

ii) Family income

Figen *et al.* (2008) suggested that that average family income did not contribute in the learning of self help skills after training among 30 participants with mental retardation.

iii) Socio-economic status

Koskentausta *et al.* (2007) identified risk factors for psychiatric disturbance in children with intellectual disability was significantly increased with low socio-economic status of the family.

2.4 Parental involvement:

It is widely assumed that involving parents will effect changes in the child directly (Hornby and Singh., 1984) as a result of enhancing parental management skills or indirectly improving family functioning through support and counseling. Yule (1975) discussed the various advantages of training parents in behavioral principles which are equally applicable for any kind of programmes for the mentally handicapped persons and their families. Studies on parental involvement are reviewed and described under following sub-headings.

2.4.1 Parental involvement in training of mentally challenged children

2.4.2 Parental involvement in early intervention

2.4.3 Parental involvement in special education

2.4.4 Parental involvement in communicating with teachers

2.4.5 Parental problem solving process

2.4.6 Parental decision making process

2.4.7 Parental involvement in transition period

2.4.8 Parental involvement in residential placement

2.4.1 Parental involvement in training of mentally challenged children:

Now a days parental involvement is found to be very effective in the training of disabled children because most of the time children spend their time in the home, parents can regularly correct, train their children.

Rani and Reddy (1999) studied "Involvement of parents in training mildly mentally retarded children of rural areas in self care and play skills" on a sample of 30 mentally retarded children of 4 to 8 years from Manovikas special school, Progressive schedule developed by NIMH for both self care and play skills were used. The results revealed that the children who received training from their mothers in learning self care and play skills improved significantly at the end of two months participating in intervention programme.

Roach *et al.* (1999) conducted a study on "Mothers and fathers of children with Down syndrome: Parental stress and involvement in child care" on a sample of 41 two parent families of young children (<5 years) with Down syndrome and 58 two parent families with typically developing children. Results revealed that parents of children with Down syndrome perceived more care-giving difficulties, child related stress and parent related stress than did parents of typically developing children. Mothers are more involved than fathers in daily care-giving, child related tasks and child socialization.

Ricci and Hodapp (2003) carried out a study on "Fathers of children with Down's syndrome versus other types of intellectual disability: Perceptions, stress and involvement" on 30 children with Down's syndrome and 20 intellectually disabled. Measures used were Personality checklist (Wishart and Johnston, 1990), child behavior checklist (Achenbach, 1991), Parenting stress index (Abidin, 1995), Parental involvement in child care index (Radin, 1982) and Fathering behavior questionnaire (self- structured). Results indicated that both fathers and mothers rated their children with Down syndrome as having more positive personality traits and fewer maladaptive behaviors so reported less child related stress. The two groups of fathers were similarly involved in child rearing.

Alvey and Aeschleman (2008) studied on "Evaluation of a parent training programme for teaching mentally retarded children age-appropriate restaurant skills: A preliminary

investigation". After participating in a brief training programme, three mothers attempted to facilitate greater independence in their developmentally delayed children during meals at a fast-food restaurant. The results indicated that the parents' teaching interactions were influenced by the training programme and that their children's restaurant skills were enhanced.

Similarly McIntyre (2008) conducted a study on "Parent training for young children with developmental disabilities: Randomized controlled trial". The 21 families in the experimental group received usual care plus the 12-week Incredible Years Parent Training Program with developmental delay modifications. Families in the control group ($n = 23$) received usual care, including early childhood education and related services. Results suggested that this parent training intervention was superior to usual care for young children with developmental delays or disabilities in reducing negative parent-child interactions and child behavior problems.

From above all studies it can be concluded that parent's involvement has beneficial effects in training of self-care, social and play skills.

2.4.2 Parental involvement in early intervention

Parents play a very important role in early intervention, child assessment and intervention which has a beneficial effect on the development of child.

Bailey *et al.* (1992) conducted study on "Creating family-centered services in early intervention: Perceptions of professional in four states. 180 professionals were assessed with self-structured scales and results revealed significant discrepancies between current and ideal practices were found in four dimensions: parent involvement in decision about child assessment, parent participation in assessment, parent participation in the team meeting and decision making, and the provision of family goals and services.

A similar study was conducted by Bjorck-Akesson and Granlund (1995) on "Family involvement in assessment and intervention: Perceptions of professionals and parents in Sweden". Sample consisted of 139 professionals and 73 parents of disabled children receiving services from 15 rehabilitation centres. 10 point rating scale developed by Bailey *et al.* (1992) was used. Results showed that professionals and parents expressed significant discrepancies between current and ideal practices. Parent rated typical family involvement in the 5.0-5.5 range which reflects moderate degree of family involvement but they rated ideal family involvement in the range of 6.6-7.7 reflecting that they would like to have a higher degree of family involvement.

Similarly, Trivette *et al.* (1995) studied on "Family-oriented program models, helping practices, and parental control appraisals" on 280 parents of young children (birth to 5 years) with disabilities or at-risk for poor developmental outcomes. Results identified that parents were involved in early intervention and human services programs.

Thus it can be concluded from above stated studies that there is difference in ideal and real involvement of parents. Parents are moderately involved in participation with school but they wanted to be involved more.

2.4.3 Parental involvement in special education

Parental involvement in special education can be supportive for the professionals of special education centre by implanting information about their children and may have an impact in the development of basic concepts and also educational attainment of the children.

Winton and Turnbull (1981) assessed parent's perspectives concerning their own involvement in their child's educational program by interviewing 32 mothers of pre-school handicapped children and result found that mothers needed consistent professional involvement with their child so they could take a break from full-time educational responsibility.

A study was conducted by Deci *et al.* (1992) on "Autonomy and competence as motivational factors in students with learning disabilities and emotional handicaps". Results found that perceived parental support of autonomy accompanied by significant adult involvement contributes to greater intrinsic, motivation, achievement, and adjustment of students in special education programs.

Bennett *et al.* (1997) reported that most of the parents felt a high degree of involvement in child's education and also teachers indicated positive attitudes toward parent involvement, when conducted a study on "Putting inclusion into practice: Perspectives of teachers and parents" on a sample of 84 teachers and 48 parents had a total of 60 children with disabilities and majority of them were cognitive impaired.

Deslandes *et al.* (1999) on "Patterns of home and school partnership for general and special education students at the secondary level" on a sample of 525 general education students and 112 special education students. Results found that parental involvement in learning activities was one of the important predictors of student's educational outcomes of the groups. But parental monitoring was also found important for the special education student's homework. The questionnaire was based on Epstein's framework.

Lai and Ishiyama (2004) conducted a study on "Involvement of immigrant Chinese Canadian mothers of children with disabilities". Semi-structured interviews were conducted with 10 recent immigrant mothers of disabled children. Mothers exhibited their devotion towards their children and had shown a desire to help them educationally. But limited English proficiency had adversely affected most parents' involvement at school and, to some extent, at home.

Lindstrom *et al.* (2007) carried out a study on "Transition to employment: Role of the family in career development" on 13 young adults with learning disabilities in age range from 21-27 years of age. In-depth and semi-structured interview revealed that family participation and levels of involvement in school and other day-to-day activities varied across the sample. About more than half of the families (53%) were highly involved in providing supervision and structured activities during childhood and into adolescence.

From all the above studies it can be concluded that parents are highly involved in the education of parents but due to lack of knowledge, time constraint they seek help of school professionals.

2.4.4 Parental involvement in communicating with teachers

Good communication between parents and teachers can be influencing factors for the effective training in the acquisition of skills of children with special needs.

Harry *et al.* (1995) conducted a study on "Communication versus compliance: African-American parent's involvement in special education." A longitudinal 3 year study investigated through ethnographic interviews with parents of 24 pre-schoolers and professionals in special education program. Despite low levels of participation by parents, the data shown consistent initial efforts by families to support their children's schooling.

Rueda *et al.* (2005) revealed that 16 Latino mothers of children with disabilities had shown concern about the poor communication between themselves and caseworkers, teachers, and other professionals, which was due in part to the fact that many felt that they lacked information regarding transition planning and service options.

Similarly Zijlstra and Vlaskamp (2005) in his study "The impact of medical conditions on the support of children with profound intellectual and multiple disabilities" shown that there is a discrepancy between the information contained in such communication logs and information system.

Guralnick *et al.* (2008) conducted a study on "Mother's social communication adjustments to young children with mild developmental delays." Analysis conducted over a two year period revealed that adjustment were commensurate abilities, suggesting that mothers of children with developmental delays continue to display school communication patterns that are supportive of their child's development.

From the study conducted by Fontaine *et al.* (2008) on "Transfer on information between parents and teachers of children with profound intellectual and multiple disabilities at special education centers," on a sample size of 12 children between ages 3 to 18 years. Sentences written in communication logs were analyzed. Results revealed that communication logs were not very effective in relation to an adequate information transfer between parents and professionals to optimize the mutual support of children with PIMD. Parents write slightly less about every topic than teachers expect private life category.

Thus, this can be concluded from the reviews collected that transfer of information between teachers and parents are not very effective, parents are less involved in the communication with the school personnel.

2.4.5 Parental problem solving process

Reviews related to parental problem solving with their children with intellectual disabilities are presented below.

Costigan *et al.* (1997) carried out a study on "Family process and adaptation to children with mental retardation: Disruption and resilience in family problem solving interactions". Results revealed that family problem-solving process are generally resilient to the adaptations families make for children with intellectual disabilities.

Floyd *et al.* (2004) studied on "Family problem-solving with children who have mental retardation". Problem-solving were observed within families of children with mental retardation and multiple comparison groups (total N=162 families). The findings revealed that parents were more persistent and directive with their children who had mental retardation in the form of frequent use of lower limit controls while also avoiding cycles of negative parent child exchanges. Irrespective of disability status, child behavior problems were associated with negative parent-child interactions.

So, from all above studies, it can be noted that parents of mental retardation adapt themselves during problem-solving process with their children.

2.4.6 Parental decision making process

Families play a critical role in the decision making process in the planning and accessing services for the children with developmental delays.

A study on parental involvement in IEP meetings have revealed consistently that while parent's attendance is fairly high, parent participation in actual decision making is very limited. Goldstein and Turnbull (1982) observed that the majority of parent contributions in the IEP meetings were on the topic personal/family issues, not on such educational issues as evaluation, curriculum, and placement.

Neely- Barnes *et al.* (2008) conducted a study on "family decision making: Benefits to persons with developmental disabilities and their family members." This study (N=547) modeled patterns of family decision making and assessed benefits to persons with developmental disabilities (DDs) and their family members. A latent profile analysis identified four classes that were, highly involved in decision making (n=118), involved in planning (n=166), involved only in financial decisions (n=75) and uninvolved (n=188). Multiple regression analysis indicated that high family involvement in decision making is associated with receiving more services, increased family member satisfaction, and increased family member perception of provider competence.

Hence above recent studies have shown that parental involvement is high in decision making process related to the education of their disabled children, while old studies shown the reverse trend.

2.4.7 Parental involvement in transition period:

Transition is an important part of the service system for students with developmental disabilities, a period of during which young adults prepare for life beyond mandatory schooling (Blacher, 2001). The transition period may be especially stressful for the families of these young adults, who often experience a sudden change or decrease in services.

Hanline and Halvorsen (1989) suggested that all parents were involved in the transition of their disabled children in his study "Parents perceptions of the integration transition process: Overcoming artificial barriers" on 13 parents of 14 students with disabilities ranged in age from 4 to 22 years which includes children with Down syndrome, Cerebral palsy and multiple handicaps .

Wagner *et al.* (1991) indicated that young people with disabilities have a more difficult time making the transition to adulthood than do their peer without disabilities; and the fears

and concerns expressed by parents of students with disabilities confirm that the impact of this transition can be felt by parents as well as the young person leaving high school.

Morningstar *et al.* (1995) conducted a study on "Why do students with disabilities tell us about the importance of family involvement in the transition from school to adult life?" on four focus groups viz. students with learning disabilities, emotional and behavioral disorders and mental retardation. Results showed majority of students identified certain family members as being able to provide support during transition process, and being involved in planning for the future.

Thomas and Maxwell (1996) performed a study on "Packaging the parachute: parent's experiences as their children prepare to leave high school" on 93 parents of students with disabilities and 111 parents of students without disabilities. Three factors were identified representing parent's (a) comfort with transition, (b) vision for their child's future, and (c) response to the schooling process. Results predicted that parents of students with disabilities show greater discomfort with the transition process from school to adult life and have less optimistic visions about their son or daughter's future than do parents of students without disabilities.

Devlieger and Trach (1999) studied "Mediation as transition process: the impact on postschool employment, outcomes", on six persons with mild mental retardation. Results revealed that the involvement of parents and focal persons was disproportionate to that of school and agency efforts more often resulted in sheltered employment, while personal or parent mediation resulted more often in self-employment and continuing education outcomes.

Kramer and Blacher (2001) study on "Transition for young adults with severe mental retardation: school preparation, parent's expectations and family involvement". These issues were examined with 52 families who had transition age sons or daughters with severe mental retardation by using measures viz. Problem behavior scale (developed by Bruininks *et al.* 1996), Transition experiences survey and Parent involvement in transition planning instrument. Results revealed that families are very involved in the transition programming of their sons or daughters.

Rueda *et al.* (2005) studied on cultural models of transition: Latina mothers of young adults with developmental disabilities". Sample consisted of 16 mothers of young adults with severe disabilities, (Down syndrome-7, autism-4, mental retardation (unspecified)-3, pachygyria-1 and microcephaly-1). Results revealed that these mothers perceived themselves as more knowledgeable about their children and better able to make decisions about work placement and living arrangements for their children than professionals involved. Mothers have placed a high priority on the development of life skills such as bathing, fixing light meals, and so forth and social adaptations.

Lindstrom *et al.* (2007) investigated the role of the family in career development and postschool employment outcomes for young adults with learning disabilities. 59 in-depth interviews were conducted with 13 young adults, parents and school staff. Results observed parents were highly involved in making decisions about independent living activities, personal relationships, and postschool employment and training opportunities in the young adult years.

Hogansen *et al.* (2008) studied on "Transition goals and experiences of females with disabilities: Youth, parents, and professionals" on 146 participants, including female youth with disabilities (n=67), parents of young women with disabilities (n=34), and professionals who work with them (n=45). Findings suggested that similar to children, a number of parents described goals for their child related to education, family and relationships and independence. Although family members have the potential to be significant inspirational role models to young women in transition, youth also talked about the difficulty their parents seemed to have in "letting go" and allowing them to become more independent.

Thus from above all findings it can be noted that parents are moderately involved during the transition period of disabled children but there is discrepancy in efforts of parents and school personal and also between parents of children with disabilities and without disabilities.

2.4.8 Parental involvement in residential placement

The majority of adults with mental retardation continue to live at home with their parents well into adulthood but parental death and incapacitation may prompt a crisis of the adult with mental retardation to another setting (Gordon *et al.*, 1997). Understanding continuity and discontinuity in family involvement following change in the living situation of the son or daughter with mental retardation is important.

Stoneman and Crapps (1990) reported low rates of family involvement with a sample of persons with mental retardation (most between the ages of 18 to 45 years) living in family care homes (foster homes) in his study "Mentally retarded individuals in family care homes: Relationship with the family of origin" and suggested that the fragility of family involvement when geographical distance was great, when family bonds may have been challenged by multiple prior placement, and when family members were not involved in the placement process.

Similarly Baker *et al.* (1993) studied on "Family involvement in residential treatment of children with psychiatric disorder" on a diverse and non-volunteer sample of families, a broad range of child diagnosis (psychiatric disorder, mental retardation, or dual diagnosis) and large residential centers that were far from many person's family homes. Surveys completed by staff members revealed lower family involvement rates, with half of the children having three or fewer family contacts yearly.

However Blacher and Baker (1994) found no change in involvement over a year's time in his longitudinal study "Family involvement in residential treatment of children with retardation: Is there evidence of detachment? Similar findings were reported by Baker *et al.* (1996) study on "Family involvement in residential treatment" on families with 163 children and adults in residential treatment and with their programs and revealed as there was no evidence of detachment, a lessening of involvement over time in placement.

Another similar study was conducted by Blacher *et al.* (1999) on "Leaving or Launching? Continuing family involvement with children and adolescents in placement". Postplacement involvement and well-being of 53 families who had placed their child into a residential facility were studied. Parents were interviewed an average of 1, 2, and 3.5 years following placement. Visitation remained moderately high, expressed attachment was high and stable, and most parents reported experiencing less guilt than at the time of placement. Parents were still thinking and talking about the child frequently.

Seltzer *et al.* (2001) conducted a study on "Continuity or discontinuity of family involvement following residential transitions of adults who have mental retardation." Sample consisted of 117 mothers. Results found that aging mothers were highly involved in the relocation process and had frequent contact and continued emotional involvement with their adult child. Mothers became increasingly satisfied with their level of contact with their child over time, less worried about future, and had decreasing levels of direct caregiving and contact with residential staff.

Roper and Jackson (2007) studied ambiguous loss and boundary ambiguity experienced by families during the process of placing their child in out-of-home care was described by parents in 20 families raising a child with severe or profound developmental disabilities (SPDD). Parents faced ambiguities related to the nature and diagnosis of the disability, support services, and placement. Parents experienced two forms of boundary ambiguity (role and membership ambiguity) and ambivalence regarding placement decisions.

Berge and Holm (2007) also suggested in his study of "Boundary ambiguity in parents with chronically ill children: Integrating theory and research" and observed that after placement of the child with SPDD, membership ambiguity could increase as family members grapple with making sense of whether the child with SPDD is in or outside of the family. Parents experienced mixed feelings of ambivalence as they struggled to reconcile placing their child.

From above all studies it can be concluded that parents are highly involved even after placing their child in foster homes except where residential are far from the home place. And they feel ambiguity while placing their children out-of-home care.

2.5 Factors influencing parental involvement

Factors which influence parental involvement are reviewed and presented under following headings.

2.5.1 Children's characteristics

i) Age

Trivette *et al.* (1995) revealed that parental involvement in early intervention did not differ with the age of disabled children. Similar result found by Bailey *et al.* (1999) in his study "Awareness, use, and satisfaction with services for Latino parents of young children with disabilities" on 200 Latino parents. Results reported that for mothers, age of the child did not influence the awareness and use of services but influence satisfaction with services.

However Ricci and Hodapp (2003) identified that the child's chronological age influenced the fathers of children with Down syndrome. Specifically, older children with DS appear less reinforcing and less acceptable to their fathers. Neeley-Barnes *et al.* (2008) also found that family receives more services and highly involved in decision making when persons with developmental disabilities were younger. Similarly Ly (2008) explained that child's age influenced parent's behavior ratings of encouragement and less help because they perceived older children to have higher ability and effort.

From above all the collected reviews it can be noted that age of the children influences the parental involvement in the education and training of the children.

ii) Gender

Frey *et al.* (1989) in his study "Stress and coping among parents of handicapped children: A multidimensional approach" examined that father adaptation to girls (as opposed to boys) with disabilities seems better.

Whereas Bailey *et al.* (1999) reported that gender of mental retarded children have no influence on the awareness, use of services and satisfaction of services reported by both mother and father of the children.

Contrary to above study Ricci and Hodapp (2003) revealed that the effect of gender favoring boys occurred when fathers rated the actual behaviors engaged in with their children with intellectual disability. Fathers played with and taught boys more than girls with ID.

Guralnick *et al.* (2008), Neely- Barnes *et al.* (2008) reported gender may well exert an effect on the parental involvement.

Hence, from above all studies it can be concluded that gender may or may not have influence on parental involvement.

iii) Sibling status:

Hanneman and Blacher (1998) conducted a study on "Predicting placement in families who have children with severe handicaps: A longitudinal analysis". Effects of child characteristics and home environment on caregiver's behavior intentions regarding placement were examined longitudinally for 100 families of children with mental retardation. Results indicated mothers promoted more serious consideration of placement when had larger number of siblings.

2.5.2 Factors associated with disability

i) Disability of children:

On comparison of mental retardation with psychiatric disorder, Baker *et al.* (1996) interestingly found that families of persons with mental retardation were less involved in residential treatment even though they reported perceiving more opportunities for involvement and feeling more welcome to visit than did other families of children with psychiatric disorder.

A similar result was found by Hanneman and Blacher (1998) that the more normative the child's appearance, the less likely caregivers were to seriously consider placement and to place.

Deslandes *et al.* (1999) who reported that parents of special education students were less involved in supervision of the adolescents' in learning activities at home, in participating at school as audience than parents of general education.

Bailey *et al.* (1999) reported that for mother's degree of disability did not influence the awareness and use of services but influence the satisfaction with services. Mothers of children with milder delays tended to be more satisfied with services. But for fathers, severity of delay accounted for significant variance in both awareness and use but not for satisfaction with services.

Similarly Ricci and Hodapp (2003) revealed that father in the two groups i.e. Down syndrome and Intellectual disability did not differ in how often they assume child care duties or socialization responsibilities, they were also similar in their involvement in child-rearing decisions and in their availability to spend time with their child.

Whereas Neely-Barnes *et al.* (2008) found that family members were more involved in decision making when the person had more severe intellectual disabilities and higher support needs.

Guralnick *et al.* (2008) reported that mother's provided more specific information to children who had lower communication activity levels and addressed a higher proportion of statements to provide information to children at higher cognitive and language levels, it appears that mothers adjustments are consistent with efforts to maintain a high level of interaction commensurate with their child's level of development.

From the above studies stated it can be concluded that parent's involvement decreases as the severity increases, and in comparison of general education students, special education student's parents are less involved in the education of their children.

2.5.3 Parental characteristics

i) Age of family member:

Trivette *et al.* (1995) found parent age showed no relationship with the parental involvement in early intervention of children with disabilities of younger age (birth to age 5).

However, Hayden and Heller (1997) indicated that older families use fewer services and have fewer service system expectations. Similarly Neely- Barnes *et al.* (2008) revealed that younger family members were more involved in decision making. And family members in the uninvolved group were older than involved group.

Thus from the above studies it can be noted that younger parents are more involved in using services and decision making. But parent age did not influence the involvement in the early intervention program.

ii) Gender of parents

Families who have a child with mental retardation, mothers are relatively more involved than are fathers with the direct care and management of the children in the study of Heller *et al.* (1997) on "Maternal and paternal caregiving of persons with mental retardation across the lifespan".

Roach *et al.* (1999) found that mothers were more involved than fathers in daily caregiving, child related tasks, and child socialization. Similarly, Bailey *et al.* (1999) studied on 200 Latino parents of younger children with mental retardation and developmental disabilities and found that mothers were significantly more aware of services and reported a higher use of services for the child and family than did fathers.

Mother-father differences were also reported by Floyd *et al.* (2004) more pronounced for the children with intellectual disabilities, in the form of very low rates of problem resolution exchanges by the fathers, although rates of behavior by fathers are lower than rates by mothers, both parents demonstrate similar types of behavior.

Hence, from above all studies it can be concluded that mothers are more involved in care giving activities, using services, problem resolution than the fathers of mentally challenged children.

iii) Education of parents:

Trivette *et al.* (1995) did not find relationship between parental involvement in early intervention and education of parents.

Similarly Bailey *et al.* (1999) reported no relation of education of parents with the awareness, use of services and satisfaction of services reported by parents of mentally retarded and developmental delays children.

Consistent result was also found by Lindstrom *et al.* (2007) who reported that parental education did not contribute to the employment outcome of disabled children during transition period.

By all these studies it can be concluded that parental education may not influence the parental participation to the training of disabled children.

iv) Occupation of parents:

Lindstrom *et al.* (2007) found that majority of parents are highly involved in the transition period of young adults with learning disabilities regarding postschool employment, independent living and training opportunities but it was not found linked with the occupation of parents.

2.5.4 Familial characteristics

i) Race:

Neely-Barnes *et al.* (2008) found that family involvement in decision making did not differ on the basis of race or type of family member of the person with developmental disabilities.

While, Ly (2008) explored that in comparison to European American parents, Asian American parents also provided more help in solving problems to children perceived to blow in effort.

ii) Income of the family

Trivette *et al.* (1995) showed no relationship between family income and their involvement in the early intervention program for their disabled children.

However Neely-Barnes *et al.* (2008) revealed that higher income families were more involved specifically in financial decisions but had low involvement in planning and choosing support workers and received fewer services.

iii) Socio-economic status of family

Trivette *et al.* (1995) reported that SES did not influence the parental involvement in the early intervention program for their disabled children.

Baker *et al.* (1996) also found that SES was not related to involvement of parents of mentally retarded and psychiatric disorder and dual diagnostic children.

Similarly Bailey *et al.* (1999) have not found SES as predictor variable accounted for significant variance in awareness, use of services as well satisfaction with services.

However Anderson *et al.* (1975) found that higher SES predicted greater involvement. Similarly Baker *et al.* (1993) revealed that involvement was predicted primarily by family resources (SES).

Hanneman and Blacher (1998) found that higher socio-economic standing of mother's promoted more serious consideration of placement.

During transition period regarding postschool employment and independent living, Lindstrom *et al.* (2007) observed the same that family SES was related to initial career decision making and vocational identity development.

Thus from the above studies it cannot be concluded that SES played a significant role in the extent of involvement of parents because of contradictory findings. Hence, research should be planned in this direction.

2.6 Parental expectations

Parental expectations create a “self-fulfilling prophecy” that determines the level of functioning a child ultimately achieves or child's outcome. Parents are likely to transmit the values of doing well according to their expectations. Studies on parental expectations are reviewed and presented under following subheadings

2.6.1 Parental developmental expectations of children

2.6.2 Parental educational expectations

2.6.3 Parental expectations regarding social development

2.6.4 Parental expectations regarding transitional outcomes and post school outcomes

2.6.1 Parental developmental expectations of children

Parents' expectations may be viewed as a dimension of the home environment that directly as well as indirectly influences children's behaviors and achievement.

Tucker and Fox (1995) study on “Assessment of families with mildly handicapped and non-handicapped preschoolers”. A total of 125 families of preschoolers were interviewed – 65 had children with mild handicaps and 60 had non-handicapped children. The families were interviewed and compared using the reports from the parent behavior checklist and the child behavior checklist. The results indicated that mothers of the mildly handicapped sample had significantly lower developmental expectations than did mothers of the non-handicapped sample. In addition, parents of mildly handicapped preschoolers saw them as displaying higher levels of internalizing and total behavior problems than did the parents of the other group of children.

Clare *et al.* (1998) conducted a study on “Parents developmental expectations and child characteristics: longitudinal study of children with developmental delays and their families.” This study examined the relation between child characteristics and parents developmental expectations for their children with developmental delays at ages 3, 7 and 11 by using semi structured interview, Gessel developmental schedules, Stanford Binet short form and Vineland adaptive behavior communication and daily living subscales. Results revealed that parent's developmental expectations were moderately stable over time, tending to decline as children matured. The possibility that parents actively adjust their expectations is supported by investigators who found that parents generally get more accurate in their estimations of abilities as children mature (Anton and Dindia., 1984), and hold developmental goals for children over time that are in accordance with abilities (Clare, 1998).

Gilmore *et al.* (2003) conducted a study on “Developmental expectations, personality stereotypes, and attitudes towards inclusive education: Community and teacher views of Down syndrome” on a sample of 2,053 people from the community and a group of 538 experienced teachers. The findings suggest that accurate knowledge and positive, but realistic expectations are important for enhancing the acceptance of individuals with disabilities within their schools and communities.

Parent's expectations been positively associated with future outcomes of children with disabilities reported by Ivey (2004), study on “What do parents expect? A study of likelihood and importance issues for children with Autism spectrum disorders”. Participants in the study Were 25 parents in two Midwestern states. Results indicated that parents perceived a higher degree of importance than likelihood for future outcomes. Parents expressed extreme concerns about their child's protection and safety. In addition, there were statistically significant differences between importance and likelihood for issues of safety, adult responsibility, and success in education, with importance rated higher than likelihood.

Farheen *et al.* (2008) performed a study on “Coping Strategies in Families with Mentally Retarded Children”. In the 100 families with 102 children (age<18 years) from special schools of Indore city, 98 fathers (2 had expired) and 100 mothers were interviewed by using the family assessment schedule developed for the ‘Family Interview for Stress and Coping in Mental Retardation, (FISC-MR), a semi-structured interview, developed at NIMHANS. Result identified that 35% families had largely appropriate expectations from their child while 9% had highly inappropriate expectations.

By all these studies it can be concluded that parental developmental expectations depend on the child's abilities and realistic expectations are key factor in accepting and generating skills among retarded children.

2.6.2 Parental educational expectations

Parents' appropriate expectations for their children are more likely to set a standard for their schooling and school functioning.

Dharap (1986) studied on "An investigation into the problems of the education of the mentally retarded children" and found that parents had unrealistic expectations and high hopes about their mentally retarded child, out of sheer ignorance of the mental capacity of such children. If their expectations did not get fulfilled, they started hating the child.

Masino and Hodapp (1996) studied "Parental educational expectations for adolescent with disabilities". Four types of disability conditions were included: visual impairment (n=97), hearing impairment (n=126), deafness (n=38) and orthopedic impairment (n=61). Controls without disabilities were also included although parental expectations were found to be higher for students with disabilities than for those without, students disability status (disabled Vs nondisabled) did not contribute significantly to the ability to predict parental expectations.

Linstrand *et al.* (2002) conducted a study on "Parental expectation from three different perspectives: What are they based on? Results revealed that in all studies i.e. an intervention programme, a study on information and communication technology, the parents, when they participated in projects or courses, increased their hopes for improvements for the child and increased the possibilities for activity and communication.

From above stated studies it can be concluded that few parents have low expectations and few have higher expectations from their disabled children in comparison to nondisabled children.

2.6.3 Parental expectations regarding social development

In earlier quoted study by Dharap (1986) reported that parents wanted to ensure the social security of their mentally retarded child, without burdening their other children or relatives.

Shahzadi (1992) study on perceptions of disability, expectations and aspirations about the disabled children, and the problems faced by the family and siblings of mentally retarded children residing in Karachi". Results revealed that expectations attached with the child revealed that majority of parents and siblings feel that the child cannot live independently but will need continuous supervision.

Lange (1995) conducted a study on "School choice and students with disabilities: Parent perspectives and expectations". The parents of 18 children and adolescents who transferred their child to a different school participated in an in-depth interview. In the results, the needs discussed most often by parents centered on accommodation on adaptation in their child's program. The parents also emphasized the need for help in personal/ social adjustment, the need for a warm supportive environment, and some sort of home-school communication.

Kolb and Hanley-Maxwell (2003) explored parental views about critical social skills of adolescents with high-incidence disabilities (11 parents of disabled children, six had cognitive disabilities, three had learning disabilities and two had emotional disabilities). In this study parents shared their beliefs that emotional intelligence and character play critical roles in the social and emotional development of their children. Findings indicate that although parents agree that academic performance is important, they want their children to develop skills in two major areas: (a) interpersonal and intrapersonal skills, which include skills such as communicating, listening, interpreting, and discerning; and (b) moral development, which includes areas of character, empathy, and perseverance/motivation.

Linstrand and Brodinls (2004) studied on "Information and communication technology an opportunity for parents of children with disabilities?" This study focused on how parents of children with disabilities experience 7 months of computer activities together with their children. The results indicated that parents had expectations that their children will be able to participate actively in society and have the same opportunities as other children.

These studies explain that parents expected their child to be socially adjusted independent living.

2.6.4 Parental expectations regarding transitional outcomes and post school outcomes

Preparation of young adults with disabilities for high school graduation and the world beyond has become of interest to educators, parents and other service professionals. This stage of the life course is commonly referred to as transition.

Retish (1989) conducted a study on "Parent expectations and special needs students" and found that parent expectations of special needs students regarding the transition from school to work were minimal.

McNair and Rusch (1991) also examined parent expectations of post school outcomes for individual with mild or moderate disabilities and found that majority wanted independent with job.

Baker *et al.* (1996) study on 163 children with mental retardation and psychiatric disorders and observed that involvement with the family member was predicted by parental expectations that he or she would return home and by less or no mental retardation.

Kraemer and Blacher (2001) conducted a study on "Transition for young adults with severe mental retardation: school preparation, parental expectations, and family involvement." 52 families were assessed by family data sheet, scales of independent behavior-revised, problem behavior scale (Bruininks *et al.*, 1996), transition experiences surveys, parent involvement in transition planning instrument. Results found discrepancy between parent's idealistic vocational expectations for their sons and daughters and realistic vocational expectations. Ideally parents would like to see the young adults working in independent and supported work environment.

Mutua and Dimitrov (2001) conducted a study on "Parent's expectations about future outcomes of children with mental retardation in Kenya: Differential effects of gender and severity of MR". This study defined and validated three constructs of parents expectations about future outcomes i.e. adult responsibilities, community membership, and educational attainment. Results revealed that gender differences in favor of boys were found for the parent's expectations about future adult responsibilities and educational attainment, but not about community membership. Overall, parent's expectations about future outcomes for children with severe mental retardation are much lower than those for children with mild or moderate mental retardation.

Kraemer and Blacher (2001) reported that majority of parents of severe mental retardation never or seldom thought about the young adult moving out of the home.

Grigal and Neubert (2004) studied "Parent's in-school values and post-school expectations for transition aged youth with disabilities career development for expectation individuals," on 234 parents of secondary level students with high and low incidence of disabilities. Significant difference was found between parents of students with high and low incidence disabilities in the value they placed on instructional domains and transition planning areas, their desired independent living situations, and their post-school expectations for education and employment for their son or daughter.

Lindstrom *et al.* (2007) also found similar results that across the entire sample, families held limited or vague career aspirations and had low expectations from their young adults with learning disabilities.

Ly (2008) conducted a study on "Asian American parent's attributions of children with Down syndrome: connections with child characteristics and culture." The study explored cultured differences between European American (n=26) and Asian American (n=17), parent's attributional ratings, reactions, and behaviors regarding their child's jigsaw puzzle performance. Although the children's puzzle abilities did not differ, compared with European American parents, Asian American parents judged their child as less successful and had lower expectations for future success. Asian American parents also attributed the child's performance to lower ability and lower effort. Affectively they indicated less sympathy and more anger and blame toward the child. Despite striking ethnic differences, parents in both

groups judged their older children as more successful and reported offering them less encouragement and help.

Thus it can be concluded that parents wanted their children to lead independent life while some had minimal work expectations from their disabled children, they expected from their children to take future adult responsibilities, educational outcome, and they never thinks about the young severely mentally retarded adult to move out of home.

2.7 Factors influencing parental expectations

Factors which influence parental expectations of disabled children are reviewed and presented under following headings.

2.7.1 Children's characteristics

i) Age:

Narayan *et al.* (1993) also found the positive correlation between the child's age and parent's expectation.

Clare *et al.* (1998) reported that parental expectations for their children's future functioning tended to decline. From child's age 3 to 7 and 7 to 11, approximately half of the families held identical expectations for their children's.

Ly (2008) identified that child's age influenced parents evaluation of their child's performance and expectation for future success. Parents judged performance of their older children more favorable and successful.

Contrary to the above studies Masino and Hodapp (1996) suggested that student's age had a negative effect on the parental educational expectations of students with disabilities. Expectations were lower for students with disabilities who were older than their classmates.

Thus, it can be concluded from most of the above stated studies that age of the disabled children influences the developmental and educational expectations of parents.

ii) Gender:

Narayan *et al.* (1993) reported the influence of sex of mentally retarded children on parental expectation. Mutua and Dimitrov (2001) examined the same gender influence on parental expectations, and gender differences in favor of boys were found about future adult responsibilities and educational attainment.

While Masino and Hodapp (1996) identified that gender did not contribute to the parental educational expectation of students with disabilities.

From the above stated studies it cannot be concluded that gender has influence on the expectations of parents because of contradictory result. Hence further research is needed.

2.7.2 Factors associated with disability and special education

Studies related to factors associated with disability and special education are reviewed and presented under the subheadings of disability, attendance and school performance of children.

i) Disability:

Masino and Hodapp (1996) studied that parental expectation found to be similar for students with and without disabilities. Disability status and type of disability did not contribute to the equation. Ly (2008) also reported the same result that child's overall IQ did not relate to parental attributional ratings, reactions, child's performance and success in the future.

However Narayan *et al.* (1993) reported influence of level of mental retardation on parental expectations.

Tucker and Fox (1995) identified that mothers of the mildly handicapped sample had significantly lower developmental expectation than did mothers of the non-handicapped sample.

Whitney-Thomas and Hanley-Maxwell (1996) have examined differences in the overall transition expectations of parents in high school students with and without disabilities have found that parents of children with disabilities have more concerns regarding vocational options, future residential environments, social networks and need for assistance.

Mutua and Dimitrov (2001) also identified parent's expectations about future outcomes for children with severe mental retardation was much lower than those for children with mild or moderate mental retardation.

Grigal and Neubert (2004) also found the significant difference between parents of students with high and low incidence of disabilities in the transition planning areas and post school expectations.

Thus it is clear from most of the above studies that disability status has influence on the parental expectations, however in few studies IQ shown no influence on parental expectations.

ii) Attendance:

Masino and Hodapp (1996) found that although there is a disparity in college attendance rate between students with and without disabilities, parental education expectations are similar in both the groups.

iii) School performance:

Hossler and Stage (1992) conducted a study on "Family and high school experience influences on the postsecondary educational plans for Ninth-grade students" with sample 2,497 Ninth-grade students and reported that high parental expectations are believed to lead to high academic achievement, which inturn leads to higher parental expectations in case of students of non-disabilities.

Masino and Hodapp (1996) found that the school performance had positive effects on parental education expectation from students with disabilities to the similar degree of non-disabled students.

Similar results were also reported by Patrikakou (1996) demonstrated that student perception of parental expectations had significant positive effects on school achievement for both general education and special education students.

From all the above studies it can be concluded that school performance had positive effects of parental education expectation.

2.7.3 Parental characteristics

Studies related to parental education and occupation are reviewed and presented below.

i) Parent's education:

The combination of parent's education and parental expectations may be the best predictor of student's college plans of students without disabilities reported by Hossler and stage (1992).

Narayan *et al.* (1993) examined the factors influencing the expectations of parents for their mentally retarded children. In terms of treatment for cure, education, training and general information, parental expectations are influenced by education of parents and it is positively correlated.

Similar results were found by Masino and Hodapp (1996) parent education had positive effects on parental education expectations of students with disabilities.

Hence, above study have shown the positive effects of parent's education on parental education expectations.

ii) Occupation of parents:

Narayan *et al.* (1993) suggested in terms of treatment for cure, education, training and general information, parental expectations for their mentally retarded children are also influenced by occupation of parents.

2.7.4 Familial characteristics

Reviews pertaining to familial characteristics are presented under following subheading of race and socio-economic status.

i) Race:

Compared to European American counterpart Asian American parents tend to place more emphasis on the role of effort (Stevenson *et al.*, 1990). Masino and Hodapp (1996) also found the difference in expectations with respect to race.

Ly. (2008), in comparison with European American parents, Asian American parents judged their child as less successful and had lower expectations for future success. Asian American parents also attributed the child's performance to lower ability and lower effort.

From all the above studies it can be noted that race has an influence on the parental expectations.

ii) Socio-economic status:

Narayan *et al.* (1993) reported influence of socio-economic status on the parental expectations from their mentally retarded children.

2.8 Parental attitudes towards inclusive education:

Hanline and Halvorsen (1989) suggested that parents recognized the benefits of integration and see no major disadvantages, although parents did identify areas, in his study of "Parents perceptions of the integration transition process: Overcoming artificial barriers" on 13 parents of 14 students with disabilities ranged in age from 4 to 22 years which also includes children with Down syndrome, Cerebral palsy and multiple handicaps.

Green and Shinn (1994) study on "Parent attitudes about special education and reintegration: what is the role of student outcomes?" Parent (N=21) of children receiving special education resource room services in reading were interviewed and results found that 11 of the 21 parents checked the most negative response when asked whether their child should be integrated into the regular classroom. More than 50% parents were reluctant to have their children reintegrated into general education classes for reading purpose. However slightly less than 50% had positive attitude towards reintegration.

Similarly Bennett *et al.* (1997) studied on "Putting inclusion into practice: Perspectives of teachers and parents". Sample size consisted of 84 teachers and 48 parents had a total of 60 children with disabilities, majority of them were cognitive impaired. Separate surveys were developed named as Parent survey on Inclusion (PSI) and Teacher survey on Inclusion (TSI) for both parents and teachers. Parents reported that positive attitudes toward persons with disabilities were essential to successful inclusion and felt strongly about the benefits of inclusion for their child while teachers focused on the need for supports and resources.

A similar study was conducted by Palmer (1998) on "Parents of children with significant cognitive disabilities" and identified that parents were more positive attitude regarding the impact of inclusion on mutual social benefits acceptance, and treatment of their child and more apprehensive regarding the impact of inclusion on the quality of educational services their child receives.

Tang *et al.* (2008) conducted a study on "Cognitive Outcome of Children with Developmental Delay in Hong Kong". A total of 493 children were included in the study. At the initial diagnosis, 60.4% (298) of children were diagnosed to have borderline developmental delay, while 39.6% (195) children were found to have significant developmental delay reaching mental retardation (MR) level. Half (49.0%) of the parents with children of limited IQ declined remedial service in mainstream schools; while around 40.0% (37.9%) of the parents with children of MR insisted their children to be integrated into normal schools.

From all the above studies, it can be noted that majority of parents have positive attitude while very few have negative attitude regarding the inclusive education.

2.9 Parental satisfaction with school services:

Green and Shinn (1994) reported that almost uniformly, all 21 parents reported a high degree of satisfaction with the services their children received from special education. Bailey *et al.* (1999) reported that parents were moderately satisfied with services received from the school.

A similar study conducted by Alam *et al.* (2005) on "Behavior of parents towards physically handicapped children" on 50 physically handicapped children, out of which 14 per cent were mental retardation. Results revealed that half of the respondents were satisfied with the treatment of their handicapped child provided by the institutes.

Thus it can be concluded from all above studies that parents of disabled children are satisfied with the education, services offered by the special school.

3. MATERIAL AND METHODS

The present study was undertaken to know the parental involvement and expectations in promoting social and personal skills of mentally challenged children attending special school in Hubli and Dharwad city of Karnataka during the year 2008-09.

The procedure followed to conduct the research is described under the following sub-headings:

- 3.1 Research design
- 3.2 Population and sample
- 3.3 Research tools used for the study
- 3.4 Variables selected and quantification
- 3.5 Data collection procedures
- 3.6 Statistical analysis
- 3.7 Operational definitions
- 3.8 Hypothesis set for the study

3.1 Research design

A correlation research design was employed as the study aimed to know the effect of parental involvement and parental expectations on the social and personal skills of mentally challenged children.

3.2 Population and Sample

The population of the study consisted of the children attending the special school that offers educational program for mentally challenged children in Hubli and Dharwad city. There were totally 9 special education schools offering education program for mentally challenged children in Hubli and Dharwad city. Among these 33 per cent of the total schools (3 in no.) were selected on the basis of popularity of the schools and strength of the children. Two from Hubli named USHAS school for Exceptional children and Rotary school for slow learner and one from Dharwad city named Mamta school were selected. The total strength of children from these three schools was 160. Out of this, 50 per cent (80) children in the age range of 5-16 years having literate parents formed the sample. Some parents did not return the performa and some were deleted due to incomplete information. The final sample size was 53. (Fig.1).

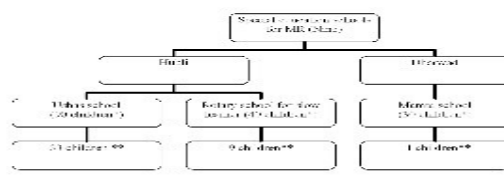


Fig.1. Flow chart depicting sample selection for the study

Fig.1. Flow chart depicting sample selection for the study

3.3 Research tools used for the study

The tools employed for the study are enumerated below and described later.

- 1) General information schedule
- 2) Behavior Assessment Scale for Indian Children with Mental Retardation (BASIC-MR) by Peshwaria and Venkatesan, NIMH (1992).
- 3) Parental involvement - self structured schedule
- 4) Parental expectation – self structured schedule
- 5) Socio-economic status tool {a combination of Aoran et al (1969) & Venkatramiah (1983)}

Description of the tools

- 1) General information schedule

General information schedule consisted items to collect information about the children regarding age, gender, family type, caste, religion, ordinal position, education and occupation of parents, family income, degree of disability, associated presence or absence of disability, age at admission to special school, duration of education and regularity in attending the school (Appendix I).

- 2) Behavior Assessment Scales for Indian Children with Mental Retardation (BASIC-MR)

BASIC-MR developed by Peshawaria & Venkatesan NIMH (1992), was used to assess the social and personal skills of the children. The scale entails detailed assessment of the skill behaviors and problem behaviors of the children in age range 3 to 16 years. The scale consisted of two parts (Appendix II). Part-A consisted 280 items having 7 domains viz. motor, activities of daily living, language, reading-writing, number-time, domestic-social and prevocational money and in part-B, there are 75 items having 10 domains of undesirable behaviors. Out of this only 160 items were selected to assess social and personal skills. The responses for each item anchored with a score of 0 to 5 with: independent-5, verbal hints-4, verbal instructions-3, physical help-2, totally dependent-1 and not applicable-0. The total number of abilities in different areas yields the total ability of the children. The maximum attainable score is 800 & minimum score is 0. Children were classified into three categories based on their ability in performing the tasks as rated by their class teachers.

Classification is shown below:

Category	Social and personal skills of children		
	Social skills Score	Personal skills Score	Total Score
Low	0-66	0-200	0-266
Moderate	67-133	201-400	267-533
High	134-200	401-600	534-800

The reliability of the scale established by the author through the inter-rater reliability for the part A on overall scores was 0.835 shows a high degree of positive correlations between two raters independent assessment. The reliability of the scale with selected items on pretesting by the researcher on a sample of 10 children assessed through split half method was found to be 0.99.

- 3) Parental involvement schedule:

It is a self structured tool having two parts. Part A consisted of 73 items which pertains to social and personal skills of the children. There are 22 items for social skills. This comprises of social, communication and community use items, whereas personal skills consisted of 51 items which comprises of self care, home living, health and safety, self direction, pre-academics and domestic skills. Information pertaining to the acquisition of skill and involvement of parents, teachers or child's own effort is elicited. Part B consists of 11 questions which attempt to know the parents ability, skills, time to teach, willingness and

involvement in teaching the child. Both part A and part B attempts to assess the parental involvement in the training of the mentally challenged children. For every 'Yes' response a score of 2 is given and for 'No' score of 1 is assigned. So minimum score is 84 and maximum is 168. Total score in each dimension is calculated and categorized as low, moderate and high involvement. (Appendix III).

The classification is as shown below:

Category	Parental involvement		
	Social skills Score	Personal skills Score	Total Score
Low	22-29	51-67	84-112
Moderate	30-37	68-84	113-141
High	38-45	85-102	142-170

The tool was pretested on a sample of 10 children which were not included in the main study. Reliability of this tool was calculated using split-half method and it was found to be 0.97.

4) Parental expectation schedule

It is a self structured tool to know the expectation of parents regarding the development outcomes of the child. On the basis of information elicited from parental involvement schedule, their expectation of school role in the education and training of children and their participation is gathered. Parents had to indicate the activities (from the items of parental involvement schedule) what they expected their child to attain. In the acquisition of the task/skill whether they expected school or child to learn on their own or they themselves were responsible to train them. So, for every task where parents expressed their expectation a score of '2' is assigned and the tasks where parents did not express their expectation a score of '1' is given. Thus, minimum score is 73 and maximum is 146 for 73 items. Total score is calculated and they are categorized as low, moderate and high expectations. It includes an additional six statements regarding the training provided by the special school, mainstreaming, academic achievement, rehabilitation, adult role and occupation to be taken by their child in adulthood. (Appendix IV).

The classification for the expectations is as shown below:

Category	Parental expectations		
	Social skills Score	Personal skills Score	Total Score
Low	22-29	51-67	73-97
Moderate	30-37	68-84	98-121
High	38-45	85-102	122-146

5) Socio-Economic Status Scale

A combination of Aoran *et al.* (1969) and Venkatramiah (1983) was used to assess the socio-economic status of children. Educational status was assessed employing Venkatramiah scale (1983) and occupational status by Aoran *et al.* (1969). The children were grouped into the three categories of socio-economic status considering factors caste, education, occupation and family income with levels as shown below:

Category	Score
Low	2-17
Medium	18-33
High	34-49

3.4 Variables selected and quantification

As the study aimed to know the influence of characteristics of child and parental and familial factors on social and personal skills of children, parental expectations and parental involvement. The selected factors were:

- I. Children's characteristics and factors associated with disability and special education:
 - 1) Children's characteristics:
 - a) Age
 - b) Gender
 - c) Ordinal position
 - d) Sibling constellation
 - 2) Factors associated with disability:
 - a) Degree of disability
 - b) Associated or non-associated disability
 - c) No. of associated disability
 - d) Age at identification of disability
 - 3) Factors associated with special educational
 - a) Age at admission to special school
 - b) Duration of special education (no. of years of schooling)
 - c) Regularity in attending the school (regular or irregular)
 - 4) Degree of constraint: Combined effect of disability and special education
- II. Parental characteristics:
 - a) Educational status of parents
 - b) Occupational status of parents
- III. Familial characteristics:
 - a) Caste
 - b) Religion
 - c) Family type
 - d) Family size
 - e) Family income
 - f) Socio-economic status

The quantification of these selected variables are given below.

- I. Children's characteristics and factors associated with disability and special education
 - 1) Children's characteristics:
 - a) Age

The chronological age of the children in completed years at the time of investigation was considered. Children were classified into two categories based on their age:

Categories	Age in years
Younger	5-10years
Older	10-16years

- b) Gender: The children were classified as male and female.

- c) Ordinal position

Based on their ordinal position of birth, they were categorized as first born, middle born, last born. The categorization is given below:

Ordinal position-	First born
	Middle born
	Last born

- d) Sibling constellation

Based on the number of siblings, children were categorized as

- Without sibling
- With sibling- the children with sibling were categorized into
 - first born - only younger brother (Y.B)
 - only younger sister (Y.S.)
 - Middle born
 - Last born - only elder brother (E.B)
 - only elder sister (E.S)

(Note: The sample consisted of 43 children with sibling, among whom 36 were first born, only 4 were middle born and 13 were last born, so only these combinations were taken, and only 10 children were without sibling) (Appendix V).

2) Factors associated with disability:

a) Degree of disability

The children were classified into three categories based on their degree of mental retardation on the basis of parent's reports and counterchecked by the child's records maintained in the school. The categorization is given below:

Classification	Score
Mild (55-75 IQ)	1
Moderate (30-50 IQ)	2
Severe (<30 IQ)	3

b) Associated disability

The children were classified into two category based on the associated disability along with mental retardation. The categorization is given below:

Classification	Score
Mental retardation	1
Associated disability	2

c) No. of associated disability

Further children were classified into two category based on the number of associated disability as follows:

Classification	Score
No associated disability	1
One associated disability	2
Two & more associated disabilities	3

The types of associated disability based on collected data are presented in Appendix VI.

d) Age at identification of disability

Children were classified into two categories based on age at which parents identified them as disabled children. Categorization is given below:

Classification	Score
Early (<3years)	1
Late (>3years)	2

3) Factors associated with special education

a) Age at admission to special schools

Children were classified into five categories based on the age of admission of children to the special school. The categorization is as follows:

Category	Score
Very early (0-3years)	1
Early (3-6years)	2
Slightly late (6-9years)	3
Late (9-12years)	4
Extremely late (>12years)	5

b) Years of schooling

Based on the years of schooling, children were classified into four categories as shown below:

Classification	Score
<1 year	4
1-3 year	3
3.1-5 year	2
5.1 year & above	1

c) Attendance of children in school

Children were classified into two categories based on the attendance in the school. The categorization is as follows:

Classification	Score
Regular	1
Irregular	2

d) Degree of constraint

The summation of all the factors associated with disability viz. degree of disability, associated or non associated disability, no. of associated disability, age at identification of disability and special education viz. age at admission to schools, years of schooling attendance of children in school, yielded higher disadvantage named as degree of constraint which is the combined effect of factors associated with disability and special education. So, the degree of constraint is classified into following categories by considering minimum and maximum scores:

Classification	Score
Mild constraint	7-11
Moderate constraint	12-16
Severe constraint	17-21

II. Parental characteristics:

Parental characteristics such as educational, occupational status were the parameters considered as per the scale

a) Educational status of parents

Educational status of mother and father was quantified separately by using the weightage as per the scale developed by Venkataramiah (1983)

Education level	Score
Illiterate	0
Can read only/ (5 th std)	2
Can read and write well/ (7 th std)	5
Middle and high school	10
College (PUC)	12
Graduate	15
Post graduate, professional (M.B.B.S, B.E)	18
Advanced education (PhD, M.D)	20

b) Occupational status of parents

Occupational status of father and mother was quantified separately using the weightage as per the scale developed by Aaron et al (1969)

Occupation level	Score
Unemployed	0
Labourer	2
Caste occupation	5
Small business shop, cultivation	10
Business, clerks, elementary school, teachers, etc.	15
High school teacher, technicians	18
Landlord, high Government officials, professionals	20

III. Familial characteristics

The familial factors such as caste, religion, family type and size and income were considered.

a) Caste

Classification was made as per Karnataka Gazette 1994 and was quantified as follows:

Classification	Score
Forward caste	5
Backward caste	3
Scheduled caste/Tribe	1

The details of caste are provided in Appendix VII.

b) Religion

Religion was classified as follows:

Classification

Hindu

Muslim

Christian

Jain

Buddhism

c) Family type

The family was classified into two categories of family type viz..nuclear family and joint family based on composition of the family.

- i. Nuclear family: family with parents and their children.
- ii. Joint family: family with two or more couples and their children.

d) Family size

On the basis of number of family members living together, children were classified into three categories as below:

Family size	Score
Small (<4)	1
Medium (5-8)	2
Large (9 & above)	3

e) Family income

Income of the family was determined by considering monthly income. The categorization was on the basis of minimum salary according to Government of Karnataka (GOK, 2008) with Rs 11000/month as low and above Rs 1.00,000 as high income. The classification is shown below:

Income level	Score
Low (<11,000)	1
Medium (11,000-1,00,000)	2
High (>1,00,000)	3

f) Socio-economic Status

Based on SES children were grouped into the three categories considering the factors such as caste, education, occupation and family income by using socio-economic status tool with levels as shown below:

Socio-economic status	Score
Low (2-17)	1
Medium (18-33)	2
High (34-49)	3

3.5 Data collection procedures

There were 9 special schools offering education program to mentally retarded children in Hubli and Dharwad. Among these, two from Hubli and one from Dharwad were selected. The Head of the institutions were contacted and permission was taken for approaching the parents and teachers. List of the children with age range between 5-16 years was made for each of the selected schools. Out of this list, children whose parents were literate were selected randomly. Parents of the selected children were approached through the school and questionnaire technique was used due to regional language constraint.

Teachers were requested to send the questionnaire i.e. general information schedule, self structured parental involvement and parental expectation schedule to the selected parents through the children. Parents were reminded through phone calls to fill the questionnaire and return back through their children to school. Some of the questionnaires

were collected with the help of the teacher and some parents were also approached in the school when they visited the child.

BASIC-MR tool was administered to the teacher/teachers who had a long term association with the child to rate the child on social and personal skills. This scale was not administered to the parents as the scale has items more related to academic, and teachers are found more efficient.

The schedules were cross checked for complete information. In case of incomplete information pertaining to general information schools were contacted and the information was gathered through school admission register. The incomplete performas were deleted.

Children's social and personal skills assessed by BASIC-MR and parental involvement tool was corroborated. A similar trend in assessment was found between two scales with 67.92 per cent while only 11 and 21 per cent rated slightly higher or slightly lower than teacher respectively. Correlation analysis was also found to be positive and significant between the two scales with the value of 0.78 at 1 per cent level of significance.

Comparison	Frequency	Percentage
Parents rated their child's ability slightly higher than teachers	6	11.32
Parents rated their child's ability slightly lower than teachers	11	20.75
Parents rated their child's ability similar to teachers	36	67.92

3.6 Statistical Analysis

The following statistical tests were used for analyzing the data.

- Frequency and percentage were used to interpret the children's characteristics, factors associated with disability, special education, parental and familial characteristics, level of social and personal skills of mentally challenged children, levels of parental involvement and expectations and qualitative analysis.
- Chi square – non- parametric test was employed to find out the association between dependent and independent variables using the formula,

$$\chi^2 = \sum_{i=1}^r \sum_{j=1}^c \frac{(O_{ij} - e_{ij})^2}{e_{ij}}$$

χ^2 values are compared with table values for (r-1) (c-1) degrees of freedom (df)

'r' denoting the number of rows, 'c' denoting number of columns in the contingency table.

- Modified Chi-square – non-parametric test of independence was applied to determine the association between dependent and independent variables, wherever the frequencies were less than five using the formula by Lawal and Upton (1984) test of independence was applied to determine the association between dependent and independent variables using the formula.

Modified $\chi^2 = \{1 - 1/n (1-d^{-1/2})\} \times \chi^2$ d,0.05 at 5% level

Where,

χ^2 d 0.05 = Table χ^2 value at 'd' degrees of freedom for 5 per cent level of significance

n = sample size

- Karl-Pearson's product moment correlation coefficient analysis was carried out to assess the degree of relationship between age, disability and special education, social and personal skills of mentally challenged children, parental involvement and expectations, using the formula:

e)

$$r = \frac{n \sum xy - \sum x \sum y}{\sqrt{\{n \sum x^2 - (\sum x)^2\} \{n \sum y^2 - (\sum y)^2\}}}$$

Where,

r = Simple correlation coefficient

x = Independent variable

y = dependent variable

$\sum x$ = Sum of x values

$\sum y$ = Sum of y values

$\sum x^2$ = Sum of squares of x values

$\sum y^2$ = Sum of squares of y values

$\sum xy$ = Sum of squares of xy values

n = Number of pairs of observations

- f) 't' – test was used to test the difference between independent variables on the social and personal skills of children, parental involvement and expectations by using the following formula:

$$t = \frac{|\bar{X}_1 - \bar{X}_2|}{\sqrt{S^2 [1/n_1 + 1/n_2]}}$$

Where,

$$S^2 = \frac{S_1^2 (n_1 - 1) + S_2^2 (n_2 - 1)}{(n_1 + n_2 - 2)}$$

\bar{X}_1 = Mean of the first group

\bar{X}_2 = Mean of the second group

n_1 = Number of observations in the first group

n_2 = Number of observations in the second group

S_1^2 = Variance of the first group

S_2^2 = Variance of the second group

S^2 = Pooled variance of S_1 and S_2

- g) One-way (2 factor) Analysis of Variance technique was carried out to compare independent variables with the dependent variables.

Critical difference (CD) was calculated using 't' test to test the significant difference between mean effects and interactions whatever they found significant using the formula:

$$CD = \sqrt{2} \times S.E.m. \times t_e$$

Where,

S.E.m. = Standard error of mean

t_e = Table value of 't' for error degree of freedom

- h) Two-way analysis of variance (ANOVA) technique was employed to know the influence of demographical variables on social and personal skills of mentally challenged children, parental involvement and parental expectations.

- i) Step down linear regression analysis was adopted to identify the most important independent variables for the variation in social and personal skills of mentally challenged children, parental involvement and expectations using the formula:

$$Y = a + b_1X_1 + b_2X_2 + \dots + b_nX_n$$

Where,

$$b_i = \frac{\text{Covariance } (X_i Y_i)}{\text{Variance of } x_i} = \frac{n \sum X_i Y_i - (\sum X_i) (\sum Y_i)}{n \sum X_i^2 - (\sum X_i)^2}$$

$$\text{Regression } t = \frac{b_i}{\text{SE } (b_i)}$$

Where,

Y = Dependent variable

a = Constant

X₁ . . . X_n = Independent variables

b₁ . . . b_n = Regression coefficient

SE = Standard error

3.7 Operational definitions

Mental retardation

Mental retardation is defined as “significant subaverage intellectual function existing concurrently with deficits in adaptive behavior and manifested during the developmental period.”

Or

A condition of arrested or incomplete development of mind of a person which is specially characterized by sub-normality of intelligence i.e. cognitive, language, motor and social abilities. The condition was stated as per schools' records.

Degree of disability

Degree of disability is the extent of mental retardation an individual possesses which was reported by parents and cross checked by school records. The degree of disability is classified into mild, moderate and severe retardation based on IQ.

Associated disability

Associated disabilities are the syndromes, disorders or other types of disability associated with MR which worsens the condition of children which was known by parent's report and school's record.

Social skills

Social skills are the skills which enable the children to be socially adjusted. This includes social, language which was assessed by using BASIC-MR tool.

Personal skills

Personal skills can be defined as set of skills that make the child self dependent in daily living activities, academic activities, etc. This includes activities of daily living, reading-writing, number-time concepts which was assessed by using BASIC-MR tool.

Parental involvement

Parental involvement of children's activities may signal the route through which a parent's skills and motivation are transferred to children and should be positively associated with children's cognitive and other development. Involvement of parents in promoting social and personal skills of mentally challenged children was measured by using self structured parental involvement schedule and administered to father/mother or both. Schedule consisted of social activities related to social, communication and community use and personal skills viz. self care, self direction, pre-academics and domestic skills.

Parental expectations

Parental expectations are expectations from their children regarding acquisition of social and personal skills, future outcome and adult roles to be taken by their children. These were assessed by using self structured parental expectations schedule.

3.8 Hypothesis set for the study

- 1) Parental involvement and expectations has no influence on social and personal skills of mentally challenged children.
- 2) The children's characteristics such as Age, Gender, Ordinal position, Sibling constellation, factors associated with disability viz. Degree of disability, Associated handicap, No. of associated disability, age at identification of disability, special education such as Age at admission to special schools, Years of schooling, Attendance of children in school do not influence social and personal skills, parental involvement and expectations of mentally challenged children.
- 3) The parental factors such as Education and Occupation of parents do not affect the social and personal skills, parental involvement and expectations of mentally challenged children.
- 4) The familial factors viz. Caste, Religion, Type of family, Family size and Family income, socio-economic status do not influence the social and personal skills , parental involvement and expectations of mentally challenged children

4. RESULTS

The results of the study are presented under the following sub headings.

4.1 Characteristics of children

4.2 Social and personal skills of Mentally Challenged children

4.3 Parental involvement in promoting social and personal skills of children

4.4 Parental expectations regarding social and personal skills of children

4.5 Interrelations between social and personal skills of children, parental involvement and parental expectations.

4.6 Hierarchical influence of significant factors on parental involvement and social and personal skills of children

4.1. Characteristics of children

The characteristics of the children considered for the study are presented under the following sub headings.

4.1.1. Children's characteristics and Factors associated with disability and special education

4.1.2. Parental and familial characteristics of children selected for the study

4.1.1. Children's characteristics and Factors associated with disability and special education

The characteristics of the sample are presented in the Table 1. It shows that the age of children ranged from 5 to 16 years. Among the children, 56.60 per cent belonged to older group with age range of 10-16 years, whereas 43.39 per cent of children belonged to younger group with the age range of 5-10 years.

Regarding the gender of the children, 62.26 per cent were male while 37.73 per cent were female.

With respect to ordinal position of the children, 67.92 per cent were first borns, 7.55 per cent were middle borns and 24.53 per cent were last borns in the family. Moreover majority of the children had one or more siblings (81.13%) and only 18.87 per cent of the sample was without siblings in the family.

Factors related with disability such as degree of disability, associated disability, no. of associated disability and age at identification, while with special education viz. age at admission to special school, years of schooling, and attendance of children in school are presented in Table 1. Regarding the degree of disability there is approximately equal distribution of children with about 45 per cent children were in moderate category followed by 30.19 per cent children under mild category and 24.53 per cent children in severe category.

With respect to associated disability, majority (71.70%) of children had associated disability of which 50.94 per cent had one associated disability and 20.76 per cent children had more than one associated disability, while 28.30 per cent children had only mental retardation. The associated disabilities observed were Spina bifida, congenital heart disease, night blindness, speech disorder, autism, ADHD etc. (Appendix VI).

Regarding age at identification of disability nearly 4/5th (81.13%) of the sample were identified early while 1/5th of the children were late identified as disabled.

About the age at admission to special school nearly half of the children (47.17%) were admitted early to special school at age of between 3 to 6 years and only 1.88 per cent was admitted very early at age of less than 3 years. While about 32.08 per cent children had took admission slightly late (age 6-9years) followed by 18.87 per cent who had taken late admission (age 9-12 years) whereas none of them were extremely late (>12 years of age) in getting admission.

Table 1: Percentage distribution of children's characteristics and factors associated with disability and special education

N=53

Characteristics		Category	Frequency	Per cent
a. Children's characteristics	Age (years)	Younger (5-10 years)	23	43.39
		Older (10-16 years)	30	56.60
	Gender	Male	33	62.26
		Female	20	37.73
	Ordinal position	First born	36	67.92
		Middle born	4	7.55
		Last born	13	24.53
	Sibling status	Only child	10	18.87
		With sibling	43	81.13
b. Factors associated with disability	Degree of disability	Mild (51-75 IQ)	16	30.19
		Moderate (31-50 IQ)	24	45.28
		Severe (<30 IQ)	13	24.53
	Associated disability	Associated disability	38	71.70
		Only mental retardation	15	28.30
	No. of associated disability	No associated disability	15	28.30
		One disability	27	50.94
		Two and more disabilities	11	20.76
	Age at identification of disability	Early (<3 years)	43	81.13
		Late (>3years)	10	18.87
c. Factors associated with special education	Age of admission to special school	Very early (0-3 years)	1	1.88
		Early (3-6 years)	25	47.17
		Slightly late (6-9 years)	17	32.08
		Late (9-12 years)	10	18.87
		Extremely late (>12 years)	0	0.00
	Years of schooling	<1 year	11	20.75
		1-3 years	20	37.74
		3.1-5 years	12	22.64
		5.1 year and above	10	18.87
	Attendance of children in school	Irregular	6	11.32
		regular	47	88.67
d. Combined effect of disability and special education	Degree of constraint	Mild constraint	20	37.74
		Moderate constraint	33	62.26
		Severe constraint	0	0.00

Regarding the years of schooling, about 37.74 per cent of children had experience of 1 to 3 years of schooling followed by 22.64 per cent children with experience of 3.1 to 5 years, 20.75 per cent had 1 year of schooling and 18.87 per cent had maximum i.e. of 5.1 and above years of schooling.

About attendance of children in school, majority of children (88.67%) were regular in attending the school whereas 11.32 per cent were irregular.

With respect to degree of constraint, none of the children belonged to category of severe constraint. Majority of them fell under the category of moderate constraint (62.26%) followed by mild constraint (37.74%).

4.1.2 Parental and familial characteristics of children selected for study.

The parental characteristics of children viz. education, occupation is presented in Table 2. Regarding the education of father, only 4.00 per cent of the fathers had education less than middle school, 18.00 percent had middle or high school education, 26.00 per cent had upto college (PUC) education. Majority of the fathers (38.00%) were graduates and 14.00 per cent of fathers were post graduates or advanced educated. While three children were not having father. With respect to education of mother, very few (5.66%) mothers had education less than middle school. Majority (39.62%) of the children's mothers had middle and high school education, 20.75 had college education (PUC), 26.41 percent mothers were graduates and about 7.56 per cent of mothers had post graduation and advanced education.

Regarding occupation of father, only one child's father was unemployed because of cancer disease. 26.00 per cent of them were high school teacher or technician, while equal distribution of fathers (24.00%) in both small business shop or cultivation and business or clerks or elementary school teacher followed by 14.00 per cent fathers were landlord or high Government officer or professionals and 10 per cent were labourer. In case of mother's occupation, majority (88.67%) of them were housewives. About 2.00 per cent were falling in each categories of small business shop or cultivation and high school teacher or technician. While 3.77 per cent of mothers were observed in the occupation of both business or clerks or elementary school teacher and landlord or high Government officer or professionals.

Table also illustrates the familial characteristics of children selected for the study such as caste, religion, type of family, size of family, income of family and socio-economic status of family. Regarding the caste, 47.16 per cent belonged to forward caste followed by backward caste which constitutes 45.28 per cent, and very few (7.56%) were from scheduled caste. Majority of the children were Hindu (81.13%) followed by Muslim (11.32%) and minimum percentage of sample were Jain (7.56%). None of them were Christian and Buddhist. The details of caste are given in Appendix VII.

Regarding the type of family, 64.15 per cent children were from nuclear families and 35.84 per cent were from joint families. More than half of the sample (56.60%) belonged to small family followed by medium family (39.62%) and very few children fell under the category of large family (3.77%).

About the income of the family, 60.37 per cent of children belonged to the category of low income and around 39.62 per cent belonged to medium category while, no child belonged to high income category. Whereas majority of children (50.94%) fell under the high socio-economic status families category followed by 39.62 and 9.43 per cent belonged to medium and low category respectively.

4.2 Social and personal skills of Mentally Challenged children

The results related to social and personal skills of mentally challenged children are presented under following sub headings

4.2.1. Social and personal skills of mentally challenged children

4.2.2. Factors influencing social and personal skills of children

Table 2: Parental and familial characteristics of children selected for study

N=53

Characteristics	Category	Frequency	Per cent
Father education* (N=50)	Less than middle school	2	4.00
	Middle and high school	9	18.00
	College (PUC)	13	26.00
	Graduate	19	38.00
	Post graduate, professional, advanced education	7	14.00
Mother education	Less than middle school	3	5.66
	Middle and high school	21	39.62
	College (PUC)	11	20.75
	Graduate	14	26.41
	Post graduate, professional, advanced education	4	7.56
Father occupation* (N=50)	Unemployed	1	2.00
	Labourer	5	10.00
	Small business shop, cultivation	12	24.00
	Business, clerks, elementary school teacher	12	24.00
	High school teacher, technician	13	26.00
	Landlord, high Govt. officer, professionals	7	14.00
Mother occupation	Unemployed	47	88.67
	Small business shop, cultivation	1	1.88
	Business, clerks, elementary school teacher	2	3.77
	High school teacher, technician	1	1.88
	Landlord, high Govt. officer, professionals	2	3.77
Caste	Forward caste	25	47.16
	Backward caste	24	45.28
	Scheduled caste/tribe	4	7.56
Religion	Hindu	43	81.13
	Muslim	6	11.32
	Christian	0	0.00
	Jain	4	7.56
	Buddhism	0	0.00
Family type	Nuclear	34	64.15
	Joint	19	35.84
Family size	Small	30	56.60
	Medium	21	39.62
	Large	2	3.77
Family income	Low	32	60.37
	Medium	21	39.62
	High	0	0.00
Socio-economic status	Low	5	9.43
	Medium	21	39.62
	High	27	50.94

Note: * N=50, fathers of three children does not exist.

4.2.1. Social and personal skills of children of mentally challenged children

Table 3a illustrates percentage distribution of social skills of children. It shows that majority of the children (37.73%) had acquired moderate level of social skills followed by 32.08 and 30.19 per cent children who fell under high and low category respectively.

From Table 3b it is noted that majority of children (45.28%) had acquired moderate level of personal skills followed by 33.97 per cent had low and least (20.75%) children were acquired high level of personal skills.

In total social and personal skills acquired by the children are presented in the Table 3c, explains that 39.62 per cent of children fell under the moderate level of skills category which constitute majority of the sample. It is followed by 35.85 and 24.53 per cent of children had low and high level of skills respectively.

4.2.2. Factors influencing social and personal skills of children

The results of factors influencing social and personal skills of children are presented under following sub headings.

4.2.2.1 Influence of child's characteristics on social and personal skills of children

4.2.2.2 Influence of factors associated with disability and special education on social and personal skills of children

4.2.2.3 Influence of parental characteristics on social and personal skills of children

4.2.2.4 Influence of familial characteristics on social and personal skills of children

4.2.2.1 Influence of child's characteristics on social and personal skills of children

From Table 4.1 it is noted that among younger age group of children more than half (56.5%) had moderate level of social and personal skills followed by low (39.1%) and high categories (4.3%). While in older age group, majority of children (40.0%) had high level of skills followed by low (33.3%) and moderate levels (26.7%). χ^2 analysis found significant association between age and skills of children. Similarly, correlation analysis also found significant positive relation between two variables indicating that as age increases skills of children also increases. Further comparison of mean scores also proved the same trend that older children had higher social and personal skills than younger children and was found significant at five per cent level.

Regarding gender, among male children higher percentage (45.5%) belonged to moderate category of skills than low (30.3%) and high categories (24.2%). Whereas majority of female children (45.0%) had low level of skills followed by moderate (30.0%) and high levels (25.0%). Statistically it was not found significantly associated. Similarly, comparison of mean scores also revealed non-significance difference between gender with the skills of children. However mean score of male children (399.39) was reported higher than females (377.55). The mean values and results of ANOVA of skills of children among gender by age are represented in Table 4.2. The results show that children of older age (437.00) had higher skills than younger age (331.35). However the analysis revealed non-significant difference among the age group indicating no impact of age on the skills. Skills of the male children (399.39) were found to be higher than female children (377.55). But analysis showed non-significant difference among the gender on the acquisition of skills. Female children had higher difference on skills whereas male children had least difference among age group. However there existed no significant interactionary effect on skills of children indicating that the effect of gender was similar among both the age group. Hence the null hypothesis stating no influence of gender on social and personal skills of children of different age group is accepted.

With respect to ordinal position majority of the first borns (44.4%) had moderate level of skills followed by low (36.1%) and least had high skills (19.4%). Among middle borns half of the children had low skills and remaining half was equally constituted by moderate and high level of skills. About 38 per cent of last borns had acquired high skills followed by low and moderate categories having equal percentage of 30.8. However the association was not found significant. Further comparison of mean scores, results revealed that last borns had higher skills (440.23) followed by first (376.00) and middle borns (368.00). But F-test analysis

Table 3a: Percentage distribution of children by level of social skills

N=53

Category	Frequency	Per cent
Low (0-66)	16	30.19
Moderate (67-133)	20	37.73
High (134-200)	17	32.08

Table 3b: Percentage distribution of children by level of personal skills

N=53

Category	Frequency	Per cent
Low (0-200)	18	33.97
Moderate (201-400)	24	45.28
High (401-600)	11	20.75

Table 3c: Percentage distribution of children by level of social and personal skills

N=53

Category	Frequency	Per cent
Low (0-266)	19	35.85
Moderate (267-533)	21	39.62
High (534-800)	13	24.53

Table 4.1: Influence of child's characteristics on social and personal skills of children

N=53

Child's characteristics		Social and personal skills of children			Total (%)	Mean (S.D)	χ^2 ('r'-value)	t'-value/ F
		Low	Moderate	High				
Age	Younger (5-10 years)	9 (39.1)	13 (56.5)	1 (4.3)	23 (100)	331.35 (132.79)	9.797** (0.359**)	-2.362*
	Older (10-16 years)	10 (33.3)	8 (26.7)	12 (40.0)	30 (100)	437.00 (180.13)		
	Total	19 (35.8)	21 (39.6)	13 (24.5)	53 (100)	391.15 (168.37)		
Gender	Male	10 (30.3)	15 (45.5)	8 (24.2)	33 (100)	399.39 (172.83)	1.504 ^{NS}	0.454 ^{NS}
	Female	9 (45.0)	6 (30.0)	5 (25.0)	20 (100)	377.55 (164.22)		
	Total	19 (35.8)	21 (39.6)	13 (24.5)	53 (100)	391.15 (168.37)		
Ordinal position	First born	13 (36.1)	16 (44.4)	7 (19.4)	36 (100)	376.00 (162.97)	2.411 ^{NS}	0.728 ^{NS} SE-58.69
	Middle born	2 (50.0)	1 (25.0)	1 (25.0)	4 (100)	368.00 (198.49)		
	Last born	4 (30.8)	4 (30.8)	5 (38.5)	13 (100)	440.23 (190.60)		
	Total	19 (35.8)	21 (39.6)	13 (24.5)	53 (100)	391.15 (168.37)		
Sibling status	Only child	4 (40.0)	5 (50.0)	1 (10.0)	10 (100)	365.80 (167.80)	1.455 ^{NS}	-0.525 ^{NS}
	With sibling	15 (34.9)	16 (37.2)	12 (27.9)	43 (100)	397.05 (169.93)		
	Total	19 (35.8)	21 (39.6)	13 (24.5)	53 (100)	391.15 (168.37)		

* Significant at 0.05 level, ** Significant at 0.01 level

NS: Non-significant

Table 4.2: Comparison of social and personal skills of children by gender and age

N=53

Age	Male			Female			Total		
	N	Mean	S.D	N	Mean	S.D	N	Mean	S.D
Younger	16	352.69	140.04	7	282.57	107.89	23	331.35	132.79
Older	17	443.35	192.67	13	428.69	169.66	30	437.00	180.13
Total	33	399.39	172.83	20	377.55	164.22	53	391.15	168.37

ANOVA

Factors	MSS	F	S.Em.	CD
Gender	21070.099	2.337 ^{NS}	33.317	-
Age	164371.578	18.232 ^{NS}	33.50	-
Gender X Age	9015.748	0.339 ^{NS}	46.802	-

NS: Non-significant

did not found significant difference in social and personal skills of children who were born in different ordinal position in the family.

The results related to sibling status illustrates that half of the children from only child category had moderate level of skills followed by 40 per cent had low level of skills and only one belonged to high category. Among the category of children with siblings highest percentage of children (37.2%) had acquired moderate level of skills followed by low (34.9%) and high levels (27.9%). But association was not found significant between sibling status and skills of children. The comparison of mean scores also revealed non-significance difference between two. However skills of children with siblings (397.05) were reported higher than without sibling (365.80).

4.2.2.2 Influence of factors associated with disability and special education on social and personal skills of children

Results of factors associated with disability (Table 4.3) depicts that among mild category of disability, 62.5 per cent children had acquired high level of skills followed by moderate (31.3%) and low levels (6.3%). Majority of moderately retarded children (66.7%) had moderate level of skills followed by low (20.8%) and high levels (12.5%). Whereas cent per cent of severely retarded children fell under the low level of skills. χ^2 analysis also found significant association between degree of disability and skills of children at zero per cent level. Similarly ANOVA also revealed significant difference between the degree of disability with social and personal skills of children. Milder children reported higher skills with mean scores of (549.69) followed by moderate (393.92) and severe category (190.92). Table 4.4 illustrated social and personal skills of children by gender and degree of disability. The mean difference of children on acquisition of skills among different degree of disability was found to be significant at 5 per cent level. Significant differences existed among all the three categories among both male and female. The main effect of gender was found non-significant. Among mild and moderate both categories males were superior in skills than females whereas reverse trend was observed in case of severe category. No interactionary effect between gender and degree of disability was found statistically on acquisition of skills of children indicating that there was no significant difference among gender was seen among the three degree of disabilities. Thus null hypothesis stating no influence of degree of disability on skills of children among gender is accepted.

Results also showed significant association between associated disability and skills of children at one per cent level. Among children with only mental retardation, 60 per cent of them had high level of skills followed by equal percentage (20%) reported by low and moderate category. Further comparison of mean scores explained that children with only mental retardation had higher skills (483.87) than children with associated disability (354.55). 't'- test analysis also found significant difference between the two. Regarding the no. of associated disability, among the children with one associated disability, majority (48.1%) fell under the moderate level of skills followed by low (40.7%) and high level (11.1%). Among children with two or more associated disability, equal percentage of children (45.5%) had acquired low and moderate levels of skills followed by high level (9.1%). χ^2 analysis also found significant association between no. of associated disability and skills of children at 5 per cent level. However comparison of mean scores revealed significant difference between children with only mental retardation and with associated disability with the skills of children but critical difference was not observed in case of no. of associated disability categories. Thus, statistically significant difference was not found. Children with one associated disability had higher mean score than with two or more associated disability. Comparison of social and personal skills by gender and associated disability is presented in the Table 4.5. The results of the children were found non-significant indicating that children with associated disability or only mental retardation did not differ on skills. The table also illustrates non-significant difference between gender. The interactionary effect of associated disability and gender was also not significant. However female children had higher difference among the categories of only mental retardation and associated disability than male children.

Majority of children identified early (41.9%) were equally belonged to low and moderate level of skills followed by high category (16.3%). Among late identified children 60 per cent fell under the high level of skills followed by moderate (30.0%) and low level (10.0%). The significant association was also found by χ^2 analysis at five per cent level. Further 't'-test analysis also found significant difference between age at identification of disability with social

Table 4.3: Influence of factors associated with disability and special education on social and personal skills of children

N=53

Factors associated with disability and special education			Social and personal skills of children			Total (%)	Mean (S.D)	χ^2 ('r'-value)	't'- value/ F
			Low	Moderate	High				
a. Factors associated with disability	Degree of disability	Mild (51-75 IQ)	1 (6.3)	5 (31.3)	10 (62.5)	15 (100)	549.69 (124.49)	44.217***	41.925*** SE-21.04 CD-58.311
		Moderate (31-50 IQ)	5 (20.8)	16 (66.7)	3 (12.5)	24 (100)	393.92 (115.57)		
		Severe (<30 IQ)	13 (100.0)	-	-	13 (100)	190.92 (30.30)		
		Total	19 (35.8)	21 (39.6)	13 (24.5)	53 (100)	391.15 (168.37)		
	Associated disability	Only mental retardation	3 (20.0)	3 (20.0)	9 (60.0)	15 (100)	483.87 (182.77)	14.231**	2.662**
		Associated disability	16 (42.1)	18 (47.4)	4 (10.5)	38 (100)	354.55 (149.47)		
		Total	19 (35.8)	21 (39.6)	13 (24.5)	53 (100)	391.15 (168.37)		
	No. of associated disability	No associated disability	3 (20.0)	3 (20.0)	9 (60.0)	15 (100)	483.87 (182.77)	14.307**	3.784* SE-38.627 CD-107.05
		One associated disability	11 (40.7)	13 (48.1)	3 (11.1)	27 (100)	366.78 (158.38)		
		Two and more disabilities	5 (45.5)	5 (45.5)	1 (9.1)	11 (100)	324.55 (126.77)		
		Total	19 (35.8)	21 (39.6)	13 (24.5)	53 (100)	391.15 (168.37)		
	Age at identification of disability	Early (<3 years)	18 (41.9)	18 (41.9)	7 (16.3)	43 (100)	364.21 (160.52)	8.908*	-2.539*
		Late (>3years)	1 (10.0)	3 (30.0)	6 (60.0)	10 (100)	507.00 (158.69)		
		Total	19 (35.8)	21 (39.6)	13 (24.5)	53 (100)	391.15 (168.37)		
b. Factors associated with special education	Age at admission to special school	Very early (0-3 years)	-	1 (100)	-	1 (100)	301.00 -	9.418 ^{NS}	1.797 ^{NS} SE-33.002
		Early (3-6 years)	8 (32.0)	13 (52.0)	4 (16.0)	25 (100)	374.08 (145.77)		
		Slightly late (6-9 years)	9 (52.9)	4 (23.5)	4 (23.5)	17 (100)	359.00 (174.86)		
		Late (9-12years)	2 (20.0)	3 (30.0)	5 (50.0)	10 (100)	497.50 (191.17)		
		Total	19 (35.8)	21 (39.6)	13 (24.5)	53 (100)	391.15 (168.37)		
	Years of schooling	<1 year	6 (54.5)	4 (39.6)	1 (9.1)	11 (100)	297.36 (177.02)	4.297 ^{NS}	1.689 ^{NS} SE-48.66
		1-3 years	5 (25.0)	10 (50.0)	5 (25.0)	20 (100)	409.05 (136.73)		
		3.1-5 years	4 (33.3)	4 (33.3)	4 (33.3)	12 (100)	445.08 (186.19)		
		5.1 years and above	4 (40.0)	3 (30.0)	3 (30.0)	10 (100)	393.80 (178.32)		
		Total	19 (35.8)	21 (39.6)	13 (24.5)	53 (100)	391.15 (168.37)		
		Total	19 (35.8)	21 (39.6)	13 (24.5)	53 (100)	391.15 (168.37)		
	Attendance of children in school	Regular	15 (31.9)	20 (42.6)	21 (25.5)	47 (100)	400.70 (165.48)	2.863 ^{NS}	1.160 ^{NS}
		Irregular	4 (66.7)	1 (16.7)	1 (16.7)	6 (100)	316.33 (188.00)		
		Total	19 (35.8)	21 (39.6)	13 (24.5)	53 (100)	391.15 (168.37)		
c. Combined effect of disability and special education	Degree of constraint	Mild constraint	3 (15.0)	9 (45.0)	8 (40.0)	20 (100)	474.95 (151.28)	7.264* (-0.512**)	3.305**
		Moderate constraint	16 (48.5)	12 (36.4)	5 (15.2)	33 (100)	340.36 (159.47)		
		Total	19 (35.8)	21 (39.6)	13 (24.5)	53 (100)	391.15 (168.37)		

* Significant at 0.05 level, ** Significant at 0.01 level, *** Significant at 0.001 level

NS: Non-significant

Table 4.4: Comparison of social and personal skills of children by gender and degree of disability

N=53

Degree of disability	Male			Female			Total		
	N	Mean	S.D	N	Mean	S.D	N	Mean	S.D
Mild	12	565.42	79.88	4	502.50	223.92	16	549.69	124.49
Moderate	12	402.17	94.10	12	385.67	137.56	24	393.92	115.57
Severe	9	174.33	13.88	4	228.25	21.78	13	190.92	30.30
Total	33	399.39	172.83	20	377.55	164.22	53	391.15	168.37

ANOVA

Factors	MSS	F	S.Em.	CD
Gender	755.129	0.075	22.827	-
Degree of disability	320989.893	32.211*	28.056	75.756
Gender X Degree of disability	9965.344	0.885	38.894	-

* Significant at 0.05 level

and personal skills of children. Late identified children (507.00) had higher skills than early (364.21) rejecting the null hypothesis. The results of the Table 4.6 illustrate comparison of social and personal skills of children by gender and age at identification. Main effect of both factors age at identification of disability and gender was found non-significant. Late identified females scored higher (626.33) than early (333.65). Same trend was also observed in case of male children. The interactionary effect of the gender and age at identification of disability was inferred non-significant statistically indicating that the effect of gender was similar among the age at identification of disability, hence the null hypothesis is accepted.

Results of factors associated with special education also presented in the Table 4.3. Only child is being admitted to school at a very early age fell under the level of moderate skills. Among early admitted children more than half (52.0%) had moderate level of skills followed by low (32.0%) and high levels (16.0%). Majority of children from slightly late category (52.9%) belonged to low level of skills whereas equal percentage of children (23.5%) were in both moderate and high levels. Among late admitted children half of them fell under the category of high level of skills and another half were constituted by both moderate (30.0%) and low levels (20.0%). However the statistical analysis showed non-significant association between the categories of age at admission to school and skills of children. Further comparison of mean scores result revealed late admitted children had higher mean score (497.50) while least score was found in case of very early admitted children (301.00). But ANOVA revealed no significant difference.

Regarding years of schooling, majority of children (54.5%) among the category of less than one year of schooling fell under low level of skills followed by moderate (39.6%) and least 9.1 per cent children had acquired high level of skills. Half of the children who had experience of one to three years of schooling belonged to moderate level of skills and another half equally constituted by low and high level of skills. Whereas in case of 3.1 to 5 years of schooling, children were equally distributed in all the three levels of skills. Among children who had 5.1 and above years of schooling, higher percentage reported to low level (40%) followed by 30 per cent each in moderate and high level of skills. However χ^2 analysis inferred no significant association between years of schooling and skills of children. Further 'F' test analysis also found non-significant difference between the two. The children having 3.1 to 5 years of schooling had higher mean scores (445.08) and least in case of less than 1 year of schooling (177.02).

About attendance of children in school, among the regularly attending children, majority (42.6%) had acquired moderate level of skills followed by low (31.9%) and high levels (25.5 %). Whereas higher percentage of children (66.7%) who were not attending the school regularly fell under low level than 16.7 per cent in each moderate and high levels of skills. Since the statistical analysis showed non-significance, it is concluded that there was no association between distribution of children by levels of skills and attendance of children in school. Further comparison of mean scores revealed that regularly attending children had higher social and personal skills (400.70) than irregular (316.33). But, significant difference was not found.

In case of combined effect of disability and special education (degree of constraint), it is noted that majority of children with mild constraint (45%) had acquired moderate level of skills followed by high (40%) and only 15 per cent had low level of skills. Among children with moderate constraint, higher percentage of children (48.5%) had acquired low level of skills followed by 36.4 per cent had acquired moderate level of skills and least 15.2 per cent children fell under high category. χ^2 analysis also found significant association between distribution of children by degree of constraint and levels of skills of children at five per cent level. Similarly result of 't' -test analysis was found significant difference between two indicating that the children with mild constraint had higher skills (474.95) than moderate constraint (340.36). Table 4.7 predicts comparison of social and personal skills of children by gender and degree of constraint. Analysis showed non-significant difference by degree of constraint with the acquisition of skills. The main effect of gender was also found to be non-significant, which illustrated no difference among gender. Female children had lower difference between mild and moderate level of constraint than males. With mild constraint females found to be better skills. Same trend was observed in case of males. However the interactionary effect of gender and degree of constraint was found non-significant indicating that the trend of difference between degrees of constraint of both gender are similar. Hence

Table 4.5: Comparison of social and personal skills of children by gender and associated disability

N=53

Associated disability	Male			Female			Total		
	N	Mean	S.D	N	Mean	S.D	N	Mean	S.D
Only mental retardation	9	460.67	207.48	6	518.67	149.13	15	483.87	182.77
Associated disability	24	376.42	156.73	14	317.07	133.16	38	354.55	149.47
Total	33	399.39	172.83	20	377.55	164.22	53	391.15	168.37

ANOVA

Factors	MSS	F	S.Em.	CD
Gender	4.630	0.000 ^{NS}	35.107	-
Associated disability	209038.478	5.934 ^{NS}	34.488	-
Gender X Associated disability	35228.589	1.380 ^{NS}	48.455	-

NS: Non-significant

Table 4.6: Comparison of social and personal skills of children by gender and age at identification of disability

N=53

Age at identification of disability	Male			Female			Total		
	N	Mean	S.D	N	Mean	S.D	N	Mean	S.D
Early	26	384.19	175.39	17	333.65	133.90	43	364.21	160.52
Late	7	455.86	162.54	3	626.33	59.60	10	507.00	158.69
Total	33	399.39	172.83	20	377.55	164.22	53	391.15	168.37

ANOVA

Factors	MSS	F	S.Em.	CD
Gender	25081.158	0.294 ^{NS}	83.051	-
Age at identification of disability	231486.299	2.718 ^{NS}	39.55	-
Gender X Age at identification of disability	85183.191	3.417 ^{NS}	55.022	-

NS: Non-significant

the null hypothesis stating no influence of degree of constraint on social and personal skills of children of both gender is accepted.

4.2.2.3 Influence of parental characteristics on social and personal skills of children

The parental characteristics influencing the skills of children are represented in Table 4.8. Only one child from each of the categories of father's education viz. illiterate, advance education and can read only had acquired moderate level of skill in first two category and low skills in last one. Children of middle or high school educated fathers were equally distributed in all the three levels of skills. Among children of college educated fathers, majority of them belonged to moderate skills category (53.8%) followed by low (30.8%) and high categories (15.4%). While 42.1 per cent of children of graduated fathers had low level of skills followed by high (31.6%) and moderate skills (26.3%). Half of the children of post graduate or professional fathers had acquired moderate level of skills and remaining half were constituted by low (33.3%) and high categories (16.7%). However the association was not found significant. Further comparison of mean scores revealed that child of illiterate father had higher mean scores (449.00) and least score (219.00) was reported by children of father who could read only. But F test analysis was found non-significance.

Regarding mother's education, only one child of each illiterate and advance educated mother had acquired high and moderate level of skills respectively. Among the category of mother who could read only, one child each had acquired moderate and high skills. Among the middle or high school educated mothers 42.9 per cent children had acquired low level of skills followed by equal percentage (28.6%) in both moderate and high level of skills. Among the college passed mothers more than half (54.5%) of children fell under the category of moderate followed by low (27.3%) and high level of skills (18.2%). In case of post graduate or professional educated mothers three children were equally distributed in all the three levels of skills. However the statistical analysis found non-significant association. Further F test analysis also found non-significant difference between the mother's education and skills of children. However, comparison of mean scores showed higher skills (543.00) acquired by the child of illiterate mother followed by could read only category (493.50) and least score was exhibited by advance educated mother (267.00).

With respect to father's occupation, only one child from unemployed father's category had acquired moderate level of skills. Among children whose fathers were labourer, majority (40%) belonged to each low and moderate category followed by 20 per cent children had high level of skills. Among category of small business shop or cultivation, half of the children had low level of skills and another half was equally reported by moderate and high categories. Among fathers who were business man or clerks or elementary school teacher, 41.7 per cent fell under the category of high level of skills followed by moderate (33.3%) and low levels (25.0%). More than half (53.8%) of the children whose fathers were high school teacher or technicians had acquired low level of skills followed by moderate (30.8%) and high levels of skills (15.4%). Among the landlord or high Government officials or professionals fathers none of the children belonged to low category while majority of children (85.7%) had moderate followed by high skills (14.3%). Statistical analysis did not found any association between father's occupation and skills of children. Further comparison of mean scores revealed that child of unemployed father had higher skills (533.00) and least score (329.25) was exhibited by children of father who had small business shop or cultivation. The difference was not found significant statistically.

Regarding mother's occupation, 38.3 per cent children of unemployed mother had acquired skills in each low and moderate categories followed by high category (23.4%). Only one child from both the categories viz. small business shop or cultivation and high school teacher or technicians had acquired moderate level of skills. Whereas among the category of business class mother or clerks or elementary school teacher one child had fell under low skills category and another one under high category. While in the category of landlord or high Government officials or professionals mothers, one child belonged to moderate and another one to high category. However the statistical analysis showed no significant association between the levels of social and personal skills of children and mother's occupation. Further comparison of mean scores, the result revealed that children of high school teacher mother had higher level of skills (501.00) and least score was shown by the category of unemployed mothers (382.45). ANOVA did not found any significant difference between the two, thus accepting the null hypothesis.

Table 4.7 Comparison of social and personal skills of children by gender and degree of constraint

N=53

Degree of constraint	Male			Female			Total		
	N	Mean	S.D	N	Mean	S.D	N	Mean	S.D
Mild constraint	13	498.92	160.78	7	430.43	131.18	20	474.95	151.28
Moderate constraint	20	334.70	150.99	13	349.08	177.73	33	340.36	159.47
Total	33	399.39	172.83	20	377.55	164.22	53	391.15	168.37

ANOVA

Factors	MSS	F	S.Em.	CD
Gender	8447.317	0.426 ^{NS}	32.623	-
Degree of constraint	173943.964	8.781 ^{NS}	32.623	-
Gender X Degree of constraint	19808.54	0.792 ^{NS}	45.718	-

NS: Non-significant

Table 4.8: Influence of parental characteristics on social and personal skills of children

Parental characteristics		Social and personal skills of children			Total (%)	Mean (S.D)	χ^2	F
		Low	Moderate	High				
Father's education (N=50)	Illiterate	-	1 (100)	-	1 (100)	449.00 -	8.183 ^{NS}	0.331 ^{NS} SE-30.9
	Can read only	1 (100)	-	-	1 (100)	219.00 -		
	Middle & high school	3 (33.3)	3 (33.3)	3 (33.3)	9 (100)	417.33 (192.31)		
	College (PUC)	4 (30.8)	7 (53.8)	2 (15.4)	13 (100)	367.38 (155.30)		
	Graduate	8 (42.1)	5 (26.3)	6 (31.6)	19 (100)	396.37 (186.48)		
	Post graduate & professional	2 (33.3)	3 (50.0)	1 (16.7)	6 (100)	396.67 (162.53)		
	Advanced education	-	1 (100)	-	1 (100)	267.00 -		
	Total	18 (36.0)	20 (40.0)	12 (24.0)	50 (100)			
Mother's education (N=53)	Illiterate	-	-	1 (100)	1 (100)	543.00 -	8.958 ^{NS}	0.414 ^{NS} SE-43.067
	Can read only	-	1 (50.0)	1 (50.0)	2 (100)	493.50 (62.93)		
	Middle & high school	9 (42.9)	6 (28.6)	6 (28.6)	21 (100)	394.90 (197.90)		
	College (PUC)	3 (27.3)	6 (54.5)	2 (18.2)	11 (100)	388.36 (149.67)		
	Graduate	6 (42.9)	6 (42.9)	2 (14.3)	14 (100)	362.79 (148.76)		
	Post graduate & professional	1 (33.3)	1 (33.3)	1 (33.3)	3 (100)	430.00 (223.27)		
	Advanced education	-	1 (100)	-	1 (100)	267.00 -		
	Total	19 (35.8)	21 (39.6)	13 (24.5)	53 (100)	391.15 (168.37)		
Father's occupation (N=50)	Unemployed	-	1 (100)	-	1 (100)	533.00 -	13.268 ^{NS}	1.306 ^{NS} SE-45.798
	Labourer	2 (40.0)	2 (40.0)	1 (20.0)	5 (100)	407.40 (194.60)		
	Small business shop, cultivation	6 (50.0)	3 (25.0)	3 (25.0)	12 (100)	329.25 (172.87)		
	Business, clerks elementary school teacher	3 (25.0)	4 (33.3)	5 (41.7)	12 (100)	469.42 (154.08)		
	High school teacher, technicians	7 (53.8)	4 (30.8)	2 (15.4)	13 (100)	335.69 (184.21)		
	Landlord, high govt. officials, professionals	-	6 (85.7)	1 (14.3)	7 (100)	409.00 (111.89)		
	Total	18 (36.0)	20 (40.0)	12 (24.0)	50 (100)			
Mother's occupation (N=53)	Unemployed	18 (38.3)	18 (38.3)	11 (23.4)	47 (100)	382.45 (168.10)	5.905 ^{NS}	0.282 ^{NS} SE-79.704
	Small business shop, cultivation	-	1 (100)	-	1 (100)	459.00 -		
	Business, clerks elementary school teacher	1 (50.0)	-	1 (50.0)	2 (100)	457.00 (282.84)		
	High school teacher, technicians	-	1 (100)	-	1 (100)	501.00 -		
	Landlord, high govt. officials, professionals	-	1 (50.0)	1 (50.0)	2 (100)	441.00 (246.07)		
	Total	19 (35.8)	21 (39.6)	13 (24.5)	53 (100)	391.15 (168.37)		

NS: Non-significant

4.2.2.4 Influence of familial characteristics on social and personal skills of children

The result of the Table 4.9 illustrates that among the forward caste category 40 per cent children had acquired moderate level of skills followed by low (32%) and high categories (28%). Majority of the children (41.7%) from backward caste had acquired low level of skills followed by moderate (33.3%) and high level of skills (25.0%). Among scheduled caste/Tribe, 3/4th children fell under the category of moderate and remaining 1/4th to low category while none of them belonged to high category. But statistical analysis was found non-significant association. Further comparison of mean scores also found non-significant difference between different castes and skills of children. Hence skills of the children from forward caste were higher (395.16) than backward (390.79) and scheduled caste/Tribe (368.25).

Regarding religion, 39.5 per cent children from Hindu category had low level of skills, 37.2 per cent had moderate and 23.3 per cent had high level of skills. Among Muslim half of children had acquired moderate level of skills followed by high (33.3%) and low categories (16.7%). Half of the children from Jain religion had moderate level of skills and another half is equally distributed in low and high categories. However χ^2 analysis revealed no significant association between the religion and skills of children.

About family type majority (44.1%) of children from nuclear families had acquired moderate level of skills followed by low (32.4%) and high categories (23.5%). Among joint families 42.1 per cent children had acquired low, 31.6 per cent moderate and 26.3 per cent had high level of skills. Since the statistical analysis showed non-significance, it is concluded that there was no association between distribution of children by levels of skills and type of family. The comparison of mean scores revealed that children from nuclear families had higher skills (392.79) than from joint families (388.21) but found non-significance.

With regards to family size, majority of children (43.3%) from small family had acquired moderate level of skills followed by low (33.3%) and high levels (23.3%). Same trend was also observed among children from medium sized families. Whereas both children from large families fell under the category of low skills. However, statistically result was found non-significant association.

Regarding family income, among low family income group, 40.6 per cent children had acquired low level skills followed by moderate (31.10%) and high categories (28.1%). whereas more than half (52.4%) of children from medium income families belonged to moderate category followed by low (28.6%) and high categories (19.00%). χ^2 analysis did not found association between family income and skills of children. Further comparison of mean scores found that children from low income families had acquired higher skills (393.22) than medium income group (388.00). But statistically it was not found significant. About socio-economic status, equal percentage of children (40%) from low SES had acquired both moderate and high levels of skills followed by low level (20%). Among medium category of SES majority (42.9%) of children had acquired low level of skills followed by moderate (33.3%) and high categories (23.8%). Whereas in case of high SES majority of children (44.4%) were fell under the category of moderate level of skills followed by low (33.3%) and high categories (22.2%). Since the statistical analysis showed non-significance, it is concluded that there was no association between distribution of children by level of skills and SES. Further comparison of mean scores, result revealed that children from low SES had acquired higher skills (475.00) followed by high (387.70) and medium SES categories (375.62). Statistical analysis also found non-significance difference between two, thus accepting the null hypothesis.

4.3 Parental involvement in promoting social and personal skills of mentally challenged children

The results of parental involvement are presented under following sub headings

4.3.1 Percentage distribution by level of parental involvement

4.3.2 Qualitative analysis

4.3.3 Factors influencing parental involvement

Table 4.9: Influence of familial characteristics on social and personal skills of children

N=53

Familial characteristics		Social and personal skills of children			Total (%)	Mean (S.D)	χ^2	t'-value/ F
		Low	Moderate	High				
Caste	Forward caste	8 (32.0)	10 (40.0)	7 (28.0)	25 (100)	395.16 (158.52)	3.071 ^{NS}	0.043 ^{NS} SE- 43.61
	Backward caste	10 (41.7)	8 (33.3)	6 (25.0)	24 (100)	390.79 (189.36)		
	Scheduled caste/tribe	1 (25.0)	3 (75.0)	-	4 (100)	368.25 (120.94)		
	Total	19 (35.8)	21 (39.6)	13 (24.5)	53 (100)	391.15 (168.37)		
Religion	Hindu	17 (39.5)	16 (37.2)	10 (23.3)	43 (100)	385.77 (166.59)	1.464 ^{NS}	0.538 ^{NS} SE- 62.59
	Muslim	1 (16.7)	3 (50.0)	2 (33.3)	6 (100)	454.67 (199.44)		
	Jain	1 (25.0)	2 (50.0)	1 (25.0)	4 (100)	353.75 (161.92)		
	Total	19 (35.8)	21 (39.6)	13 (24.5)	53 (100)	391.15 (168.37)		
Family type	Nuclear	11 (32.4)	15 (44.1)	8 (23.5)	34 (100)	392.79 (156.95)	0.846 ^{NS}	0.094 ^{NS}
	Joint	8 (42.1)	6 (31.6)	5 (26.3)	19 (100)	388.21 (191.64)		
	Total	19 (35.8)	21 (39.6)	13 (24.5)	53 (100)	391.15 (168.37)		
Family size	Small	10 (33.3)	13 (43.3)	7 (23.3)	30 (100)	396.33 (158.31)	3.943 ^{NS}	1.564 ^{NS} SE- 30.01
	Medium	7 (33.3)	8 (38.1)	6 (28.6)	21 (100)	403.14 (181.62)		
	Large	2 (100)	-	-	2 (100)	187.50 (30.41)		
	Total	19 (35.8)	21 (39.6)	13 (24.5)	53 (100)	391.15 (168.37)		
Family income	Low	13 (40.6)	10 (31.1)	9 (28.1)	32 (100)	393.22 (173.28)	2.369 ^{NS}	0.109 ^{NS}
	Medium	6 (28.6)	11 (52.4)	4 (19.0)	21 (100)	388.00 (164.78)		
	Total	19 (35.8)	21 (39.6)	13 (24.5)	53 (100)	391.15 (168.37)		
Socio-economic status	Low	1 (20.0)	2 (40.0)	2 (40.0)	5 (100)	475.00 (176.77)	1.605 ^{NS}	0.707 ^{NS} SE- 49.57
	Medium	9 (42.9)	7 (33.3)	5 (23.8)	21 (100)	375.62 (174.54)		
	High	9 (33.3)	12 (44.4)	6 (22.2)	27 (100)	387.70 (164.01)		
	Total	19 (35.8)	21 (39.6)	13 (24.5)	53 (100)	391.15 (168.37)		

NS: Non-significant

4.3.1 Percentage distribution by level of parental involvement

Parental involvement in promoting social skills of children is presented in Table 5a. Majority of the parents (88.68%) had expressed low involvement followed by 11.32 per cent who had moderate level of involvement while none of the parents had high involvement in promoting the social skills.

It is noted by the Table 5b that most of the parents approximately 2/3rd (67.92%) had low involvement and about 1/3rd parents had moderate involvement which constitutes about 32 per cent of the sample. However none of them had high involvement in enhancing the personal skills of children.

Table 5c presents the parental involvement in developing social and personal skills of children. None of the parents had high involvement whereas 28.30 per cent had moderate while majority of the parents (71.70%) expressed low involvement in promoting social and personal skills of children.

4.3.2 Qualitative analysis

Qualitative analysis in promoting social and personal skills are described under the following sub headings

4.3.2.1 Parents with low involvement

4.3.2.2 Parents with high involvement

4.3.2.3 Schools with low involvement

4.3.2.4 Schools with high involvement

4.3.2.5 Parents and schools together with low involvement

4.3.2.6 Parents and schools jointly with high involvement

4.3.2.1 Qualitative analysis of parents with low involvement

Table 6.1a illustrates a low involvement of parents regarding social skills, like in acquisition of social tasks such as showing sympathy for others, when they are sad or upset (3.8%), apologizing if he or she hurts the feelings of others (7.5%), greeting other children (9.4%) etc. None of the parents were involved in promoting communication tasks like discussing a topic for more than 3 minutes, ending conversations appropriately and very few were in tasks viz. refrains (controls himself) from interrupting others when they are talking (1.9%), asking questions (7.5%) etc.

Similarly with respect to personal skills also, parents were less involved in pre-academic activities such as telling what day comes before another (0%), reading and obeying common signs (1.9%), in writing his/her first and last name (3.8%) etc. In health and safety like taking cares of his/her minor injuries (3.8%), and in case of home living like assisting adults in preparing meals/snacks (9.4%) etc. (Appendix VIII).

4.3.2.2 Qualitative analysis of parents with high involvement

Results of Table 6.1b show the qualitative analysis of parents with high involvement. In social skills, parents were highly involved in enhancing social activities like responding appropriately when introducing to others (17%) and in community use items viz. recognizing and naming buildings (26.4%), crossing the road carefully (18.9%), making a small purchase at a food store (17%) etc.

Regarding personal skills, highly involved tasks were in the area of self care activities viz. brushing teeth (47.2%), mixing rice and dhal and serving himself (37.7%), dressing himself/herself (32.1%) etc. In home living viz. putting own dirty glass or plate in sink (49.1%), placing dirty clothes in the proper place (43.4%), in health and safety tasks like carrying breakable objects safely and carefully (32.1%), avoiding touching or playing with dangerous items (30.2%) etc. (Appendix VIII).

4.3.2.3 Qualitative analysis of schools with low involvement

Table 6.2a presents the social skills where school had no involvement viz. in training of community use tasks like Making a small purchase at a food store, whereas less in case of

Table 5a: Percentage distribution by level of parental involvement in promoting social skills

N=53

Category	Frequency	Per cent
Low (22-29)	47	88.68
Moderate (30-37)	6	11.32
High (38-45)	0	0.00

Table 5b: Percentage distribution by level of parental involvement in promoting personal skills

N=53

Category	Frequency	Per cent
Low (51-67)	36	67.92
Moderate (68-84)	17	32.08
High (85-102)	0	0.00

Table 5c: Percentage distribution by level of parental involvement in promoting social and personal skills

N=53

Category	Frequency	Per cent
Low (84-112)	38	71.70
Moderate (113-141)	15	28.30
High (142-170)	0	0.00

Table 6.1a: Qualitative analysis of parents with low involvement in promoting social and personal skills of children

Sl. No.	Tasks	n (%)
	Social skills	
1.	Discusses a topic for more than 3 minutes	0 (0)
2.	Ends conversations appropriately	0 (0)
3.	Refrains (controls himself) from interrupting others when they are talking	1 (1.9)
4.	Shows sympathy for others when they are sad or upset	2 (3.8)
5.	Apologizes if he or she hurts the feelings of others	4 (7.5)
6.	Asks question (e.g., will you play with me)	4 (7.5)
7.	Seeks friendship with others in his/her group	4 (7.5)
8.	Greets other children	5 (9.4)
	Personal skills	
1.	Tells what day comes before another	0 (0)
2.	Reads and obeys common signs (e.g., Do not Enter, Exit, or Stop)	1 (1.9)
3.	Cares for his/her minor injuries	2 (3.8)
4.	Writes his/her first and last name	2 (3.8)
5.	Writes at least two letters in own name	3 (5.7)
6.	Assists adults with preparing meals/snacks	5 (9.4)
7.	Counts from 1 to 20	6 (11.3)
8.	Writes numbers 1 to 10	6 (11.3)

Table 6.1b: Qualitative analysis of parents with high involvement in promoting social and personal skills of children

Sl. No.	Tasks	n (%)
	Social skills	
1.	Recognizes and names buildings (e.g., hospital)	14 (26.4)
2.	Looks both ways before crossing the road	10 (18.9)
3.	Makes a small purchase at a food store	9 (17.0)
4.	Responds appropriately when introduced to others	9 (17.0)
	Personal skills	
1.	Puts own dirty glass or plate in sink	26 (49.1)
2.	Brushes teeth	25 (47.2)
3.	Places dirty clothes in the proper place	23 (43.4)
4.	Mixes rice and dhal and serves himself	20 (37.7)
5.	Carries breakable objects safely and carefully	17 (32.1)
6.	Dresses himself/herself	17 (32.1)
7.	Avoids touching or playing with dangerous item (e.g., knife)	16 (30.2)
8.	Follows an adults directions to "stop" when in danger	15 (28.3)
9.	Sits on the toilet without being held	14 (26.4)
10.	Disposes of own leftover food	13 (24.5)
11.	Feeds himself	11 (20.8)
12.	Uses bathroom without help	11 (20.8)
13.	Stays within sight of parents or other familiar adults in a public place without wandering off	11 (20.8)

training in communication skills such as using past tense to talk about prior events (0%), ending conversations appropriately (1.9%) etc. and in social activities like refrains from saying something that might embarrass or hurt (0%), discussing a topic for more than 3 minutes (5.7%) etc.

With respect to personal skills, schools had low involvement in promoting health and safety tasks like avoiding touching or playing with dangerous items (0%), carrying breakable objects safely and carefully (1.9%) etc. in self care tasks viz. putting shoes and laces (1.9%), mixing rice and dhal and serving himself (3.8%), taking a bath without help (3.8%) etc. (Appendix VIII).

4.3.2.4 Qualitative analysis of schools with high involvement

Results of qualitative analysis of schools with high involvement are presented in the Table 6.2b. Regarding social skills, schools are highly involved in promoting the tasks of social activities such as greeting other children (17.0%), apologizing if he or she hurts the feelings of others (11.3%), in communication tasks like telling parent, or others about his/her favorite activities (11.3%), and in community use tasks such as describing the duties of workers (13.2%) etc.

Regarding personal skills, high involvement of schools were found in the area of pre-academics viz. stating the days of the week in order (26.4%), followed by writing at least two letters of their own name (24.5%) etc. In self care tasks e.g. feeding himself (18.9%), dressing himself/herself (11.3%) etc. in home living like keeping toys, games and other belongings neat and clean (9.4%), and following an adults directions to “stop” when in danger (9.4%) under health and safety category (Appendix VIII).

4.3.2.5 Qualitative analysis of parents and schools together with low involvement

From Table 6.3a it is noted in relation to social skills that combined involvement of parents and school were low in promoting communication tasks like asking questions (0%), ending conversations appropriately (3.8%) etc. in community use items e.g. carrying enough money to make small purchases (0%), looking both ways while crossing the road (3.8%) etc.

With respect to personal skills, parents and schools were less involvement in the area of self care like feeding himself (0%), brushing teeth (1.9%). In home living activities like assisting adults in the preparation of meals/snacks (0%), placing dirty clothes in the proper place (1.9%) etc, and no involvement was reported in case of following self direction tasks e.g. controlling temper when a parent or other adult takes a toy or object away (0%), discusses ways to solve conflicts with others (0%) (Appendix VIII).

4.3.2.6 Qualitative analysis of parents and schools jointly with high involvement

Table 6.3b depicts the qualitative analysis of high involvement of parents and schools together. High involvement showed in social activities were greeting other children (13.2%), responding appropriately when being introduced to others (9.4%), while in community use tasks 9.4 per cent involvement was observed in each mentioned tasks like describing the duties of workers, recognizing and naming the buildings etc.

Regarding personal skills, high involvement of parents and schools were in pre-academic tasks like writing his/her first and last name (11.3%), counting from 1 to 20 (11.3%) etc. Following an adult's direction to “stop” when in danger (11.3%) under health and safety domain. In self direction, 11.3 per cent reported for the task i.e. starting activity almost immediately when asked to do so and 7.5 per cent were involved in self care task of putting shoes and laces (Appendix VIII).

4.3.3 Factors influencing parental involvement

Factors influencing parental involvement in promoting social and personal skills of children are represented under following sub headings.

4.3.3.1 Influence of child's characteristics on parental involvement

4.3.3.2 Influence of factors associated with disability and special education

4.3.3.3 Influence of parent's characteristics

4.3.3.4 Influence of familial characteristics

Table 6.2a: Qualitative analysis depicting schools with low involvement in promoting social and personal skills of children

Sl. No.	Tasks	n (%)
	Social skills	
1.	Uses past tense to talk about prior events	0 (0)
2.	Refrains (controls himself) from saying something that might embarrass or hurt	0 (0)
3.	Makes a small purchase at a food store	0 (0)
4.	Ends conversations appropriately	1 (1.9)
5.	Refrains (controls himself) from interrupting others when they are talking	1 (1.9)
6.	Shows sympathy for others when they are sad or upset	3 (5.7)
7.	Discusses a topic for more than 3 minutes	3 (5.7)
	Personal skills	
1.	Avoids touching or playing with dangerous item (e.g., knife)	0 (0)
2.	Asks an adult before going near something that could be dangerous (e.g., animals)	0 (0)
3.	Discusses ways to solve conflicts with others	0 (0)
4.	Put shoes and laces	1 (1.9)
5.	Carries breakable objects safely and carefully	1 (1.9)
6.	Mixes rice and dhal and serves himself	2 (3.8)
7.	Controls temper when a parent or other adult takes a toy or object away	2 (3.8)
8.	Takes a bath without help	2 (3.8)
9.	Disposes of own leftover food	2 (3.8)

Table 6.2b: Qualitative analysis depicting schools with high involvement in promoting social and personal skills of children

Sl. No.	Tasks	n (%)
	Social skills	
1.	Greets other children	9 (17.0)
2.	Describes the duties of workers (eg., doctors help the sick)	7 (13.2)
3.	Apologizes if he or she hurts the feelings of others	6 (11.3)
4.	Tells parent , or others about his/her favorite activities	6 (11.3)
5.	Recognizes and names buildings (e.g., hospital)	5 (9.4)
6.	Seeks friendship with others in his/her group	5 (9.4)
	Personal skills	
1.	States the days of the week in order	14 (26.4)
2.	Writes at least two letters in own name	13 (24.5)
3.	Writes numbers 1 to 10	12 (22.6)
4.	Counts from 1 to 20	11 (20.8)
5.	Feeds himself	10 (18.9)
6.	Tells what day comes before another	7 (13.2)
7.	Writes his/her first and last name	7 (13.2)
8.	Sits on the toilet without being held	6 (11.3)
9.	Uses bathroom without help	6 (11.3)
10.	Dresses himself/herself	6 (11.3)
11.	Follows an adults directions to "stop" when in danger	5 (9.4)
12.	Reads and obeys common signs (e.g., Do not Enter, Exit, or Stop)	5 (9.4)
13.	Keeps toys, games and other belongings neat and clean	5 (9.4)

Table 6.3a: Qualitative analysis of joint responsibility of parents and schools with low involvement in promoting social and personal skills of children

Sl. No.	Tasks	n (%)
	Social skills	
1.	Asks question (e.g., will you play with me)	0 (0)
2.	Discusses a topic for more than 3 minutes	0 (0)
3.	States home telephone number	0 (0)
4.	Carries enough money to make small purchase	0 (0)
5.	Uses past tense to talk about prior events	2 (3.8)
6.	Looks both ways before crossing the road	2 (3.8)
7.	Ends conversations appropriately	2 (3.8)
	Personal skills	
1.	Feeds himself	0 (0)
2.	Assists adults with preparing meals/snacks	0 (0)
3.	Controls temper when a parent or other adult takes a toy or object away	0 (0)
4.	Discusses ways to solve conflicts with others	0 (0)
6.	Carries hot containers safely and carefully	0 (0)
7.	Mixes rice and dhal and serves himself	1 (1.9)
8.	Places dirty clothes in the proper place	1 (1.9)
9.	Brushes teeth	1 (1.9)
10.	Keeps toys, games and other belongings neat and clean	1 (1.9)

Table 6.3b: Qualitative analysis of joint responsibility of parents and schools with high involvement in promoting social and personal skills of children

Sl. No.	Tasks	n (%)
	Social skills	
1.	Greets other children	7 (13.2)
2.	Recognizes and names buildings (e.g., hospital)	5 (9.4)
3.	Describes the duties of workers (eg., doctors help the sick)	5 (9.4)
4.	Responds appropriately when introduced to others	5 (9.4)
5.	Apologizes if he or she hurts the feelings of others	4 (7.5)
	Personal skills	
1.	Starts activity almost immediately when told to do so.	6 (11.3)
2.	Counts from 1 to 20	6 (11.3)
3.	Follows an adults directions to "stop" when in danger	6 (11.3)
4.	Writes his/her first and last name	6 (11.3)
5.	Writes at least two letters in own name	5 (9.4)
6.	Writes numbers 1 to 10	5 (9.4)
7.	Tells what day comes before another	5 (9.4)
8.	Put shoes and laces	4 (7.5)

4.3.3.1 Influence of child's characteristics on parental involvement

Table 7.1 reveals that higher percentage of parents of younger children (82.6%) had low involvement than moderate involvement (17.4%). Same trend was also observed in case of parents of older children. Equal number of parents (19) of both younger and older children categories fell under the low level of involvement where as in moderate level higher number of parents belonged to children with older age than younger. However the association of age of children with parental involvement analyzed by χ^2 test revealed non-significant association. But age of children was positively correlated with parental involvement indicating that as age increases parental involvement also increases. Further on comparison of mean scores the results revealed that older children had higher mean score (110.53) than younger children (102.87) and it was also found to be significant at five percent level of significance.

The table also exhibits that majority of both male and female children had low parental involvement. Among moderate category, males were more in number (9) than females (6). However association between gender and parental involvement was found non-significant. The comparison of mean scores revealed that female children (108.75) had higher parental involvement than male children (106.27). But, the results of 't'-test revealed non-significant differences which is on par with the null hypothesis set for the gender. Comparison of parental involvement by gender and age is presented in Table 7.2. Results revealed that parental involvement was found non-significant among gender indicating that parents of children of both gender did not differ on involvement. The parents of female children had higher involvement than males in both the age group. The main effect of age was found significant. However the interactionary effect of gender and age was found non-significant indicating that the trend of difference between gender of children of different age group are similar. Hence, the null hypothesis stating no influence of gender of children on parental involvement of different age group is accepted.

Regarding ordinal position of children, it was found that parents of all the four middle borns, majority of first borns and last borns had low level of parental involvement. In case of moderate level higher numbers (10) were parents of first borns than last borns (5). However the statistical analysis showed no significant association between levels of parental involvement and ordinal position. Again, the comparison of mean scores revealed that last borns (110.62) had higher mean scores followed by first borns (106.69) and middle borns (100.75). But, the result of 'F' test was not found significant. Hence the null hypothesis stating no difference of ordinal position with parental involvement is accepted.

The table also illustrates that higher number of parents of children with siblings (31) than only child (7) fell under the low level of involvement. Same trend was also observed in case of moderate level. However the χ^2 analysis inferred no significant association between sibling status and parental involvement. The comparison of mean scores revealed that parents of only child had higher mean score (108.40) than with siblings (106.93). But the statistical analysis showed no significant differences, thus accepting the hypothesis set for the study.

4.3.3.2 Influence of factors associated with disability and special education on parental involvement

Table 7.3 indicates that 2/3rd of parents of children with mild degree of disability had moderate level of parental involvement whereas among moderate and severe disability, majority of children fell under low parental involvement constituting 87.50 per cent and 100 per cent respectively and χ^2 value found significant association between degree of disability and parental involvement. A significant negative correlation was found indicating that as severity of children increases parental involvement decreases. Further comparison of mean scores revealed that parents of mildly retarded children had higher mean score (116.69) than moderately (107.63) and severely retarded (94.77). 'F' value was also found significant at zero per cent level showing parents had high involvement in case of mild children than moderate and severely retarded children. Comparison of parental involvement by gender and degree of disability is presented in Table 7.4. Main effect of degree of disability was found significant at five per cent level. But the main effect of gender was found non-significant. The parents of mild and moderately retarded females had higher mean scores than males of same categories. However parents of severely retarded females (93.50) had lower mean scores than males (95.33). Parents of female children had higher difference on parental involvement

Table 7.1: Influence of child's characteristics on parental involvement

N=53

Child's characteristics		Parental involvement		Total (%)	Mean (S.D)	χ^2 ('r'-value)	't'- value/ F
		Low	Moderate				
Age	Younger (5-10 years)	19 (82.6)	4 (17.4)	23 (100)	102.87 (9.00)	2.384 (0.367**)	-2.409*
	Older (10-16 years)	19 (63.3)	11 (36.7)	30 (100)	110.53 (13.05)		
	Total	38 (71.7)	15 (28.3)	53 (100)	107.21 (12.00)		
Gender	Male	24 (72.7)	9 (27.3)	33 (100)	106.27 (10.51)	0.046 ^{NS}	-0.725 ^{NS}
	Female	14 (70.0)	6 (30.0)	20 (100)	108.75 (14.29)		
	Total	38 (71.7)	15 (28.3)	53 (100)	107.21 (12.00)		
Ordinal position	First born	26 (72.2)	10 (27.3)	36 (100)	106.69 (11.30)	2.245 ^{NS}	1.143 ^{NS} SE-3.59
	Middle born	4 (100)	-	4 (100)	100.75 (9.11)		
	Last born	8 (61.5)	5 (38.5)	13 (100)	110.62 (14.12)		
	Total	38 (71.7)	15 (28.3)	53 (100)	107.21 (12.00)		
Sibling status	Only child	7 (70.0)	3 (30.0)	10 (100)	108.40 (13.75)	0.018 ^{NS}	0.346 ^{NS}
	With sibling	31 (72.1)	12 (27.9)	43 (100)	106.93 (11.72)		
	Total	38 (71.7)	15 (28.3)	53 (100)	107.21 (12.00)		

* Significant at 0.05 level, ** Significant at 0.01 level

NS: Non-significant

Table 7.2: Comparison of parental involvement by child's gender and age

N=53

Age	Male			Female			Total		
	N	Mean	S.D	N	Mean	S.D	N	Mean	S.D
Younger	16	102.62	8.33	7	103.43	11.07	23	102.87	9.00
Older	17	109.71	11.39	13	111.62	15.38	30	110.53	13.05
Total	33	106.27	10.51	20	108.75	14.29	53	107.21	12.00

ANOVA

Factors	MSS	F	S.Em.	CD
Gender	21.579	6.018 ^{NS}	2.387	-
Age	683.377	190.586*	2.401	6.654
Gender X Age	3.586	0.026 ^{NS}	3.353	-

* Significant at 0.05 level, NS: Non-significant

Table 7.3: Influence of factors associated with disability and special education on parental involvement

N=53

Factors associated with disability and special education			Parental involvement		Total (%)	Mean (S.D)	χ^2 ('r'-value)	't'- value/ F
			Low	Moderate				
a. Factors associated with disability	Degree of disability	Mild (51-75 IQ)	4 (25.0)	12 (75.0)	16 (100)	116.69 (10.68)	25.280***	21.405*** SE-1.86 CD -5.155
		Moderate (31-50 IQ)	21 (87.5)	3 (12.5)	24 (100)	107.63 (9.77)		
		Severe (<30 IQ)	13 (100)	-	13 (100)	94.77 (3.27)		
		Total	38 (71.7)	15 (28.3)	53 (100)	107.21 (12.00)		
	Associated disability	Only mental retardation	8 (53.3)	7 (46.7)	15 (100)	113.87 (13.63)	3.477 ^{NS}	2.686**
		Associated disability	30 (78.9)	8 (21.1)	38 (100)	104.58 (10.34)		
		Total	38 (71.7)	15 (28.3)	53 (100)	107.21 (12.00)		
	No. of associated disability	No associated disability	8 (53.3)	7 (46.7)	15 (100)	113.87 (13.63)	3.540 ^{NS}	3.554* SE-3.15 CD-8.73
		One associated disability	21 (77.8)	6 (22.2)	27 (100)	104.37 (8.65)		
		Two and more disabilities	9 (81.8)	2 (18.2)	11 (100)	105.09 (14.17)		
		Total	38 (71.7)	15 (28.3)	53 (100)	107.21 (12.00)		
	Age at identification of disability	Early (<3 years)	33 (76.7)	10 (23.3)	43 (100)	105.91 (10.95)	2.860 ^{NS}	1.664 ^{NS}
		Late (>3years)	5 (50.0)	5 (50.0)	10 (100)	112.80 (15.15)		
		Total	38 (71.7)	15 (28.3)	53 (100)	107.21 (12.00)		
b. Factors associated with special education	Age at admission to special school	Very early (0-3 years)	1 (100)	-	1 (100)	95 -	3.134 ^{NS}	3.144* SE-2.193 CD-6.078
		Early (3-6 years)	19 (76.0)	6 (24.0)	25 (100)	106.32 (10.01)		
		Slightly late (6-9 years)	13 (76.5)	4 (23.5)	17 (100)	103.82 (12.97)		
		Late (9-12years)	5 (50.0)	5 (50.0)	10 (100)	116.40 (11.46)		
		Total	38 (71.7)	15 (28.3)	53 (100)	107.21 (12.00)		
	Years of schooling	<1 year	8 (72.7)	3 (27.3)	11 (100)	102.45 (13.82)	1.756 ^{NS}	1.356 ^{NS} SE-3.52
		1-3 years	16 (80.0)	4 (20.0)	20 (100)	106.55 (8.77)		
		3.1-5 years	7 (58.3)	5 (41.7)	12 (100)	112.33 (14.00)		
		5.1 years and above	7 (70.0)	3 (30.0)	10 (100)	107.60 (12.41)		
		Total	38 (71.7)	15 (28.3)	53 (100)	107.21 (12.00)		
	Attendance of children in school	Regular	34 (72.3)	13 (27.7)	47 (100)	107.09 (11.22)	0.084 ^{NS}	-0.206 ^{NS}
		Irregular	4 (66.7)	2 (33.3)	6 (100)	108.17 (18.37)		
		Total	38 (71.7)	15 (28.3)	53 (100)	107.21 (12.00)		
c. Combined effect of disability and special education	Degree of constraint	Mild constraint	11 (55.0)	9 (45.0)	20 (100)	112.05 (11.30)	4.414* (-0.403**)	2.389*
		Moderate constraint	27 (81.8)	6 (18.2)	33 (100)	104.27 (11.60)		
		Total	38 (71.7)	15 (28.3)	53 (100)	107.21 (12.00)		

* Significant at 0.05 level, ** Significant at 0.01 level, *** Significant at 0.001 level

NS: Non-significant

whereas male children had least difference among the degrees of disability. However no significant interactionary effect was revealed on parental involvement indicating that the effect of degree of disability was similar among the gender. Hence the null hypothesis stating no influence of degree of disability on parental involvement of children of both gender is accepted.

The table also depicts that parents of children with associated disability were in higher number (30) than of children with only mental retardation, fell under the category of low parental involvement while almost equal number was observed in case of moderate category. But χ^2 test revealed non-significant association. While 't'-test was found significantly different between the two. Parents of children with only mental retardation had higher mean scores (113.87) than of children with associated disability (104.58). Table 7.5 shows Comparison of parental involvement by gender and associated disability. The analysis showed no significant difference among children with only mental retardation and with associated disability. Moreover, the main effect of gender was obtained non-significant indicating that there was no impact of gender on parental involvement. There existed greater difference among parents of female children than male children. The interactionary effect of child's associated disability and gender showed no difference, indicating that the pattern of difference of parental involvement among children with only mental retardation and with associated disability was common for both the gender.

Regarding no. of associated disabilities, parents of children with one disability were higher in number (21) followed by two or more disabilities (9) and children with no associated disability (8) fell under the category of low parental involvement while number of parents decreases as no. of associated disabilities increases in case on moderate category of involvement. However statistically it was not found significantly associated. Whereas ANOVA test revealed significant difference between the two. Critical difference value (8.73) showed significant difference between parents of children with only mental retardation and both categories of associated disabilities but mean scores was not found significant between one (104.37) and two or more associated disabilities (105.09).

The table also exhibits majority of parents (76.79%) of children from early identified category had low parental involvement than 23.3 per cent fell under moderate category of involvement. Equal percentage (50%) of parents of children belonged to late identified category had low and moderate level of involvement. However, the association was not significant. The comparison of mean scores revealed that parents of late identified children had higher involvement (112.80) than early identified (105.91). But 't'-test analysis showed non-significant differences.

Table also presents influence of factors associated with special education on parental involvement. Regarding age at admission to special school, results found that cent per cent (1 in no.) of parents of children who got admission very early had low involvement. Nearly equal per cent from both slightly late and early categories and 50 per cent from late category fell under low level of parental involvement. Whereas in the moderate level of involvement higher number of parents were observed in early admitted children (6), followed by late (5) and least in slightly late category(4). But χ^2 analysis found a non-significant association. The comparison of mean scores showed that parents of late admitted children had higher mean score (116.40) followed by early (106.32), slightly late (103.82) and very early categories (95). This difference was statistically found significant. Thus rejecting the null hypothesis, stating no difference between the ages at admission to special school with parental involvement.

Comparison of parental involvement by gender and age at admission to special school is presented in Table 7.6 and it can be seen from the table, that parental involvement was found significant at zero per cent level among gender indicating that parents of children of both gender differ on involvement. Parents of female children had higher mean scores (108.75) than males (106.27). Main effect of age at admission to school was also found significant at zero per cent level. Parents of male children had higher difference on parental involvement than female children among the categories of the age at admission to special schools. However there existed no significant interactionary effect on parental involvement indicating that the effect of gender among different ages at admission was similar. Hence the null hypothesis stating no influence of gender on parental involvement of different categories of age at admission of children to special schools is accepted.

Table 7.4: Comparison of parental involvement by child's gender and degree of disability

N=53

Degree of disability	Male			Female			Total		
	N	Mean	S.D	N	Mean	S.D	N	Mean	S.D
Mild	12	115.92	8.17	4	119.00	17.78	16	116.69	10.68
Moderate	12	104.83	6.59	12	110.42	11.79	24	107.63	9.77
Severe	9	95.33	3.57	4	93.50	2.38	13	94.77	3.27
Total	33	106.27	10.51	20	108.75	14.29	53	107.21	12.00

ANOVA

Factors	MSS	F	S.Em.	CD
Gender	54.226	1.015 ^{NS}	1.937	-
Degree of disability	1537.896	29.496*	2.380	6.596
Gender X Degree of disability	52.140	0.643 ^{NS}	3.3	-

* Significant at 0.05 level, NS: Non-significant

Table 7.5: Comparison of parental involvement by child's gender and associated disability

N=53

Associated disability	Male			Female			Total		
	N	Mean	S.D	N	Mean	S.D	N	Mean	S.D
Only mental retardation	9	109.78	14.26	6	120.00	10.94	15	113.87	13.63
Associated disability	24	104.96	8.73	14	103.93	12.99	38	104.58	10.34
Total	33	106.27	10.51	20	108.75	14.29	53	107.21	12.00

ANOVA

Factors	MSS	F	S.Em.	CD
Gender	216.186	0.667 ^{NS}	2.466	-
Associated disability	1116.548	3.447 ^{NS}	2.423	-
Gender X Associated disability	323.909	2.571 ^{NS}	3.463	-

NS: Non-significant

Table 7.6: Comparison of parental involvement by child's gender and age at admission to special school

N=53

Age at admission	Male			Female			Total		
	N	Mean	S.D	N	Mean	S.D	N	Mean	S.D
Very early	1	95.0	-	-	-	-	1	95	-
Early	16	104.69	8.31	9	109.22	12.50	25	106.32	10.01
Slightly late	8	101.75	9.47	9	105.67	15.81	17	103.82	12.97
Late	8	115.37	11.19	2	120.50	16.26	10	116.40	11.46
Total	33	106.27	10.51	20	108.75	14.29	53	107.21	12.00

ANOVA

Factors	MSS	F	S.Em.	CD
Gender	178.133	7.793***	3.267	9.054
Age at admission	363.101	9.983***	5.296	14.678
Gender X Age at admission	0.967	0.007 ^{NS}	5.459	-

*** Significant at 0.001 level, NS: Non-significant

The result of Table 7.7 illustrates comparison of parental involvement by degree of disability and age at admission to special school. The main effect of age at admission to special school was non-significant. But the main effect of degree of disability was found significant. Parents of milder children scored higher (116.69) than moderate (107.63) and severe categories (94.77). The parents of mildly retarded children had higher difference between the categories of age at admission. Whereas in severe category, least difference was observed. However there existed no significant interactionary effect on parental involvement indicating that the effect of degree of disability was similar among the categories of age at admission to special school.

Results also showed that higher number of parents of children (16) who had 1 to 3 years of schooling had low involvement than had less than one year of schooling (8) and equal number (7) contributed by both categories viz. 3.1 to 5 years and 5.1 and above years of schooling. Not much difference was found in the number of parents of children with different years of schooling in the category of moderate level of parental involvement. Association between years of schooling and levels of parental involvement was found non-significant. The F-value also revealed that there was no significant difference between the two. However parents of children who had 3.1 to 5 years of schooling had higher mean score (112.33) followed by 5.1 years and above (107.60), 1 to 3 years (106.55) and least was observed where children had less than one year of schooling (102.45).

Majority of the parents of children (72.3%) who were attending school regularly had low involvement followed by the moderate category of involvement (27.7%). The result also shows a similar trend in case of parents of irregular children. However statistically it was not found significantly associated. The comparison of mean scores revealed less difference between the parents of children who were regular and irregular in attending the schools. 't'-test analysis was also found non-significant.

Regarding the combined effect of disability and special education (degree of constraint) under the category of low parental involvement a higher number of parents were seen in the category of children with moderate constraint (27) and only 11 in mild constraint. While in case of moderate level of involvement reverse trend was observed. This association was found significant by χ^2 analysis. Similarly a significant negative correlation was found indicating that as degree of constraint increases parental involvement decreases. Further, the comparison of mean scores revealed that parents of children with mild constraint had higher involvement (112.05) than moderately constraint (104.27). This difference was also found statistically significant, thus rejecting the null hypothesis.

Table 7.8 depicts Comparison of parental involvement by gender and degree of constraint. The main effect of degree of constraint was found significant but main effect of gender was not found significant, indicating no impact of gender on parental involvement. The results also showed no interactionary effect of degree of constraint and gender on parental involvement indicating similar parental involvement in both gender among children with different degree of constraint. Hence, the null hypothesis is accepted.

4.3.3.3 Influence of parental characteristics on parental involvement

From the Table 7.9 it can be seen that under the category of low parental involvement higher number of fathers were graduate (12) followed by college educated (10), middle or high school passed (7), post graduate or professionals (4) and only one from each categories viz. advanced education, can read only and illiterate. While in case of moderate involvement maximum fathers were graduates (7) followed by college passed (3) and were equally distributed in middle or high school education, post graduate or professionals (2). However this association was not found significant. The comparison of mean scores revealed that illiterate father had higher mean score (112.0) followed by middle or high school educated (108.00), and a least was observed in case of college passed fathers (104.62). ANOVA value also depicts a non-significant difference thus accepting the null hypothesis.

Regarding with mother's education, among the low involvement category higher number of mothers (14) had middle or high school education followed by graduate (10), college passed (9) and as less as two in number from post graduate or professional and one in each advanced education, can read only and illiterate categories. In the category of moderate level of involvement maximum number of mothers (7) belonged to graduate category and least i.e. only one each from post graduate or professional and can read only

Table 7.7: Comparison of parental involvement by child's degree of disability and age at admission to special school

N=53

Age at admission	Mild			Moderate			Severe			Total		
	N	Mean	S.D	N	Mean	S.D	N	Mean	S.D	N	Mean	S.D
Very early	-	-	-	1	95.00	-	-	-	-	1	95.00	-
Early	7	114.29	11.21	13	106.46	6.64	5	94.80	17.9	25	106.32	10.01
Slightly late	4	109.25	7.14	7	110.14	15.29	6	92.83	1.72	17	103.82	12.97
Late	5	126.00	5.24	3	111.00	1.73	2	100.50	3.54	10	116.40	11.46
Total	16	116.69	10.68	24	107.63	9.77	13	94.77	3.27	53	107.21	12.00

ANOVA

Factors	MSS	F	S.Em.	CD
Age at admission	199.165	2.702 ^{NS}	3.764	-
Degree of disability	1296.609	17.349**	2.444	6.773
Age at admission X Degree of disability	75.259	1.081 ^{NS}	3.560	-

** Significant at 0.01 level, NS: Non-significant

Table 7.8: Comparison of parental involvement by child's gender and degree of constraint

N=53

Degree of constraint	Male			Female			Total		
	N	Mean	S.D	N	Mean	S.D	N	Mean	S.D
Mild constraint	13	111.31	11.64	7	113.43	11.40	20	112.05	11.30
Moderate constraint	20	103.00	8.47	13	106.23	15.44	33	104.27	11.60
Total	33	106.27	10.51	20	108.75	14.29	53	107.21	12.00

ANOVA

Factors	MSS	F	S.Em.	CD
Gender	82.607	23.250 ^{NS}	2.40	-
Degree of constraint	693.447	195.169*	2.40	6.651
Gender X Degree of constraint	3.553	0.026 ^{NS}	3.363	-

* Significant at 0.05 level, NS: Non-significant

Table 7.9: Influence of parental characteristics on parental involvement

Parental characteristics		Parental involvement		Total (%)	Mean (S.D)	χ^2	F (SE)
		Low	Moderate				
Father's education (N=50)	Illiterate	1 (100)	-	1 (100)	112.00 -	2.293 ^{NS}	0.131 ^{NS} (2.131)
	Can read only	1 (100)	-	1 (100)	106.00 -		
	Middle & high school	7 (77.8)	2 (22.2)	9 (100)	108.00 (12.12)		
	College (PUC)	10 (76.9)	3 (23.1)	13 (100)	104.62 (9.12)		
	Graduate	12 (63.2)	7 (36.8)	19 (100)	107.32 (12.99)		
	Post graduate & professional	4 (66.7)	2 (33.3)	6 (100)	107.50 (13.14)		
	Advanced education	1 (100)	-	1 (100)	106.00 -		
	Total	36 (72.0)	14 (28.0)	50 (100)	106.80 (11.24)		
Mother's education (N=53)	Illiterate	1 (100)	-	1 (100)	98.0 -	2.109 ^{NS}	0.209 ^{NS} (3.019)
	Can read only	1 (50.0)	1 (50.0)	2 (100)	113.0 (1.41)		
	Middle & high school	14 (66.7)	7 (33.3)	21 (100)	107.14 (11.86)		
	College (PUC)	9 (81.8)	2 (18.2)	11 (100)	105.64 (10.72)		
	Graduate	10 (71.4)	4 (28.6)	14 (100)	108.21 (14.32)		
	Post graduate & professional	2 (66.7)	1 (33.3)	3 (100)	108.33 (18.15)		
	Advanced education	1 (100)	-	1 (100)	106.00 -		
	Total	38 (71.7)	15 (28.3)	53 (100)	107.21 (12.00)		
Father's occupation (N=50)	Unemployed	1 (100)	-	1 (100)	104.00 -	1.044 ^{NS}	1.282 ^{NS} (3.20)
	Labourer	4 (40.0)	1 (20.0)	5 (100)	109.60 (14.77)		
	Small business shop, cultivation	8 (66.7)	4 (33.3)	12 (100)	102.33 (10.65)		
	Business, clerks elementary school teacher	8 (66.7)	4 (33.3)	12 (100)	110.17 (10.61)		
	High school teacher, technicians	10 (76.9)	3 (23.1)	13 (100)	103.77 (11.52)		
	Landlord, high govt. officials, professionals	5 (71.4)	2 (28.6)	7 (100)	112.71 (8.64)		
	Total	36 (72.0)	14 (28.0)	50 (100)	106.80 (11.24)		
Mother's occupation (N=53)	Unemployed	35 (74.5)	12 (25.5)	47 (100)	106.66 (11.91)	4.034 ^{NS}	0.781 ^{NS} (4.848)
	Small business shop, cultivation	-	1 (100)	1 (100)	121.00 -		
	Business, clerks elementary school teacher	1 (50.0)	1 (50.0)	2 (100)	106.00 (15.56)		
	High school teacher, technicians	1 (100)	-	1 (100)	101.00 -		
	Landlord, high govt. officials, professionals	1 (50.0)	1 (50.0)	2 (100)	117.50 (16.26)		
	Total	38 (71.7)	15 (28.3)	53 (100)	107.21 (12.00)		

NS: Non-significant

categories. However χ^2 analysis revealed a non-significant association. The comparison of mean scores revealed that mothers who could read only had higher mean score (113.0) and illiterate mothers had least (98.0), while nearly equal mean scores was observed in rest of the mother's education categories. A non-significant difference between mother's education and parental involvement was found through F-value.

It is also perceived from the table that in all the categories of father's occupation majority of the fathers fell under low involvement category out of them higher number (10) of fathers were high school teacher or technician and only one was from unemployed category. In case of moderate level maximum numbers of fathers (4) were from small business shop or cultivation and business or clerks or elementary school teacher categories, as less as one was from labourer class. However χ^2 analysis was not found significant. The comparison of mean scores revealed that fathers who were landlord or high Government officials or professionals (112.71) had higher mean score followed by business or clerks or elementary school teacher (110.17) and least was observed by small business shop or cultivation opted fathers (102.33). ANOVA test found a non-significant difference between different level of education and parental involvement.

With respect to mother's occupation, majority of unemployed mothers (74.5%) had low involvement while 25.5 percent belonged to moderate involvement category. Mothers from each business or clerks or elementary school teacher and landlord or high Government officials or professionals were equally distributed in both low and moderate levels of involvement. Only one mother who belonged to each category of small business shop or cultivation and high school teacher or technicians fell under moderate and low levels of involvement respectively. However the association between mother's occupation and parental involvement was found non-significant. The comparison of means revealed that mothers who had small business shop or cultivation had higher mean scores (121.00) while mothers who were high school teachers had least mean scores. However mother's education level did not differ statistically with parental involvement.

4.3.3.4 Influence of familial characteristics on parental involvement

It is observed from the Table 7.10 that majority of parents from the forward caste (64%) had low involvement followed by moderate parental involvement (36%). In backward caste category 3/4th parents had low involvement and 1/4th had moderate. While, cent per cent parents from scheduled caste and scheduled tribes had low involvement. However a non-significant association was found. The comparison of mean scores revealed that forward caste families had higher mean score (108.12) followed by backward caste (106.50) and scheduled caste and scheduled tribes (105.75). Hence, parental involvement did not differ statistically with castes.

Majority of parents in all the religion were less involved, but among the category of low involvement higher number of parents were Hindu (30), while five and three parents were from Muslim and Jain religion respectively. In moderate involvement category, Hindu families were higher in number (13), whereas only one from each Muslim, and Jain were there. Though, the association was found non-significant statistically. Further comparison of mean scores revealed that Muslim families had higher mean score (108.33) followed by Hindu (107.49) and Jain (102.50). But F-value revealed a non-significant difference.

Regarding family type, among nuclear type of families majority of them (3/4th) belonged to category of low involvement and remaining 1/4th to moderate category. Whereas 2/3rd of the joint families fell under low involvement category and 1/3rd in moderate. However association was not found significant. The comparison of mean scores revealed that parents of nuclear families had slightly higher involvement (107.79) than joint families (106.16). But statistically it was not found significant differences.

The table also shows that cent per cent parents from larger families, 71.4 per cent from medium and 70.0 per cent from small size families fell under low involvement category. Remaining 30.0 per cent and 28.6 per cent from small and medium sized families respectively belonged to moderate category. Statistical analysis did not found any association between size of the families and levels of parental involvement. Further comparison of mean scores revealed that large families had lowest mean scores (93.0) and nearly equal mean scores was observed in medium (107.81) and small sized families (107.73). ANOVA value also found

Table 7.10: Influence of familial characteristics on parental involvement

N=53

Familial characteristics		Parental involvement		Total (%)	Mean (S.D)	χ^2	t'-value/ F (SE)
		Low	Moderate				
Caste	Forward caste	16 (64.0)	9 (36.0)	25 (100)	108.12 (13.27)	2.438 ^{NS}	0.139 ^{NS} (2.96)
	Backward caste	18 (75.0)	6 (25.0)	24 (100)	106.50 (11.49)		
	Scheduled caste/tribe	4 (100)	-	4 (100)	105.75 (7.76)		
	Total	38 (71.7)	15 (28.3)	53 (100)	107.21 (12.00)		
Religion	Hindu	30 (69.8)	13 (30.2)	43 (100)	107.49 (12.34)	0.501 ^{NS}	0.37 ^{NS} (4.01)
	Muslim	5 (83.3)	1 (16.7)	6 (100)	108.33 (11.09)		
	Jain	3 (75.0)	1 (25.0)	4 (100)	102.50 (11.21)		
	Total	38 (71.7)	15 (28.3)	53 (100)	107.21 (12.00)		
Family type	Nuclear	25 (73.5)	9 (26.5)	34 (100)	107.79 (12.00)	0.157 ^{NS}	0.473 ^{NS}
	Joint	13 (68.4)	6 (31.6)	19 (100)	106.16 (12.25)		
	Total	38 (71.7)	15 (28.3)	53 (100)	107.21 (12.00)		
Family size	Small	21 (70.0)	9 (30.0)	30 (100)	107.73 (12.74)	0.833 ^{NS}	1.484 ^{NS} (1.9)
	Medium	15 (71.4)	6 (28.6)	21 (100)	107.81 (10.86)		
	Large	2 (100)	-	2 (100)	93.00 (1.41)		
	Total	38 (71.7)	15 (28.3)	53 (100)	107.21 (12.00)		
Family income	Low	23 (71.9)	9 (28.1)	32 (100)	106.38 (12.90)	0.001 ^{NS}	-0.620 ^{NS}
	Medium	15 (71.4)	6 (28.6)	21 (100)	108.48 (10.67)		
	Total	38 (71.7)	15 (28.3)	53 (100)	107.21 (12.00)		
Socio-economic status	Low	4 (80.0)	1 (20.0)	5 (100)	112.60 (11.13)	0.908 ^{NS}	0.927 ^{NS} (3.33)
	Medium	15 (71.4)	6 (28.6)	21 (100)	104.95 (12.75)		
	High	19 (70.4)	8 (29.6)	27 (100)	107.96 (11.56)		
	Total	38 (71.7)	15 (28.3)	53 (100)	107.21 (12.00)		

NS: Non-significant

a non-significant difference, thus null hypothesis stating no differences among the size of the family for the parental involvement is accepted.

It is virtually noted by the table that nearly equal percentage of parents from low and medium family income group had low as well as moderate involvement. Statistically a non-significant association was observed. Further comparison of mean scores revealed a higher mean scores by medium income families (108.48) than low (106.38). But non-significant differences were found from 't'-test.

Regarding socio-economic status of families, 2/5th of the parents of low SES had low involvement whereas 1/5th had moderate involvement. Nearly equal percentage i.e. more than 70 percent of both medium and high SES categories fell under low involvement category while approximately remaining 30 percent had moderate involvement. Since the statistical analysis established non-significance, it is concluded that there was no association between SES of families and parental involvement. The comparison of mean scores revealed that low SES families had higher involvement (112.60) which was followed by high SES (107.96) and medium SES (104.95). However F-test revealed no significance difference between SES with parental involvement with acceptance of null hypothesis.

4.4 Parental expectations regarding social and personal skills of children

The results of parental expectations are presented under following sub headings

4.4.1 Percentage distribution by level of parental expectations

4.4.2 Qualitative analysis

4.4.3 Factors influencing parental expectations

4.4.1 Percentage distribution by level of parental expectations

Table 8a shows the distribution of parental expectations of children regarding social skills. It was noted that majority of the parents (94.34%) fell under the low expectations category, 5.66 per cent parents had moderate expectations and none of the parents had high expectations regarding acquisition of social skills of the children.

The distribution of parental expectations of children regarding personal skills is presented in Table 8b. It shows that most of the parents 96.23 per cent had low expectations, 3.77 per cent had moderate and none of them had high expectations regarding acquisition of personal skills of the children.

Table 8c depicts the distribution of overall parental expectations of children regarding social and personal skills. About 96.23 per cent parents had low expectations which constitute majority of the sample and very few (3.77%) had moderate expectations, where as none of them had high expectations from their children regarding acquisition of social and personal skills.

4.4.2 Qualitative analysis

Qualitative analyses of parental expectations regarding social and personal skills are represented under following sub-headings.

4.4.2.1 Low parental expectations of children's social and personal skills

4.4.2.2 High parental expectations of children's social and personal skills

4.4.2.3 Expectations opined by parents regarding social and personal skills of children

4.4.2.4 Parental expectations with parental involvement

4.4.2.5 Parental expectations with school's involvement

4.4.2.6 Parental expectations with child's involvement

4.4.2.7 Parental expectations with joint involvement of parent and school

4.4.2.8 Parental satisfaction with the education/ training provided by school

Table 8a: Percentage distribution by level of parental expectations regarding social skills

N=53

Category	Frequency	Per cent
Low (22-29)	50	94.34
Moderate (30-37)	3	5.66
High (38-45)	0	0.00

Table 8b: Percentage distribution by level of parental expectations regarding personal skills

N=53

Category	Frequency	Per cent
Low (51-67)	51	96.23
Moderate (68-84)	2	3.77
High (85-102)	0	0.00

Table 8c: Percentage distribution by level of parental expectations regarding acquisition of skills

N=53

Category	Frequency	Per cent
Low (73-97)	51	96.23
Moderate (98-121)	2	3.77
High (122-146)	0	0.00

4.4.2.9 Attitude of parents regarding mainstreaming

4.4.2.10 Parental expectations regarding child's academic achievement

4.4.2.11 Parental expectations regarding child's occupation

4.4.2.12 Types of job aspired by parents for their children

4.4.2.13 Parental expectations about adult role of children

4.4.2.1 Low parental expectations of children's social and personal skills

From the Table 9.1a it is observed that the tasks expected by the parents from their children were low as less as 1.9 per cent in each tasks viz. responding appropriately when being introduced to others, apologizing if he or she hurts the feelings of others and no expectations in task e.g. showing sympathy for others when they are sad or upset among social activities. Whereas in community use items 1.9 per cent parents had expectation regarding the task such as walking alone to friend's house in the neighborhood. In personal skills no parent's expectation was seen in the area of health and safety tasks viz. showing, telling about a cut, injury, illness, staying within sight of parents or other familiar adult in a public place without wandering off etc. In home living tasks like wiping up of spills at home (0%), getting their own snacks from cabinet (1.9%), taking own clothes from drawers or closet while getting dressed (1.9%) etc. Self direction tasks were to follow a routine without being reminded (0%), starting activity almost immediately when asked to do so (1.9%), whereas no expectations in the task of stating the days of the week in order, in the domain of pre-academic skills.

4.4.2.2 High parental expectations of children's social and personal skills

Table 9.1b presents the qualitative analysis of parents with high expectations of children's social and personal skills. The task expected from the social skills category was carrying enough money to make small purchases (9.4%) which fell under the domain of community use. Regarding personal skills, 35.8 per cent parents had expectations regarding of tasks viz. writing at least two letters of their own name followed by writing numbers from 1 to 10 (28.3%), counting from 1 to 20 (13.2%) under the pre-academic items. In self care tasks feeding himself/herself (24.5%), sitting on the toilet without any assistance (15.1%), dressing himself/herself (15.1%) etc. Whereas the tasks among self direction were working independently and asking for help only when necessary (20.8%) and controlling temper when a parent or other adult takes a toy or object away (9.4%).

4.4.2.3 Expectations opined by parents regarding social and personal skills of children

Table 9.2 depicts the qualitative analysis of parental expectations regarding social and personal skills of children which was opined by some of the parents in open ended questions. Majority of parents reported high expectations in the social domain which includes social activities (37.93%), language development (31.03%) and discipline (20.68%), followed by personal domain which includes personal activities (34.48%), academic skills (46.28%). Only 3.45 per cent parents (1 in no.) had expectation from their child to stop eating plastics.

4.4.2.4 Parental expectations with parental involvement

Table 9.3 depicts the tasks where 3.8 per cent or more parents wanted to participate in the training of the children, indicating highest participation from parent's side. The tasks were mainly related to personal skills. Among these, self care tasks were more emphasized by parents like taking a bath without any help (5.7%), washing his/her own hair (3.8%) etc. Carrying hot containers safely and carefully (3.8%) under health and safety category while maximum percentage was reported in case of home living task i.e. assisting adults during preparation of meals/snacks (7.5%). Rest of the tasks which were not presented in the table, were the tasks where only one parent or none of them wanted to participate in the training of the children. The details of this are given in the Appendix IX.

4.4.2.5 Parental expectations with school's involvement

The tasks which are presented in the Table 9.4 are the only tasks where parents had expectations from the school in training of the children and there were no expectations in the remaining tasks from school (Appendix IX). The expected tasks of social skills were seeking friendship with others in his/her group (3.8%), refraining from saying something that might

Table 9.1a: Qualitative analysis of low parental expectations of children's social and personal skills

Sl. No.	Tasks	n (%)
	Social skills	
1.	Shows sympathy for others when they are sad or upset	0(0.0)
2.	Responds appropriately when introduced to others	1(1.9)
3.	Apologizes if he or she hurts the feelings of others	1(1.9)
4.	Walks alone to friends house in the neighborhood	1(1.9)
	Personal skills	
1.	Shows, tells about a cut, injury, illness	0 (0.0)
2.	Wipes up spills at home	0(0.0)
3.	Stays within sight of parents or other familiar adults in a public place without wandering off	0(0.0)
4.	States the days of the week in order	0(0.0)
5.	Carries breakable objects safety and carefully	0(0.0)
6.	Follows a routine without being reminded	0(0.0)
7.	Uses electrical outlet or sockets safely	0(0.0)
8.	Gets own snacks from cabinet	1(1.9)
9.	Starts activity almost immediately when told to do so	1(1.9)
10.	Takes own clothes from drawers or closet when getting dressed	1(1.9)
11.	Puts things in their proper places when finished using them	1(1.9)
12.	Makes his/her own bed	1(1.9)

Table 9.1b: Qualitative analysis of high parental expectations of children's social and personal skills

Sl. No.	Tasks	n (%)
	Social skills	
1.	Carries enough money to make small purchase	5(9.4)
	Personal skills	
1.	Writes at least two letters in own name	19(35.8)
2.	Writes numbers 1 to 10	15(28.3)
3.	Feeds himself	13(24.5)
4.	Sits on the toilet without being held	8(15.1)
5.	Dresses himself/herself	8(15.1)
6.	Takes a bath without help	8(15.1)
7.	Counts from 1 to 20	7(13.2)
8.	Assists adults with preparing meals/snacks	5(9.4)
9.	Controls temper when a parent or other adult takes a toy or object away	5(9.4)
10.	Put shoes and laces	5(9.4)
11.	Brushes teeth	5(9.4)
12.	Reads and obeys common signs (e.g., Do not Enter, Exit, or Stop)	4(7.5)

Table 9.2: Expectations opined by parents regarding social and personal skills of children
N =29

Sl. No.	Expectations	Frequency	Per cent
1.	Social skills	26	89.66
i)	Social	11	37.93
ii)	Language	9	31.03
iii)	Discipline	6	20.68
2.	Personal skills	25	86.21
i)	Personal	10	34.48
ii)	Academic	14	48.28
iii)	Stop eating plastics	1	3.45

Note: More than one response provided by the respondents

Table 9.3: Qualitative analysis of parental expectations with parental involvement

Sl. No.	Tasks	n (%)
	Personal skills	
1.	Assists adults with preparing meals/snacks	4(7.5)
2.	Takes a bath without help	3(5.7)
3.	Feeds himself	2(3.8)
4.	Mixes rice and dhal and serves himself	2(3.8)
5.	Put shoes and laces	2(3.8)
6.	Brushes teeth	2(3.8)
7.	Carries hot containers safely and carefully	2(3.8)
8.	Washes his/her own hair	2(3.8)

embarrass or hurt (1.9%). Only two tasks of community use category were recognizing and naming buildings (3.8%) and carrying enough money to make small purchases (1.9%). All four communications related items were expected by 1.9 per cent of parents from school viz. asking questions, using past tense to talk about prior events etc. Seven personal skills related tasks were expected from the school, most of them were pre-academic tasks like writing at least two letters in own name (15.1%), writing his/her first and last name (13.2%) etc. The only task i.e. putting shoes and laces (1.9%) and working independently and asking for a help only when required (1.9%) was from self care and self direction area respectively.

4.4.2.6 Parental expectations with child's involvement

The tasks presented in the Table 9.5 were the only tasks where parents had expectations from their children to learn on their own and in the remaining tasks they did not have any expectations at all from their children (Appendix IX). All the eight mentioned tasks of social skills were expected by only one parent, of which community use tasks were describing the duties of workers, crossing the road safely etc, and three tasks from communication activities like discussing a topic for more than 3 minutes, ending conversations appropriately and stating home's telephone number. Whereas only one task from social domain was apologizing if he or she hurts the feelings of others. In total, 13 tasks were expected in case of personal skills categorized as domestic skills tasks e.g. lighting a gas stove (3.8%), preparing food items (1.9%) etc, in case of self direction tasks were discussing ways to solve conflicts with others (3.8%), working independently and asks for help only when necessary (3.8%) etc. 1.9 per cent expectations from each self care tasks was reported like sitting on the toilet without being held, dressing himself/herself and taking a bath without any help. While only one task was expected in the area of health and safety i.e. carrying hot containers safely and carefully (1.9%).

4.4.2.7 Parental expectations with joint involvement of parents and schools

Table 9.6 shows the task reported by two or more parents and rest of the tasks either not reported by any parents or by only one, details of which are given in Appendix IX. Two tasks from social skills and rest 15 from personal skills were the expected tasks where parents wanted to contribute with school. The two tasks of social skills belonged to community use items were carrying enough money to make small purchases (5.7%) and making a small purchase at a food store (3.8%). In personal skills, maximum number (8) were from self care tasks viz. feeding himself (18.9%), sitting on the toilet without being held (13.2%), using bathroom without any help (13.2%) etc. and pre-academic tasks were writing at least two letters of their own name (18.9%), writing numbers 1 to 10 (17%) etc. One task from each area of self direction, home living and health and safety were working independently and asking for help only when necessary (11.3%), keeping toys, games and other belongings neat and clean (3.8%) and caring for his/her minor injuries (3.8%) respectively.

4.4.2.8 Parental satisfaction with the education/ training provided by school

Table 9.7a shows the distribution of parents related to the satisfaction with the education/training provided by the school. It is noted that majority of parents i.e. 94.34 per cent parents had shown satisfaction from the education/ training provided by the school. However, only 5.66 per cent parents were not satisfied.

Reasons given by parents related to satisfaction with education/training of school are shown in Table 9.7b. Regarding the satisfaction as per beneficial to child, in the social skills domain, about 12.00 per cent had related it to the disciplining of children and 4.00 per cent associated it with the opportunity for their children to mingle with others. With respect to personal skills, about 28.00 per cent parents expressed their view on the improvement of children in daily living activities, 14.00 per cent parents were satisfied with the training program given by some specialist, 10.00 per cent with the therapies provided in school and 8.00 per cent with the motivation that their children exposed to which made them lively, more active and happy.

Regarding the satisfaction as per beneficial for parents, 16.00 per cent parents reported that schools provide an emotional support to them, 12.00 per cent were satisfied in each dimensions like effective teaching, special skills of teachers, contentment of school with education and with the committed management of school. Whereas 6.00 per cent parents

Table 9.4: Qualitative analyses of parental expectations with school involvement

Sl. No.	Tasks	n (%)
	Social skills	
1.	Recognizes and names buildings (e.g., hospital)	2 (3.8)
2.	Seeks friendship with others in his/her group	2 (3.8)
3.	Asks question (e.g., will you play with me)	1 (1.9)
4.	Uses past tense to talk about prior events	1 (1.9)
5.	Responds appropriately when introduced to others	1 (1.9)
6.	Discusses a topic for more than 3 minutes	1 (1.9)
7.	Ends conversations appropriately	1 (1.9)
8.	Refrains (controls himself) from saying something that might embarrass or hurt	1 (1.9)
9.	Carries enough money to make small purchase	1 (1.9)
	Personal skills	
1.	Writes at least two letters in own name	8 (15.1)
2.	Writes his/her first and last name	7 (13.2)
3.	Writes numbers 1 to 10	6 (11.3)
4.	Reads and obeys common signs (e.g., Do not Enter, Exit, or Stop)	3 (5.7)
5.	Counts from 1 to 20	2 (3.8)
6.	Works independently and asks for help only when necessary	1 (1.9)
7.	Put shoes and laces	1 (1.9)

Table 9.5: Qualitative analysis of parental expectations with child's involvement

Sl. No.	Tasks	n (%)
	Social skills	
1.	Describes the duties of workers (eg., doctors help the sick)	1 (1.9)
2.	Discusses a topic for more than 3 minutes	1 (1.9)
3.	Looks both ways before crossing the road	1 (1.9)
4.	Apologizes if he or she hurts the feelings of others	1 (1.9)
5.	Ends conversations appropriately	1 (1.9)
6.	Orders for his/her own meals when eating out	1 (1.9)
7.	States home telephone number	1 (1.9)
8.	Walks alone to friends house in the neighborhood	1 (1.9)
	Personal skills	
1.	Works independently and asks for help only when necessary	2 (3.8)
2.	Controls temper when disagreeing with friends	2 (3.8)
3.	Discusses ways to solve conflicts with others	2 (3.8)
4.	Lights a gas stove	2 (3.8)
5.	Controls temper when a parent or other adult takes a toy or object away	1 (1.9)
6.	Sits on the toilet without being held	1 (1.9)
7.	Carries hot containers safely and carefully	1 (1.9)
8.	Dresses himself/herself	1 (1.9)
9.	Takes a bath without help	1 (1.9)
10.	Washes utensils	1 (1.9)
11.	Cuts vegetables	1 (1.9)
12.	Washes clothes	1 (1.9)
13.	Prepares food items	1 (1.9)

Table 9.6 Qualitative analyses of joint involvement of parents and schools

Sl. No.	Tasks	n (%)
	Social skills	
1.	Carries enough money to make small purchase	3 (5.7)
2.	Makes a small purchase at a food store	2 (3.8)
	Personal skills	
1.	Feeds himself	10(18.9)
2.	Writes at least two letters in own name	10(18.9)
3.	Writes his/her first and last name	9 (17.0)
4.	Writes numbers 1 to 10	8(15.1)
5.	Sits on the toilet without being held	7 (13.2)
6.	Uses bathroom without help	7 (13.2)
7.	Works independently and asks for help only when necessary	6(11.3)
8.	Dresses himself/herself	6 (11.3)
9.	Counts from 1 to 20	5 (9.4)
10.	Takes a bath without help	4 (7.5)
11.	Brushes teeth	3 (5.7)
12.	Buttons his/her own clothing	3 (5.7)
13.	Put shoes and laces	2 (3.8)
14.	Keeps toys, games and other belongings neat and clean	2 (3.8)
15.	Cares for his/her minor injuries	2 (3.8)

Table 9.7a: Satisfaction of parents with education/training provided by school

N=53

Response	Frequency	Per cent
Yes	50	94.34
No	3	5.66

Table 9.7b: Reasons opined by parents regarding satisfaction with education of school

N=50

Sl.no.	Response	Frequency	Per cent
I.	Satisfaction as beneficial for child		
a)	Social skills		
i.	Mingles with others	2	4.00
ii.	Well disciplined/obeys/reduction in temper tantrum	6	12.00
b)	Personal skills		
i.	Improved in daily living activities	14	28.00
ii.	Regularity in personal and cognitive activities	5	10.00
iii.	Therapies	5	10.00
iv.	Motivation to engage in beneficial activities/lively/active/happy	4	8.00
v.	Training program for child by specialist	7	14.00
II.	Satisfaction as beneficial for parents		
i.	Provide emotional support	8	16.00
ii.	Effective teaching	6	12.00
iii.	Requisite facilities in a place	3	6.00
iv.	Congenial atmosphere	2	4.00
v.	Contented with education	6	12.00
vi.	Teachers have special skills	6	12.00
vii.	Committed management of school	6	12.00
viii.	Did not give any reason	8	16.00

Note: More than one response provided by the respondents

were satisfied by the requisite facilities available in a single place followed by congenial atmosphere of school (4.00%). While about 16.00 per cent parent did not show any reason of satisfaction with the education of the school.

4.4.2.9 Attitude of parents regarding mainstreaming

Table 9.8a depicts the attitude of parents regarding mainstreaming. More than half (52.83 %) of the parents wanted their child to be included in school which is for normal children while 45.28 per cent parents had shown a negative attitude towards mainstreaming whereas 1.88 per cent parent did not respond.

Reason given by parents regarding mainstreaming of their children is shown in Table 9.8b. Regarding the mainstreaming about 32.14 per cent parents wanted their children to be in common pool followed by 21.43 per cent parents wanted to see the drastic changes where their children will gain more confidence and improve self-esteem (17.86%) and same 17.86 per cent parents had confidence that their children will cope with regular activities and will shine in society. Very few (7.14%) parents associated it with the protected environment and more patient teachers in normal school. While 25.00 per cent parents did not give any reason regarding mainstreaming.

Regarding not to mainstreaming their children, about 50.00 per cent parents had accepted that their children are not normal and are not capable for normal syllabus, followed by 25.00 per cent parents who expressed a need of special education and care, while 20.83 per cent explained that their children may lose confidence with normal and intelligent children. However, 25.00 per cent parent had not given any reason for not to mainstreaming their children.

4.4.2.10 Parental expectations regarding child's academic achievement

Table 9.9 depicts the distribution of parental expectation regarding academic achievement of their children. It is noted that majority of parents (52.83%) did not have any expectations regarding academic achievement but they wanted their children to be socially independent. However 18.86 per cent parents wanted their children to attain the education till PUC & above, followed by 10th standard (15.09%), 9.43 per cent parents wanted their children to complete upto 10th standard and also to become socially independent while few parents (3.77%) wanted till 7th standard.

4.4.2.11 Parental expectation regarding child's occupation

Table 9.10a shows the distribution of parental expectations regarding occupation of children in future. More than half of the parents (60.37%) expected their children to be independent with job in future, followed by 18.86 per cent parents expressing that their children will remain under their care, 13.20 per cent parents wanted a part time job or sheltered workshop and 5.56 percent under Government aid. Whereas 1.88 per cent i.e. one parent wanted both themselves and Government aid to take care of their child in future.

4.4.2.12 Types of job aspired by parents for their children

The types of job aspired by parents for their children are presented in Table 9.10b. About 18.75 per cent parents identified small business for their children, followed by 15.63 per cent parents left this decision on the children's wish or liking, 12.50 per cent parents reported any type of job according to his/her children's capabilities, 6.25 per cent each in stitching/tailoring, social work and the work where their children will feel comfortable and 3.13 per cent parents wanted computer/painting and same percentage of parents wanted to just engage and discipline them. However about 53.13 per cent parents were not aware of or not sure of any type of job they wanted for their children.

4.4.2.13 Parental expectations about adult role of the children

Table 9.11 explains about the distribution of parental expectations about adult roles to be opted by their children. Majority of parents (37.73 %) wanted their child to earn for their livelihood followed by have children (33.96%), 9.43 per cent parents wanted their children to get married, 3.77 per cent wants their child to depend on parental care also independent life and self caring was expected by same percentage of parents. Whereas 1.88 per cent parents reported both earning for a livelihood and have children. While 9.43 per cent parents did not give any response.

Table 9.8a: Attitude of parents regarding mainstreaming

N=53

Response	Frequency	Per cent
Yes	28	52.83
No	24	45.28
No response	1	1.88

Table 9.8b: Reasons opined by parents regarding mainstreaming

Sl. No.	Response	Frequency	Per cent
a)	Reason for mainstreaming (n=28)		
i.	Gain more confidence/ self-esteem	5	17.86
ii.	Want to be normal/ in common pool	9	32.14
iii.	Cope up with regular program and shine in society	5	17.86
iv.	To see drastic change/ sufficient to learn	6	21.43
v.	Teachers are more patient/ protection n normal school	2	7.14
vi.	Did not give any reason	7	25.00
b)	Reason for not mainstreaming (n=24)		
i.	Not capable/not a normal child	12	50.00
ii.	Normal, intelligent children may hurt/tease/lose confidence	5	20.83
iii.	Special education/ special care	6	25.00
iv.	Did not give any reason	6	25.00

Note: More than one response provided by the respondents

Table 9.9: Expectations of parents regarding child's academic achievement

N=53

Sl. No.	Response	Frequency	Per cent
1.	VII	2	3.77
2	X	8	15.09
3.	PUC and above	10	18.86
4.	None but socially independent	28	52.83
5.	Both 2 and 4	5	9.43

Table 9.10a: Expectation of parents regarding child's occupation

N=53

Sl. No.	Response	Frequency	Per cent
i.	Under parents care	10	18.86
ii.	Government aid	3	5.56
iii.	Sheltered workshop (a part time job)	7	13.20
iv.	Independent with job	32	60.37
v.	Both i and ii	1	1.88

Table 9.10b: Types of job aspired by parents for their children

N=32

Sl. No.	Type of job	Frequency	Per cent
i.	Small business	6	18.75
ii.	According to his/her capability	4	12.50
iii.	Any work he/she will feel comfortable	2	6.25
iv.	To engage and discipline them	1	3.13
v.	Stitching and tailoring	2	6.25
vi.	As he/she will like	5	15.63
vii.	Social work	2	6.25
viii.	Computer/painting	1	3.13
ix.	Not aware/not sure	17	53.13

Note: More than one response provided by the respondents

Table 9.11: Parental expectations about adult role of children

N=53

Sl. No.	Adult roles	Frequency	Per cent
i.	Dependent on parents care	2	3.77
ii.	Get married	5	9.43
iii.	Earn for a livelihood	20	37.73
iv.	Have children	18	33.96
v.	Only independent self caring/ independent life	2	3.77
vi.	Both iii and iv	1	1.88
vii.	No response	5	9.43

4.4.3 Factors influencing parental expectations

Factors influencing parental involvement in promoting social and personal skills of children are represented under following sub headings.

4.4.3.1 Comparison of mean squares of parental expectations by child's characteristics and factors associated with disability and special education

4.4.3.2 Comparison of mean squares of parental expectations by parental and familial characteristics

4.4.3.1 Comparison of mean squares of parental expectations by child's characteristics and factors associated with disability and special education

It is perceived from the Table 10.1 about child's characteristics that parents of different age group had almost equal expectations. The analysis also exhibited non-significant difference among younger and older age group children on parental expectations.

The comparison of mean scores revealed that parents of male children had higher expectations (78.33) than females (76.35). However, 't'-test analysis revealed non-significant difference. Thus null hypothesis stating that parental expectations did not differ among the gender is accepted.

Regarding the ordinal position, parents of last borns had higher expectations (82.15) followed by first borns (76.28) and middle borns (74.50). The analysis also found significant differences among last borns with both first and middle borns at one per cent level but not in between first and middle borns. Results of Table 10.2 show the comparison of parental expectations by child's gender and ordinal position. The main effect of both ordinal position and gender were found non-significant on parental expectations. The ordinal position of male children showed a greater difference in parental expectations than female children. The interactionary effect of gender and ordinal position was found non-significant indicating that the difference among the gender are similar, hence the null hypothesis stating no influence of ordinal position of children on parental expectations of both gender is accepted.

The results of 't'-test analyzed on parental expectations revealed non-significant difference between sibling status. However parents of only child had lower mean scores (75.60) than with siblings (78.05).

The Table 10.1 also shows the comparison of mean scores of parental expectations with factors associated with disability. The results report that parents of mildly retarded children had higher expectations (79.38) followed by severely retarded (78.00) and moderately retarded children (76.17). But F-test analysis revealed non-significant difference.

The mean scores of parents of children with only mental retardation (79.67) were higher than children with associated disability (76.76) shows higher expectations from children with only mental retardation. However statistically it was not found significant. With the no. of associated disabilities, parents of children with only mental retardation had higher mean scores, but in case of associated disabilities higher expectations were from children with two or more associated disabilities (78.27) than with only one (76.15). However statistical analysis was not found significant difference, thus accepting the null hypothesis.

The scores of parents of children identified at an early age as disabled was higher (78.16) shows higher expectations than from late identified children (75.10). But 't'-test analyzed no significant difference.

The results of table also observed comparison of mean scores of parental expectations with the factors associated with special education of children. Regarding age at admission to special school, parents of children who got admitted late to special schools had higher expectations (80.80) followed by slightly late (79.12), early (75.44) and least was observed from very early category (73.00). However statistical analysis revealed no significant difference of parental expectations among different age of children at admission to special school.

With regards to years of schooling, parents of children who had less than 1 year and 1 to 3 years of schooling had almost equal but higher mean scores followed by 3.1 to 5 years (77.42) and 5.1 years and above (75.40). However analysis inferred no significant differences.

Table 10.1: Comparison of mean scores of parental expectations by child's characteristics and factors associated with disability and special education

N=53

Characteristics			Mean	S.D	't'- value/ F
a. Child's characteristics	Age	Younger (5-10 years)	77.65	6.84	0.065 ^{NS} (<i>r</i> '-value - 0.068)
		Older (10-16 years)	77.53	6.34	
	Gender	Male	78.33	7.87	1.079 ^{NS}
		Female	76.35	2.94	
	Ordinal position	First born	76.28	3.72	5.085** SE-1.5 CD-4.157
		Middle born	74.50	1.91	
		Last born	82.15	10.53	
	Sibling status	Only child	75.60	3.44	-1.074 ^{NS}
		With sibling	78.05	6.97	
b. Factors associated with disability	Degree of disability	Mild (51-75 IQ)	79.38	8.91	1.216 ^{NS} SE-1.65
		Moderate (31-50 IQ)	76.17	2.90	
		Severe (<30 IQ)	78.00	7.69	
	Associated disability	Only mental retardation	79.67	8.06	1.482 ^{NS}
		Associated disability	76.76	5.68	
	No. of associated disability	No associated disability	79.67	8.06	1.522 ^{NS} SE-1.81
		One disability	76.15	4.05	
		Two and more disabilities	78.27	8.56	
	Age at identification of disability	Early (<3 years)	78.16	7.04	1.353 ^{NS}
		Late (>3years)	75.10	2.08	
c. Factors associated with special education	Age at admission to special school	Very early (0-3 years)	73.00	-	2.382 ^{NS} SE-1.58
		Early (3-6 years)	75.44	2.53	
		Slightly late (6-9 years)	79.12	7.41	
		Late (9-12years)	80.80	9.91	
	Years of schooling	<1 year	78.64	8.14	0.521 ^{NS} SE-1.57
		1-3 years	78.20	7.73	
		3.1-5 years	77.42	5.21	
		5.1 years and above	75.40	1.84	
	Attendance of children in school	Regular	77.77	6.74	0.564 ^{NS}
		Irregular	76.17	4.31	
d. Combined effect of disability and special education	Degree of constraint	Mild constraint	78.15	7.43	0.489 ^{NS} (<i>r</i> '-value - 0.095)
		Moderate constraint	77.24	5.96	

** Significant at 0.01 level

NS: Non-significant

Table 10.2: Comparison of parental expectations by child's gender and ordinal position

N=53

Ordinal position	Male			Female			Total		
	N	Mean	S.D	N	Mean	S.D	N	Mean	S.D
First born	22	76.41	4.04	14	76.07	3.27	36	76.28	3.72
Middle born	3	74.33	2.31	1	75.00	-	4	74.50	1.91
Last born	8	85.12	12.70	5	77.40	2.07	13	82.15	10.52
Total	33	78.33	7.87	20	76.35	2.94	53	77.58	6.50

ANOVA

Factors	MSS	F	S.Em.	CD
Gender	30.814	0.584 ^{NS}	3.167	-
Ordinal position	126.028	1.944 ^{NS}	2.034	-
Gender X Ordinal position	64.833	1.859 ^{NS}	2.813	-

NS: Non-significant

Results identified that parents of children who were regularly attending the school had higher expectations (77.77) than children who were not regular (76.17). But it was observed to be non-significant from 't'-test analysis.

The table also exhibits the combined effect of disability and special education indicating degree of constraint and the result shows higher mean scores exhibited by the parents of children with mild constraint (78.15) than moderate constraint category (77.24). However, ANOVA revealed non-significant difference, thus accepting the null hypothesis stating that parental expectations did not differ among different degree of constraint.

4.4.3.2 Comparison of mean squares of parental expectations by parental and familial characteristics

With respect to parental characteristics it is noted from the Table 10.3 that higher mean score exhibited by fathers who could read only (80.00) followed by almost equal scores reported by illiterate and graduate fathers, advanced educated (78.00), college passed (76.92) and least expectations showed by middle and high school educated fathers (75.00). However F-test analysis revealed non-significant difference.

Regarding mothers' education, equal and higher mean scores (78.00) was observed in mothers who could read only, college educated (PUC) and with advanced education (78.50) than middle or high school passed, graduate, post graduate or professional who had almost equal mean scores. A least expectations were exhibited by illiterate mothers (76.00). But this difference was not found statistically significant.

The table identified that fathers who were high school teacher or technicians had higher expectations (83.38) followed by nearly equal mean scores contributed by the categories of labourer, landlord or high Government officials or professionals and unemployed. Least and almost equal expectations reported by fathers who had small business shop or cultivation and business or clerks or elementary school teacher. The statistical analysis also found significant difference at 1 per cent level, thus rejecting the null hypothesis. Comparison of parental expectations by child's gender and father's occupation is presented in Table 10.4. The 'F' value inferred no significant difference among father's occupations and among gender on the parental expectations. Fathers of male children showed higher difference in the father's occupation as against the fathers of female children. The interactionary effect of gender and father's occupation was found non-significant on the parental expectations indicating that the trend of difference among the fathers of children of both gender is similar. Hence the null hypothesis stating no influence of gender on parental expectations of different occupations of fathers is accepted.

The comparison of mean scores (Table 10.3) revealed that mothers who were high school teacher or technicians had higher expectations with mean scores of 92.00 followed by the categories viz. small business shop or cultivation, landlord or high Government officials or professional, unemployed (housewives), business or clerks or elementary school teacher with slight differences in mean scores. Statistical analysis was found non-significant. Thus, null hypothesis stating no difference of parental expectations among different categories of mother's occupations is accepted.

The table also compares the mean scores of familial characteristics with parental expectations. Among the caste classification, families from backward caste had higher expectations (78.58) than forward caste category (77.28) and least was observed in the scheduled caste or scheduled tribe category (73.50). However statistically, difference was not found significant. It is virtually equal and higher mean scores were observed in the families from Muslim and Jain than Hindu religion. But F-test analysis did not find significant difference between families of different religion and parental expectations.

Regarding the family type, both nuclear and joint type of families had almost equal parental expectations and 't'-test also found non-significant difference. With respect to size of the family, equal and higher mean scores was observed among small and medium sized families than larger sized families. However statistical analysis revealed non-significant difference.

The comparison of mean scores revealed that medium income families had higher expectations (79.24) than low income families (76.50) but, difference was not found significant. Regarding the socio-economic status of the family, high SES families had higher

Table 10.3: Comparison of mean squares of parental expectations by parental and familial characteristics

Characteristics			Mean	S.D	N=53 't'- value or F
a. Parental characteristics	Father's education (N=50)	Illiterate	79.00	-	0.430 ^{NS} SE-0.85
		Can read only	80.00	-	
		Middle & high school	75.00	1.66	
		College (PUC)	76.92	7.76	
		Graduate	79.11	8.32	
		Post graduate & professional	76.67	3.20	
		Advanced education	78.00	-	
	Mother's education	Illiterate	76.00	-	0.059 ^{NS} SE-1.20
		Can read only	78.00	1.41	
		Middle & high school	77.43	6.98	
		College (PUC)	78.55	9.04	
		Graduate	77.21	5.22	
		Post graduate & professional	77.00	4.00	
		Advanced education	78.00	-	
	Father's occupation (N=50)	Unemployed	76.00	-	3.564** SE-1.08 CD-3.05
		Labourer	76.40	2.97	
		Small business shop, cultivation	74.92	2.54	
		Business, clerks elementary school teacher	75.00	2.00	
		High school teacher, technicians	83.38	10.63	
		Landlord, high govt. officials, professionals	76.29	2.36	
	Mother's occupation	Unemployed	77.32	6.56	1.294 ^{NS} SE-0.39
		Small business shop, cultivation	78.00	-	
		Business, clerks elementary school teacher	76.50	0.71	
		High school teacher, technicians	92.00	-	
		Landlord, high govt. officials, professionals	77.50	0.71	
b. Familial characteristics	Caste	Forward caste	77.28	5.80	1.106 ^{NS} SE-1.06
		Backward caste	78.58	7.49	
		Scheduled caste/tribe	73.50	1.00	
	Religion	Hindu	76.63	5.17	2.636 ^{NS} SE-3.59
		Muslim	81.50	7.99	
		Jain	82.00	13.44	
	Family type	Nuclear	77.79	6.02	0.311 ^{NS}
		Joint	77.21	7.43	
	Family size	Small	77.83	6.42	0.063 ^{NS} SE-2.06
		Medium	77.33	6.97	
		Large	76.50	4.95	
	Family income	Low	76.50	5.35	-1.519 ^{NS}
		Medium	79.24	7.78	
	Socio-economic status	Low	76.80	2.86	2.164 ^{NS} SE-1.16
		Medium	75.52	2.66	
		High	79.33	8.43	

** Significant at 0.01 level

NS: Non-significant

Table 10.4: Comparison of parental expectations by child's gender and father's occupation

N=50

Father's occupation	Male			Female			Total		
	N	Mean	S.D	N	Mean	S.D	N	Mean	S.D
Unemployed	1	76.00	-	-	-	-	1	76.00	-
Labourer	2	76.00	4.24	3	76.67	2.89	5	76.40	2.97
Small business shop, cultivation	8	73.88	1.64	4	77.00	2.94	12	74.92	2.54
Business, clerks elementary school teacher	5	74.88	1.64	7	75.14	2.34	12	75.00	2.00
High school teacher, technicians	12	83.75	11.02	1	79.00	-	13	83.38	10.63
Landlord, high govt. officials, professionals	4	77.50	1.00	3	74.67	2.89	7	76.29	2.36
Total	32	73.38	7.99	18	75.94	2.62	50	77.50	6.65

ANOVA

Factors	MSS	F	S.Em.	CD
Gender	3.696	0.200 ^{NS}	1.638	-
Father's occupation	24.847	1.350 ^{NS}	3.034	-
Gender X Father's occupation	15.356	0.405 ^{NS}	3.248	-

NS: Non-significant

Table 11a: Interrelation between parental involvement and social and personal skills of children

N=53

Variable		Parental involvement		Total (%)	Mean (S.D)	χ^2	'r'- value
		Low	Moderate				
Social and personal skills of children	Low	19 (100)	-	19 (100)	96.95 (5.13)	18.233***	0.780**
	Moderate	15 (71.4)	6 (28.6)	21 (100)	110.00 (10.01)		
	High	4 (30.8)	9 (69.2)	13 (100)	117.69 (10.87)		
	Total	38 (71.7)	15 (28.3)	53 (100)	107.21 (12.00)		

Table 11b: Interrelation between parental expectations and social and personal skills of children

N=53

Variable		Parental expectations		Total (%)	Mean (S.D)	χ^2	'r'- value
		Low	Moderate				
Social and personal skills of children	Low	18 (94.7)	1 (5.3)	19 (100)	77.53 (6.51)	1.489 ^{NS}	0.094 ^{NS}
	Moderate	21 (100)	-	21 (100)	76.57 (4.57)		
	High	12 (92.3)	1 (7.7)	13 (100)	79.31 (8.92)		
	Total	51 (96.2)	2 (3.8)	53 (100)			

Table 11c: Interrelation between parental involvement and parental expectations

N=53

Variable		Parental involvement		Total (%)	Mean (S.D)	χ^2	'r'- value
		Low	Moderate				
Parental expectations	Low	37 (72.5)	14 (27.5)	51 (100)	107.18 (11.75)	0.482 ^{NS}	0.142 ^{NS}
	Moderate	1 (50.0)	1 (50.0)	2 (100)	108.00 (24.04)		
	Total	38 (71.7)	15 (28.3)	53 (100)	107.21 (12.00)		

** Significant at 0.01 level, *** Significant at 0.001 level

NS: Non-significant

expectations (79.33) followed by low (76.80) and medium categories (75.52). However parental expectations did not differ statistically among different category of socio-economic status of families thus accepting the null hypothesis.

4.5 Interrelations between social and personal skills of children, parental involvement and parental expectation

The results of the topic presented under following sub headings

4.5.1 Interrelation between parental involvement and social and personal skills of children

4.5.2 Interrelation between parental expectations and social and personal skills of children

4.5.3 Interrelation between parental involvement and parental expectations

4.5.1 Interrelation between parental involvement and social and personal skills of children

From the Table 11a it is noted that cent per cent children had low level of skills fell under the low parental involvement category. Among children with moderate skills, majority of them (71.4%) had low parental involvement followed by moderate involvement (28.6%). Whereas reverse trend was observed in case of children with high skills that means majority of them (69.2%) had moderate level of parental involvement than low involvement (30.8%). χ^2 analysis also found significant association between the two. Further correlation analysis revealed a positive and significant relation between parental involvement and social and personal skills of children which indicates as parental involvement increases, skills of children also increases or vice-versa. Hence, rejecting the null hypothesis stating no relation between skills of children and parental involvement.

4.5.2 Interrelation between parental expectations and social and personal skills of children

Table 11b shows majority of children from all the categories of skills fell under the category of low parental expectations. While only child from each low and high level of skills fell under moderate expectations category. The result found non-significant association. Further correlation analysis revealed positive relation but found non-significant. Thus, accepting the null hypothesis indicating no relation between skills of children and parental expectations.

4.5.3 Interrelation between parental involvement and parental expectations

Table 11c depicts that majority of parents (72.5%) from low expectations category had low involvement whereas only 27.5 per cent had moderate involvement. Among the category of moderate parental expectations two parents were equally distributed in both the involvement categories. Since χ^2 analysis showed non-significant association, it is concluded that there was no association between parental involvement and expectations. Further correlation analysis revealed a positive relation but found non-significant. Thus, accepting the null hypothesis stating no relation between parental involvement and parental expectations.

4.6 Hierarchical influence of significant factors on parental involvement and social and personal skills of children

The data was subjected to step-wise regression analysis. The results (Table 12a) revealed that among five variables viz. age, degree of constraint, socio-economic status, social and personal skills of children and parental expectations. Only social and personal skills of children were the major variable which influences upto 61 per cent on the parental involvement. This was found significant at zero per cent level of probability.

Whereas, when step-wise regression was analyzed on social and personal skills of children (Table 12b), parental involvement was the major variable which contributed upto 61 per cent for the acquisition of skills of children. Secondly parental involvement and degree of

constraint both together contributed upto 65.5 per cent for the acquisition of skills of children. This was found significant at zero and one per cent level respectively.

Table 12a: Regression analysis of significant factor on parental involvement

Variable	R ²	F
Social and personal skills of children	0.608	79.196***

Table 12b: Hierarchial influence of significant factors on social and personal skills of children

Variables	R ²	F
Parental involvement	0.608	79.196 ***
Degree of constraint	0.655	6.784**

** Significant at 0.01 level, *** Significant at 0.001 level

5. DISCUSSION

The results of the study on “Parental involvement and expectations in promoting social and personal skills of mentally challenged children” are discussed under following sub-headings.

- 5.1 Social and personal skills of mentally challenged children
- 5.2 Factors influencing social and personal skills
- 5.3 Parental involvement in promoting social and personal skills of mentally challenged children
- 5.4 Factors influencing parental involvement
- 5.5 Parental expectations regarding acquisition of social and personal skills of mentally challenged children
- 5.6 Factors influencing parental expectations
- 5.7 Interrelations between Social and personal skills of mentally challenged children, parental involvement and parental expectations.

5.1 Social and personal skills of mentally challenged children

A higher percentage of children had moderate level of social and personal skills followed by low and high levels (Table 3c and Fig. 6). Disability status of the children, potential possessed by them, training given to the children might be responsible factors in the acquisition of skills. The findings are supported by the study of Su *et al.* (2008) who found that general cognitive dysfunction impairs the daily functions in people with ID. Similarly Verdonschot *et al.* (2008) who positively related the participation of person with ID in community with opportunities, services provided, family involvement, stimulation of the environment of facilities etc.

5.2 Factors influencing social and personal skills

Factors influencing skills of children are presented under the sub-headings of child's, parental and familial characteristics.

5.2.1 Child's characteristics

The results of Table 4.1 and Fig. 2 revealed significant positive relation between age and skills of children. Comparison of mean scores also proved the same trend that older children had higher skills than younger. As children grow with maturity and experience they are more able to acquire skills. The findings are supported to the study of Ly (2008) who reported that mothers perceived older children with mental retardation have higher ability. Similarly, Schatz and Hamdan-Allen (1995), Ando *et al.* (1980) and Ando and Yoshimura (1979) suggested positive relation of age with socialization and daily living skills, academic skill level and adaptive behavior level respectively. Contradictory to the findings, Figen *et al.* (2008) did not found impact of age on acquisition of self help skills, while Bruschini *et al.* (2003) who found all profound and severe patients had no bladder control regardless of age while milder and normal inferior value acquired progressive urinary control with aging.

Social and personal skills of mentally challenged children did not differ by gender, ordinal position, and sibling status. This may be due to the fact that children of both gender regardless of ordinal position and sibling status are equally affected by disability condition and disability status may be the determining factor in the acquisition of skills. However (Table 4.2) interactionary effect of age and gender on acquisition of social and personal skills was not found significant, indicating that pattern was similar among both the age group irrespective of gender (Fig.5). These results are in conformity with Nourani (1998) and Figen *et al.* (2008) who reported that gender differences were not significant in development of social and personal skills of mentally challenged children.

5.2.2 Factors associated with disability and special education

The results (Table 4.3 and Fig.3) have shown significant difference in acquisition of skills among children with different degree of disability. This is because IQ level is prerequisite

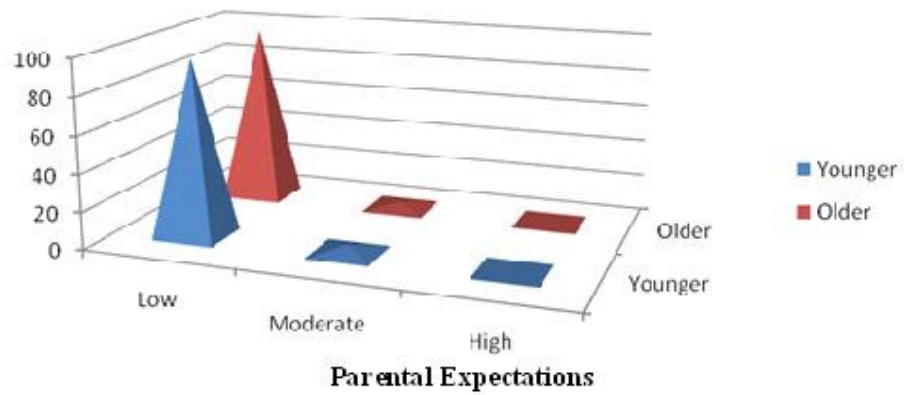
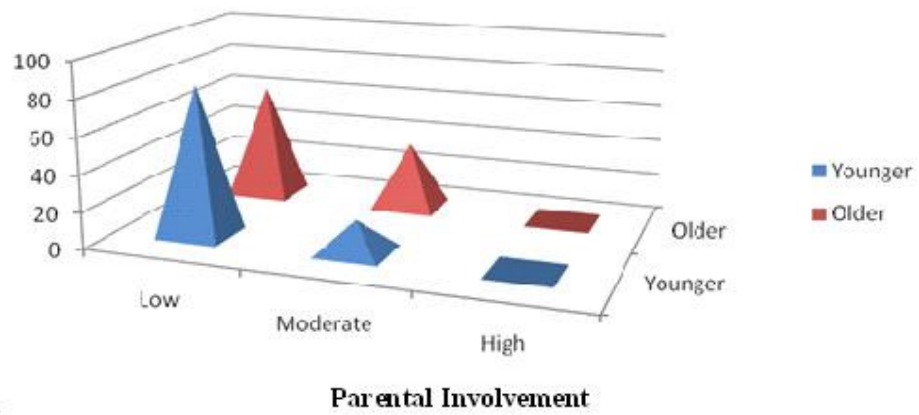
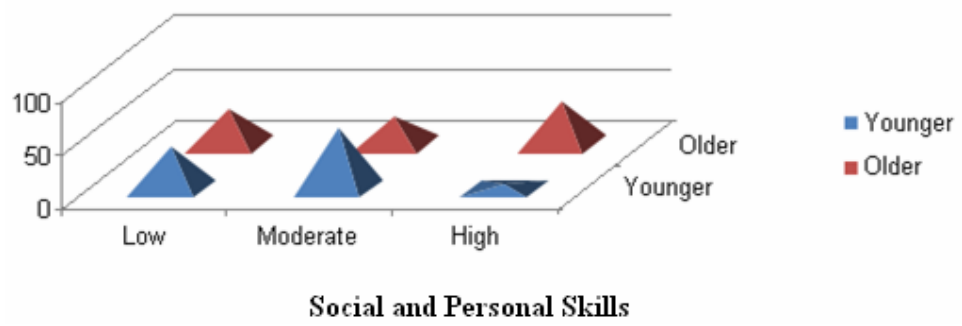


Fig.2. Social and personal skills of children parental Involvement and parental Expectations by Child's age

to children to acquire the skills which is in accordance to the definitions given by DSM-IV-TR. Many researchers also found similar result viz. Schatz and Hamden-Allen (1995) and Bruschini *et al.* (2003) who reported that IQ was positively related to the adaptive behavior. Similarly Rodrigue *et al.* (1990) and Wilkins (2008) reported that children with Down syndrome and intellectually disabled adults performed better in social skills than autistic children. However, Graham (2007) found no difference between the groups. The results (Table 4.4) of the main effect of gender and interactionary effect of degree of disability and gender on acquisition of skills of children was found non-significant, indicating that similar trend was observed in both the gender regardless of degree of disability.

With respect to results on associated handicaps, it was noted that significant difference was found between children with only mental retardation, and with associated disability on development of skills. The above findings may be because of associated disability worsen the condition of mental retarded children which has deteriorating effect in the acquisition of skills. The findings are in congruent with Bolte and Poustka (2002) and Wilkins (2008) who found social skills deficits were more in case of mental retardation with autism or with PDD-NOS than only mental retardation. Whereas in contradictory with the findings, Graham (2007) reported that associated disability did not contribute to the development of skills. The interactionay effect of associated disability and gender on development of skills was not found significant, indicating that skills development was more or less same among both gender with respect to associated disability.

Late identified children had higher social and personal skills than early identified and it was also found significant. The reasons for the results may be because children with severely handicaps can be identified early, because of severity they are able to learn very few skills while in case of mild handicaps, because of milder in disability, they can master over the adaptive skills so identified late as a disabled child.

With respect to factors associated with special education, none of the factors viz. age at admission to special school, years of schooling, and attendance of children in school had shown influence on the development of skills among retarded children. This may be due to small sample size and disproportionate sample distribution, like 88.67 per cent children were regular and only 11.32 per cent were irregular in attending the school. But significant difference was found in case of degree of constraint with the acquisition of skills (Fig. 4). Correlation analysis also revealed a significant and negative relation between the two indicating that as the constraint increased, the social and personal skills decreased. Table 12b depicts that degree of constraint influenced 65.5 per cent in the acquisition of the social and personal skills along with the parental involvement. This implies that disability status was a determinant factor for the acquisition of skills. The interactionay effect of degree of constraint and gender (Table 4.7) was found non-significant indicating that the trend of difference among different degree of constraint was common for both the gender. This may be due to unequal distribution of children with 62.26 per cent males and 37.73 per cent females. Male and female children might have acquired same skills among all the degree of constraint.

5.2.3 Parental and familial characteristics

The data presented in the Table 4.8 and Table 4.9 depicts no significant relation of parental characteristics (parent's education and occupation), familial characteristics (caste, religion, family type, family size, family income, and socio-economic status) with the development of skills of mentally challenged children. Children acquire skills irrespective of these factors and acquisition of skills might be depending on the disability status and schooling. Similar result is also reported by Figen *et al.* (2008) who observed that family size and average family income did not contribute in the learning of self help skills. But parent's education had a positive impact on the acquisition of skills. Contradictory with the findings of SES, Koskentausta (2007) identified risk factors for psychiatric disturbance in children with intellectual disability. These factors significantly increased among low socio-economic status family.

5.3 Parental involvement in promoting social and personal skills of mentally challenged children

Majority of the parents (Table 5c and Fig. 6) were in low involvement in enhancing the social and personal skills of children followed by moderate involvement. None of the parents had high involvement. The reasons may be that parents are not knowledgeable, not having special skills to train the children and have accepted the children as retarded with very low expectations. Parental involvement had shown higher influence (61%) on social and personal skills of children (Table 12a) so, involvement dependent on the skills of children. The present finding is substantiated with the studies of Winton and Turnbull (1981) who revealed that parents constantly need help of school professionals. While Bjorck-Akeson and Granlund (1995) reported moderate involvement of parents but they liked to be more involved. However most of studies revealed that after parents got training, their involvement level increased which showed development of skills in the mental retardation children (Rani and Reddy, 1999; Alvey and Aeshleman, 2008). Thus there is need to involve the parents in the training of the children with mental retardation which can be enhanced by giving training to parents, imparting knowledge about the potential of children.

The tasks where parents were less responsible for training (Table 6.2a) were social skills like ending conversations appropriately, greeting other children, seeking friendship, discussing topic etc. Among personal skills, mainly pre-academic tasks was there e.g. writing 1 to 20, his/her name, telling what day comes before another, reading and obeying common signs etc. Items related to health and safety viz. caring for his/her minor injuries was emphasized by parents. school were highly responsible in majority of children in the tasks of pre-academic skills followed by self care skills e.g. feeding himself, sitting on the toilet without being held, dressing, and among social skills like greeting other children, seeking friendship, apologizing when hurt others and community use tasks (Table 6.2b). While rest of the skills were not emphasized.

5.4 Factors influencing parental involvement

5.4.1 Child's characteristics

The results (Table 7.1 and Fig. 2) revealed significant difference between younger and older children in parental involvement and had a positive relation between the two indicating that parental involvement was higher in older children. This may be due to the fact that as the children grow, parents wanted their child to be independent in personal and social skills. It is very difficult for parents of young children with disabilities to read their child's cues accurately and to understand their needs. The experience in upbringing gives confidence among parents to train them. So they got involved in developing the skills of mentally challenged children. The result is contradictory with the findings of Ricci and Hodapp (2003), Neeley-Barnes *et al.* (2008) and Ly (2008) who revealed that more parental involvement in children of younger age. The interactionary effect of age and gender on parental involvement was not found significant, indicating that parental involvement did not vary among male and female children in case of both the age group.

Parental involvement did not differ by gender, ordinal position, and sibling status (Fig. 5). This indicates non differential treatment of children by parents regardless of gender. The findings is supported by Bailey *et al.* (1999) who reported that gender of mental retarded children has no influence on the awareness, use of services as reported by both mother and father of the children. Whereas Guralnick *et al.* (2008) and Neeley-Barnes *et al.* (2008) had reported gender may well exert an effect on the parental involvement. Parents were equally involved irrespective of ordinal position and sibling status of children. Haneman and Blacher (1998) identified mothers who promoted more serious consideration of placing their children in residential schools which shows less of their involvement when they had larger number of siblings.

5.4.2 Factors associated with disability and special education

It is perceived (Table 7.3 and Fig. 3) that degree of disability had influence on parental involvement and it was found significant. Reason may be due to reciprocal interactions between parents and their children with the behavior of each participant affecting

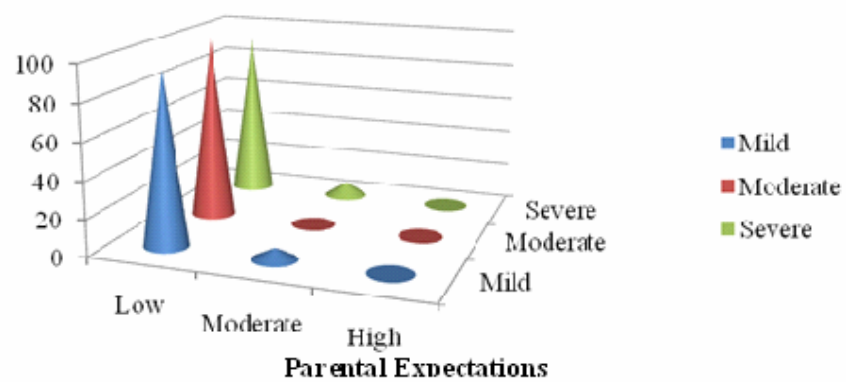
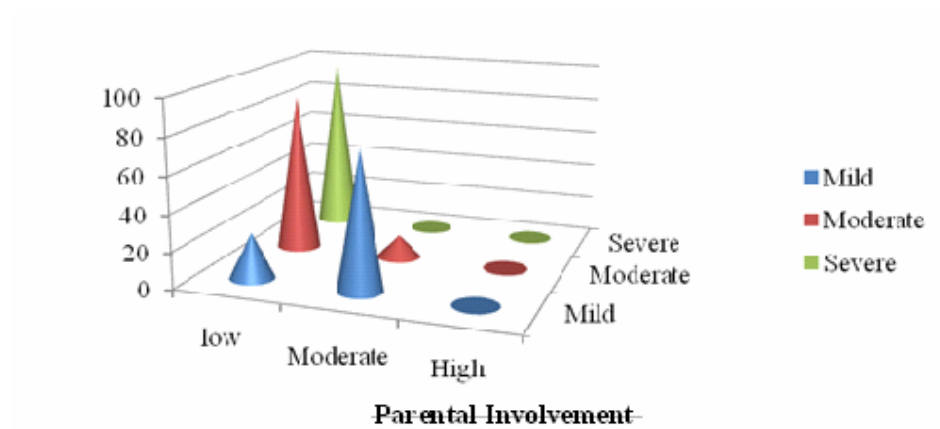
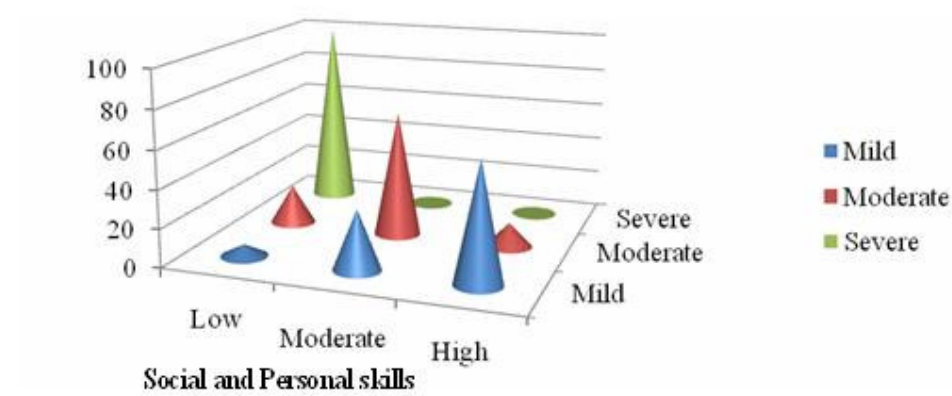


Fig.3. Social and Personal Skills of children, Parental Involvement and Parental Expectations by Child's Degree of Disability

the behavior of the other (Chamberlain and Patterson, 1995). Mean differences showed that children with milder disability had higher involvement. The findings are in congruency with Guralnick *et al.* (2008) who reported higher communication and interaction with higher cognitive and language levels of children with mild developmental delays. Contradictory to the result, Ricci and Hodapp (2002) who found that, fathers of children with Down syndrome and other types of intellectual disability were similarly involved in child rearing. A similar result was also found by Bailey *et al.* (1999). Whereas Neeley-Barnes *et al.* (2008) reported that family members were more involved in decision making when the person had more severe intellectual disabilities.

The mean scores on parental involvement of children with mental retardation were higher than with associated disability and statistically found significant. The reasons may be same that there is reciprocal relationship between parents and children and as severity increases parents are not able to train the child because of poor interaction of mentally retarded child. It may also be because of expertise required for handling greater degree of disability. The findings are in line with Deslandes *et al.* (1999) who reported parents of special education were less involved than with general education students.

With respect to age at identification of disability, early identified children did not differ significantly with the late identified on parental involvement which may be due to disproportionate distribution of children where 81.13 per cent children were early identified.

Pertaining to age at admission to school, parental involvement was higher among children who got late admission and least in case of very early admitted child. The reason behind this finding may be that late admitted children were milder in retardation so, involvement was more which is discernible in the trend in mean scores as seen in Table 7.7. When comparison of mean scores of parental involvement by age at admission to special school and degree of disability was considered the results revealed the degree of disability was stronger contributing factor than the age at admission to the special school. Further comparison of gender and age at admission to school with parental involvement reveals significance of main effect of both but interactionary effect was not found significant (Table 7.6). This implies parents sought admission to school irrespective of gender.

Years of schooling and regularity in school attendance did not influence parental involvement. Parents continued to provide care and training to the children regardless of years of schooling. With respect to regularity in attendance of children with 88.67 per cent of them were regular. Whereas, 11.32 per cent children (6 in no.) were not regular in attending the school. Out of six children, five were female children and only one was male child which shows the differential treatment of parents in sending the school. Among them, one female child did not have father while mother was housewife so, incapability of mother may be the reason in not sending to the school. However, the difference in parental involvement was not observed between regular and irregular children in school.

Regarding degree of constraint (Fig. 4), significant difference was found between degree of constraint and parental involvement. Correlation analysis also revealed significant and negative relation between the two variables indicating that parental involvement increased in children with milder constraint. Reason may be the parents' efficacy in handling milder form of disability with their children. The main effect of degree of constraint was also found significant but main effect of gender and interactionary effect of degree of constraint and gender was found non-significant. This finding is on par with Baker *et al.* (1996) identified less involvement of families in mental retardation children than psychiatric disorder.

5.4.3 Parental characteristics

Influence of education and occupation of parents, both father and mother (Table 7.9) was found non-significant. This may be due to less range in education and occupation of parents. The reasons for the results may be parent were involved equally in promoting social and personal skills of children regardless of their education and occupation. The results regarding the parents education is consistent with the findings of Bailey *et al.* (1999), Lindstrom *et al.* (2007) who reported no relationship between parental involvement and education of parents. Lindstrom *et al.* (2007) also explained occupation of parents did not contribute to the parental involvement.

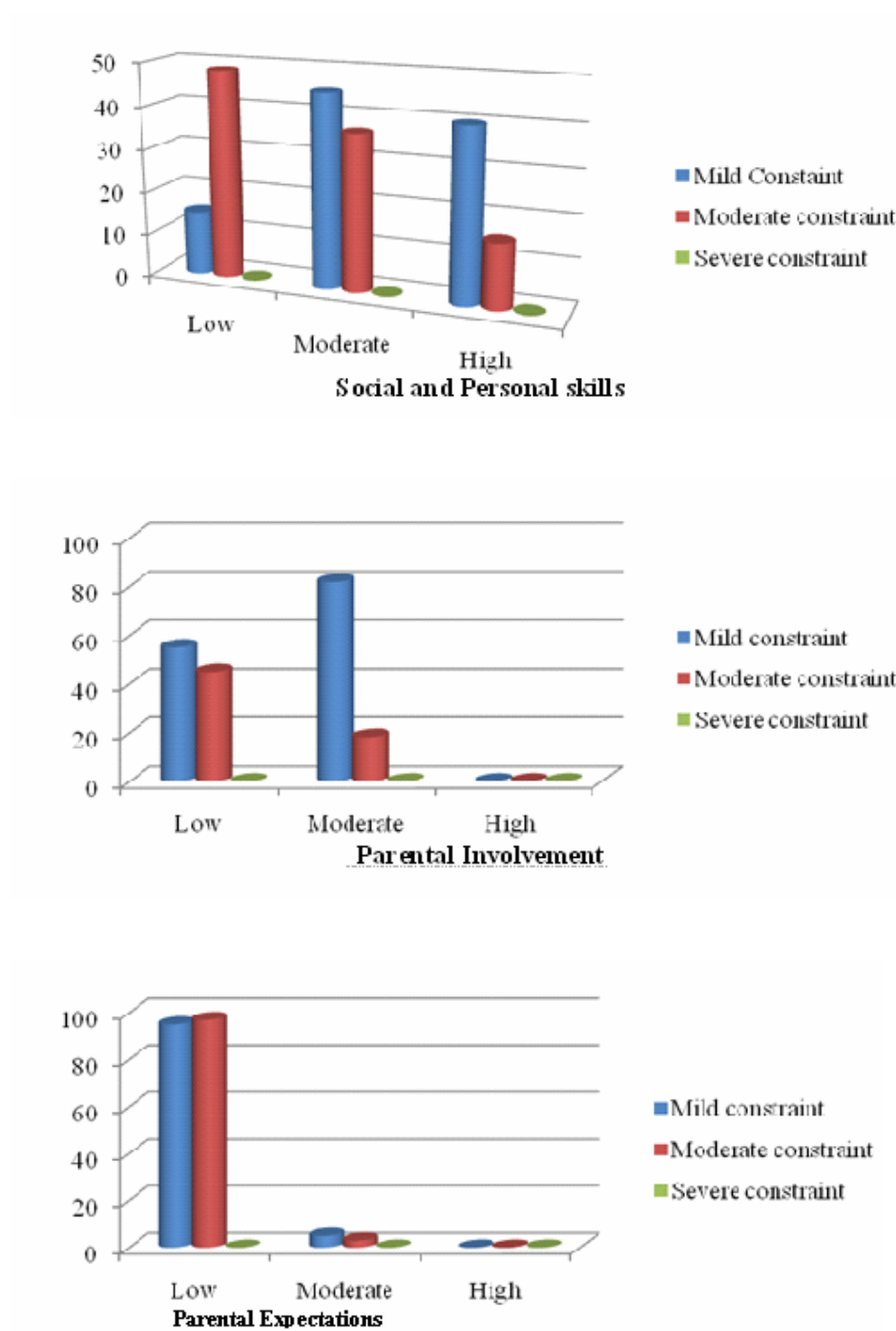


Fig.4. Social and Personal Skills of Children, Parental Involvement and Parental Expectations by Child's Degree of Constraint

5.4.4 Familial characteristics

The results (Table 7.10) revealed non-significant difference between castes and religions on parental involvement. The results are in line with Neely-Barnes *et al.* (2008) who found that family involvement did not differ on the basis of race. It may be due to involvement of parents in enhancing the skills of mentally challenged children would be regardless of caste and religion.

Parental involvement was not influenced by the family type and size. This may be the reason that due to major responsibility of parents to be involved irrespective of different types and size of family especially when a child is mentally retarded. The findings are on par with Neely-Barnes *et al.* (2008) who also reported that family involvement was not affected by type of family and members.

The data presented (Table 7.10) also depicts non significant relation of family income and parental involvement. Among the sample, 60.37% belonged to low income group while only 39.62 per cent children from middle income. The above findings may be due to the fact that better environment provided by parents in training of the mentally challenged children irrespective of their financial conditions. The findings are in congruent with Trivette *et al.* (1995) whose study also showed no relationship between family income and their involvement. Contradictorily Neely-Barnes *et al.* (2008) reported higher income families were more involved than lower income families.

Parental involvement was not significantly influenced by the SES of family. It may be because of that parents from all the SES background provide equal care, participation in the training of the children in developing the skills. The present findings are substantiated with studies of Bailey *et al.* (1999) who also did not found SES as predictor for the involvement.

5.5 Parental expectations regarding acquisition of social and personal skills of mentally challenged children

A higher percentage of parents had low expectations (Table 8c and Fig. 6), almost 96 per cent and only two parents had moderate. None of the parents had high expectations regarding acquisition of social and personal skills of children. This may be due to reason that parents have accepted the disability of children. The findings are in agreement with Shahzadi (1992) who reported that parents and siblings feel that the child cannot live independently but will need continuous supervision. Similarly Tucker and Fox (1995) who indicated that mothers of mildly handicapped sample had significantly lower developmental expectations than of non-handicapped sample. But some researcher like Schneider and Gearhart (1985) reported that mothers may underestimate their children with delays and do not challenge them enough. Similarly Miller (1986) suggested that parent's inaccurate estimations of their children's capacities may negatively influence children's development by limiting parent's ability to create an optimally challenging environment. So, parents should not underestimate their child, and should provide the opportunities to develop the full potential. While a recent study of Farheen *et al.* (2008) who reported a higher percentage of parents shown appropriate expectations.

Case studies of two children where parents had moderate level of expectations are: One was 11 years old having mild degree of disability and no other associated disability. The child got admitted in special school a year ago at the time of survey. Earlier to this school the child went to normal school. He had one elder brother. Father was graduated and working as manager in private sector with the monthly income of Rs 25,000. Mother was undergraduate and housewife. Parents find it difficult to accept the reality and expect normalcy. They expect the child to be independent with job in future life. But they did not have any expectations regarding educational attainment. Parent expected him to be socially independent. As child had acquired basic skills, their expectations were high in acquisition of more advance skills like working independently, good conversation and communication skills, and tasks like making a small purchase, going to neighbor's house, crossing the road alone as well as academic skills. Parents want the child to assist adults in preparing meals, washing utensils, lighting a gas stove, cutting vegetables etc.

Another case was a 7 year old identified at the age of one year, an autistic child with severe retardation, no speech at all and frequently attacked by fits. The child had one elder

sister, got admitted in school just 2 months prior to the interviewer's date of visit. Father had done PUC and was employed in a business sector with monthly income of Rs 10,000. Mother was housewife and SSLC passed. Because of the severity, the child was totally dependent on the parents for daily living activities. Parents had moderate level of expectations mainly in the area of basic self help skills viz. toileting, bathing, feeding, brushing teeth, dressing, walking etc. Parents do not want him to attend the school with normal children because they understand the severity. But they just want him to be socially independent. They have no job expectations as they wish to take care of him, but want the child to have his family as an adult.

Majority of parents had low expectations. Among the tasks with high expectations (Table 9.1b), the tasks were related to personal skills which includes self-care skills, home living activities, pre-academic skills etc. Parents had higher expectations from school (Table 9.4), mainly in the area of pre-academics. Parents want to highly participate in the training of self-care skills (Table 9.3). Parents had low expectations from their children on tasks to be learnt on their own (Table 9.5).

A higher percentage of parents (89.66%) had expectations in the social domain (includes social activities, discipline and language development) followed by 86.21 per cent in personal domains (includes personal and academic skills) (Table 9.2). One parent had expectations that child should stop eating plastics, the child was 11 years old and had mild mental retardation along with hearing impairment and had a pica of eating plastics.

With results (Table 9.7a) pertaining to satisfaction of the services offered by school, majority of parents were satisfied with the education/training provided by the school to their retarded children. The reasons (Table 9.7b) regarding satisfaction with school services were that child had improved in acquisition of daily living activities, developing discipline, and therapies provided to their child. They were also satisfied with emotional support provided by the schools, and for providing congenial atmosphere, requisite facilities all under one roof, effective teaching and they also appreciated the special skills of the teacher to train their child. The findings are on par with Green & Shinn (1994) and Bailey *et al.* (1999) who reported that parents had high degree of satisfaction with the services their children received from special education.

A higher percentage of parents had positive attitude regarding mainstreaming their child (Table 9.8a). The reasons given by the parents (Table 9.8b) were, they want their child to be in common pool/ as a normal child, to gain more confidence and expected to see drastic change. Their believe is that children have capability and will cope up with regular program. The findings are in agreement with Palmer (1998) and Benett (1997) who reported positive attitude of parents towards inclusive education.

About parental expectations regarding academic achievement of their children (Table 9.9), majority of parents did not expect their child to attain higher education but want their child to be socially independent. Parents realized that, socially independence is more important for their disabled child than academic achievement. The findings are on par with Kolb and Hanley-Maxwell (2003) who stated although parents agree with academic performance being important, they want their children to develop skills regarding interpersonal and intrapersonal and motor development.

A higher percentage of parents (Table 9.10a) want their children to be independent with job, and earn for their livelihood as an adult (Table 9.11). Parents ideally expect, but realistically when parents were asked by the investigator which job they preferred for their children, majority of them (53.13%) were not sure (Table 9.10b). This finding is supported by the study of Kramer and Blacher (2001), McNair and Rusch (1991) who reported that majority of parents expected their children to work independently as adults. Ivey (2004) also supports the findings that a higher parental expectation was reported than likelihood regarding adult responsibility and success in education.

5.6 Factors influencing parental expectations

The results of analysis of influence of selected factors viz. child's characteristics, factors associated with disability and special education, parental and familial characteristics on parental expectations was found non-significant. This may be due to disproportionate

distribution of parents among the levels of expectations. Majority (96.37%) had low expectations with a range of 73 to 92 scores.

Normally parents have higher expectations from their children to develop the skills with increase in age. Acceptance and recognition of mental retardation in children might have resulted in similar expectations irrespective of age (Fig. 2). This finding support the study of Clare *et al.* (1998) who reported parent's expectations of developmental delayed children were moderately stable over time and age. However Narayan *et al.* (1993) found positive relation while, Masino and Hodapp (1996) reported negative relation between age and parental expectations.

Parental expectations were similar in both male and female children (Fig. 5). Regardless of gender, parents expected their children to be independent in social and personal skills. The results are in line with Masino and Hodapp (1996) who reported that gender did not contribute to the parental expectations of students with disabilities. While data is contradictory with the study of Narayan *et al.* (1993) and Mutua and Dimitrov (2001) who reported a influence of gender on parental expectations.

With respect to ordinal position, parents had significantly higher expectations from last born child in comparison with first and middle borns. This may be due to the experience gained by parents in upbringing their first and middle borns and non-recognition of disability in their last born child. So, expectations of normal development might have been observed. The results (Table 10.2) demonstrated parental expectations did not differ significantly in the main effect of both gender and ordinal position and also interactionary effect was found non-significant. The results obtained may be because of unequal distribution of male and female children among different ordinal position in a family.

Degree of disability (Fig. 3), associated disability and degree of constraint (Fig. 4) did not contribute to the parental expectations. The results may be because all parents had accepted the child as they are. So, parents had low expectations regardless of degree of severity. This result is consistent with the findings of Ly (2008) who found child's IQ did not relate to future expectations. Similarly Masino and Hodapp (1996) reported type of disability did not influence the educational expectations. However findings of Narayan *et al.* (1993), Tucker and Fox (1995), Mutua and Dimitrov (2001) and Grigal and Neubert (2004) reported an influence of disability over parental expectations.

Age at identification of disability, age at admission to special school, years of schooling, and attendance of children in school did not influence the parental expectations. It may be that majority of parents had low expectations and less hopes from their children regardless of schooling factors. Masino and Hodapp (1996) found parental educational expectations were similar in both disabled and non-disabled student although there was disparity in college attendance.

Among the parental familial characteristics viz. parent's education and occupation (Table 10.3), only fathers' occupation influenced the parental expectations. Parents who were high school teachers or technicians had significantly higher expectations than parents who were employed in higher professionals (Doctor, high Government officers) or in caste occupation, labourer and so on. This trend may be because of the confidence in effectively imparting social and personal skills which includes pre-academic skills by the teachers to the economically and socially deprived children studying in the schools. While in case of professionals, awareness of the mental retardation condition may be responsible for low expectations. Among people of low occupation (e.g. tailor, labourer) lack of awareness may have lead to low expectations. This finding is supported by Narayan *et al.* (1993) who also found an influence of parent's occupation on the parental expectations. Regarding to parent's education, the data of the present study is contradicted by the studies of Narayan *et al.* (1993) Masino and Hodapp (1996) who found a positive relation between the parent's education and parental expectations.

Results (Table 10.4) depict the main effect of gender, father occupation, and interactionary effect with parental expectations which was non-significant. The results may be obtained due to unequal distribution of parents among different level of education among male and female children.

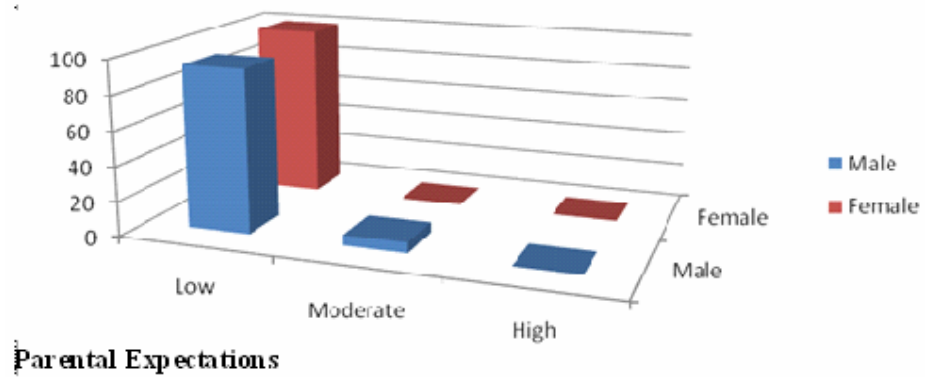
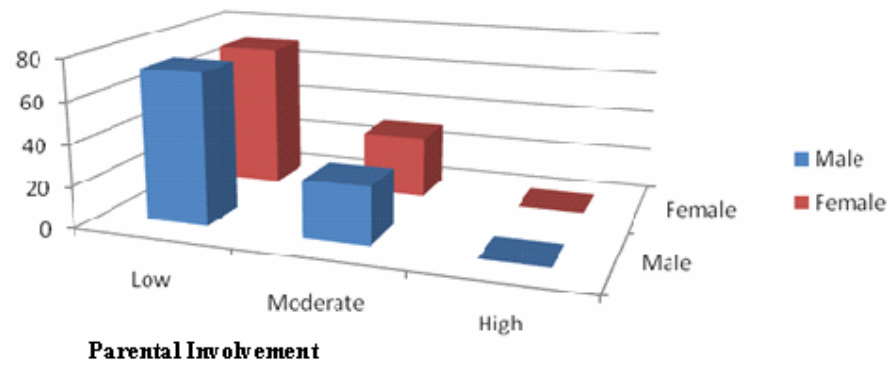
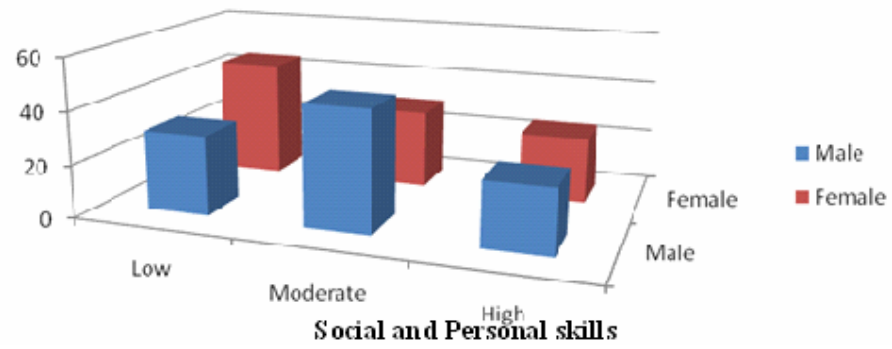


Fig.5. Social and Personal Skills of children, Parental Involvement and Parental Expectations by Child's gender

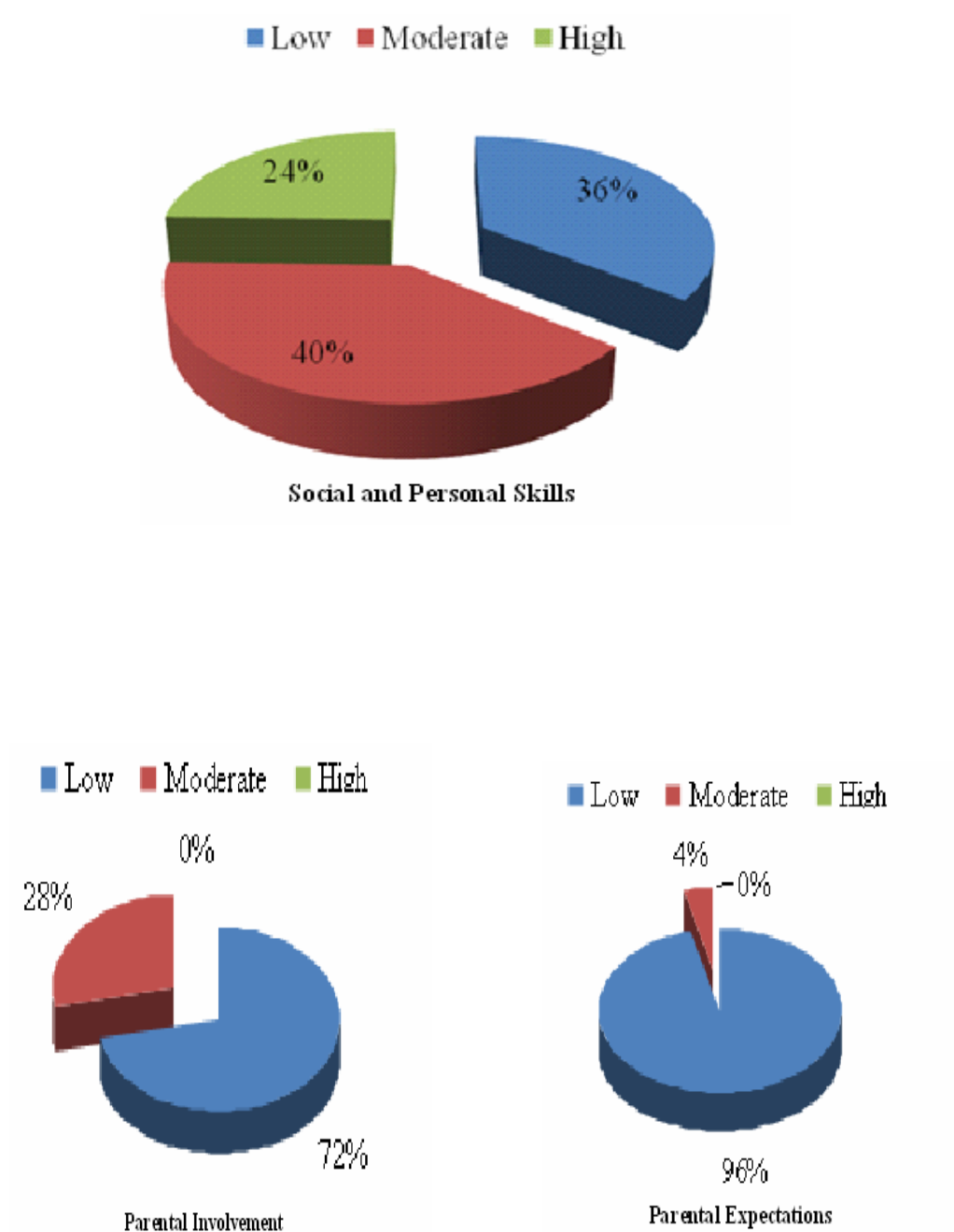


Fig.6. Percentage distribution of mentally challenged children by Social and personal skills, Parental Involvement and Parental Expectations

None of the familial factors such as caste, religion, family size, family type, family income and Socio-economic status had shown influence on parental expectations. Regarding SES, contradictory result was found by Narayan *et al.* (1993) who revealed a significant influence of SES on parental expectations on mentally challenged children.

5.7 Interrelations between Social and personal skills of mentally challenged children, parental involvement and parental expectations

Significant positive relation was obtained with regard to parental involvement and social and personal skills of children (Table 11a). Social and personal skills of children influenced parental involvement upto 61 percent (Table 12a). This indicated that parental involvement was higher in children with higher level of skills. It may be due to the reciprocity in interactions with more parental involvement children respond more and vice-versa and parents gain confidence in promoting social and personal skills in mentally challenged children. The findings is supported by Verdonshot *et al.* (2008) who reported that family involvement has a positive effect on community participation of persons with intellectual disability. Similar result was also found by Rani and Reddy (1999), Alvey and Aeschleman (2008) and McIntyre (2008) who found training of children from their parents enhance the skills.

Social and personal skills had no influence on parental expectations statistically but correlation analysis revealed a positive but non-significant relation (Table 11b). This may be because parents expect more when children acquire more skills, when children were not capable they had low expectations because of acceptance/awareness. But non-significant relation is due to disproportionate distribution of sample. This finding is supported by Mutua and Dimitrov (2001) and Narayan *et al.* (1993) who identified parent's expectations about future outcomes for children with severe mental retardation were much lower than those for children with mild or moderate mental retardation.

A non-significant but positive relation was observed between parental involvement and parental expectations (Table 11c), indicating as parental expectations increases parental involvement also increases. As parents had accepted the disability of child, they may have had low expectations regarding acquisition of skills resulting in low involvement in the development of skills among challenged children. The non-significant relation is due to disproportionate distribution of parents in the levels of expectations where more than 96 per cent fell under low expectations category with a less range.

6. SUMMARY AND CONCLUSIONS

Study on “Parental involvement and expectations in promoting social and personal skills of mentally challenged children” was undertaken in Hubli and Dharwad city of Karnataka during 2008-2009. The aim of the study was presented below.

- 1) To assess the social and personal skills of mentally challenged children studying in special schools.
- 2) To study the extent of involvement of parents in developing social and personal skills of mentally challenged children.
- 3) To know parental expectations regarding social and personal skills of mentally challenged children.
- 4) To determine the influence of child's characteristics, factors associated with disability and special education, parental and familial factors on social and personal skills of mentally challenged children, parental involvement and parental expectations

The population for the study comprised of mentally challenged children who were attending special schools in Hubli and Dharwad city. There were nine special schools in Hubli and Dharwad city. Two from Hubli and one from Dharwad city were selected on the basis of popularity of the schools and class strength. Sample of 50 per cent of the total strength of these three schools was selected in the age range of 5-16years having literate parents. This resulted with a sample of 80 children, out of which some data parents did not return the performas and some were deleted due to incomplete information. The final sample size was consisted of 53 children.

A schedule was developed to elicit general information such as child's, parental, familial characteristics, factors associated with disability and special education. Behavior Assessment Scales for Indian Children with Mental Retardation (BASIC-MR) developed by Peshawaria and Venkatesan (1992) was administered to assess the social and personal skills of mentally challenged children. A self-structured schedule was used to determine the extent of parental involvement and expectations. Pre test was done to establish the reliability of the selected research tools. A combination of items employed by Aoran *et al.* (1969) and Venkatramiah (1983) was used to assess the socio-economic status of family. Frequency and Percentages were computed in order to know the demographic characteristics of children, social and personal skills of children, parental involvement and parental expectations. Chi square test of association, Karl Pearson correlation coefficient, 't'-test and One-way ANOVA was used to know the influence of independent variables on all the three dependent variables viz. social and personal skills of children, parental involvement and expectations and to know the interrelation between the three variables Chi square test of association and Karl Pearson correlation coefficient were used. Two-way ANOVA was employed to know the influence of gender on the dependent variable with the significant factors. Step-wise regression analysis was used to know the hierarchial influence of selected factors on social and personal skills, parental involvement and parental expectations.

SALIENT FEATURES OF INVESTIGATION

The social and personal skills of mentally challenged children, parental involvement, and parental expectations and influencing factors are presented.

Social and personal skills of children

- A higher percentage of children (39.62%) had acquired moderate level of skills followed by low level (35.85%) and least was observed in high category (24.53%).

Influencing factors

- Older children had significantly higher level of social and personal skills than children of younger age.
- Male and female children did not differ significantly on levels of skills but male children were significantly higher on the skills compared to female children.
- Degree of disability, associated disability and degree of constraint had influence on the acquisition of skills among children. Children with mild disability and lesser constraint were higher social and personal skills.

- Late identified children had significantly higher level of skills than early identified because late identified children were milder in disability status.
- Social and personal skills of children did not differ by ordinal position, sibling status, age at admission to special school, years of schooling, regularity in school attendance, education and occupation of father and mother, caste, religion, family type and size, family income and socio-economic status.

Parental involvement in promoting social and personal skills of mentally challenged children

- Majority of parents (71.70%) had low involvement in developing the skills among children and slightly more than one quarter (28.30%) were in moderate level. None of the parents were in the high category.

Influencing factors

- Parental involvement was significantly more in older children than younger age.
- Involvement of parents was similar among both male and female children.
- Degree of disability, associated disability and degree of constraint had significant influence on parental involvement, indicating that parental involvement was higher in children with milder disability.
- Parental involvement was significantly higher in late admitted children to special school than other, because late identified children were milder in disability.
- Factors viz. ordinal position, sibling status, age at identification of disability, years of schooling, attendance of children in school, parent's education and occupation, caste, religion, family type and size, family income and socio-economic status did not influence the involvement of parents.

Parental expectations regarding acquisition of skills and special education

- More than 96 per cent parents had low expectations in acquisition of skills and very few (3.77%) had moderate. None of them were in the high category of expectations.
- Majority (94.34%) of parents were satisfied with the services provided by school.
- A higher percentage of parents (52.83%) wanted their children to be mainstreamed to normal school.
- More than half of the parents (52.83%) expected their children to be socially independent and did not have any educational expectations.
- Majority of parents (60.37%) wanted their children to be independent economically with a job in adulthood and to earn for their livelihood (37.73%).

Influencing factors

- Parents had significantly higher expectations in case of children who were last born in comparison to middle and first born.
- Fathers as high school teacher or technician exhibited significantly higher expectations than father with high Government officers or professionals or caste occupation or labourer.
- Factors such as age, gender, sibling status, degree of disability, associated disability, no. of associated disability, age at identification of disability, age at admission to special school, years of schooling, regularity in school attendance, degree of constraint, education of father and mother, mother's occupation, caste, religion, family type and size, family income and socio-economic status did not have significant influence on parental expectations.

Interrelation between social and personal skills of children, parental involvement and parental expectations

- Significant relation was observed between parental involvement and social and personal skills of children. The more the ability of children, more the parental involvement.
- Parental expectations did not influence the levels of skills of children. However, higher expectations were reported in case of children with high level of skills.
- Parental involvement did not influence the levels of parental expectations but parental involvement was higher where parents had higher expectations.

Hierarchical influence of significant factors on parental involvement and social and personal skills of children

- Social and personal skills of children had major influence upto 61 per cent on parental involvement.
- Degree of constraint along with parental involvement had influence upto 65 per cent on social and personal skills of children

IMPLICATIONS AND RECOMMENDATIONS

- The results revealed that the social and personal skills of mentally challenged children need to be enhanced as about 75 per cent children were in low and moderate category. Schools and Parents have a significant role in promoting the skills.
- Results also revealed that parental involvement had major influence upto 61 per cent on social and personal skills of children, so parental involvement is the answer for promoting social and personal skills of children.
- Approximately 2/3rd of parents had low involvement in developing social and personal skills of children. As majority of parents (96 %) had low expectations so, their involvement was low. It is true that parents are accepting the disability of children, but they should not underestimate the children. Low expectations may hinder the development of skills in the retarded children.
- In spite of majority of parents having high expectations regarding their future and adult role, social independence, independence with job and to earn for their livelihood, their involvement was less in developing the full potential of the children. If children are not given ample opportunities which comprise of a variety of stimulation, encouragement, love, warmth, then their potential may not be tapped. The functional ability and behavior of mentally retarded person is not dependent only on intellectual capacity, environment and effective training are also equally important. Thus, it is essential to create awareness among the parents so that they can involve themselves and promote training of the children in such a way that their children develop their full potential. Various training programmes should be organized along with awareness campaign imparting knowledge to parents related to care and education of disabled children. Methods such as pamphlets, books, mass communication may be employed. Counseling services need to be provided for the parents in appraising the capacity and the limitations of children with mental retardation, what to expect from their child and need and ways to involve in personal and social skills and to create congenial environment in home.
- Late recognition of mild mental retardation and so late admission was one of the important factors associated with schooling. There is a need for developmental assessment of children by child development clinicians so that early detection and early intervention is facilitated.
- The degree of constraint had a significant influence on the social and personal skills. So early identification of disability, early admission to school, years of schooling, regularity in attending the school have a favourable effect and parents need to be appraised.
- Most of the parental and familial characteristics did not have a significant influence on the social and personal skills of the children while factors associated with disability and special education had. This implies that schools have a greater influence in promoting social and personal skills. Parents also had expectations of the school to involve more in condition with severe disability and constraints. So, school should also provide caring and stimulating environment to enhance the skills of the children and can act as motivating force to encourage the parents in involving in developing skills of mentally challenged children. There is a need for social worker and Human development specialist to liaison the home and school.
- Social and personal skills of mentally challenged children, extent of parent involvement and parental expectations can be helpful for the teachers, social worker, counselor, Government, policy maker and planner in the programme formulation and execution of it for the care and education of mentally challenged children.

CONCLUSION

Thus from the findings of this study it can be concluded that majority of mentally challenged children had acquired moderate and low level of social and personal skills than high skills. Majority of parents had low level of involvement as their expectations were also low. Parental involvement, social and personal skills of children were affected by most of the factors related to disability, degree of constraint and age of the children but not affected by parental and familial characteristics which implies special education was a strong influencing factor in the acquisition of skills. Results also showed that acquisitions of skills were influenced by parental involvement and degree of constraint.

SUGGESTIONS FOR FUTURE RESEARCH

Following studies can be carried out in the future

- ❖ The present study was limited to the age group of 5-16 years and literate parents. So, parental involvement and parental expectations of mentally challenged children below 5 years and above 16 years can be studied.
- ❖ Comparison of parental involvement and expectations of children attending residential and day schools.
- ❖ Comparison between parents in involvement and expectations.
- ❖ Comparison of parental involvement and expectations between mentally challenged and normal children.
- ❖ Comparison of parental involvement and expectations between mentally challenged children and other disabilities.

REFERENCES

- AAMD., 1973. Revised. Washington: American Association on Mental Deficiency. (Cited in: Sen., 1992).
- Alam, A., Noureen, H., Alchatar, N., Imran, M., Iqbal, I. and Jamil, M., 2005, Behavior of parents towards physically handicapped children. *J. Agri. Soc. Sci.* 1 (1): 54-55.
- Alvey, G. L. and Aeschleman, S. R., 2008, Evaluation of a parent training programme for teaching mentally retarded children age-appropriate restaurant skills: A preliminary investigation. *J. Intellect. Disabil. Res.* 34 (5): 421-428.
- American Association on Mental Retardation, 2002. Mental Retardation: Definition, classification and systems of supports, 10th Edition. Washington, DC: American Association on Mental Retardation.
- [http://www.aamr.org/mental retardation](http://www.aamr.org/mental%20retardation).
- American Psychiatric Association Diagnostic and Diagnostic and Statistical manual of mental disorders, 4th edn. Text. Revision. Washington DC; American Psychiatric Association "MR", 2008.
- [www.googlesearch.co.in/Psychiatric Association/ DSM-IV TR](http://www.googlesearch.co.in/Psychiatric%20Association/D%20SM-IV%20TR).
- Anderson, V. H., Schlottman, R. S. and Weiner, B. J., 1975, Predictors of parents' involvement with institutionalized retarded children. *Am. J. Ment Defic.* 79: 705-710.
- Ando, H. and Yoshimura, I., 1979, speech skill levels and prevalence of maladaptive behaviors in autistic and mentally retarded children. *Child. Psychiat. Human. Devp.* 10 (2): 85-90.
- Ando, H., Yoshimura, I. and Wakabayashi, S., 1980, Effects of age on adaptive behavior levels and academics level in autistic and mentally retarded children. *J. Autism. Dev. Disord.* 10 (2): 173-184.
- Anonymous, 1994, caste classification. Karnataka gazette, Government of Karnataka.
- Anton, B. S. and Dindia, G., 1984, Parental perceptions of cognitive abilities of children with cerebral palsy. *Psychological Reports*, 54: 987-990.
- Aoran, P. G., Marihal, V. G. and Malatesha, R. N., 1969, A common socio-economic status scale rural and urban areas. *Monograph.* 3: 14-16.
- Bailey, D. B., Buysee, V., Edmondson, R. and Smith, T. M., 1992, Creating family-centered services in early intervention: Perceptions in four states. *Except. Child.* 58: 298-309.
- Bailey, D. B., Skinner, D., Rodriguez, P., Gut, D. and Correa, V., 1999, Awareness, use, and satisfaction with services for latino parents of young children with disabilities. *Except. Child.* 65 (3): 367-381.
- Baker, B. L., Blacher, J. and Pfeiffer, S. I., 1993, Family involvement in residential treatment of children with retardation: Is there evidence of detachment? *J. Child Psychol. Psychiat.* 35: 505-520.
- Baker, B. L., Blacher, J. and Pfeiffer, S. I., 1996, Family involvement in residential treatment. *Am. J. Ment Retard.* 101 (1): 1-14.
- Begab, M., 1966, The mentally retarded and the family. In Irving Philips (Ed.) *Prevention and Treatment of Mental Retardation*. New York: Basic books. (Cited in: Parvathi and Vijayakumar., 1995)
- Behera, A., 2001, The effectiveness of cognitive skill training on performance in dressing in the mentally retarded. *Indian J. Occupational Therapy*, 33 (2): 15-19.
- Benda, C. E., Squires, N. D., Ogonik, J. J. and Wise, R., 1963, Personality factors in mild mental retardation. Part I. Family backward and socio-cultural patterns. *Am. J. Ment. Defic.* 68: 24-80. (Cited in: Sen., 1992)

- Bennett, T., Deluca, D. and Bruns, D., 1997, Putting inclusion into practice: Perspectives of teachers and parents. *Except. Child.* 64 (1): 115-131.
- Berge, J. M. and Holm, K. E., 2007, Boundary ambiguity in parents with chronically ill children: Integrating theory and research. *Family Relations*, 56: 123-134.
- Bhatia, M. S., Kabra, M. and Sapra, S., 2007, Behavioral problems in children with Down syndrome. <http://www.ncbi.nlm.nih.gov/pubmed/16085968>
- Bjorck-Akesson, E. and Granlund, M., 1995, Family involvement in assessment and intervention: Perceptions of professionals and parents in Sweden. *Except. Child.* 61 (6): 520-535.
- Blacher, J., 2001, Transition to adulthood: Mental retardation, families and culture. *Am. J. Ment. Retard.* 106 (2): 173-188.
- Blacher, J. and Baker, B. L., 1994, Family involvement in residential treatment of children with retardation: Is there evidence of detachment? *J. Child Psychol. Psychiat.* 35: 505-520.
- Blacher, J., Baker, B. L. and Feinfield, K. A., 1999, Leaving or launching? Continuing family involvement with children and adolescents in placement. *Am. J. Ment. Retard.* 104: 452-465.
- Bloom, A. S. and Zelko, F. A. J., 2006, Neuropsychological assessment: Variability in adaptive behavior in children with developmental delay. *J. Clinical Psychol.* 50 (2): 261-265.
- Bolte, S. and Poustka, F., 2002, The relation between general cognitive level and adaptive behavior domains in individuals with autism with and without co-morbid mental retardation. *Child. Psychiat. Human. Dev.* 33 (2): 165-172.
- Bruschini, H., Faria, N., Garcez, E. and Sprougi, M., 2003, Development of bladder control in mentally handicapped children. *International Braz. J. Uro.* 29 (5): 455-458.
- Buck, P., 1950, *The child who never grew*. New York: The John Day Company. (Cited in: Sen., 2000)
- Carvalho, R. L. and Almeida, G., 2009, Assessment of postural adjustments in persons with intellectual disability during balance on the seesaw. *J. Intellect. Disabil. Res.* 53 (4): 389-395.
- Chamberlain, P. and Patterson, G., 1995, Discipline and child compliance in parenting. In M. H. Bornstein (ed.), *Handbook of Parenting*, Vol. 4, Applied and practical parenting. Mahwah, N. J. Lawrence Erlbaum.
- Clare, L., 1998, The relationship of child characteristics and parents' of developmental goals for children from preschool to adolescence. Unpublished doctoral dissertation. (Cited in: Clare *et al.*, 1998)
- Clare, L., Garnier, H. and Gallimore, R., 1998, Parents' developmental expectations and child characteristics: Longitudinal study of children with developmental delays and their families. *Am. J. Ment. Retard.* 103 (2): 117-129.
- Cooper, S. A., Smiley, E., Jackson, A., Finlayson, J., Allan, L., Mantry, K. and Morrison, J., 2008, Adults with intellectual disabilities: Prevalence, incidence and remission of aggressive behavior and related factors. *J. Intellect. Disabil. Res.* 53 (3): 217-232.
- Corbett, J., 1977, Mental Handicap-Psychiatric aspects. In M. Rutter (Ed.), *Child Psychiatry, Modern approaches*. Oxford: Blackwell scientific; Philadelphia: Lippincott. (Cited in: Sen., 1992)
- Costigan, C. L., Floyd, F. J., Harter, K. S. M. and McClintock, J. C., 1997, Family process and adaptation to children with mental retardation: Disruption and resilience in family problem solving interactions. *J. Family. Psychol.* 11: 515-529.
- Deci, E. L., Hodges, R., Pierson, L. and Tomassone, J., 1992, Autonomy and competence as motivational factors in students with learning disabilities and emotional handicaps. *J. Learning Disabil.* 25 (7): 458-471.

- Deslandes, R., Royer, E., Potvin, P. and Leclerc, D., 1999, Patterns of home and school partnership for general and special education students at the secondary level. *Except. Child.* 65 (4): 496-506.
- Devlieger, P. J. and Trach, J. S., 1999, Mediation as a transition process: The impact on post school employment outcomes. *Except. Child.* 65 (4): 507-523.
- Dharap, N. Y., 1986, An investigation into the problems of the education of the mentally retarded children. Ph. D. Edu., Poona U.
- Donovan, A. M., 1988, Family stress and ways of coping with adolescents who have handicaps: Maternal perceptions. *Am. J. Ment. Retard.* 92: 502-509.
- Dunlap, W. R., 1987, A functional classification for independent living for the mentally retarded, *British J. Ment. Subnormality.* 33 (64): 66-76.
http://bjdd.net/oldPDFs/64_66to76.
- Dykens, E. M and Kasari, C., 1997, Maladaptive behavior in children with Prader-Willi syndrome, Down syndrome and nonspecific mental retardation. *American Journal of Ment. Retard.* 102: 228-237.
- Farheen, A., Dixit, S., Bansal, S. B. and Yesikar, V., 2008, Coping strategies in families with mentally retarded children. *Ind. J. for the Practising Doctor.* 5(5): 11-12.
- Figen, A. R., Kilic, E. and yarpuzler, A. A., 2008, A study of learning assessment of personal hygiene skills of mentally retarded individuals in Drop-in day care services. *Turk. J. Med. Sci.* 38 (5): 447-453.
- Floyd, F. J., Harter, K. S. M. and Costigan, C. L., 2004, Family problem-solving with children who have mental retardation. *Am. J. Ment. Retard.* 109 (6): 507-524.
- Fontaine, H., Zejlstra, H. P. and Vlaskamp, C., 2008, Transfer of information between parents and teachers of children with profound intellectual and multiple disabilities at special education centres. *J. Applied Res. Intellect. Disabil.* 27: 477-483.
- Frenkel, S. and Bourdin, B., 2008, Verbal, visual and spatio-sequential short-term memory: Assessment of the storage capacities of children and teenagers with Down's syndrome. *J. Intellect. Disabil. Res.* 53 (2): 152-160.
- Frey, K. S., Greenberg, M. T and Fewell, R. R., 1989, Stress and coping among parents of handicapped children: A multidimensional approach. *Am. J. Ment. Retard.* 94: 240-249.
- Gilmore., Linda. A., Campbell., Jeniffer., Cuskelly. and Monica., 2003, Developmental expectations, personality stereotypes, and attitudes towards inclusive education: Community and teacher views of Down syndrome. *International. J. Disabil. Dev. Edu.* 50 (1): 65-76.
- Goldstein, S. and Turnbull, A. P., 1982, The use of two strategies to increase parent participation in the IEP conference. *Except. Child.* 48 (4): 360-361.
- Gomez, R. and Hazeldine, P., 1996, Social information processing in mild mentally retarded children. *Res. Devp. Disabil.* 17 (3): 217-227.
- Gordon, R., Seltzer, M. M. and Krauss, M. W., 1997, The aftermath of parental death: Changes in the context and quality of life. In R. L. Schalock (Ed.), *Quality of life, Volume II: Application to persons with disabilities* (pp. 25-42). Washington, DC: American Association on Mental Retardation.
- Graham, C. T., 2007, Deficits in social skills and feeding behaviors associated with adults diagnosed with autistic disorder living in an institutionalized setting. M.A. Thesis, Graduate faculty of the Louisiana State University and Agricultural and Mechanical College.
http://etd.lsu.edu/docs/Graham_Thesis.pdf

- Green, S. K. and Shinn, M. R., 1994, Parent attitudes about special education and reintegration: What is the role of student outcomes? *Except. Child.* 61 (3): 269-281.
- Grigal, M., Neubert, D. A., 2004, Parents in school values and post-school expectations for transition aged youth with disabilities. *Career. Dev. Except. Child.* 27 (1): 65-85.
- Guralnick, M. J., Neville, B., Hammond, M. A. and Connor, R. T., 2008, Mothers social communicative adjustments to young children with mild developmental delays. *Am. J. Ment. Retard.* 113 (1): 1-18.
- Haager, D. and Vaughn, S., 1995, Parent, teacher, peer and self-reports of the social competence of students with learning disabilities. *Except. Child.* 26: 205-217.
- Hanline, M. F. and Halvorsen, A., 1989, Parent perceptions of the integration transition process: Overcoming artificial barriers. *Except. Child.* 55 (6): 487-492.
- Hanneman, R. and Blacher, J., 1998, Predicting placement in families who have children with severe handicaps: A longitudinal analysis. *Am. J. Ment. Retard.* 102 (4): 392-408.
- Harry, B., Allen, N. and McLaughlin, M., 1995, Communication versus compliance: African-American parents' involvement in special education. *Except. Child.* 61 (4): 364-377.
- Hayden, M. F. and Heller, T., 1997, Support, problem-solving/coping ability, and personal burden of younger and older caregivers of adults with mental retardation. *Ment. Retard.* 35: 364-372.
- Heller, T., Hsieh, K. and Rowitz, L., 1997, Maternal and paternal caregiving of persons with mental retardation across the lifespan. *Family Relations*, 46: 407-415.
- Hogansen, J. M., Powers, K., Geenen, S., Gil-Kashiwabara, A. and Powers, L., 2008, Transition goals and experiences of females with disabilities: Youth, parents, and professionals. *Except. Child.* 74 (2): 215-234.
- Hornby, G. and Singh, N. N., 1984, Behavioral group training with parents of mentally retarded children. *J. Ment. Defi. Res.* 28: 43-52. (Cited in: Menon., 1989)
- Hossler, D. and Stage, K., 1992, Family and high school experience influences on the postsecondary educational plans of ninth grade students. *Am. Educational Res. J.* 29: 425-451.
- Ivey, J., 2004, What do parents expect? A study of likelihood and importance issues for children with autism spectrum disorders. *Focus on Autism and other Developmental Disabilities*, 19: 27-33.
- Kabra, M. and Gulati, S., 2003, Mental retardation. *Indian J. Pediatr.* 70 (2): 153-158.
- Kolb, S. M. and Hanley-Maxwell, C., 2003, Critical social skills for adolescents with high incidence disabilities: Parental perspectives. *Except Child.* 69 (2): 163-179.
- Koskentausta, T., Livanainen, M. and Almqvist, 2007, Risk factors for psychiatric disturbance in children with intellectual disability. *J. Intellect. Disabil. Res.* 51 (1): 43-53.
- Kraemer, B. R. and Blacher, J., 2001, Transition for young adults with severe mental retardation: Dimensions of family involvement. *Am. J. Ment. Retard.* 39 (6): 423-435.
- Kumar, S. G., Das, A., Bhandary, P. V., Soans, H. N., Kumar, H. and Kotian, M. S., 2008, Prevalence and pattern of mental disability using Indian disability evaluation assessment scale in a rural community of Karnataka. *Ind. J. Psychiat.* 50 (1): 21-23.
- Kuppuswamy, B., 1968, A survey on mental retardation among children enrolled in middle schools of Mysore city. *Indian J. Ment. Retard.* 1: 12. (Cited in: Kabra and Gulati., 2003)

- Lai, Y. and Ishiyama, F. I., 2004, Involvement of immigrant Chinese Canadian mothers of children with disabilities. *Except. Child.* 71 (1): 97-108.
- Lange, C. M., 1995, School choice and students with disabilities: Parent perspectives and expectations. Research report No. 15, Enrollment options for students with disabilities.
- Lindstrand, P. and Brodinls, J., 2004, Information and communication technology an opportunity for parents of children with disabilities? *Int. J. Rehabil. Res.* 27 (2): 113-118.
- Lindstrand, P., Brodinls, J. and Lind, L., 2002, Parental expectations from three different perspectives: What are they based on? *Int. J. Rehabil. Res.* 25 (4): 261-269.
- Lindstrom, L., Doren, B., Metheny, J., Johnson, P. and Zane, C., 2007, Transition to employment: Role of the family in career development. *Except. Child.* 73 (3): 348-366.
- Lippold, T. and Burns, J., 2009, Social support and intellectual disabilities: A comparison between social network of adults with intellectual disability and those with physical disability. *J. Intellect. Disabil. Res.* 53 (3): 463-473.
- Ly, T. M., 2008, Asian American parents' attributions of children with Down syndrome: Connections with child characteristics and culture. *Intellect. Dev. Disabil.* 46 (2): 129-140.
- Madhav, S. M., 2001, Epidemiological study of prevalence of mental disorders in India. *J. Comm. Med.* 26 (4): 198-200.
- Mahoney, G., Boyce, G., Fewell, R. R., Spiker, D. and Wheeden, C. A., 1998, The relationship of parent-child interaction to the effectiveness of early intervention services for at-risk children and children with disabilities. *Topics in Early Childhood Special Education.* 18: 5-16.
- Mamta. and Punia, S., 2003, Maternal knowledge of mental retardation: Contributing factors. *Indian. Pshychol. Rev.* 60 (1): 24-28.
- Masino, L. L. and Hodapp, R. M., 1996, Parental educational expectations for adolescents with disabilities. *Except. Child.* 62 (6): 515-523.
- McIntyre, L. L., 2008, Parent training for young children with developmental disabilities: Randomized controlled trial. *Am. J. Ment. Retard.* 113 (5): 356-368.
- McNair, J. and Rusch, F. R., 1991, Parental involvement in transition programs. *Ment. Retard.* 29 (2): 93-101.
- Menon, R. P., 1989, Parental involvement in the training and management of their mentally handicapped persons. *J. Personality and Clinical Studies.* 5 (2): 217-221.
- Mental retardation in India, 1966, Report of the First All India Conference on Mental Retardation, New Delhi. (Federation for the Welfare of the Mentally Retarded, New Delhi). (Cited in: Kabra and Gulati., 2003)
- Mervis, C. B., Klein-Tasman, B. P. and Mastin, M. E., 2001, Adaptive behavior of 4- through 8-year-old children with Williams syndrome. *Am. J. Ment. Retard.* 106 (1): 82-93.
- Miller, S. A., 1986, Parents beliefs about their children's cognitive abilities. *Devp. Psychol.* 22: 276-284.
- Morningstar, M. E., Turnbull, A. P. and Turnbull III, H. R., 1995, What do students with disabilities tell us about the importance of family involvement in the transition from school to adult life? *Except. Child.* 62 (3): 249-260.
- Mutua, N. K. and Dimitrov, D. M., 2001, Parents' expectations about future outcomes of children with MR in Kenya. Differential effect of gender and severity of MR. *J. special. Edu.* 35 (3): 172-180.
- Narayan, J., Madhvan, T. and Prakasam, B., 1993, Factors influencing the expectations of parents of mentally retarded children, *J. Intellect. Disabil. Res.* 37 (2): 161-168.

- Neely-Barnes, S., Graff, J. C., Marcenko, M. and Weber, L., 2008, Family decision making: Benefits to persons with developmental disabilities and their family members. *Intellect. Dev. Disabil.* 40 (2): 93-105.
- Nourani, K., 1998, Social and adaptive behavior of Iranian preschoolers: Teachers and parents ratings. Ph. D. Thesis, Ontario Institute for studies in Education of University of Toronto (Canada). <http://hdl.handle.net/1807/12173>
- Olga F. P., 1981, A Guide and Handbook for Parents of Mentally Retarded Children. Charles C Thomas Publishing Ltd, United States.
- Palmer, D. S., Borthwick-Duffy, S. A. and widaman, K., 1998, Parent perceptions of inclusive practices for their children with significant cognitive disabilities. *Except. Child.* 64 (2): 271-282.
- Parvathi, A. S. and Vijayakumar, V. S. R., 1995, Gender of the mentally retarded and associated parental reactions. *Psychological studies.* 40 (2): 87-92.
- Patrikakou, E. N., 1996, Investigating the academic achievement of adolescents with learning disabilities: A structural modeling approach. *J. Educational Psychol.* 88 (3): 435-450.
- Peshawaria, R., 1988, Guidance and counseling for parents of mentally handicapped persons. Update in mental retardation, material for second refresher course, NIMH. (Cited in: Menon, R.P., 1989)
- Peshawaria, R. and Venkatesan, S., 1992, Behavior Assessment Scales for Indian Children with Mental Retardation (BASIC-MR), NIMH, Secunderabad.
- Peshawaria, R., Menon, D. K, Ganguli, R., Roy, S., Pillay, R. and Gupta, A., 1995, Understanding Indian families, having persons with mental retardation: Impact on Parents (Cited in: Mamta and Punia., 2003)
- Quinn, M. M., Jannasch-Penell, A. and Rutherford, R. B., 1995, Using peers as social skills training agents for students with antisocial behavior. A cooperative learning approach. *Preventive Social Failure.* 39: 26-31.
- Rani, U. K. and Reddy, V. N., 1999, Involvement of parents in training mildly retarded children of rural areas in self care and play skills. *Ind. Psychol. Rev.* 52 (1): 2-8.
- Retish, P., 1989, Parent expectations and special needs students. *Special Services in the Schools*, 4 (3/4): 159-162.
- Ricci, R. A. and Hodapp, R. M., 2003, Fathers of children with Down's syndrome versus other types of intellectual disability: Perceptions, stress and involvement. *J. Intellect. Disabil. Res.* 47 (415): 273-284.
- Roach, M. A., Orsmond, G. I and Baratt, M. S., 1999, Mothers and fathers of children with Down syndrome: Parental stress and involvement in child care. *Am. J. Ment. Retard.* 104 (5): 422-436.
- Rodrigue, J. R., Morgan, S. B and Geffken, G., 1990, A comparative evaluation of adaptive behavior in children and adolescents with autism, Down syndrome, and normal development. *J. Autism. Dev. Disord.* 21 (2): 187-196.
- Roper, S. O. and Jackson, J. B., 2007, The ambiguities of out-of-home care: Children with severe or profound disabilities. *Family Relations*, 56: 147-161.
- Rosen, L., 1955, Usual parental reactions, 166-171. (Cited in: Olga, F. P., 1981).
- Rueda, R., Monzo, L., Shapiro, J., Gomez, J. and Blacher, J., 2005, Cultural models of transition: Latino mothers of young adults with developmental disabilities. *Except. Child.* 71 (4): 404-414.
- Saroj, S. K. and Draughn, W. H., 1979, Comparative study of behavioral dimensions of mentally retarded and normal children as a function of chronological and mental age-Missouri children's picture series.
- http://bjdd.net/old/PDFs/52_18to22

- Schatz, J. and Hamdan-Allen, G., 1995, Effects of age and IQ on adaptive behavior domains for children with autism. *J. Autism. Dev. Disord.* 25 (1): 51-60.
- Schneider, P. and Gearhart, M., 1985, Interaction studies of parents and mentally retarded children: Is mother's behavior adaptive or maladaptive? Proceedings from the sixth Wisconsin symposium on Research in Child Language Disorders. Madison: University of Wisconsin Press. (Cited in Clare *et al.*, 1998)
- Schwartz, C., 1995, Assessing levels of personal autonomy among Israeli adults with intellectual disabilities living in group homes and apartment settings. *J. Intellect. Dev. Disabil.* 20 (1): 41-50.
- Seltzer, M. M., Krauss, M. W., Hong, J. and Orsmond, G. I., 2001, Continuity or discontinuity of family involvement following residential transitions of adults who have mental retardation. *Ment. Retard.* 39 (3): 181-194.
- Sen, A., 1992, Mental handicap among rural children. Sage publishers, New Delhi, India.
- Sen. A. K., 2000, Research in mental retardation in India: Challenges and opportunities. *Psychological Studies.* 45 (3): 139-144.
- Shahzadi, S., 1992, Perceptions of disability, expectations and aspirations about the disabled children, and the problems faced by the family and siblings of mentally retarded children residing in Karachi, Ph.D. Thesis. Uni. Karachi (Pakistan). www.google.co.in
- Stein, M. A., Szumowski, E., Blonclid, T. A. and Roizer, N. J., 2006, Adaptive skills dysfunction in ADD and ADHD children. *J. Child. Psychol. Psychiatry.* 36 (4): 663-670.
- Stevenson, H., Lev, S., Chen, C., Strigler, J.W., Hsu, C., Kitamura, S. and Hatano, G., 1990, Contexts of achievements: A study of American, Chinese, and Japanese children monographs of the society for research in child development, 55 (1-2, serial number 221).
- Stoneman, Z. and Crapps, J., 1990, Mentally retarded individuals in family care homes: Relationship with the family of origin. *Ment. Retard.* 94: 420-430.
- Su, C. Y., Chen, C. C., Wang, Y. P., Lin, Y. H. and Wu, Y. Y., 2008, Neuropsychological predictors of everyday functioning in adults with intellectual disabilities. *J. Intellect. Disabil. Res.* 52 (1): 18-28.
- Tang, K. M. L., Chen, T. Y. K., Lau, V. W. Y. and Wu, M. M. F., 2008, Cognitive outcome of children with developmental delay in Hong Kong. *HK. J. Paediatr.* 13: 157-164.
- Thomas, J. M. and Maxwell, C. H., 1996, Packaging the parachute: Parents experiences as their children prepare to leave high school. *Except. Child.* 63 (1): 75-87.
- Tredgold, A. F., 1937, A textbook of Mental Deficiency. Baltimore: Wood. (Cited in: Sen., 1992)
- Trivette, C. M., Dunstm C. J., Boyd, K. and Hamby, D. W., 1995, Family-oriented program models, helping practices, and parental control appraisals. *Except. Child.* 62: 237-248.
- Tucker, M. A. and Fox, R. A., 1995, Assessment of families with mildly handicapped and nonhandicapped preschoolers. *J. School. Psycho.* 33 (1): 29-37.
- Venkatramiah., 1983, Development of a socio-economic status scale for farm families of North Karnataka. *Uni. Agric. Sci., Dharwad.*
- Verdonschot, M. M. L., de Witte, L. P., REichrath, E., Buntinx, W. H. E. and Curfs, L. M. G., 2008, impact of environment factors on community participation of persons with intellectual disability: A systemic review. *J. Intellect. Disabil. Res.* 53 (1): 54-64.
- Wagner, M., Newman, L., D'amico, R., JAY, E. D., Butler-Nalin, P., Marder, C. and Cox, R., 1991, Youth with disabilities: How are they doing? Menlo Park, CA: SRI. (ERIC Document Reproduction Service No. ED: 341228).

- Whitney-Thomas, J. and Hanley-Maxwell, C., 1996, Packing the parachute: Parents' experiences as their children prepare to leave high school. *Except. Child.* 63 (1): 75-87.
- Wilkins, J., 2008, A comparison of social skills profiles in intellectual disabled adults with and without ASD. M.A. Thesis, Graduate faculty of the Louisiana State University and Agricultural and Mechanical College.
http://etd.lsu.edu/docs/Jonathan_Wilkins_Thesis_August_2008.pdf
- Wilkinson, K. M. and Ronski, M. A., 1995, Responsiveness of male adolescents with mental retardation to input from nondisabled peers. *J. Speech. Hearing. Res.* 38: 1045-1053.
- Winton, R. and Turnbull, A. P., 1981, Parental involvement as viewed by parents of preschool handicapped children. *Topics in Early Childhood Special Education.* 1 (3): 11-19.
- World Health Organization (WHO), 1968, Organization of services for the mentally retarded. Fifteenth report of the WHO Expert Committee on Mental Health. Geneva: WHO. (Cited in Sen., 1992)
- Wuang, Y. P., Wang, C. C., Huang, M. H. and Su, C. Y., 2008, profiles of cognitive predictors of motor functions among early school-age children with mild intellectual disabilities. *J. Intellect. Disabil. Res.* 52 (12): 1048-1060.
- Yule, W., 1975, Teaching psychological principles to non-psychologist. *J. Association of Educational Psychology.* 10 (3): 5-16. (Cited in: Menon., 1989)
- Zedin, A. G. and Turner, J. L., 1984, Self-perspectives on being handicapped: Stigma and adjustment. In R. B. Edgerton (Ed.) *Lives in Process: Mildly retarded adults in a large city*, (pp. 93-120) Washington, DC: American Association on Mental Deficiency. (Cited in: Clare *et al.*, 1998)
- Zijlstra, H. P. and Vlaskamp, C., 2005, The impact of medical conditions on the support of children with profound intellectual and multiple disabilities. *J. Applied Res. Intellect. Disabil.* 18: 151-161.
- Zingerevich, C., Greiss-Hess, L., Lemons-Chitward, K., Harris, S. W., Hessel, D., Look, K. and Hagerman, R. J., 2008, Motor abilities of children diagnosed with Fragile X syndrome with and without autism. *J. Intellect. Disabil. Res.* 53 (1): 11-18.

APPENDIX I

General information schedule

1. Name of the Child:

2. Age:

3. Gender: Male/Female

4. Date of Birth:

5. Family type: Nuclear/Joint

6. Caste:

7. Religion:

8. Ordinal position:

9. Sibling constellation:

	Brother	Sister
Elder		
Younger		

10. Family composition;

Sl. No.	Name of the family Member	Age	Gender	Relation with you	Educational status	Occupation	Income/month
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							

11. Degree of Disability: Mild/Moderate/Severe

12. Associated Disability; Yes / No

If Yes, then, a) Cerebral Palsy b) Any Other _____

13. How old was the child when you realized the child's development is delayed _____

14. What was the age of child when he was admitted to the special school _____

15. Has there been a delay in admitting the child to school. Yes /No

16. No. of Years of schooling (in this school) _____

17. Is he/she regular in attending the School? Yes / No

APPENDIX II
Behavior assessment scale

Instructions – Read each item carefully and Write the score of each item with the suitable alternatives according to the child's ability to perform the following tasks. The score of the alternatives are: Independent -5, verbal hints-4, Verbal instructions-3, Physical help-2, or Totally dependent-1(cannot do) and Not applicable-0. The items are to be considered according to the age of the child. If the child performs items in advance to his age do rate them.

A. SOCIAL SKILLS

- | | |
|----------|---|
| 0–5years | 1. Responds with correct gesture when said ta-ta.
2. Responds to own name by turning his/her head.
3. Identifies teacher by his/her name.
4. Goes inside school yard and come back.
5. Shares food/toys with other children |
| 5-7years | 6. Greets others
7. Seeks permission to go out
8. Sings /dances with music
9. Offers help to teachers in classroom/school chores.
10. Knows duties of various occupations
11. Waits for his turn with 4 to 5 other children.
12. Plays with 4-5 children. |
| 7-9years | 13. Comes and goes to school unattended when the school is written the same neighbourhood
14. Says 'please' and 'thank you'
15. Introduces himself to others
16. Plays with children for 20 minutes in cooperative play /activity
17. Can across road. |
| 9+ years | 18. Goes to home from school or vice versa outside his neighbourhood.
19. Receives and gives message takes on phone or in person.
20. Travels in a bus on own. |

B. ACTIVITIES OF DAILY LIVING

Eating

- | | |
|----------|---|
| 0-5years | 1. Swallows liquid or semi-solid foods
2. Drinks from cup or glass
3. Discriminate eatables from non-eatables
4. Chews solid foods |
| 5-7years | 5. Picks up food with Fingers and puts in mouth
6. Peels banana /orange skin
7. sucks water /liquid through a straw
8. Mixes rice, dhal and eats with hands/spoon. |

Toileting

- | | |
|----------|--|
| 0-5years | 9. Indicates need to go to toilet
10. Reaches the toilet |
| 5-7years | 11. Removes underwear/pant before sitting on toilet seat.
12. Washes self after use of the toilet
13. Flushes toilet after use |

Brushing

- | | |
|----------|---|
| 0-5years | 14. Wipes hands with towel/cloth
15. Washes hands with soap and water |
| 5-7years | 16. Brushes teeth
17. Spits paste
18. Cleans the tongue
19. Applies paste on the tooth brush |

Bathing

- | | |
|----------|---------------------------------------|
| 0-5years | 20. Pours water on self for bathing |
| | 21. Wipes face with towel/cloth |
| 5-7years | 22. Washes face with soap and water |
| | 23. Uses towel for drying body |
| | 24. Removes soap from body with water |
| | 25. Applies soap on body |

Dressing

- | | |
|----------|---|
| 0-5years | 26. Takes off clothes when unbuttoned |
| | 27. Puts on underpants or elastic knickers |
| | 28. Unbuttons clothing |
| | 29. Puts on shirt/frock (need not button) |
| 5-7years | 30. Puts slippers on correct feet |
| | 31. Buttons own clothing |
| | 32. Puts on pullover shirt/skirt and blouse |
| | 33. Laces shoes or buckles sandals |
| 7-9years | 34. Ties knots |

Grooming

- | | |
|----------|--|
| 5-7years | 35. Applies powder on face/body |
| | 36. Oils hair |
| | 37. Cuts nails with nail cutter/scissors |
| | 38. Puts on Wrist watch |
| 9+ years | 39. Plaits hair (female)/combs hair with parting (males) |
| | 40. Looks after menstrual hygienic (female)/ shaves (male) |

C. READING- WRITING

Reading

- | | |
|----------|--|
| 0-5years | 1. Matches five similar objects |
| | 2. Matches five common objects to picture in a book |
| | 3. Matches five colours |
| | 4. Recognizes his/her name |
| | 5. Reads his/her name |
| | 6. Sorts five similar pictures into same category |
| | 7. Matches five three letter words |
| 5-7years | 8. Identifies five colours |
| | 9. Names five colours |
| | 10. Reads five printed words |
| 7-9years | 11. Reads name of parents |
| | 12. Reads two word phrases |
| | 13. Reads own address |
| | 14. Reads names of family members/friends |
| | 15. Reads short sentences |
| | 16. Reads sign boards |
| 9+ years | 17. Reads small paragraphs |
| | 18. Reads large print from magazines, newspapers, etc. |
| | 19. Reads medium sized handwritten paragraphs |
| | 20. Reads Short news item from newspapers |

Writing

- | | |
|----------|---|
| 0-5years | 21. Scribbles with chalk or pencil on a slate, floor or paper |
| | 22. Traces along a three inch straight line |
| | 23. Traces along a circular object |
| | 24. Traces alphabets of own name |
| | 25. Copies alphabets of own name |
| | 26. Copies a straight line |
| | 27. Copies a circle |
| | 28. Draws a line connecting three dots |
| | 29. Writes own name |
| 5-7years | 30. Copies a square |
| | 31. Copies a triangle |

	32. Copies own address
	33. Writes own address
7-9years	34. Copies five printed sentences
	35. Writes 5-6 words on dictation
	36. Writes five sentences on dictation
9+ years	37. Writes a letter
	38. Fills in an application
	39. Writes a composition of minimum 40 words on simple topics
	40. Writes a leave letter

D. NUMBER-TIME

Number

0-5 years	1. Rote counts 1-5
	2. Separates one object from a group upon request
	3. Discriminate between less and more
	4. Matches identical number of concrete objects
5-7 years	5. Recognizes written numbers from 1-10
	6. Writes numbers sequentially from 1-10
	7. Picks up specified number of objects upto five
	8. Arranges number symbols sequentially from 1-5 in an order
	9. Follows direction to fill upto half glass
	10. Adds single digit numbers within 10
	11. Subtracts single digit numbers within 10
7-9years	12. Writes numerals upto 100 on random dictation
	13. Does two digit addition without carry over
	14. Does two digit subtraction without borrowing
	15. Does two digit addition with carry over
	16. Does two digit subtraction without borrowing
9+ years	17. Names math Symbols
	18. Measures liquid using measuring cups
	19. Weighs Objects using weighing scale
	20. Uses calculator for basic arithmetic operations

Time

0-5years	21. Associates time/events to routine school activities
	22. Associates watch/clock with time
	23. Follows 'now', 'later', 'hurry', 'wait'
	24. Tells correctly of it is day or night
	25. Tells correctly of it is morning or evening
5-7years	26. Follows yesterday, today and tomorrow
	27. Tells hour and minute hands on the clock
	28. Names and identifies days of the week
	29. Counts by five's
7-9years	30. Tells time by hour
	31. tells own age in years
	32. Names and identifies months of the year
	33. Associates time with work routine
	34. Tells time by quarter hour
	35. Tells date of birth
9+ years	36. Tells day, date, month and year
	37. Reads and uses a calendar
	38. Tells time to the minutes on the clock
	39. Reminds on prefixed time
	40. Sets watch to correct time

E. LANGUAGE

Receptive

0-5years	1. Locates items/person on command by looking at them
	2. Responds to verbal or gestural commands
	3. Follows simple commands that call for action

- | | |
|----------|---|
| 5-7years | 4. Points to familiar objects |
| | 5. Follows question forms, whose, which, why? |
| | 6. Carries out two sequential verbal or gestural commands |
| 7+ years | 7. Follows left, right |
| | 8. Follows sight words |
| | 9. Follows traffic signs/signals |

Expressive

- | | |
|----------|--|
| 0-5years | 10. Indicates basic needs by pointing or gesturing |
| | 11. Speaks five single words meaningfully |
| | 12. When asked tells own name |
| | 13. Uses two word phrases |
| | 14. Tells use of five familiar objects |
| | 15. Describes actions of people using words |
| | 16. Uses words to indicate commands |
| 5-7years | 17. Names common vehicles, animals, vegetables, fruits |
| 7-9years | 18. Uses complex sentences |
| | 19. Narrates simple jokes |
| 9+ years | 20. Carries on simple conversations |

APPENDIX III
Parental involvement schedule
Part A

Instructions – The following items or statements are related to the behavior of life skills.
Please read each item carefully, if the behavior of an item is found with your child then only write ‘Yes’ otherwise ‘No’. IF your answer is ‘Yes’, kindly indicate whether that behavior or skill is (1) Learnt own (2) You trained or (3) Learnt in School.

ಸೂಚನೆಗಳು: ಪ್ರತಿಯೊಂದು ವಾಕ್ಯವನ್ನು ಸರಿಯಾಗಿ ಓದಿ ಅವುಗಳ ಮುಂದೆ “ಹೌದು” ಅಥವಾ “ಇಲ್ಲ” ಎಂದು ಗುರುತು ಮಾಡಿ.
ಒಂದು ವೇಳೆ ನಿಮ್ಮ ಮಗುವು ಕೆಳಗೆ ಉಲ್ಲೇಖಿಸಿದ ಕಾರ್ಯಗಳನ್ನು ಮಾಡುತ್ತಿದ್ದರೆ (✓) ಎಂದು ಗುರುತು ಮಾಡಿ.
ಇಲ್ಲವಾದರೆ (x) ಎಂದು ಗುರುತು ಮಾಡಿ. ಕಾರ್ಯಗಳನ್ನು ಮಾಡಿದ್ದಲ್ಲಿ ನಿಮ್ಮ ಮಗುವು ಅವುಗಳನ್ನು ಕಲಿತಿದ್ದು ಹೇಗೆ ಎಂದು ಹೇಳಿರಿ (ಸ್ವಂತ ಕಲಿಕೆ/ಪಾಲಕರ ಕಲಿಕೆ/ಶಾಲೆಯಲ್ಲಿ ಕಲಿತಿದ್ದು)

Sl. No.	Tasks ಕಾರ್ಯ	Yes/ No ಹೌದು/ ಇಲ್ಲ	Learnt own ಸ್ವಂತ ಕಲಿಕೆ	You trained ಪಾಲಕರು ಕಲಿಸಿದ್ದು	In school ಶಾಲೆಯಲ್ಲಿ ಕಲಿತಿದ್ದು
1.	Asks for food ಊಟಕ್ಕಾಗಿ ಕೇಳುತ್ತಾನೆ/ಕೇಳುತ್ತಾಳೆ				
2.	Gets own snacks from cabinet ತನಗೆ ಬೇಕಾದ ಉಪಹಾರವನ್ನು ಡಬ್ಬದಿಂದ ತಾನೇ ತೆಗೆದುಕೊಳ್ಳುತ್ತಾನೆ/ತೆಗೆದುಕೊಳ್ಳುತ್ತಾಳೆ				
3.	Shows, tells about a cut, injury, illness ಅಸ್ವಸ್ಥತೆ, ನೋವು ಆದುದನ್ನು ತೋರಿಸುತ್ತಾನೆ/ತಾಳೆ ಮತ್ತು ಹೇಳುತ್ತಾನೆ/ಹೇಳುತ್ತಾಳೆ				
4.	Greets other children ಬೇರೆ ಮಕ್ಕಳನ್ನು ಅಭಿನಂದಿಸುತ್ತಾನೆ				
5.	Tells parent , or others about his/her favorite activities ಪಾಲಕರಿಗೆ ಅಥವಾ ಬೇರೆ ಜನರಿಗೆ ತನ್ನ ಅಚ್ಚುಮೆಚ್ಚಿನ ಚಟುವಟಿಕೆಗಳ ಬಗ್ಗೆ ಹೇಳುತ್ತಾನೆ/ತಾಳೆ				
6.	Recognizes and names buildings (e.g., hospital) ಕಟ್ಟಡಗಳನ್ನು ಗುರುತಿಸುತ್ತಾನೆ/ತಾಳೆ ಮತ್ತು ಹೆಸರಿಸುತ್ತಾನೆ/ತಾಳೆ (ಉದಾ: ಆಸ್ಪತ್ರೆ)				
7.	Starts activity almost immediately when told to do so. ಯಾವುದೇ ಚಟುವಟಿಕೆಯನ್ನು ಮಾಡಲು ಹೇಳಿದ ತಕ್ಷಣವೇ ಮಾಡಲು ಪ್ರಾರಂಭಿಸುತ್ತಾನೆ/ತಾಳೆ				
8.	Counts from 1 to 20 1 ರಿಂದ 20 ರವರೆಗೆ ಎಣಿಸುತ್ತಾನೆ/ತಾಳೆ				
9.	Feeds himself ತನ್ನಷ್ಟಕ್ಕೆ ತಾನೇ ಊಟ ಮಾಡುತ್ತಾನೆ/ತಾಳೆ				
10.	Assists adults with preparing meals/snacks ಊಟ ಅಥವಾ ಉಪಹಾರಗಳನ್ನು ಸಿದ್ಧಪಡಿಸುವುದರಲ್ಲಿ ದೊಡ್ಡವರಿಗೆ ಸಹಾಯ ಮಾಡುತ್ತಾನೆ				
11.	Follows an adults directions to “stop” when in danger ಅಪಾಯದಲ್ಲಿದ್ದಾಗ ಹಿರಿಯರು ಹೇಳಿದ ಸಲಹೆಯನ್ನು ಅನುಸರಿಸುತ್ತಾನೆ/ತಾಳೆ				
12.	Shows sympathy for others when they are sad or upset ಬೇರೆಯವರು ದುಃಖದಲ್ಲಿದ್ದಾಗ ಸಹಾನುಭೂತಿ/ಅನುಕಂಪ ತೋರಿಸುತ್ತಾನೆ/ತಾಳೆ				
13.	Asks question (e.g., will you play with me) ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳುತ್ತಾನೆ/ತಾಳೆ (ಉದಾ: ನನ್ನ ಜೊತೆಗೆ ಆಟವಾಡುತ್ತೀಯಾ?)				
14.	Recognizes the need to pay for an item before				

Sl. No.	Tasks ಕಾರ್ಯ	Yes/ No ಹೌದು/ ಇಲ್ಲ	Learnt own ಸ್ವಂತ ಕಲಿಕೆ	You trained ಪಾಲಕರು ಕಲಿಸಿದ್ದು	In school ಶಾಲೆಯಲ್ಲಿ ಕಲಿತಿದ್ದು
	leaving a store ಅಂಗಡಿಯಿಂದ ಹೊರಗೆ ಹೋಗುವ ಮೊದಲು ಖರೀದಿಸಿದ ಸಾಮಗ್ರಿಗೆ ಹಣ ಕೊಡಬೇಕೆಂದು ಅರಿತುಕೊಳ್ಳುತ್ತಾನೆ				
15.	Works independently and asks for help only when necessary ಸ್ವತಂತ್ರವಾಗಿ ಕೆಲಸಮಾಡುತ್ತಾನೆ ಮತ್ತು ಅವಶ್ಯಕತೆ ಇದ್ದಾಗ ಮಾತ್ರ ಸಹಾಯಕ್ಕಾಗಿ ಕೇಳುತ್ತಾನೆ/ತ್ತಾಳೆ				
16.	Writes at least two letters in own name ತನ್ನ ಹೆಸರಿನಲ್ಲಿಯ ಕನಿಷ್ಠ 2 ಅಕ್ಷರಗಳನ್ನಾದರೂ ಬರೆಯುತ್ತಾನೆ/ತ್ತಾಳೆ				
17.	Mixes rice and dhal and serves himself ಅನ್ನ ಮತ್ತು ಸಾಂಬರವನ್ನು ಕಲಿಸಿಕೊಂಡು ತಾನೆ ಊಟಮಾಡುತ್ತಾನೆ/ತ್ತಾಳೆ				
18.	Places dirty clothes in the proper place ಕೊಳೆಯಾದ ಉಡುಪುಗಳನ್ನು ಸರಿಯಾದ/ ನಿರ್ದಿಷ್ಟಜಾಗದಲ್ಲಿಡುತ್ತಾನೆ/ತ್ತಾಳೆ				
19.	Avoids touching or playing with dangerous item (e.g., knife) ಆಪಾಯಕರವಾದ ವಸ್ತುಗಳ (ಉದಾ: ಚೂರಿ) ಜೊತೆಗೆ ಆಟವಾಡುವುದರಿಂದ ಅಥವಾ ಮುಟ್ಟುವುದರಿಂದ ದೂರವಿರುತ್ತಾನೆ/ತ್ತಾಳೆ				
20.	Seeks friendship with others in his/her group ತನ್ನ ಗುಂಪಿನಲ್ಲಿರುವವರ ಸ್ನೇಹಕ್ಕಾಗಿ ಪ್ರಯತ್ನಿಸುತ್ತಾನೆ				
21.	Uses past tense to talk about prior events ಹಿಂದಿನ/ಮೊದಲಿನ ಸಂದರ್ಭಗಳನ್ನು ವಿವರಿಸಲು ಭೂತಕಾಲವನ್ನು ಉಪಯೋಗಿಸುತ್ತಾನೆ/ತ್ತಾಳೆ				
22.	Describes the duties of workers (eg., doctors help the sick) ಕೆಲಸಗಾರರ ಕರ್ತವ್ಯಗಳನ್ನು ವಿವರಿಸುತ್ತಾನೆ (ಉದಾ: ವೈದ್ಯರು ರೋಗಿಗಳ ಚಿಕಿತ್ಸೆ ಮಾಡುತ್ತಾರೆ.				
23.	Controls temper when a parent or other adult takes a toy or object away ಪಾಲಕರು ಅಥವಾ ಬೇರೆಯವರು ಆಟದ ಸಾಮಾನು ಅಥವಾ ವಸ್ತುವನ್ನು ತನ್ನಿಂದ ತೆಗೆದುಕೊಂಡಾಗ ಕೋಪವನ್ನು ಹತೋಟಿಯಲ್ಲಿಡುತ್ತಾನೆ				
24.	Reads and obeys common signs (e.g., Do not Enter, Exit, or Stop) ಸಾಮಾನ್ಯವಾದ ಚಿಹ್ನೆಗಳನ್ನು (ಉದಾ: ಒಳಗಡೆ ಪ್ರವೇಶವಲ್ಲ, ಹೊರಗೆ ಮತ್ತು ನಿಲ್ಲಿರಿ) ಓದುತ್ತಾನೆ/ತ್ತಾಳೆ ಮತ್ತು ಪಾಲಿಸುತ್ತಾನೆ				
25.	Put shoes and laces ಬೂಟು/ಪಾದರಕ್ಷೆಗಳನ್ನು ಧರಿಸಿ ಲೇಸುಗಳನ್ನು ಕಟ್ಟುತ್ತಾನೆ/ತ್ತಾಳೆ				
26.	Wipes up spills at home ಮನೆಯಲ್ಲಿ ಚೆಲ್ಲಿದ್ದನ್ನು ಒರೆಸುತ್ತಾನೆ				
27.	Stays within sight of parents or other familiar adults in a public place without wandering off ಹೊರಗೆ ಹೋದಾಗ ಪಾಲಕರ ಅಥವಾ ಕುಟುಂಬದವರ ಗಮನ/ದೃಷ್ಟಿ ಬಿಟ್ಟು ಎಲ್ಲಲ್ಲಿ ಅಡ್ಡಾಡುವುದಿಲ್ಲ				
28.	Responds appropriately when introduced to others ಬೇರೆಯವರಿಗೆ ಪರಿಚಯಿಸಿದಾಗ ಸರಿಯಾಗಿ ಪ್ರತಿಕ್ರಿಯಿಸುತ್ತಾನೆ/ತ್ತಾಳೆ				
29.	Discusses a topic for more than 3 minutes ಯಾವುದೇ ಒಂದು ವಿಷಯದ ಬಗ್ಗೆ 3 ನಿಮಿಷಕ್ಕಿಂತ ಹೆಚ್ಚಿಗೆ ಸಮಯ ಚರ್ಚಿಸುತ್ತಾನೆ/ತ್ತಾಳೆ				
30.	Looks both ways before crossing the road ಅಕ್ಕಪಕ್ಕ ನೋಡಿ ರಸ್ತೆಯನ್ನು ದಾಟುತ್ತಾನೆ/ತ್ತಾಳೆ				

Sl. No.	Tasks ಕಾರ್ಯ	Yes/ No ಹೌದು/ ಇಲ್ಲ	Learnt own ಸ್ವಂತ ಕಲಿಕೆ	You trained ಪಾಲಕರು ಕಲಿಸಿದ್ದು	In school ಶಾಲೆಯಲ್ಲಿ ಕಲಿತಿದ್ದು
31.	Controls temper when disagreeing with friends ಗೆಲೆಯರ ಮಧ್ಯ ಭಿನ್ನಾಭಿಪ್ರಾಯ ಬಂದಾಗ ತನ್ನ ಸಿಟ್ಟನ್ನು ಹಿಡಿತದಲ್ಲಿ ಇಟ್ಟುಕೊಳ್ಳುತ್ತಾನೆ				
32.	States the days of the week in order ವಾರದ ದಿನಗಳನ್ನು ಕ್ರಮವಾಗಿ ಹೇಳುತ್ತಾನೆ/ತಾಳೆ				
33.	Sits on the toilet without being held ಶೌಚಾಲಯದ ಕ್ರಿಯೆಗಳನ್ನು ಬೇರೆಯವರ ಸಹಾಯವಿಲ್ಲದೇ ನಿರ್ವಹಿಸುತ್ತಾನೆ				
34.	Puts own dirty glass or plate in sink ಉಪಯೋಗಿಸಿದ್ದ ಗ್ಲಾಸ್ ಮತ್ತು ಪ್ಲೇಟನ್ನು ತೊಳೆಯಲು ಇಡುತ್ತಾನೆ/ತಾಳೆ				
35.	Carries breakable objects safely and carefully ಒಡೆಯುವಂತಹ ವಸ್ತುಗಳನ್ನು ಸುರಕ್ಷಿತವಾಗಿ ಮತ್ತು ಕಾಳಜಿಯಿಂದ ಒಯ್ಯುತ್ತಾನೆ/ತಾಳೆ				
36.	Apologizes if he or she hurts the feelings of others ಬೇರೆಯವರ ಭಾವನೆಗಳಿಗೆ ನೋವುಂಟುಮಾಡಿದಾಗ ಕ್ಷಮೆಯಾಚಿಸುತ್ತಾನೆ/ತಾಳೆ				
37.	Ends conversations appropriately ಸಂಭಾಷಣೆಯನ್ನು ಸರಿಯಾಗಿ ಮುಗಿಸುತ್ತಾನೆ				
38.	Finds the rest room in public places ಸಾರ್ವಜನಿಕ ಸ್ಥಳಗಳಲ್ಲಿ ವಿಶ್ರಾಂತಿ ಗೃಹವನ್ನು/ಸ್ಥಳವನ್ನು ಹುಡುಕುತ್ತಾನೆ/ತಾಳೆ				
39.	Follows a routine without being reminded ನೆನಪಿಸದಿದ್ದರೂ ದಿನಚರಿಯನ್ನು ಪಾಲಿಸುತ್ತಾನೆ				
40.	Writes numbers 1 to 10 1 ರಿಂದ 10 ರ ವರೆಗೆ ಸಂಖ್ಯೆಗಳನ್ನು ಬರೆಯುತ್ತಾನೆ/ತಾಳೆ				
41.	Brushes teeth ಹಲ್ಲು ಉಜ್ಜುತ್ತಾನೆ/ತಾಳೆ				
42.	Takes own clothes from drawers or closet when getting dressed ಬಟ್ಟೆ ಬದಲಿಸುವಾಗ ತನ್ನ ಬಟ್ಟೆಗಳನ್ನು ಕಪಾಟಿನಿಂದ ತಾನೆ ತೆಗೆದುಕೊಳ್ಳುತ್ತಾನೆ				
43.	Asks an adult before going near something that could be dangerous(e.g., animals) ಯಾವುದೇ ಅಪಾಯಕಾರಿ ವಸ್ತು/ಪ್ರಾಣಿಗಳ ಹತ್ತಿರ ಹೋಗುವುದಕ್ಕಿಂತ ಮುಂಚೆ ಹಿರಿಯರನ್ನು ಕೇಳುತ್ತಾನೆ/ತಾಳೆ				
44.	Refrains (controls himself) from saying something that might embarrass or hurt ಬೇಜಾರಾಗುವ ಅಥವಾ ದುಃಖವನ್ನುಂಟು ಮಾಡುವ ವಿಷಯಗಳನ್ನು ಹೇಳುವುದರಿಂದ ತಡೆಯುತ್ತಾನೆ				
45.	Refrains (controls himself) from interrupting others when they are talking ಬೇರೆಯವರು ಮಾತನಾಡುವಾಗ ನಡುವೆ ಮಾತನಾಡುವುದನ್ನು ತಡೆದುಕೊಳ್ಳುತ್ತಾನೆ				
46.	Orders for his/her own meals when eating out ಹೊರಗಡೆ ಹೋದಾಗ ತನಗೆ ಬೇಕಾದ ಊಟವನ್ನು ತಾನೆ ಆರ್ಡರ್ (ಆಜ್ಞೆ) ಮಾಡುತ್ತಾನೆ/ತಾಳೆ				
47.	Discusses ways to solve conflicts with others ಬೇರೆಯವರೊಂದಿಗೆ ಇದ್ದ ಗೊಂದಲಗಳನ್ನು ಬಗೆಹರಿಸುವ ಮಾರ್ಗಗಳನ್ನು ಚರ್ಚಿಸುತ್ತಾನೆ/ತಾಳೆ				
48.	Tells what day comes before another ಯಾವ ದಿನವು ಯಾವ ದಿನದ (ವಾರದ) ಮೊದಲು ಬರುತ್ತಿ				

Sl. No.	Tasks ಕಾರ್ಯ	Yes/ No ಹೌದು/ ಇಲ್ಲ	Learnt own ಸ್ವಂತ ಕಲಿಕೆ	You trained ಪಾಲಕರು ಕಲಿಸಿದ್ದು	In school ಶಾಲೆಯಲ್ಲಿ ಕಲಿತಿದ್ದು
	ಎನ್ನುವುದನ್ನು ಹೇಳುವನು/ಳು				
49.	Uses bathroom without help ಸಹಾಯವಿಲ್ಲದೆ ಶೌಚಾಲಯವನ್ನು ಉಪಯೋಗಿಸುತ್ತಾನೆ				
50.	Puts things in their proper places when finished using them ವಸ್ತುಗಳನ್ನು ಉಪಯೋಗಿಸಿದ ನಂತರ ಅವುಗಳ ನಿರ್ದಿಷ್ಟ ಸ್ಥಳಗಳಲ್ಲಿ ಇಡುತ್ತಾನೆ/ತಾಳೆ				
51.	Carries hot containers safely and carefully ಬಿಸಿ ಪಾತ್ರೆಗಳನ್ನು ಸುರಕ್ಷಿತವಾಗಿ ಹಾಗೂ ಕಾಳಜಿಯಿಂದ ಒಯ್ಯುತ್ತಾನೆ/ತಾಳೆ				
52.	States home telephone number ಮನೆಯ ದೂರವಾಣಿ ಸಂಖ್ಯೆಯನ್ನು ಹೇಳುತ್ತಾನೆ/ತಾಳೆ				
53.	Makes a small purchase at a food store ಅಂಗಡಿಯಲ್ಲಿ ಸಣ್ಣ ಪುಟ್ಟ ಆಹಾರ ಪದಾರ್ಥಗಳನ್ನು ಖರೀದಿ ಮಾಡುತ್ತಾನೆ				
54.	Writes his/her first and last name ತನ್ನ ಹೆಸರು ಮತ್ತು ಅಡ್ಡ ಹೆಸರು ಬರೆಯುತ್ತಾನೆ/ತಾಳೆ				
55.	Dresses himself/herself ಬಟ್ಟೆಗಳನ್ನು ಸ್ವತಃ ಧರಿಸುತ್ತಾನೆ/ತಾಳೆ				
56.	Keeps toys, games and other belongings neat and clean ಆಟಕೆ ಸಾಮಾನುಗಳನ್ನು ಮತ್ತು ಇತರೆ ವಸ್ತುಗಳನ್ನು ಸರಿಯಾಗಿ ಮತ್ತು ಸ್ವಚ್ಛವಾಗಿ ಇಡುತ್ತಾನೆ				
57.	Uses electrical outlet or sockets safely ವಿದ್ಯುತ್ ಉಪಕರಣಗಳನ್ನು ಕಾಳಜಿಯಿಂದ ಉಪಯೋಗಿಸುತ್ತಾನೆ				
58.	Walks alone to friends house in the neighborhood ನೆರೆಹೊರೆಯಲ್ಲಿರುವ ಗೆಳೆಯರ ಮನೆಗೆ ಒಬ್ಬನೆ ಹೋಗುತ್ತಾನೆ				
59.	States time and day of favorite television shows ತನ್ನಿಷ್ಟವಾದ ಟಿ.ವಿ. ಕಾರ್ಯಕ್ರಮಗಳ ಸಮಯ ಹಾಗೂ ದಿನವನ್ನು ತಿಳಿಸುತ್ತಾನೆ				
60.	Buttons his/her own clothing ಬಟ್ಟೆಯ ಗುಂಡಿಗಳನ್ನು ತಾನೇ ಹಾಕಿಕೊಳ್ಳುತ್ತಾನೆ				
61.	Wipes wet or dirty shoes before entering a house ಮನೆಯೊಳಗೆ ಪ್ರವೇಶಿಸುವ ಮೊದಲು ಒದ್ದೆಯಾದ ಅಥವಾ ಕೊಳೆಯಾದ ಪಾದರಕ್ಷೆಗಳನ್ನು ಒರೆಸಿಕೊಳ್ಳುತ್ತಾನೆ				
62.	Cares for his/her minor injuries ತನ್ನ ಚಿಕ್ಕ ಗಾಯಗಳ ಬಗ್ಗೆ ಕಾಳಜಿ ವಹಿಸುತ್ತಾನೆ/ವಹಿಸುತ್ತಾಳೆ				
63.	Carries enough money to make small purchase ಚಿಕ್ಕ ಪುಟ್ಟ ಖರೀದಿ ಮಾಡಲು ಸಾಕಷ್ಟು ಹಣ ತೆಗೆದುಕೊಂಡು ಹೋಗುತ್ತಾನೆ/ಹೋಗುತ್ತಾಳೆ				
64.	Takes a bath without help ಯಾರ ಸಹಾಯವಿಲ್ಲದೆ ಸ್ನಾನ ಮಾಡುತ್ತಾನೆ/ತಾಳೆ				
65.	Disposes of own leftover food ಉಳಿದಹೋದ ಆಹಾರವನ್ನು ತಾನೇ ಚೆಲ್ಲುತ್ತಾನೆ/ತೆಗೆದಿಡುತ್ತಾನೆ				
66.	Washes his/her own hair ತನ್ನ ಕೂದಲನ್ನು ತಾನೇ ತೋಳಿದುಕೊಳ್ಳುತ್ತಾನೆ/ತಾಳೆ				
67.	Makes his/her own bed ತನ್ನ ಹಾಸಿಗೆಯನ್ನು ತಾನೇ ಮಾಡಿಕೊಳ್ಳುತ್ತಾನೆ/ತಾಳೆ				
68.	Uses towel for drying body ದೇಹವನ್ನು ಒರೆಸುವ ವಸ್ತ್ರ ಉಪಯೋಗಿಸುತ್ತಾನೆ				
69.	Washes utensils				

Sl. No.	Tasks ಕಾರ್ಯ	Yes/ No ಹೌದು/ ಇಲ್ಲ	Learnt own ಸ್ವಂತ ಕಲಿಕೆ	You trained ಪಾಲಕರು ಕಲಿಸಿದ್ದು	In school ಶಾಲೆಯಲ್ಲಿ ಕಲಿಸಿದ್ದು
	ಪಾತ್ರೆ ತೊಳೆಯುತ್ತಾನೆ/ತ್ತಾಳೆ				
70.	Cuts vegetables ತರಕಾರಿ ಹೆಚ್ಚುತ್ತಾನೆ/ತ್ತಾಳೆ				
71.	Washes clothes ಬಟ್ಟೆಯನ್ನು ಒಗೆಯುತ್ತಾಳೆ/ಒಗೆಯುತ್ತಾನೆ				
72.	Lights a gas stove ಗ್ಯಾಸ್ ಸ್ಟೋವ್ ಹೆಚ್ಚುತ್ತಾನೆ/ತ್ತಾಳೆ				
73.	Prepares food items ಅಡುಗೆ ಮಾಡುತ್ತಾನೆ/ತ್ತಾಳೆ				

Part B

Instructions – Kindly tick / indicate ‘Yes’ or ‘No’ for the following items:

ಸೂಚನೆ: ಕೆಳಕಂಡ ಪ್ರಶ್ನೆಗಳಿಗೆ ಹೌದು ಅಥವಾ ಇಲ್ಲ ಎಂದು ಗುರುತಿಸಿ

- I spend my free time with the child in talking and discussing.
ನಾನು ನನ್ನ ಖಾಲಿ ಸಮಯವನ್ನು ನನ್ನ ಮಗುವಿನ ಜೊತೆಗೆ ಮಾತನಾಡಲು ಚರ್ಚೆಯಲ್ಲಿ ಕಳೆಯುತ್ತೇನೆ. Yes/ No
ಹೌದು/ಇಲ್ಲ
- I have sufficient skill to provide training and education.
ನನ್ನ ಮಗುವಿಗೆ ಶಿಕ್ಷಣ ಮತ್ತು ತರಬೇತಿ ನೀಡಲು ಸಾಕಷ್ಟು ಕೌಶಲ್ಯತೆ ಇದೆ. Yes/ No
ಹೌದು/ಇಲ್ಲ
- I regularly revise for about one hour daily whatever is taught in the school.
ನಾನು ದಿನವೂ ಶಾಲೆಯಲ್ಲಿ ಕಲಿಸಿದ್ದನ್ನು ಒಂದು ಘಂಟೆ ಮರು ಅಭ್ಯಾಸ ಮಾಡಿಸುತ್ತೇನೆ. Yes/ No
ಹೌದು/ಇಲ್ಲ
- I take my child outside to friends / functions whenever I go
ನಾನು ನನ್ನ ಮಗುವನ್ನು ನನ್ನ ಜೊತೆಗೆ ಗೆಳೆಯರ ಮನೆಗೆ/ಸಮಾರಂಭಗಳಿಗೆ ಕರೆದುಕೊಂಡು ಹೋಗುತ್ತೇನೆ. Yes/ No
ಹೌದು/ಇಲ್ಲ
- I have the required knowledge to teach him/her as she/he is a special child
ನನ್ನ ಮಗು ವಿಶಿಷ್ಟ ಅಥವಾ ಅಸಾಧಾರಣ ಮಗು ಅದುದರಿಂದ ಅವಳಿಗೆ/ಅವನಿಗೆ ತರಬೇತಿ ನೀಡಲು ನನಗೆ ಸರಿಯಾದ ತಿಳುವಳಿಕೆ ಇದೆ. Yes/ No
ಹೌದು/ಇಲ್ಲ
- I have the required knowledge to teach him/her regularly what is taught in the special school
ನನಗೆ ವಿಶಿಷ್ಟ ಮಕ್ಕಳ ಶಾಲೆಯಲ್ಲಿ ದಿನವೂ ಕಲಿಸಿದ್ದನ್ನು ಕಲಿಸಲು ನನಗೆ ಜ್ಞಾನವಿದೆ. Yes/ No
ಹೌದು/ಇಲ್ಲ
- I regularly correct and train the child in his academic activities
ನಾನು ನನ್ನ ಮಗುವಿನ ಶೈಕ್ಷಣಿಕ ಚಟುವಟಿಕೆಗಳಲ್ಲಿಯೂ ತಪ್ಪುಗಳನ್ನು ತಿದ್ದುತ್ತೇನೆ ಮತ್ತು ತರಬೇತಿಯನ್ನು ಕೊಡುತ್ತೇನೆ. Yes/ No
ಹೌದು/ಇಲ್ಲ
- I regularly correct and train the child's in his play and social activities
ನಾನು ನನ್ನ ಮಗುವನ್ನು ಆಟ ಮತ್ತು ಸಾಮಾಜಿಕ ಚಟುವಟಿಕೆಗಳಲ್ಲಿ ತಿದ್ದಿ ತರಬೇತಿಯನ್ನು ಕೊಡುತ್ತೇನೆ. Yes/ No
ಹೌದು/ಇಲ್ಲ
- I take care of the child's health and hygiene
ನಾನು ನನ್ನ ಮಗುವಿನ ಆರೋಗ್ಯ ಮತ್ತು ಸ್ವಚ್ಛತೆಯ ಬಗ್ಗೆ ಕಾಳಜಿವಹಿಸುತ್ತೇನೆ. Yes/ No
ಹೌದು/ಇಲ್ಲ
- I willingly help the child in his/ her work whenever he/she come to me with difficulties in completing the task
ನನ್ನ ಮಗು ಕಾರ್ಯವನ್ನು ಪೂರ್ಣಗೊಳಿಸುವ ತೊಂದರೆಯೊಂದಿಗೆ ನನ್ನ ಹತ್ತಿರ ಬಂದರೆ ನಾನು ನನ್ನ ಇಚ್ಛೆಯಿಂದ ಅದನ್ನು ಪೂರ್ಣಗೊಳಿಸಲು ಸಹಾಯಮಾಡುತ್ತೇನೆ. Yes/ No
ಹೌದು/ಇಲ್ಲ
- I feel inferior in front of others as my child is with disability.
ನನ್ನ ಮಗುವಿಗೆ ನ್ಯೂನತೆ ಇರುವುದರಿಂದ ನನಗೆ ಕೀಳು ಭಾವನೆ ಬರುತ್ತದೆ. Yes/ No
ಹೌದು/ಇಲ್ಲ

APPENDIX IV
Parental expectation schedule
Part A

For the tasks your child is not able to do as indicated by you in Proforma 1, what are your expectations? Enlist the tasks.

ಪರಫಾರ್ಮ-1ರಲ್ಲಿ ನೀವು ತಿಳಿಸಿದ ಹಾಗೆ ಕೆಲ ಕಾರ್ಯಗಳನ್ನು ನಿಮ್ಮ ಮಗುವಿನಿಂದ ಮಾಡಲು ಆಗುತ್ತಿಲ್ಲ ಹಾಗಾದರೆ ನೀವು ಎನನ್ನು ಬಯಸುತ್ತೀರಾ ?

Expected tasks ನಿರೀಕ್ಷಿಸಿದ ಕಾರ್ಯಗಳು	You will train ನೀವು ತರಬೇತಿ ನೀಡಬಹುದು	School should train ಶಾಲೆ ತರಬೇತಿ ನೀಡಬೇಕು	Will learn on his/her own ತನ್ನಷ್ಟಕ್ಕೆ ತಾನೆ ಕಲಿಯಬಹುದು

Part B

Instructions – Please provide your opinion on the following aspects regarding the education and training of your child.

ಸೂಚನೆ: ದಯವಿಟ್ಟು ನಿಮ್ಮ ಮಕ್ಕಳ ಶಿಕ್ಷಣ ಮತ್ತು ತರಬೇತಿಯ ಬಗ್ಗೆ ಕೆಳಕಂಡ ವಿಷಯಗಳ ಬಗ್ಗೆ ತಮ್ಮ ಅಭಿಪ್ರಾಯ ತಿಳಿಸಿ.

1. Are you satisfied with the education/training provided by the special school?

ನೀವು ನಿಮ್ಮ ಮಗುವಿನ ಶಾಲೆಯಲ್ಲಿ ಕೊಡುವ ಶಿಕ್ಷಣ ಮತ್ತು ತರಬೇತಿಯಿಂದ ಸಂತುಷ್ಟರಾಗಿದ್ದೀರಾ?

If Yes, why?

ಹೌದು, ಏಕೆ

If No, Why?

ಇಲ್ಲ, ಏಕೆ

2. Do you want your child to attend the school with normal children.

Yes/No

ನೀವು ನಿಮ್ಮ ಮಗುವನ್ನು ಸಾಮಾನ್ಯ ಶಾಲೆಗೆ ಕಳಿಸಲು ಇಚ್ಛಿಸುತ್ತೀರಾ.

ಹೌದು/ಇಲ್ಲ

If Yes, why?

ಹೌದು, ಏಕೆ

If No, Why?

ಇಲ್ಲ, ಏಕೆ

3. What standard do you expect your child should complete –

ನಿಮ್ಮ ಮಗು ಎಲ್ಲಿಯವರೆಗೆ ಕಲಿಯಬೇಕೆಂಬುದು ನಿಮ್ಮ ಇಚ್ಛೆ

a) VII

b) X

c) PUC

d) higher than PUC indicate

ಪಿ.ಯು.ಸಿ ಗಿಂತಲೂ ಹೆಚ್ಚು ಅಂದರೆ

e) none but socially independent

ಯಾವುದೇ ತರಗತಿ ಬೇಡ ಆದರೆ ಸ್ನೇಹ, ಸೌಜನ್ಯ, ಕೌಶಲ್ಯತೆ ಹೊಂದಿರಬೇಕು (ಸಾಮಾಜಿಕವಾಗಿ ಸ್ವತಂತ್ರವಾಗಿರಬೇಕು).

4. After schooling what do you want your child to be-

ಶಾಲೆಯ ನಂತರ ನೀವು ನಿಮ್ಮ ಮಗುವನ್ನು ಎನಾಗಬೇಕೆಂದು ಬಯಸುತ್ತೀರಿ

a) Under your care

ನಿಮ್ಮ ಆಶ್ರಯದಲ್ಲಿರಬೇಕು

b) Government aid

ಸರ್ಕಾರದ ನೆರವು/ಸಹಾಯ

c) Sheltered workshop (a part time job)

ಆಶ್ರಿತ ಕೆಲಸ

d) Independent with a job

ಕೆಲಸದೊಂದಿಗೆ ಸ್ವತಂತ್ರವಾಗಿರುವುದು

5. If you want your child to take up a job, what type of job do you want your child to be engaged with?

ನೀವು ನಿಮ್ಮ ಮಗು ಕೆಲಸಕ್ಕೆ ಹೋಗಬೇಕೆಂಬ ಇಚ್ಛೆ ಇದ್ದರೆ ಅವನು/ಅವಳು ಯಾವ ಕೆಲಸದಲ್ಲಿ ತೊಡಗಬೇಕೆಂದು ಇಚ್ಛಿಸುತ್ತೀರಿ

6. What do you expect, your child to be, when he/she is an adult-

ನಿಮ್ಮ ಮಗು ದೊಡ್ಡವನಾದ ಮೇಲೆ ಏನಾಗಬೇಕು ಎಂದು ನೀವು ಬಯಸುತ್ತೀರಿ.

a) Dependent on your care

ನಿಮ್ಮ ಆರೈಕೆ ಮೇಲೆ ಅವಲಂಬಿಸಿರಬೇಕು

b) Get married

ಮದುವೆಯಾಗಬೇಕು

c) Earn for a livelihood

ಜೀವನಕೊಸರ ಗಳಿಸಬೇಕು

d) Maintain his/her family

ಅವನ/ಅವಳ ಕುಟುಂಬವನ್ನು ನಿರ್ವಹಿಸಬೇಕು

APPENDIX V

Sibling constellation

Based on the number of siblings, children were categorized as

- Without sibling
- With sibling - first born
 - only younger brother (Y.B)
 - only younger sister (Y.S)
 - both Y.B and Y.S
- Middle born
 - elder brother (E.B) + (Y.B)
 - elder sister (E.S) + (Y.B)
 - E.B + Y.S
 - E.B + E.S + Y.B
 - E.B + E.S + Y.S
 - E.B + Y.B + Y.S
 - E.B + E.B + Y.B + Y.S
- Last born
 - only E.B
 - only E.S
 - Both E.B + E.S

APPENDIX VI

Types of associated disability based on collected data are given below:

Spina bifida, congenital heart disease, night blindness, speech disorder, autistic, ADHD, no speech, epileptic, cerebral palsy, specific learning disability (can't read & write), hurler syndrome, dumb & deaf, hearing impairment, vision problem, physically disabled.

APPENDIX VII

The castes under each category are given as per Karnataka Gazette 1994:

Caste	Caste classes
Forward caste	Lingayat, Brahmin, Reddy, Mudaliyar, Iyengar
Backward caste	Maratha, Viswakarma, Badiger, Uppal, Simpi, Ganiga, Sadaru, Kshatriya, Muslim, Christian, Vakkaliga, Devanga Bestha, Bhovi, Ambiga, Valmiki, Gangamakkaly, Gowli, Goka, Agasa, Kuruba, Gouli
Scheduled caste/tribe	Talawar, Bajantri, Hajama, Harijan

APPENDIX VIII

Qualitative analysis of tasks performed by children, involvement of parents, school, children themselves, and interaction between all three

Sl. No .	Tasks	Tasks performed	Only child	Only parents	Only school	CxP	CxS	PxS	CxPxS
1.	Asks for food	47 (88.7)	33 (62.3)	7 (13.2)	3 (5.7)	0 (0)	0 (0)	3 (5.7)	1 (1.9)
2.	Gets own snacks from cabinet	38 (71.7)	22 (41.5)	7 (13.2)	6 (11.3)	0 (0)	0 (0)	2 (3.8)	1 (1.9)
3.	Shows, tells about a cut, injury, illness	36 (67.9)	20 (37.7)	7 (13.2)	4 (7.5)	1 (1.9)	0 (0)	2 (3.8)	2 (3.8)
4.	Greets other children	32 (60.4)	8 (15.1)	5 (9.4)	9 (17.0)	0 (0)	2 (3.8)	7 (13.2)	1 (1.9)
5.	Tells parent , or others about his/her favorite activities	32 (60.4)	20 (37.7)	4 (7.5)	6 (11.3)	1 (1.9)	0 (0)	1 (1.9)	0 (0)
6.	Recognizes and names buildings (e.g., hospital)	32 (60.4)	8 (15.1)	14 (26.4)	5 (9.4)	0 (0)	0 (0)	5 (9.4)	0 (0)
7.	Starts activity almost immediately when told to do so.	24 (45.3)	5 (9.4)	7 (13.2)	6 (11.3)	0 (0)	0 (0)	6 (11.3)	0 (0)
8.	Counts from 1 to 20	23 (43.4)	0 (0)	6 (11.3)	11 (20.8)	0 (0)	0 (0)	6 (11.3)	0 (0)
9.	Feeds himself	35 (66.0)	13 (24.5)	11 (20.8)	10 (18.9)	2 (3.8)	0 (0)	0 (0)	1 (1.9)
10 .	Assists adults with preparing meals/snacks	13 (24.5)	4 (7.5)	5 (9.4)	3 (5.7)	1 (1.9)	0 (0)	0 (0)	0 (0)
11 .	Follows an adults directions to "stop" when in danger	31 (58.5)	5 (9.4)	15 (28.3)	5 (9.4)	0 (0)	0 (0)	6 (11.3)	0 (0)
12 .	Shows sympathy for others when they are sad or upset	28 (52.8)	21 (39.6)	2 (3.8)	3 (5.7)	0 (0)	1 (1.9)	1 (1.9)	0 (0)
13 .	Asks question (e.g., will you play with me)	28 (52.8)	18 (34.0)	4 (7.5)	4 (7.5)	1 (1.9)	1 (1.9)	0 (0)	0 (0)
14 .	Recognizes the need to pay for an item before leaving a store	21 (39.6)	8 (15.1)	9 (17.0)	0 (0)	1 (1.9)	1 (1.9)	2 (3.8)	0 (0)
15 .	Works independently and asks for help only when necessary	19 (35.8)	10 (18.9)	6 (11.3)	2 (3.8)	0 (0)	0 (0)	1 (1.9)	0 (0)
16 .	Writes at least two letters in own name	21 (39.6)	0 (0)	3 (5.7)	13 (24.5)	0 (0)	0 (0)	5 (9.4)	0 (0)
17 .	Mixes rice and dhal and serves himself	30 (56.6)	5 (9.4)	20 (37.7)	2 (3.8)	1 (1.9)	0 (0)	1 (1.9)	1 (1.9)
18 .	Places dirty clothes in the proper place	30 (56.6)	3 (5.7)	23 (43.4)	1 (1.9)	1 (1.9)	0 (0)	1 (1.9)	1 (1.9)
19 .	Avoids touching or playing with dangerous item (e.g.,knife)	26 (49.1)	6 (11.3)	16 (30.2)	0 (0)	2 (3.8)	0 (0)	1 (1.9)	1 (1.9)
20 .	Seeks friendship with others in his/her group	32 (60.4)	17 (32.1)	4 (7.5)	5 (9.4)	1 (1.9)	2 (3.8)	2 (3.8)	1 (1.9)
21 .	Uses past tense to talk about prior events	13 (24.5)	8 (15.1)	3 (5.7)	0 (0)	0 (0)	0 (0)	2 (3.8)	0 (0)
22 .	Describes the duties of workers (eg., doctors help the sick)	23 43.4	5 9.4	4 7.5	7 13.2	0 0	1 (1.9)	5 (9.4)	1 (1.9)
23 .	Controls temper when a parent or other adult takes a toy or object away	18 34.0	9 17.0	5 9.4	2 3.8	0 0	0 (0)	0 (0)	1 (1.9)
24 .	Reads and obeys common signs (e.g., Do not Enter, Exit, or Stop)	10 18.9	0 0	1 1.9	5 9.4	0 0	0 (0)	4 (7.5)	0 (0)
25 .	Put shoes and laces	13 24.5	3 5.7	4 7.5	1 1.9	0 0	0 (0)	4 (7.5)	1 (1.9)
26 .	Wipes up spills at home	30 56.6	9 17.0	15 28.3	2 3.8	0 0	0 (0)	3 (5.7)	1 (1.9)
27 .	Stays within sight of parents or other familiar adults in a public place without wandering off	33 62.3	18 34.0	11 20.8	0 0	2 3.8	0 (0)	1 (1.9)	1 (1.9)
28 .	Responds appropriately when introduced to others	29 54.7	6 11.3	9 17.0	6 11.3	1 1.9	1 (1.9)	5 (9.4)	3 (5.7)
29 .	Discusses a topic for more than 3 minutes	13 24.5	10 18.9	0 0	3 5.7	0 0	0 (0)	0 (0)	0 (0)
30 .	Looks both ways before crossing the road	17 32.1	1 1.9	10 18.9	4 7.5	0 0	0 (0)	2 (3.8)	0 (0)

Sl. No	Tasks	Tasks performed	Only child	Only parents	Only school	CxP	CxS	PxS	CxPxS
31	Controls temper when disagreeing with friends	12 22.6	5 9.4	1 1.9	3 5.7	0 0	0 (0)	2 (3.8)	1 (1.9)
32	States the days of the week in order	23 43.4	0 0	5 9.4	14 26.4	0 0	0 (0)	3 (5.7)	1 (1.9)
33	Sits on the toilet without being held	30 56.6	7 13.2	14 26.4	6 11.3	1 1.9	0 (0)	2 (3.8)	0 (0)
34	Puts own dirty glass or plate in sink	34 64.2	3 5.7	26 49.1	2 3.8	0 0	0 (0)	1 (1.9)	2 (3.8)
35	Carries breakable objects safely and carefully	26 49.1	5 9.4	17 32.1	1 1.9	1 1.9	0 (0)	1 (1.9)	1 (1.9)
36	Apologizes if he or she hurts the feelings of others	23 43.4	6 11.3	4 7.5	6 11.3	0 0	1 (1.9)	4 (7.5)	2 (3.8)
37	Ends conversations appropriately	7 13.2	4 7.5	0 0	1 1.9	0 0	0 (0)	2 (3.8)	0 (0)
38	Finds the rest room in public places	8 15.1	5 9.4	2 3.8	1 1.9	0 0	0 (0)	0 (0)	0 (0)
39	Follows a routine without being reminded	25 47.2	14 26.4	4 7.5	3 5.7	0 0	1 (1.9)	4 (7.5)	0 (0)
40	Writes numbers 1 to 10	25 47.2	0 0	6 11.3	12 22.6	0 0	1 (1.9)	5 (9.4)	1 (1.9)
41	Brushes teeth	33 62.3	2 3.8	25 47.2	4 7.5	0 0	0 (0)	1 (1.9)	1 (1.9)
42	Takes own clothes from drawers or closet when getting dressed	27 50.9	8 15.1	14 26.4	2 3.8	0 0	0 (0)	2 (3.8)	1 (1.9)
43	Asks an adult before going near something that could be dangerous(e.g., animals)	25 47.2	11 20.8	8 15.1	0 0	2 3.8	1 (1.9)	3 (5.7)	0 (0)
44	Refrains (controls himself) from saying something that might embarrass or hurt	4 7.5	2 3.8	1 1.9	0 0	0 0	0 (0)	1 (1.9)	0 (0)
45	Refrains (controls himself) from interrupting others when they are talking	9 17.0	3 5.7	1 1.9	1 1.9	1 1.9	0 (0)	3 (5.7)	0 (0)
46	Orders for his/her own meals when eating out	22 41.5	14 26.4	5 9.4	1 1.9	1 1.9	0 (0)	0 (0)	1 (1.9)
47	Discusses ways to solve conflicts with others	5 9.4	3 5.7	2 3.8	0 0	0 0	0 (0)	0 (0)	0 (0)
48	Tells what day comes before another	12 22.6	0 0	0 0	7 13.2	0 0	0 (0)	5 (9.4)	0 (0)
49	Uses bathroom without help	27 50.9	4 7.5	11 20.8	6 11.3	2 3.8	0 (0)	3 (5.7)	1 (1.9)
50	Puts things in their proper places when finished using them	26 49.1	6 11.3	12 22.6	3 5.7	0 0	2 (3.8)	2 (3.8)	1 (1.9)
51	Carries hot containers safely and carefully	14 26.4	6 11.3	7 13.2	1 1.9	0 0	0 (0)	0 (0)	0 (0)
52	States home telephone number	8 15.1	2 3.8	2 3.8	3 5.7	1 1.9	0 (0)	0 (0)	0 (0)
53	Makes a small purchase at a food store	16 30.2	4 7.5	9 17.0	0 0	0 0	0 (0)	1 (1.9)	2 (3.8)
54	Writes his/her first and last name	16 30.2	1 1.9	2 3.8	7 13.2	0 0	0 (0)	6 (11.3)	0 (0)
55	Dresses himself/herself	28 52.8	2 3.8	17 32.1	6 11.3	0 0	0 (0)	3 (5.7)	0 (0)
56	Keeps toys, games and other belongings neat and clean	21 39.6	7 13.2	7 13.2	5 9.4	0 0	0 (0)	1 (1.9)	1 (1.9)
57	Uses electrical outlet or sockets safely	19 35.8	6 11.3	10 18.9	1 1.9	0 0	0 (0)	2 (3.8)	0 (0)
58	Walks alone to friends house in the neighborhood	23 43.4	10 18.9	8 15.1	1 1.9	2 3.8	0 (0)	1 (1.9)	1 (1.9)
59	States time and day of favorite television shows	20 37.7	18 34.0	1 1.9	1 1.9	0 0	0 (0)	0 (0)	0 (0)
60	Buttons his/her own clothing	21 39.6	2 3.8	11 20.8	4 7.5	0 0	1 (1.9)	3 (5.7)	0 (0)

Sl. No .	Tasks	Tasks performed	Only child	Only parents	Only school	CxP	CxS	PxS	CxPxS
61 .	Wipes wet or dirty shoes before entering a house	17 32.1	4 7.5	6 11.3	2 3.8	0 0	0 (0)	4 (7.5)	1 (1.9)
62 .	Cares for his/her minor injuries	24 45.3	13 24.5	2 3.8	3 5.7	1 1.9	0 (0)	3 (5.7)	2 (3.8)
63 .	Carries enough money to make small purchase	4 7.5	3 5.7	1 1.9	0 0	0 0	0 (0)	0 (0)	0 (0)
64 .	Takes a bath without help	18 34.0	4 7.5	9 17.0	2 3.8	1 1.9	0 (0)	2 (3.8)	0 (0)
65 .	Disposes of own leftover food	20 37.7	4 7.5	13 24.5	2 3.8	0 0	0 (0)	1 (1.9)	1 (1.9)
66 .	Washes his/her own hair	14 26.4	6 11.3	7 13.2	0 0	0 0	0 (0)	1 (1.9)	0 (0)
67 .	Makes his/her own bed	13 24.5	7 13.2	4 7.5	1 1.9	0 0	0 (0)	0 (0)	1 (1.9)
68 .	Uses towel for drying body	33 62.3	7 13.2	17 32.1	3 5.7	1 1.9	1 (1.9)	2 (3.8)	2 (3.8)
69 .	Washes utensils	10 18.9	4 7.5	6 11.3	0 0	0 0	0 (0)	0 (0)	0 (0)
70 .	Cuts vegetables	7 13.2	1 1.9	4 7.5	1 1.9	0 0	0 (0)	1 (1.9)	0 (0)
71 .	Washes clothes	5 9.4	1 1.9	3 5.7	1 1.9	0 0	0 (0)	0 (0)	0 (0)
72 .	Lights a gas stove	7 13.2	1 1.9	6 11.3	0 0	0 0	0 (0)	0 (0)	0 (0)
73 .	Prepares food items	0 0	0 0	0 0	0 0	0 0	0 (0)	0 (0)	0 (0)

Figures in parenthesis are percentages

APPENDIX IX

Qualitative analysis of tasks expected by children, expectations from parents, school,
children, and interaction between all three

Sl. No .	Tasks	Tasks expected	Only parent	Only school	Only child	PxS	PxC	SxC	PxSxC
1.	Asks for food	2 (3.8)	1 (1.9)	0 (0.0)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
2.	Gets own snacks from cabinet	1 (1.9)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
3.	Shows, tells about a cut, injury, illness	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
4.	Greets other children	2 (3.8)	1 (1.9)	0 (0.0)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
5.	Tells parent , or others about his/her favorite activities	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
6.	Recognizes and names buildings (e.g., hospital)	3 (5.7)	0 (0.0)	2 (3.8)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
7.	Starts activity almost immediately when told to do so.	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
8.	Counts from 1 to 20	7 (13.2)	0 (0.0)	2 (3.8)	0 (0.0)	5 (9.4)	0 (0.0)	0 (0.0)	0 (0.0)
9.	Feeds himself	13 (24.5)	2 (3.8)	0 (0.0)	0 (0.0)	10 (18.9)	1 (1.9)	0 (0.0)	0 (0.0)
10 .	Assists adults with preparing meals/snacks	5 (9.4)	4 (7.5)	0 (0.0)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
11 .	Follows an adults directions to "stop" when in danger	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
12 .	Shows sympathy for others when they are sad or upset	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
13 .	Asks question (e.g., will you play with me)	3 (5.7)	1 (1.9)	1 (1.9)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
14 .	Recognizes the need to pay for an item before leaving a store	1 (1.9)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
15 .	Works independently and asks for help only when necessary	11 (20.8)	1 (1.9)	1 (1.9)	2 (3.8)	6 (11.3)	0 (0.0)	0 (0.0)	1 (1.9)
16 .	Writes at least two letters in own name	19 (35.8)	0 (0.0)	8 (15.1)	0 (0.0)	10 (18.9)	0 (0.0)	1 (1.9)	0 (0.0)
17 .	Mixes rice and dhal and serves himself	3 (5.7)	2 (3.8)	0 (0.0)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
18 .	Places dirty clothes in the proper place	1 (1.9)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
19 .	Avoids touching or playing with dangerous item (e.g.,knife)	2 (3.8)	1 (1.9)	0 (0.0)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
20 .	Seeks friendship with others in his/her group	2 (3.8)	0 (0.0)	2 (3.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
21 .	Uses past tense to talk about prior events	2 (3.8)	0 (0.0)	1 (1.9)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
22 .	Describes the duties of workers (eg., doctors help the sick)	2 (3.8)	0 (0.0)	0 (0.0)	1 (1.9)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)

Sl. No	Tasks	Tasks expected	Only parent	Only school	Only child	PxS	PxC	SxC	PxSxC
.))	
23	Controls temper when a parent or other adult takes a toy or object away	5 (9.4)	1 (1.9)	0 (0.0)	1 (1.9)	1 (1.9)	0 (0.0)	2 (3.8)	0 (0.0)
24	Reads and obeys common signs (e.g., Do not Enter, Exit, or Stop)	4 (7.5)	0 (0.0)	3 (5.7)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
25	Put shoes and laces	5 (9.4)	2 (3.8)	1 (1.9)	0 (0.0)	2 (3.8)	0 (0.0)	0 (0.0)	0 (0.0)
26	Wipes up spills at home	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
27	Stays within sight of parents or other familiar adults in a public place without wandering off	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
28	Responds appropriately when introduced to others	1 (1.9)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
29	Discusses a topic for more than 3 minutes	3 (5.7)	0 (0.0)	1 (1.9)	1 (1.9)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
30	Looks both ways before crossing the road	3 (5.7)	1 (1.9)	0 (0.0)	1 (1.9)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
31	Controls temper when disagreeing with friends	4 (7.5)	0 (0.0)	0 (0.0)	2 (3.8)	1 (1.9)	0 (0.0)	1 (1.9)	0 (0.0)
32	States the days of the week in order	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
33	Sits on the toilet without being held	8 (15.1)	0 (0.0)	0 (0.0)	1 (1.9)	7 (13.2)	0 (0.0)	0 (0.0)	0 (0.0)
34	Puts own dirty glass or plate in sink	1 (1.9)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
35	Carries breakable objects safely and carefully	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
36	Apologizes if he or she hurts the feelings of others	1 (1.9)	0 (0.0)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
37	Ends conversations appropriately	3 (5.7)	0 (0.0)	1 (1.9)	1 (1.9)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
38	Finds the rest room in public places	2 (3.8)	2 (3.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
39	Follows a routine without being reminded	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
40	Writes numbers 1 to 10	15 (28.3)	0 (0.0)	6 (11.3)	0 (0.0)	8 (15.1)	0 (0.0)	1 (1.9)	0 (0.0)
41	Brushes teeth	5 (9.4)	2 (3.8)	0 (0.0)	0 (0.0)	3 (5.7)	0 (0.0)	0 (0.0)	0 (0.0)
42	Takes own clothes from drawers or closet when getting dressed	1 (1.9)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
43	Asks an adult before going near something that could be dangerous(e.g., animals)	1 (1.9)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
44	Refrains (controls himself) from saying something that might embarrass or hurt	3 (5.7)	1 (1.9)	1 (1.9)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
45	Refrains (controls himself) from interrupting others when they are talking	3 (5.7)	1 (1.9)	0 (0.0)	0 (0.0)	1 (1.9)	1 (1.9)	0 (0.0)	0 (0.0)

Sl. No	Tasks	Tasks expected	Only parent	Only school	Only child	PxS	PxC	SxC	PxSxC
46	Orders for his/her own meals when eating out	2 (3.8)	1 (1.9)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
47	Discusses ways to solve conflicts with others	3 (5.7)	0 (0.0)	0 (0.0)	2 (3.8)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
48	Tells what day comes before another	2 (3.8)	1 (1.9)	0 (0.0)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
49	Uses bathroom without help	7 (13.2)	0 (0.0)	0 (0.0)	0 (0.0)	7 (13.2)	0 (0.0)	0 (0.0)	0 (0.0)
50	Puts things in their proper places when finished using them	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
51	Carries hot containers safely and carefully	3 (5.7)	2 (3.8)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
52	States home telephone number	3 (5.7)	1 (1.9)	0 (0.0)	1 (1.9)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
53	Makes a small purchase at a food store	3 (5.7)	1 (1.9)	0 (0.0)	0 (0.0)	2 (3.8)	0 (0.0)	0 (0.0)	0 (0.0)
54	Writes his/her first and last name	18 (34.0)	1 (1.9)	7 (13.2)	0 (0.0)	9 (17.0)	0 (0.0)	1 (1.9)	0 (0.0)
55	Dresses himself/herself	8 (15.1)	1 (1.9)	0 (0.0)	1 (1.9)	6 (11.3)	0 (0.0)	0 (0.0)	0 (0.0)
56	Keeps toys, games and other belongings neat and clean	2 (3.8)	0 (0.0)	0 (0.0)	0 (0.0)	2 (3.8)	0 (0.0)	0 (0.0)	0 (0.0)
57	Uses electrical outlet or sockets safely	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
58	Walks alone to friends house in the neighborhood	1 (1.9)	0 (0.0)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
59	States time and day of favorite television shows	1 (1.9)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
60	Buttons his/her own clothing	4 (7.5)	1 (1.9)	0 (0.0)	0 (0.0)	3 (5.7)	0 (0.0)	0 (0.0)	0 (0.0)
61	Wipes wet or dirty shoes before entering a house	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
62	Cares for his/her minor injuries	3 (5.7)	1 (1.9)	0 (0.0)	0 (0.0)	2 (3.8)	0 (0.0)	0 (0.0)	0 (0.0)
63	Carries enough money to make small purchase	5 (9.4)	1 (1.9)	1 (1.9)	0 (0.0)	3 (5.7)	0 (0.0)	0 (0.0)	0 (0.0)
64	Takes a bath without help	8 (15.1)	3 (5.7)	0 (0.0)	1 (1.9)	4 (7.5)	0 (0.0)	0 (0.0)	0 (0.0)
65	Disposes of own leftover food	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
66	Washes his/her own hair	3 (5.7)	2 (3.8)	0 (0.0)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
67	Makes his/her own bed	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
68	Uses towel for drying body	2 (3.8)	1 (1.9)	0 (0.0)	0 (0.0)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)

Sl. No	Tasks	Tasks expected	Only parent	Only school	Only child	PxS	PxC	SxC	PxSxC
69	Washes utensils	2 (3.8)	0 (0.0)	0 (0.0)	1 (1.9)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
70	Cuts vegetables	2 (3.8)	0 (0.0)	0 (0.0)	1 (1.9)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
71	Washes clothes	2 (3.8)	0 (0.0)	0 (0.0)	1 (1.9)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
72	Lights a gas stove	3 (5.7)	0 (0.0)	0 (0.0)	2 (3.8)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)
73	Prepares food items	2 (3.8)	0 (0.0)	0 (0.0)	1 (1.9)	1 (1.9)	0 (0.0)	0 (0.0)	0 (0.0)

Figures in parenthesis are percentages

PARENTAL INVOLVEMENT AND EXPECTATIONS IN PROMOTING SOCIAL AND PERSONAL SKILLS OF MENTALLY CHALLENGED CHILDREN

VINEETA KUMARI

2009

Dr. PUSHPA B. KHADI
MAJOR ADVISOR

ABSTRACT

A correlation design to know parental involvement and expectations in promoting social and personal skills of mentally challenged children was undertaken during the year 2008-09 in Hubli and Dharwad city of Karnataka state. Mentally challenged children in the age group of 5-16 years formed the population. The sample of 53 children were drawn from 3 special schools. BASIC-MR developed by Peshawaria and Venkatesan (1992) was administered to teachers to assess the social and personal skills of children. Parental involvement and expectations was assessed by using self-structured tool. A combination of Aoran *et al.* (1969) and Venkataramiah (1983) was used to assess socio-economic status of family.

Results revealed that a higher percentage of children (39.62%) had acquired moderate level of skills followed by low (35.5%) and high levels (24.53%). Age of children, degree of disability, associated disability, age at identification of disability and degree of constraint had significant influence on the acquisition of skills among children. Majority of parents (71.70%) fell in low involvement in developing the skills among children and 28.30 per cent had moderate involvement while none of the parents were in high level. Child's age, degree of disability, associated disability, age at admission to special schools and degree of constraint had significant influence on the parental involvement. More than 96 per cent had low expectations and very few (3.77%) had moderate expectations in acquisition of skills of children. Ordinal position, father's occupation had significant influence on the parental expectations. Parental involvement brought a variation of 61 per cent on social and personal skills of children while degree of constraint influenced to the extent of only 4 per cent.