

**EMOTIONAL BEHAVIOUR OF MENTALLY  
CHALLENGED CHILDREN ATTENDING SPECIAL  
SCHOOLS : PARENTAL EDUCATIONAL  
INTERVENTION FOR ENHANCING KNOWLEDGE ON  
BEHAVIOURAL MANAGEMENT**

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**BY**

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# 1. INTRODUCTION

Intellectual disability is a condition of arrested or incomplete development of brain characterized by impairment of skills and overall intelligence in areas such as cognition, language, motor and social abilities, This is also known as mental retardation . This can occur with or without any other physical or mental disorders. Mental retardation can result from damage to the brain, or from incomplete development of the brain during prenatal stage and during birth to 18 years. Mental retardation 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. Mental retardation is thus defined in terms of level of behavioural performance (Carson *et al.*, 1995).

The overall prevalence of mental retardation is reported to be between 1 to 3 per cent, with the rate for moderate, severe and profound retardation being less than 0.3 per cent. The 2001 census in India which has included the disability count as an ingredient in the National Agenda reported that a total of 14.56 million persons are disabled and the prevalence rate of disability is 1 – 9 per cent of the general population in India . According to Madhav (2001) the prevalence of mental retardation was observed to have a national rate of 4.2 per 1000 population. The prevalence estimates for disability types in the census and the national sample survey organisation (NSSO) 2002 was 15.29 percent, 11.65 percent , 16.56 percent, 57.51 percent and 11.34 percent for visual, speech, hearing, locomotor and mental disabilities respectively (Bhanushali, 2005). The prevalence of mental disability was found to be 2 – 3 percent in rural community in Karnataka (Kumar *et. al* 2008).

Although reduced level of intellectual functioning is the characteristic feature of this disorder, the diagnosis is made only if it is associated with diminished ability to adapt to the daily demands of the normal social environment. Binet classifies on the basis of IQ range as mild (52 - 68), moderate (36 - 51), severe (20 - 35) and profound (below 20) as quoted by (Mohanty and Das 2008). They can also be classified as Educable Mentally Retarded (EMR), Trainable mentally retarded (TMR) and Totally Dependent Mentally retarded (custodial care).

Children begin acquiring knowledge, skills and abilities within the home and family. Children's first social interactions are with the parents. Their language develops as they attend to verbal demands and hear expectations explained within the family, a reward system is learned and it helps the child to know what to do and what not to do. The family transmits its values of what needs to be done through many of its behaviours. Cognitive skills of reasoning, thinking and memory are practiced, and children learn to work within the family, helping with all the production and maintenance chores required. It is within the family that the child gains a sense of self and sense of the future and of what it is possible to become to perform their role efficiently. Parents are powerful reinforcing agents and know their children better than others and generally spend more time with their children. Parents are the pillars for children's development in the home front. They are children's first and most important teachers. In this sense they are the architects who build up the citizens of tomorrow. They are in unique position of continuous, sustained talking, doing, playing, and working with children. Hence there is need for parental involvement.

In a way to provide adequately parents and families need to know about their children in all their forms and offer their best to maximize development. They alone can re-vitalize, re-verberate, re-direct, and re-energise potentials and capabilities of children giving their selfless services and inputs with their bond of love and care.

In care education and early intervention family involvement in mentally challenged children is very necessary .Siblings cooperation, and acceptance is also needed. The love and affection given by the siblings, and their appreciation of the improvement reinforces and motivates the mentally challenged children. Family functioning may be a critical factor in determining how some families with children with disabilities can build on existing strengths such as play skills found in siblings, sports related interest from parents and interest within the families of maintaining healthy life styles for all members.

Not all parents have adequate knowledge regarding intellectual disability. Therefore the need for expert advice complimentary effort of educators and parents is needed to provide care and education of mentally challenged children. Hence it is important that they are empowered through adequate and appropriate information on the trends of development and know-how of managing developmental delays . Almost all parents need some type of childcare information about their parental role. Parents have a significant role to play in promoting stimulatory activities which can meet both the needs of the challenged child and normal child and also other family members, so that each and every member of the family's needs are met adequately.

During the last decade parents of mentally challenged individuals are coming together and forming parent groups or parent associations. This is considered as an important role stone in the rehabilitation process of mentally challenged individuals in the country (Peshwaria *et al* 1994). It is also observed that the appropriateness of services tend to increase with increased parental involvement. Educators and other service providers stress the importance of parents for successful habilitation of children. The increased demand for self advocacy raised by parent organizations has also influenced the demands for active participation of parents in assessment and Intervention.

There are very few studies of mentally challenged children in Karnataka and none on the emotional behaviour of mentally challenged children. Hence this study is carried out to benefit mentally challenged children, their family and the society at large.

In a democratic country like ours every child has the right to education. All children should be given equal opportunity to learn to reach their potential capacities. Education involves different functions and activities.

Education and early intervention is very important for mentally challenged and developmentally delayed children. Early Intervention has been defined as a systematic and planned effort to promote development through a series of manipulations of environmental or experimental factors initiated during the first five years of life. However as per guidelines of Individuals with Disabilities Education Act (IDEA), "Early intervention services are designed to meet the developmental needs of children from birth to six years, who have a delay in physical, cognitive, communicative, social, emotional or adaptive development or have a diagnosed condition that has a high probability of resulting in developmental delay. In early Intervention program (EIP) the primary prevention level is to reduce the occurrence of developmental disability through reduction of risk factors such as low birth weight, malnutrition and family awareness that child development can be influenced by their efforts. At a secondary prevention level, the goal is to reduce the extent of manifested childhood disability and shorten its duration. Infant stimulation and remediation programs operate at this level. In tertiary prevention, the aim is to present or reduce complications of disability (physical and behavioural) that lead to a need for institutionalization. The program should also enhance the family's understanding of the children's limitation, strengths and needs. It should also promote the family's ability to advocate for the mentally challenged child .

Though learning begins at home, formally it develops in school. Schools are important institutions where the child is oriented towards systematic learning. Schools provide facilities for education and development of the children. Schools help in developing the individuals to their best of capacities and potentials. Every step in the process of learning demands specific skills from the child. Children learn discipline, good manners, and good behaviors.

The concept of specialized services to children with disabilities is relatively new and this is true for most developing countries. The few services which are located mostly in urban areas can accommodate at the most a small proportion of children. Services to the young (0 – 6 years) are hardly available at present. So there is a need for empowering families for several reasons mentioned below :-

- The behaviour problems develop in the children generally during birth to six years.
- A large population in the developing countries lives in remote rural area where even the basic health and education services are scarce.

- While the services for such children with multiple disabilities are almost non-existent, number of such children is consistently increasing.
- More over most of such children do not reach these centres in time as parents are pursuing cure for their children in the crucial six years of the child's life. So a lot of learning that could have taken place gets delayed for children who do not attend schools.
- Very few specialized and well equipped centres existing in the neighbourhood impart training to a few selected children to different types of mentally challenged children.

Thus the big challenge for programme planners would be initiation and expansion of realistic, appropriate and result oriented services. There are many voluntary agencies which not only provide services, but also act as potential pressure groups, while some voluntary organizations have the means for professional assistance for carrying out their service activities; many of them suffer from problems owing to lack of funds, poor management technologies, absence of professionalism and lack of trained teachers and facilities. Hence one of the objectives of the study was to assess the existing special education programmes for mentally challenged children in Dharwad and Hubli cities.

Behaviors in children with developmental disabilities may be classified as skill behaviours and problem behaviours. Skill behaviours are positive behaviours that children have or need to be trained in for successful personal and social learning. Achieving greater independence for individuals with mental deviations depends upon the acquisition of a variety of important skills in a wide array of life domains, including such areas as work, transportation, cooking, and personal care. Achieving enhanced independence across these diverse areas has a common denominator, the need to learn to manage the different activities and manage a personal schedule. Social skills are often defined as a complex set of skills that include communication, problem-solving and decision making, assertion, peer and group interaction, and self regulation. (Haager and Vaughn 1995). These skills are competencies necessary for children to initiate and maintain positive social relationship with peers, teachers, family and other community members. (Quinn et al 1995).

Nearly 50-60 per cent of the mentally challenged individuals have behaviour problems (Bhatia et al 2005) . These problems are found to be four to five times more in mentally challenged individuals than in intellectually normal individual, because they have difficulties in coping up with different kind of situations, have poor cognitive ability, have poor social, and communication skills and wrong handling by people.

Problem behaviours are negative behaviours. Not all children with developmental disabilities show problem behaviour. Problem behaviours such as motor, speech, emotional and social occur at an early age . children become more aware of their feelings, and accurately interpreting these feelings is an initial step in learning to become emotionally stable (Goleman 1995, Pool 1997). Problem behaviour can have an adverse effect on learning, physical safety and self regulation. Hence, there is need for implementing efforts to reduce or completely extinguish these undesirable behaviours. Usually teachers use punishments to stop behaviours that interfere with teacher routines. But punishments alone do not solve the problem behaviour. Therefore problem behaviours have to be corrected or modified before it becomes a habit to the child. The ability to manage one's emotions is directly connected to self regulation (Kolb *et al* 2003). Presence of behaviour problems is known to produce great amount of stress and management difficulties to parents and other family members as well as teachers. Hence the behaviour problems in the child need to be recognized and reinforced through positive and negative reinforcement so that effective learning takes place.

Hence, the child's undesirable emotional behaviours need to be detected early. Parents and teachers can help the child to learn to manage his emotions and promote development. Parents need to be educated to handle the problem behaviour in their child. Research shows that certain factors increase children's risk for developing problem behaviour. Several factors viz Biological and Environmental factors which predispose children to behave in a particular way. The parents are not aware of the causes or reasons for the problem behaviour in their children. They think that their child is misbehaving and not acting according to their disciplining methods. Generally parents are not aware of the children's condition, or their improper disciplining is the cause of the problem behaviour.

Hence parents of mentally challenged children require a lot of help to acquire knowledge, and competence in building up the desirable behaviour of their children and proper development in their children. So there is a need to educate parents. Hence the need to know the status of educational programmes in the local region and to know the emotional behaviour of mentally challenged and parental awareness and parental programme for enhancing the skills and competence regarding behaviour management the present study was taken up with the following objectives.

**Objectives:**

1. To study the existing special education programmes for mentally challenged children in Dharwad – Hubli cities .
2. To assess the parental awareness and knowledge regarding special education of mentally challenged children.
3. To study the emotional behaviour of mentally challenged children attending special schools
4. To develop an educational package for parents regarding behaviour management of mentally challenged children
5. To test the efficacy of the educational package on parental knowledge regarding behavioural management of mentally retarded children
6. To study the influence of parental, familial characteristic on emotional behaviour.

## 2. REVIEW OF LITERATURE

The review of literature is very necessary for formation of hypothesis, operational definitions and to know the gaps in research as well as to execute the research programme.

The relevant literature reviewed is presented under the following sub-headings

- 2.1 Concepts / definitions.
- 2.2 History of Care and Education of Mentally Challenged Children.
- 2.3 Theoretical perspectives on causal mechanisms and management of problem behaviour
- 2.4 Developmental outcomes of mentally challenged children attending special schools
- 2.5 Parental knowledge regarding intellectual disability and special education.
- 2.6 Problem behaviours in mentally challenged children and influential factors.
- 2.7 Impact of intellectual disability and problematic behavior on family.
- 2.8 Intervention and Treatment of problem behaviours.
- 2.9 Different types of therapies for developmental outcomes of mentally challenged children.

### 2.1 Concepts /definitions :

The concepts and definitions related to emotional behaviour of mentally challenged children are presented under the following headings

#### 2.1.1 EMOTION

Emotion term commonly used to denote individual's subjective feelings which dictate moods. Emotion is considered a response to stimuli that involves characteristic physiological changes—such as increase in pulse rate, rise in body temperature, greater or less activity of certain glands, change in rate of breathing—and tends in itself to motivate the individual toward further activity. Schachter-Singers (1960) theory points out that cognitive process, not just physiological reactions, play a significant role in determining emotions. Robert Plutchik developed (1980) a theory showing eight primary human emotions: joy, acceptance, fear, submission, sadness, disgust, anger, and anticipation, and argued that all human emotions can be derived from these.

Children reveal considerable emotional growth during the years two to four. Children's emotional experiences become increasingly more clearly defined through their interactions with their social environment. With increasing age children's emotional understanding deepens and they make more complex differentiations of emotions appropriate to different situations. Two common emotions experienced during early childhood are fear and anger. Hormones secreted during an emotional state are responsible for physiological changes that occur when one experiences emotions. Adrenaline produces an increase in heart rate, secretion of sweat glands, constriction of blood vessels and shutting of digestion. These changes in body function indicate that all neurophysiological systems and sub systems of the body are involved in emotional states.

#### 2.1.2 Behavior,

The manner in which a person acts or performs; any or all of the activities of a person, including physical action learned and unlearned, deliberate or habitual. The analysis of behaviour by behaviourists is a molecular one. Bu the explanation of behaviour by Gestalt psychologists is on molar one. Molecular behaviour occurs in the organism in a given geographical environment. But according to Gestalt psychologists behaviour occurs by behavioural environment. The environment as it exists in reality is the geographical environment. But the environment as perceived by the individual is the behavioural environment

### 2.1.3 Special schools

A school for children who are unable to benefit from ordinary schooling because they have learning difficulties, physical or mental handicaps, etc.

### 2.1.4 Behavior management

Behavior management is all of the actions and conscious inactions to enhance the probability people, individually and in groups, choose behaviors which are personally fulfilling, productive, and socially acceptable (Shea and Bauer, 1987). The techniques used to control or modify an action or performance of a subject.

### 2.1.5 Behavior modification

An approach to correction of undesirable conduct that focuses on changing observable actions. Modification of the behavior is accomplished through systematic manipulation of the environmental and behavioral variables related to the specific behavior to be changed. The principles and techniques of this method have been used in treatment of both physical and mental disorders, such as alcoholism, smoking, obesity, stress, and problem behaviours

### 2.1.6 Behavior therapy

A therapeutic approach in which the focus is on the patient's observable behavior, rather than on conflicts and unconscious processes presumed to underlie his maladaptive behavior. This is accomplished through systematic manipulation of the environmental and behavioral variables related to the specific behavior to be modified; operant conditioning, systematic desensitization, token economy, aversive control, flooding, are examples of techniques that may be used in behavior therapy. Studies of classical and operant conditioning form the basis of behavior therapy, which has been used in treatment of both physical and mental disorders.

### 2.1.7 Psychotherapy

Attempts to modify observable, maladjusted patterns of behavior by the substitution of a new response or set of responses to a given stimulus. Skinner (1972) maintained that all behaviour is result of classical and operant conditioning. In operant conditioning the subject is active, he or she operates on the environment. The subject's behaviour is voluntary and is determined by its consequences. If the consequences of a particular behaviour are rewarding the child will repeat his behaviour. However if a behaviour leads to consequence that are not rewarding or are painful the child is less likely to repeat the behaviour.

Skinner emphasized the importance of rewards in shaping behaviour. Reward is a form of positive reinforcement which can be anything that make it more likely that a person will repeat a response, words of praise, hugs, gifts, sweets or candy are all potential reinforcers. In contrast negative reinforcement involves removing something unpleasant to influence a child's behaviour. Negative reinforcement is not the same as punishment. Punishment involves inflicting some kind of pain either physical or emotional.

## 2.2 History of care and education of mentally challenged children

In the ancient and medieval worlds, many more people were physically and mentally challenged than were anywhere else today. People's attitudes toward physically and mentally challenged people were also very different then. Earlier the deviant or malformed infants were killed. In later stages they were used in circus or side shows. During the Pre-Christian era the handicapped were persecuted, neglected and mistreated. Later on they were protected and pitied. In the recent years there has been a movement toward accepting the handicapped and integrating them in society to the fullest extent possible.

### 2.2.1. Rights of Mentally Challenged People

Most mentally challenged people simply want the opportunity to prove that they can function in society. Up until 1970, however, they were severely limited in the ways that they could even attempt to let others know what they were capable. Mentally challenged people do have rights, and the numerous laws and amendments that have been passed prove it.

In 1970, Congress began to address the needs of those people who suffered from developmental and other problems that had resulted in mental disabilities. From this came the "Developmental Disabilities Services and Facilities Construction Amendments of 1970.

The amendments stated that what was included in the phrase "developmental disability"; ensured that states received allotments so that facilities could be built, and plans and services could be provided; and required implementation of State plans to include the designation of a State planning and advisory council. Further, grants that could be used to hire additional staff in colleges and universities to assist with those with developmental disabilities were provided.

In 1975, "The Developmentally Disabled Assistance and Bill of Rights Act (Public Law-PL) 94-103 was implemented. It required that states must establish protection/advocacy programs in order to receive State grants, added the "Rights of the Developmentally Disabled," caused addition of the Federal discretionary grant authority, and added autism and dyslexia to the definition of developmental disability. Next the Amendments in 1984 added a "statement of purpose" to the Act, and employment-related activities to priority services areas. Also, implementation, promotion and coordination of services that would prevent developmental disabilities were allowed. In 1987, recognition of the importance of family and community members to the developmentally disabled occurred. The developmentally disabled were granted greater rights in deciding where they wanted to live, which in turn modified institutional care funding. Clarification and updating of the Act, its purposes and programs was implemented in 2000.

The function of all the acts and amendments is to ensure that the rights of mentally challenged people are upheld. Further, these rights cannot be infringed upon, ignored, or otherwise violated without serious consequences occurring. Through the continued implementation of the acts and amendments, mentally challenged people will be able to work towards achieving independence, and taking their rightful place in the community.

The past 15 to 20 years have been devoted to taking mentally challenged people out of the institutions and placing them into community programs. They cannot function in society if they are not actually in society. This is a goal which can, and ultimately should, be reached.

Through the approval and enforcement of the Acts and amendments, mentally challenged people are allowed to live as productive members of society, and tolerance and acceptance by all people, regardless of differences, is taught.

Institutions/organizations for welfare of mentally challenged children

At a seminar held in Delhi in 1964 social workers, doctors and parents of mentally handicapped children discussed the problem of inadequate facilities available in India for the education, training and rehabilitation of mentally handicapped children and decided to form a society.

The Delhi Society for the Welfare of Mentally Retarded Children registered in the year 1965 is a voluntary organization registered under the Indian Societies Registration Act of 1860. At the General Body Meeting held on 5.03.06, it was decided that, in keeping with the times, the Society be renamed as Delhi Society for the Welfare of Special Children.

As per census 2001, the range of the completely disabled in the country is between 2-3% of the total population. It is estimated that in India more than 50% of the disabled are mentally challenged people, of whom about 8 million are children of school-going age. Unfortunately, adequate facilities for education, training and rehabilitation of these children are not available in the country, with the result a vast majority of them are forced to lead a life of misery, which is a source of frustration to themselves and their families.

In 1966 the Society organized the first All India Seminar on Mental Retardation. At this seminar both the Prime Minister Ms. Indira Gandhi and the Minister for Social Welfare made it clear that in the subsequent years, care for the mentally handicapped would fall on voluntary agencies.

The Society, therefore, launched a project to provide special schooling and workshop training to the mentally disabled and establish research facilities for the study of causes and prevention of mental disability and also, to find ways and means for their rehabilitation.

In 1975, a Vocational Training Centre to equip mentally retarded children with simple repetitive skills in printing, candle making, handloom weaving, caning of chairs, and making of file covers and envelopes.

The services in the Diagnostic and Child Guidance Clinic are to evaluate development of mentally handicapped children in the area of academics, learning, skills, psychosocial adjustment, interpersonal relationships, vocational aptitudes and health. Presently, about 150-200 children are evaluated each year by a team of specialists consisting of a pediatrician, clinical psychologist, speech therapist, special educator, physiotherapist, occupational therapist and social worker. A comprehensive rehabilitation programme is designed for each child. Parents are given guidance for home training of those children who cannot be admitted to the school. The Teachers' Training Institute established in 1999, in collaboration with the Rehabilitation Council of India is set up essentially to upgrade the existing special educators and to train them with necessary skills required in managing children with special needs.

The Aims of the Program are

- To promote the welfare and ensure training and education of special children of all ages.
- To undertake and encourage scientific and other research work related to mental retardation and to promote ameliorative and preventive measures. To help and advise parents and friends of special children and to foster mutual help between them.
- To gather and disseminate information on mental retardation and to collect all books and literature on the subject and to maintain a library open to the public.
- To develop better understanding of problems of mental retardation by the public.
- To maintain a record of the mentally retarded in the Delhi area so as to facilitate promotion of training and education programmes.
- To cooperate with public, private and religious agencies and professional groups and organizations in the furtherance of these ends.
- To encourage and help the formation of similar societies for the welfare of the mentally retarded and to cooperate with those that already exist; and to affiliate, associate or cooperate with the Societies of the Federation having similar objectives.
- Undertake such activities that may be deemed incidental or conducive to the attainment of the above aims and objectives.
- Focus projects such as setting up Day Care Centres, Day Schools, Boarding Schools, Diagnostic Clinics, Rehabilitation Clubs, Vocational Training Centres, Pre-Vocational Training Centres, Holiday Homes, Canteens and similar institutions for the rehabilitation of the mentally retarded.
- To promote sports and cultural activities among the disabled and take part in National and International meets/competitions.

There has been progress since ancient times. Mentally challenged children are being sent to special schools which are run by NGO's and by the government.

Facilities available for mentally retarded children in the state and Dharwad-Hubli cities

1. Pensions are given for mentally retarded individuals. EMR with 75% IQ Rs.400/- per month and IQ 75% and above Rs.1000/- per month.
2. Scholarships for disabled are given in schools.
  - 1<sup>st</sup> to 5<sup>th</sup> standard Rs.500/- yearly
  - 5<sup>th</sup> to 10<sup>th</sup> standard Rs.1000/- yearly
  - PUC I and II Rs.1500/- yearly
  - Degree Rs.2000/- yearly
  - Above degree Rs.2500/- to Rs.3000/- yearly

3. Special schools for mentally retarded girls less than 15 years and mentally retarded women above 16 years.
4. Loan scheme for mentally retarded of Rs.35000/- are given to needy.  
Rs.15000/- for opening petty  
Rs.20000/- for adults shops
5. Mentally retarded get insurance from government Rs.2000/- after death of parents.
6. Reservation for jobs 5%.
7. Ashrya Yojane for 3%.
8. Concessions for Train fee 50% free for the one who accompanies him in train.
9. Bus pass – 100 kms and above Rs.550/- yearly.

## 2.3 Theoretical perspectives on causal mechanisms and management of problem behaviour

Theoretical perspectives is discussed under two sub headings .

2.3.1. Causal mechanisms of problem behaviour.

2.3.2. Management of problem behaviour.

Challenging behaviour is not a unitary logical entity, no single common cause for it can be identified. For example, the aetiology of self-injury or violence is most likely different from that of disorders of sexual behaviour, the causation is almost invariably multi-factorial. Causes of challenging behaviour are best studied using a bio-psycho-social model to examine the different influences on the development and maintenance of challenging behaviour. The following theoretical perspectives as given by Ganie et. al (2000) are listed as follows.

2.3.1. Causal mechanisms of problem behaviour: These are categorized as

A. Biological factors

B. Psychosocial factors

A. Biological factors:

The biological factors are genetic, neuro-chemical and abnormalities in brain structure and function.

1. Genetic studies

Researcher who takes a genetic perspective on psychopathology assume that some people inherit a genetically based predisposition to develop emotional and behavioral problems.

The determinants of some challenging behaviour closely reflect the genetics of the underlying disorder. Also a number of genetic syndromes have been identified that are associated with varying degrees of specific maladaptive behaviour. The study of these behaviours allows further understanding of the genetic contribution to particular behaviours. To this end the concept of the behavioural phenotypes has been introduced to describe the behavioral manifestations of a particular genetic make-up (genotype).

2. Neuro-chemical studies

Modern neurological and physiological models of psychopathology focus on biological factors especially chemical imbalances in the brain. These imbalances involve either neurotransmitters (chemicals that govern the transfer of signals from one cell to another) or other chemicals that control the activities of neurotransmitters.

A number of endogenous substances have been investigated for their role in the development and maintenance of challenging behaviour. In particular opioid peptides ( $\beta$ -endorphins), Sex hormones, dopamine and serotonin have been studied in relation to their role in mediating human behavioural processors such as aggression, arousal, self injury and appetite.

Endogenous opioids have been implicated in the pathophysiology of SIB and a number of etiological pathways have been hypothesized, for example the intrinsically rewarding properties of endorphins released by SIB, serotonin has been implicated in SIB, aggression, stereotypes, anxiety and behavioral disinhibition. Testosterone has been implicated in the medication of aggressive and abnormal sexual behaviour. In particular impulsive aggression in personality disorder correlates with tritiated paroxetine binding in the platelet. Hence all these mentioned aetiological pathways have been utilized as the neurochemical basis of pharmacotherapeutic interventions.

### 3. Abnormalities in Brain structure and function

Though the relationship between particular abnormalities in brain structure and function and well defined challenging behaviours is poorly researched (Robertson & Murphy 1999), there are many studies on neurobiological differences between people with psychiatric disorders and control which are reviewed and presented. Lesion studies have implicated a number of brain areas in the regulation of aggression, including the amygdala, hippocampal complex and prefrontal cortex. (Mirsky & Siegel 1994) Qualitative computerized axial tomography (CT) and quantitative positron emission tomography (PET) studies have reported anatomical abnormalities and reduced glucose metabolism in prefrontal and temporal regions. It was found by using proton magnetic resonance spectroscopy (HMRS) to study the neuronal integrity of the prefrontal lobe and amygdala-hippocampal complex in repetitively violent adults and nonviolent matched controls. Repetitively violent people had reduced neuronal density and abnormal phosphate metabolism in the prefrontal lobe and amygdala-hippocampal complex, and the degree of reduced neuronal density was related to frequency of violence (Critchley *et al.* 2000).

However for most behavioral and emotional problems, especially those of children, biological factors are better viewed as contributors than as causes.

B. Psychosocial factors: These factors are discussed under the four models:

#### 1. The functionalist approach

The majority of research into psychological factors underpinning the aetiology of challenging behaviour has taken a functional perspective, with its origins in learning theory. In this approach the emphasis is on the purpose, the behaviour serves for the individual, rather than the form of the behaviour. In addition to accessing or avoiding either external or internal events, challenging behaviour may also serve as a form of communication. A single challenging behaviour can also be multi-functional and there is an emphasis on internal events and emotions in the modern functional analysis.

Experimental research on challenging behaviours historically focuses on people with learning disability, seeking to evaluate assessment and treatment procedures. The learned behaviours are often acquired through an individual's history of interaction with his or her social and physical environment. Moreover treatments are only effective when they match the functions of the target behaviour appropriately.

#### 2. Psychodynamic models

Psychodynamic models of psychopathology have evolved over the years from Sigmund Freud's psychoanalytic theory. They assume that disturbed behaviour is a manifestation of underlying causes. Psychodynamic models, however, do not regard those causes as physical in nature. Instead, the underlying causes are assumed to be thoughts and feelings, fears, anxieties, conflicts, irrational beliefs and outlooks produced by life experiences. It is not enough simply to treat the behavioural symptoms of a problem. Problem can not be solved by just rewarding a child, but the core of the problem should be studied and corrected. What are the reasons for a particular problem should be noted before giving the therapy.

#### 3. Family models and social learning

Family models take yet another perspective in the effort to search the environment for the causes of psychopathology. This view holds that, while one person in a family is usually identified as having the problem, in fact that person's symptoms are a reflection of disturbance in the larger family system. Due to disturbances in the family the children may be

behaving in a particular way causing problems in their behaviour. The behaviours of the family are interconnected. Hence the problem should be understood by looking at all the family members.

#### 4. The developmental perspective

The Developmental perspective draws upon and integrates all the models described. It assumes that genetic and other biological influences, the family, socioeconomic and cultural contexts, and past developmental history all influence the development of emotional and behavioural problems just as they influence normal development. Thus a developmental expression of depression must incorporate biological factors, cultural influences, developmental history, and the youngster's immediate environment such as home life and friends.

#### 2.3.2. Management of problem behaviour

Behaviorism comes from the work of psychologist, Watson in the early 20<sup>th</sup> century. Watson rejected introspection or self-inspection, as a method of studying behaviour and declared that only observable behaviours are worthy of serious study. Behaviorism also refers to a set of different theories concerning the developmental process that attribute the control of developmental outcomes more to environmental factors than to biological ones. Some basic assumptions common to all behavioural view of development are

1. Development is a function of learning
2. Development is the result of different types of learning
3. Individual differences in development reflect differences in the histories and past experience of individuals.
4. Development results from the organization of existing behaviours.
5. Biological factors set general limits on the kinds of behaviours that develop, but the environment determines the behaviours in which the individual engages.
6. The development of the individual is not directly related to biological determined stages.

Along with Sigmund Freud, Russian psychologist Ivan Pavlov is one of the significant contributors to the growth of the study of human behaviours as a science. Pavlov's examination of two concepts, classical conditioning and classical conditioned reflex, started the revolution in thinking about development. Pavlov identifies two facts that affect the strength of the conditioned reflex reinforcement and extinction like Pavlov, Watson believed that the basic component of behaviours is the stimulus-response unit and that only behaviours can be produced by the particular sequencing of stimuli and responses. Watson defined a stimulus as any form of energy that excited a sensory organ. A response tends to follow a stimulus and is an observable reaction of some physiological subsystem to a stimulus. The stimulus response connection forms the basis of all behaviours influenced by the laws of classical conditioning.

The classical conditioned reflex (a special type of response) acts as a stimulus for a response that may follow. In turn this provides a linking of the S-R, association to the next S-R, association and so on creating a complex chain of interrelated behaviours in which the response from an earlier S-R association becomes the stimulus for the next.

Like Pavlov, Watson believed that it is important to take into account factors beyond the simple S-R association. For Pavlov, these factors were reinforcement and extinction and the complimentary processes of generalization and differentiation. Watson introduced the law of frequency and the law of recency, which are helpful in understanding the developmental process. The law of frequency states that the more often a person makes a response in the presence of a certain stimulus the more likely it is that the person will make the same response to that stimulus in the future, Eg.: Stopping a car when the 'red stop sign is seen'. The law of recency, states that the more recently a particular stimulus has been associated with a particular response, the more likely it is that the association will occur again.

Ideally children should be praised or punished immediately after they exhibit behaviours that is praise worthy or undesirable or at least as soon after the behaviours as possible to ensure that the association they form between the praise or punishment and the are as strong as possible. In addition parents should be consistent in dispensing both praise and punishment so that a child always receives support for certain things and also learns that other things may be in appropriate or unacceptable. But consistency should be maintained.

Skinner and other behaviourists have invested a great deal of time in defining the rules and conditions that govern the relationship between a response and the events that follow it. Skinner was concerned about understanding behaviours and development and so he focused on the study of observable behaviours. He introduces the concept of the reinforcing stimulus. If a stimulus that follows a behaviour increases the probability of that behaviour occurring again, the stimulus belongs to the general class of stimuli called reinforcer. For example if you get some incentive for a good act then because of this reinforcement you will repeat that act once again.

Just like reinforcer a general class of stimuli called punisher also affect a behaviour, for example if you are punished or have experienced an unfavourable, or unpleasant act then you avoid that behaviour or act for not facing those consequences again. Hence through experience an individual learns how event in the environment act as discriminative stimuli signaling that given behaviour will be followed by some type of reinforcer or punisher. But there are individual differences as to how a person will behave and respond to different stimuli in the environment. The factors that influence behaviours are

1. The concept of reinforcement – There are two basic classes of reinforcer : positive and negative, positive reinforcer are stimuli that are added to a situation and the result is an increase in the probability that a behaviour will occur again, eg.: praising, thanking *etc.* Negative reinforcer are stimuli that are withdrawn from a situation that is the behaviour is reinforced through the withdrawal of an unpleasant or aversive stimulus. Eg.: removal of a splinter or thorn because something is being taken away that is unpleasant. Hence, it reinforces treatment of an ailment.
2. The concept of extinction and punishment – Behaviours decrease in frequency in response to two main influences : extinction and punishment. Among the factors influencing operant behaviours there are some that may cause them to decrease in frequency or even stop altogether like for example ignoring a behaviour or not reinforcing a behaviour results in a decrease of that behaviour. The result of such lack of response to a behaviour or non reinforcement is called extinction.

Punishment is the presentation of an aversive or unpleasant stimulus, to decrease the frequency of a behaviour punishment can be related to the two classes of reinforcer and can take the form of withdrawal or a positive reinforcer or the presentation of a negative reinforcer if the effect is acting as a punishment.

So good behaviours can be had with a process of reinforcement and if the behaviour is to be decreased then it is a punisher.

Several studies have shown that inept disciplining practices and coercive parent child interactions such as yelling, parental attention to deviant behaviours and inattention to prosocial behaviour and failure to set limits play an important role in the development of aggressive, antisocial child behaviour (Patterson *et al.*, 1993). Several education and treatment programmes for parents with oppositional defiant disorder and conduct disorder children have been developed in which parents are taught parental warmth behaviour through role modeling by the therapist. The parents are provided with a list of socially reinforcing expressions to be used at home. Caregivers are taught how to play with their children in a non-directive fashion, identify and reward children's prosocial behaviour through praise and attention.

Rewarding desirable behaviour

An important aspect of effective disciplining involves the consistent use of rewards by caregivers to help children to learn appropriate behaviour. Evidence indicates that parents who positively reinforce their children's desirable behaviour increase the rate of probability of that behaviour recurring in a wide variety of situations in the future (Howard, 1996). Positive

reinforcement is effective only if it is used consistently every time the targeted behaviour occurs. If parents provide different consequences for the same behaviour at different times, the consequences tend to lose their effectiveness. Moreover, if different strengths of consequences are administered at different times, the consequence with the lesser strength declines in effectiveness (Howard, 1996)

#### Role of verbal reprimands and reasoning in discipline

A common strategy which parents use while disciplining young children is verbal reprimands and reasoning to explain why certain behaviours are inappropriate and the possible implications of such behaviour moreover, parents also attempt to elicit verbal promises from the children regarding future behaviour. Several studies indicate that verbal explanations or instructions to alter the behaviour of children younger than 6 years of age under most circumstances are not effective in changing their behaviour and in some cases may also result in worsening of behaviour (Roberts and Powers, 1990). Parents should therefore not rely on explanations, warnings, reprimands to change the child's behaviour. The use of consistent consequences following instructions to behave in a particular manner are more important to reduce to eliminate inappropriate behaviour.

#### Time out

One of the most extensively researched and recommended strategy for managing misbehaviour in children is a procedure called time out. Time out involves removing of privileges or positive reinforcement following unacceptable behaviour. For children it involves removing parental attention and praise through ignoring by isolating the child for a brief duration of time. Time-out may involve standing in a corner, sitting in a chair with the face towards the wall or partial removal from preferred activity by watching from the side line (Christophersen, 1992). Time out can be used as an effective disciplining strategy for a wide age range and has been reported to be effective in children as young as 9 months of age to about 12 years (Christophersen, 1992). However, after age 12, other methods such as withdrawal of privileges, deprivation of special experiences like watching TV, going out with friends, may be more useful.

#### Physical punishment

Physical or corporal punishment involves the application of some form of physical pain in response to undesirable behaviour (Wissow and Roter, 1994). Use of harsh punishment by parents towards young children had been found predictive of aggressive, antisocial and violent behaviour in adolescents and young adult (Eron, 1996). It is important to remember that use of physical punishment in first 6 years of life may help to establish firm habits of good behaviour (Baumrind, 1996). However the effectiveness decline with increase in the age of the child.

## 2.4 Developmental outcomes of mentally challenged children attending special schools

### 2.4.1 Education and academic skills

The classroom interactions between teachers and children predict more positive development for all children. Specific school-based interventions provide training for students with various risk factors. Focused efforts related to teachers training and support curriculum implementation and assessments of classroom settings could be used more strategically to counter the tendency toward poor outcomes. This section is presented under the following subheadings.

#### 2.4.1.1 Teacher Characteristics and Classroom Environment

#### 2.4.1.2 Academic Performance

#### 2.4.1.3 Gender Variation

Studies on these topics are presented for mentally challenged children and normal group separately.

#### 2.4.1.1 Teacher characteristics and classroom environment

Apart from the home background and pupil factors, school and teacher characteristics also influence learning outcomes.

Fellers and Saudargas (1987) using the SECOS code, attempted to determine any major differences in teacher behavior toward elementary school girls with and without learning disabilities in the regular classroom. They found that teachers did not spend more time interacting with girls with disabilities, but they ignored call outs from girls with disabilities more than from girls without disabilities.

Ramsey *et al.* (1991) described about what special education teachers should know. There should be families with lower, regulations and policies related to special education. They need to recognize characteristics of a physical, emotional, developmental, behavioural and educational nature that occur and extent of special services are required. They should know the perceptual skills of students and academic achievement. They should be able to administer tests for assessment, sensory screenings, teacher made quizzes or annual standardized assessments.

Teacher quality is another variable that has a significant impact on pupils' overall achievement scores. It was found that teacher education/ qualification was the most important determinant of students' achievement in both advantaged and disadvantaged regions (Govinda and Verghese 1993; Kingdon, 1998; Sexena, Singh and Gupta, 1996). Teacher experience was found to be an important predictor of student achievement in major empirical studies. Studies have reported a negative correlation between multigrade teaching and learning outcomes. Bashir (1994), Govinda and Vergheses, (1993), Saxena, *et al.* (1996).

Strong positive associations between teaching practices and students' achievement emerged from the studies reviewed. Practices such as giving assignments to students in maths and language, providing testing and feedback and giving homework were seen to be positively associated with students' learning (Saxena, Singh and Gupta, 1996).

Dwyer *et al.* (2000) in their article Early warning; timely response; A guide to safe school asserts that schools can prevent violence and its preceding behaviours by providing a supportive school wide climate and responding early to at risk students academic and behavioural problems. The guide's fundamental premise is that none of its recommended policies or procedures should be used to harm or label children. It stresses developing climates that avert violence and its precursors, through prevention approaches, collaboration and clear and effective policies. Early intervention should not wait until the start of school. School communities must reach out to families even before kindergarten. Abusive violence, for example can be reduced significantly when youthful mothers are provided with one on one child development information about normal development of infants and toddlers in a supportive and respectful manner. Children with poor social and behavioural skills can be identified as early as 3 years of age and be given intervention.

Bridget *et al.* (2005) examined ways in which children's risk of school failure may be moderated by support from teachers. Participants were 910 children in a national prospective study. Children were identified as at risk at ages 5 – 6 years on the basis of demographic characteristics and the display of multiple functional (behavioural, attention, academic, social) problems reported by their kindergarten teachers. By the end of first grade at risk students placed in first grade classrooms offering strong instructional and emotional support had achievement scores and student teacher relationships commensurate with their low risk peers; at risk students placed in less supportive classrooms had lower achievement and more conflict with teachers. These findings have implications for understanding the role of classroom experience may play in pathways to positive adaptation.

Studies on normal children

Class size or pupil-teacher ratio was a school variable that was not found to be consistently affecting achievement across all studies. Saxena, Singh & Gupta, (1996) found that school mean achievement continued to decrease as the pupil-teacher ratio exceeded fifty.

Ruopp. *et al.* (1979) mentioned that in smaller groups, adults spend more time interacting with children and less time simply watching them. Children in smaller groups are more verbal, more involved in activities, less aggressive and make the greatest gains in standardized tests of learnings and vocabulary.

Francis and self (1982) stated that infants and toddlers are more likely to imitate adult gestures and speech – a critical mechanism for learning – when there are fewer children per adult.

Thurlow *et al.* (1983) explored the active academic responses of students with and without learning disabilities and found that the groups did not differ in total active academic responding times overall, in task management responses overall, or in inappropriate responses overall. The two groups of students differed in the time they spent engaged in specific types of academic responses. For example, students without learning disability spent more time writing than did students with disabilities, where as the latter students spent more time playing academic games, reading aloud, talking about academic, answering academic questions.

Clarke *et al.* (1984) reported that children score better on tests of cognitive and social competence when their caregivers have higher levels of child related training and formal education.

Vandell (1988) found children in higher quality child care as preschoolers are more socially competent in elementary school, are more empathetic and are better liked by their peers.

Howes *et al.* (1992) described children in classrooms with better ratios (fewer children and more adults) are more likely to receive more appropriate care giving and experience more developmentally appropriate activities. The higher the ratio of children to adults, the greater the likelihood that children receive inadequate care giving and experience fewer developmentally appropriate activities

Further Vitaro *et al.* (1995) explored how changes in teacher ratings of children's behaviour problem from kindergarten to first grade might vary with teacher's role of managing behaviour problems. Subjects were 1,573 boys and girls rated by teachers , mothers and peers on one part of the sample on aggressive behaviour, hyperactivity, anxiety, withdrawal and social skills deficits. The teacher ratings of aggressive, hyperactive behaviours change significantly from kindergarten to grade first .

Taylor *et al.* (1996) evaluated on an ongoing consultation model to train teachers to treat challenging behaviour. The classroom teacher was trained to implement the intervention to behaviour techniques. Intervention resulted in significant decrease in challenging behaviour.

#### 2.4.1.2 Academic performance

Adams (1999) examined the relationship between behavioral problems and academic attainment in a large UK primary school. A school population – 364 children aged 8 to 11 years was assessed on a range of cognitive ability tasks. These included standardized tests of reading, arithmetic and verbal and non-verbal intelligence. Under achievement were assessed using different criteria. To assess behavior, teacher completed the strengths and Difficulties Questionnaire (R-Good-man, 1997) for each participating child. Finally, academic progress of subset of children was assessed after one year. Results indicated that a significant relationship between behavior and academic attainment, pro-social behavior was positively correlated with reading and arithmetic, hyperactivity and conduct problems were negatively correlated. This association was especially strong in the children rated by the Questionnaire as hyperactive, where around 1 in 5 had a specific reading deficit.

Merrell (2001) determined the proportion of children who were assessed by their teachers as exceptionally inattentive, hyperactive or impulsive in the classroom. The relationship between the traits and academic achievement and progress were examined. The participants were comprised of 4, 148 children from a nationally representative of a schools in England. Reading and mathematics achievement of participants were assessed at the start and end of the reception years and in year 2. Behavior was assessed at the end of the reception using a rating scale.

The proportion of children with exceptional scores on the behavior rating scale was reported. The reading and mathematics attainment and value added of children with high scores on the behavior rating scales was reported. The reading and mathematics attainment and value added of children with high scores on the behavior rating scale were found to be educationally and statistically significantly lower than children with zero scores.

#### 2.4.1.3 Gender Variation

Similarly students diagnosed as LD experienced emotional problems, McConaughy (1986) & McConaughy and Ritter (1986) reported that boys with LD experienced significantly more problem behaviours on the Child Behavior Check List (CBCL) than Non-referred boys. In one more study, Ellen (1989) compared groups of students with LD and no handicapping conditions on a scale that measured acting –out, learning problems and shy-anxious behavior. Teachers rated children with LD as having significantly more emotional problems than their non-diagnosed peers on all dimensions.

Margalit (1998) examined loneliness and coherence among Israeli pre-school children with learning disabilities. The sample consisted of 187 pre-school children divided into three groups (a) 60 children at high risk for developing learning disabilities, 47 boys and 13 girls. (b) 76 non-handicapped peers from the same pre-schools, 56 boys and 20 girls. (c) 51 children (38 boys & 13 girls) the research instruments consisted of the children's Sense of Coherence Scale, the loneliness scale, a peer nomination procedure and teachers' ratings. Two-way MANOVAs demonstrated that the two groups of children with LD and with a high risk for developing learning disabilities were less accepted by peers than students in the non-disabled group and their number of reciprocal nominations was smaller. Furthermore their teachers viewed exhibiting more learning difficulties and less adjusted behaviours than their counterparts (Non-disabled peers). Gender comparisons revealed that girls showed higher levels of adjusted behavior than boys. And also high loneliness scores and low sense of coherence were found among the children with learning disability and the high risk group. Findings of the study was supported by studies highlighted their social distress (Bender and Wall, 1994) loneliness and rejection by peers (Margalit, 1991).

Handwerk *et al.* (1998) investigated the behavioral and emotional problems of children with learning disabilities (LD) serious emotional disturbances (SED) and LD/ SED, using the Teacher Report Form (TRF). The sample consisted of 217 students with LD, 72 with SED & 68 with SED/LD ages 6 to 18 (mean age = 11.5). A univariate analysis revealed that four scales significantly contributed to the multivariate effect for gender. Parents rated girls as having more somatic complaints, attention problems, more delinquent behavior and more aggressive behaviour than boys. And for social problems, the SED group scored higher than the LD group (LD < SED). Also the children with learning disabilities differed from those with SED (serious emotional disturbance) mainly in terms of severity of problems, not with respective type of problems.

#### 2.4.2 Emotional and behavioral outcomes of challenged children

It has long been known that learning problems and behavior problems tend to go together. Children who have learning difficulties are more likely than children without learning difficulties to have behavioral and emotional problems of one sort or another. Children with behavioral and emotional problems are likely to be at high risk of the development of specific learning difficulties.

The epidemiological study that reawakened the field to the association of interest was the Isle of Wight investigation of Rutter *et al.* (1974). This pioneering study made use of a two stage procedure for assessing both under achievement and psychiatric disturbance. First the general population of nine-eleven years old on Rhode Island was screened for intellectual and academic retardation and psychiatric disturbance, plus a randomly selected group of children from the general population. Results indicated that, children with specific reading retardation were over four times more likely than the general population to display anti social behavior. Similarly, Stevenson *et al.* (1984) studied bylinkages between cognitive reading difficulties and behavior problems. They proved there was association between these two problems among children from kindergarten to elementary school years.

Similarly, most of the results of the studies (McGee *et al.*, 1985; McGee & Sheare, 1988; Marrison *et al.*, 1989; Szatmari *et al.*, 1992) essentially conform the finding that among kindergarten and grade school children, inattention and hyperactivity were the most consistent correlates of under achievement.

McKinney *et al.* (1986) studied forty-seven school identified learning disabled (LD) students who had been classified into seven behavioral sub types by a technique of hierarchical cluster analysis and were followed longitudinally for three years (McKinney & Feagans, 1984). Students with learning disabilities were classified using 60-item version of the Classroom Behavioral Inventory (CBI) (Schaefer, Edgerton and Aronson, 1977). Classroom teachers and special education teachers rated children each year on measures of independence-dependence, task orientation-distractibility, extroversion-introversion and considerateness-hostility. Also measures of reading and mathematics achievement were taken with each other. Children with attention problems and those who presented problem behaviors in the classroom during the first and second grade showed poorer achievement outcomes in later grades, compared with those who did not present a typical behavior and those who presented a withdrawn pattern of behavior. Although children tended to switch sub type membership over three years, the proportion of learning disabled children in adaptive and maladaptive subtype was similar at years one and three, as determined by classroom teachers' ratings in subsequent years.

Carlson *et al.* (1996) found that each year 7 per cent of Michigan's special education students return to fulltime general education programs through declassification. In a preliminary investigation of declassification from special education, the authors analyzed data collected by the Michigan Department of Education over the past 5 years. Respondents suggested that, as a group, students declassified from special education are academically, socially, and behaviorally well adjusted, but teachers or counselors of 11 per cent of the declassified students felt that these students continued to require special education services. Particularly note worthy were the relatively poor results for declassified students with emotional impairments.

Similarly, a series of earlier studies showed that LD children as a heterogeneous group, displayed maladaptive patterns of classroom behavior that distinguished them from average achieving peers and were associated with their failure to progress academically (Feagans and McKinney, 1981; McKinney & Feagans, 1983, 1984; McKinney & Speece, 1983).

Polly (2000) stated erroneous beliefs, distorted thoughts, and poorly controlled emotional responses to stress contribute to behaviour problems as fundamentally as do observable environmental antecedents. To understand the function of problem behaviours in students lives, assessment of their social perspectives, beliefs and feelings is as necessary as assessment of their immediate desires for attention, task avoidance, or escape. He suggests interventions in which students are taught to think clearly, solve problems and self-regulate the intensity of their emotions.

Similarly, Stevenson and Romney 1984 conducted one of the first studies examining depression in 103 students with LD ages 8 to 12 in a school setting, found that depression in 14 per cent of the sample of students with LD.

It is seemingly important to distinguish children with specific learning disabilities from learning difficulties. Depression among students with learning disabilities (LD) has been an area of study for more than 25 years. By the mid 1980s, research began to emerge on the prevalence of depression among students with LD in school settings. The majority of these studies indicated that students with LD obtained statistically higher depression scores than their peers without LD eg. symptoms or prevalence of depression for boys with or without LD. Girls reported more negative mood and less inter personal effectiveness.

Bevington *et al.* (1999) explored the association between poor academic achievement and behavioural problems by examining the direct effects of peer presence on classroom performance in children with identified learning difficulties. It was hypothesized that independent performance on a cognitive task would decrease as number of classrooms peers present increased. A total of 24 children ranged 9-14 years attending two special schools for children with emotional and behavioural difficulties participated in the study.

A within-subject design was used in which performance on a set of perceptual / conceptual matching tasks was assessed under three conditions: the child working alone, alongside with other peers, or within a group of six. Measures of non-verbal intelligence and academic attainment were collected along with teacher ratings of the severity of each child's behavior. Performance was significantly influenced by peer presence, both in terms of number of correct responses and time taken to complete the matching tasks.

Delello (1998) investigated classroom dynamics and young children identified as at risk for the development of serious emotional disturbance as compared to not-at-risk peers. Assessment of classroom dynamics included teacher (attitudes and perceptions), student (academic engagement and perceptions of teacher's expectations), and instructional factors (accommodations for at-risk-students), as well as classroom interactions (teacher-student and peer). 628 kindergarten and first-grade students in two urban schools of South Florida were screened for identifying students at risk for developing serious emotional disturbance. 28 students were identified as at high risk. Results indicated these children were experiencing a significantly different reality in the classroom than not-at-risk peers. Implications for effective classroom interventions for these young-at-risk children include collaborative / consultation teacher models, task modifications, direct instruction, and cooperative learning and peer tutor programs.

Further, Shanti (1999) examined temperament, behavioral problems and disciplining style in children with scholastic skill difficulties. A purposive sample of 20 children with scholastic skill difficulties was chosen from the Child and Adolescent Mental Health Unit NIMHANS, Bangalore. The children were between 5 to 8 years of age. A control group consisting of age and sex matched norms was chosen from two English medium schools. Results showed that children had higher rate of externalizing, internalizing, learning and miscellaneous problems. Their temperament profile was one of low adoptability and average intensity and distractibility.

Panacek and Dunlap (2003) conducted a descriptive study and examined the social lives of children with emotional and behavioral disorders, whose education occurred in segregated elementary school classrooms. The principal data were obtained from detailed interviews with 14 children with E/BD, and 14 matched comparison children from general education classroom. Major findings indicated that the children with E/BD had little opportunity to engage in integrated school activities and their social networks in schools were dominated by children and adults affiliated with special education. In contrast the social networks of the same children in their homes and neighborhoods were similar in size and constellation to the networks of the general education children. Children with E/BD identified their important friends as being from their home networks, whereas the general education children's important friends came from school.

Nelson *et al.* (2004) studied 155 students (126 boys and 29 girls) receiving special education services for emotional and behavioural disorders in a medium size urban school district in the midwest served as participants. Results indicated that 50 per cent students recommended borderline or clinical range on the broad band externalizing scale than on the internalizing scale (20 per cent). Hence students with E/BD are more likely to be characterized by significant externalizing behaviours when rated by teachers.

Maag *et al.* (2006) studied the depression among students with LD, with the sample of fourteen studies included 1701 participants with LD. Database was searched for articles beginning in 1977 and continuing to August 2003. Results revealed that students with learning disabilities had statistically higher scores on measures of depression than their peers without LD, done for the purpose of meta-analysis of the data based literature and quantify mean difference in depression measure scores and levels of clinic depression between students with and without LD. Results revealed that researchers have found that students with learning disabilities obtained statistically higher scores on measures of depression than their peers without LD.

## 2.5 Parental knowledge regarding intellectual disability and special education.

Parents especially women generally have greater involvement with family matters, many mothers carry on bravely with the task of integrating usual family duties and special burden of catering to the needs of the mentally challenged child. Mothering of a mentally challenged child is a complex experience with various shades of emotions and various levels of stress and resources. Hence the mothers of challenged children need to be encouraged for taking assistance from formal and informal support sources.

Mamta and Punia (2003) analysed the parental knowledge regarding mental retardation on the basis of background area, residence area and socio-economic status. The data were collected from the parents of severely mentally retarded and moderately retarded children on a sample of 30. Data was collected from each category by using self-structured and pre-tested interview schedule and knowledge inventory. The results indicated that parents had high and moderate knowledge on all aspects except facilities available. Socio-economic status and residential area made a significant influence on the knowledge of parents. Parents of lower SES were significantly lower in knowledge than from the parents of high SES.

Basu *et al.* (2004) study purported to explore with a qualitative interview technique, the cognitive and affective responses of the mothers of mentally challenged children to the disability and the child itself. A sample of 80 middle class Bengali mothers of 25 - 60 years of age whose children were enrolled at least for over a year in various special service organizations of Kolkata were interviewed. All the children belonged to mild retardation category (IQ 50 - 69) and were between 5 – 20 years of age. Content analysis and rating revealed that the mothers were apparently aware of the scientific status of the disability in terms of its clinical status and prognosis. The affective reactions toward the child were ambivalent characterized by both love and rejection. The impact of the mentally challenged child on their own lives was negative but positive rewards and gains have been reported. It was concluded that the mothers mastered inner strength mostly from formal and informal social support to deal effectively with the stressful situation.

Kolb *et al.* (2003) in a qualitative research explored parental views about critical social skills for adolescents with high-incidence disabilities. Parents in this study 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 wanted 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 or motivation.

Currier (2004) studied Parental Knowledge of ADHD and opinions of commonly used treatments. The present investigation examined the effect of a brief knowledge intervention aimed at increasing knowledge of ADHD on treatment acceptability of commonly utilized treatments for ADHD in a low SES, minority population seeking initial services at a multidisciplinary behaviour clinic for ADHD. Participants included 48 female guardians, who gained knowledge after the intervention.

A study by Rashid *et al.* (2005) focuses on the relationship between parent and child home literacy activity and children's academic functions was investigated with a sample of 65 elementary – age children with reading disabilities and their primary care givers. Three combinations of readings course were used to provide an index of reading achievement viz., Woodcock Reading Mastery Test-Revised (WRMT-R), Wide Range Achievement Test-3 (WRAT-3) and Word Identification, Word Attack. Results revealed small but significant correlations between race and IQ, mother's education and literacy scores and child's age and several of academic and literacy variables. Examinations of the responses to the child's literacy questions revealed that the literacy experiences in the home varied greatly within the sample. Approximately 22 per cent of the children were read 7 to 9 times per week. More than half of the sample never visited the library. 20 percent of the children never read or looked at books alone at home.

The children in the sample rarely watched educational programmes on Television. The results also indicated that children's home literacy activities were not significantly related to any of their academic abilities, whereas parents' home literacy activities were significantly related to children's passage comprehension and spellings course.

Similarly, a meta analysis of 101 related studies by White (1982) also suggested that when the home atmosphere was positive (e.g. Parents attitude toward education parents' aspirations for their children, cultural and intellectual activities of the family) relatively high correlations were found with academic achievement.

## 2.6 Problem behaviors in mental challenged children and influential factors.

It is well documented that mentally retarded children have a greater risk of developing psychiatric disorders, as compared to children with normal intelligence. Certain neuro-physiological mechanisms have been considered to be responsible for this vulnerability. Another psychological variable related to emotional disorders in children is temperament. It is possible that mentally retarded children have certain temperament traits that make them vulnerable to develop psychiatric disorders during the course of development.

Ritter David (1989) found that problematic conduct was seen more in boys than girls, and the ratings of adoptive functioning were significantly low within regular classroom settings than within special education.

Malhotra (1990) studied the temperament profiles of MR and normal gp, children with mental retardations were found temperamentally to be withdrawing, poorly adaptable, with predominantly negative mood and low distractibility.

Chandler *et al.* (1999) have reported that functional assessment is an assessment and intervention process that assists educators in identifying the factors that produce and support challenging behavior. Hence functional assessment uses interventions to prevent and remediate challenging behavior and facilitates the development of appropriate behavior. From their study the challenging behavior and non engagement decreased in each at risk classrooms with functional assessment.

Safran and Oswald (2003) reported the importance of positive behavior supports which recognizes the broad set of relevant variables that can affect a persons behavior. The violence prevention curriculum, the social skills lessons, incentives help in reducing problem behavior.

Carter *et al.* (2003) examined the importance of work and job performance from children with E/BD. The E/BD adolescents evaluate their job performance significantly more favorably than their supervisors which show their satisfaction.

Nachshen *et al.* (2005) provided an insight that Individuals with Intellectual disabilities are at higher risk than individuals without disabilities for developing a psychiatric disorder. They reported that prevalence of mental health problems to occur in approximately 10-40 percent of individuals with disability. Also a high incidence of clinically significant behaviour problems in children with Intellectual disability. Behaviour problems begin to develop in children with Intellectual disability as young as two years and remain stable across time and developing into a dual diagnosis in adulthood.

Nelson *et al.* (2007) suggest that several risk factors are associated with the development of maladaptive behaviors based on the data analyses there were two primary findings. First among the 11 risk factors, 5 were most predictive of problem behavior including externalizing, internalizing, child maladjustment, family functioning and maternal depression. Secondly by stepwise logistic regression the best predictors of problem behavior were difficult child, destroys own toys and maternal depression.

Gupta *et al.* (2007) suggested the effect of yoga therapy on persons with mental retardation. If properly practiced it helps to co-ordinate the activities of the mind and body of the mentally challenged persons. It also helps to reduce distracted state of mind and help in concentration.

## 2.6.1 Factors influencing problem behaviour

The selected factors studied are:

- a. Socio-Economic Status
  - b. Gender
  - c. Education of mother
- a. Socio-economic status affects the child's development with regard to nutrition, value disciplining facilities and academic achievement.

Shenoy (1992) studied a population of 1549 children in the age range of five to eight years from middle socio economic status and reported scholastic backwardness in 11 per cent of boys and 8 per cent of girls. An interesting age trend of decline in percentage of scholastic backwardness in girls and increase in boys was noted. Rozario (1991) in a study of 110 children of 9 years of age from lower, middle socio-economic status from-country found nearly one third children to be scholastically backward, majority of them had specific learning disabilities.

Brandner (2004) studied Low Socio-economic status and found to impact children's learning and development. Socially physically and mentally these homes had the tendency to be lacking in positive developmental factors. These factors had the potential to influence children in a variety of negative ways including lower IQ scores, increase behavior problems, lower speech and language ability and problems with academics.

### b. Gender

Numerous neurodevelopment disorders, including cerebral palsy, attention-deficit hyperactivity disorder (ADHD) autism, speech and language disorders and learning disabilities are diagnosed more often in boys than in girls (Abramowic *et al.*, 1975). Researches have advanced theories emphasizing the importance of gender differences in rates of maturation (Ounstead & Taylor, 1972). Chromosomal structure (Childs, 1965), thresholds of genetic vulnerability (DeFries, 1965), thresholds of genetic vulnerability to birth complications (Singer, Westphar & Niswander, 1968) as possible explanations for higher male prevalence neuro-developmental disorder problems.

Heath *et al.* (2000) compared girls and boys with and without learning disabilities (LD) on mean reports of depressive symptoms, prevalence of depression and type of depressive symptom reported. 100, fourth and sixth-grade children with LD and 104 children without LD were compared on the Children's Depression Inventory (Kovacs, 1992). Results revealed that mean level of depressive symptoms between students with and without LD did not differ but prevalence of depression was marginally different. Girls with LD reported higher mean levels of depressive symptoms and higher prevalence of depression than girls without LD where as there was no difference in mean levels of depression among boys.

Liederman, *et al.* (2005) reviewed studies that were designed to minimize ascertainment bias in the selection of individuals with reading disabilities. These include population-based studies that identified children with reading difficulties by objective, unbiased methods and studies that examined the gender ratios among the affected relatives of those diagnosed with reading difficulties. Authors concluded that even when ascertainment biases were minimized, there is still a significant preponderance of boys with reading difficulties, although the gender ratio of the affected relatives of those with reading difficulties manifests the weakest male bias, suggesting that male prevalence of reading difficulties is not a myth but reliable phenomenon.

### c. Education of the Mother

Kochanek *et al.* (1990) examined child-centered data from birth to 7 years and familial factors as possible predictors of disabilities in adolescence; subjects were Rhode Island participants of the NCPP. A sample of 268 handicapped adolescent was studied. Results indicated that parental traits (maternal education) are more accurate predictors of adolescent status from birth to 3 years. Whereas child centered skills assessed at 4 – 7 years of age are better predictors than are familial factors?

## 2.7 Impact of intellectual disability and problematic behaviour on family

Cameron *et al.* (1991) state that parenting any child can at times be a stressful experience. In general parents of normal children report less parenting stress when compared to parents of disabled children.

Dumas *et al.* (1991) study on parents of children with behaviour disorders, autism, Down syndrome and normally developing children revealed significant differences in parenting stress between children with behaviour disorders and autism as compared to parents of children with down syndrome and normal development. These differences suggest that type of developmental disability may affect parents perception of stress.

Firat *et al.* (2002) compared the psychopathology in the mothers of Autistic and mentally retarded children. There were 40 mothers of Autistic children and 38 mothers of mentally retarded children from child and Adolescent psychiatry in Turkey. It was found from the study that non depression rate was 27.5% in the mothers of autistic children whereas it was 55.3% in mothers of mentally retarded children, which shows that mothers of autistic children experienced more psychological distress than those of a mentally retarded child.

Baker *et al.* (2003) examined the continuity of child behaviour problems and their relationship with parenting stress. Child behaviours were examined from the perspectives of fathers as well as mothers. There were 205 families with their 3 years old children, from central pennsylvania and southern California, USA, children classified as delayed were 82 and non delayed 123. child behaviour checklist indicated child problems and Family impact questionnaires were used to assess the child's impact on family. It was found that parenting stress was higher in delayed group but was related to the extent of behaviour problems than to the child's developmental delays.

Upadhyay and Havalappanavar (2007) compared the level of stress among widows and widowers with families where both parents are alive. 77 single parents were compared with that of 77 families where both parents were alive. Results revealed that single parent families of mentally retarded experienced higher level of stress compared to fly with both parents alive.

Dhillon and Babu (2008) compared the levels of stress perceived by mothers and fathers of intellectually challenged persons. A sample of 45 couples having son or daughter with mild and averagely intellectual disability participated in the study. Out of these 15 couples were parents of children between age of 4 to 12 years and 15 couples of young adults who received from various organization and special school in New Delhi, Results showed similar stress levels for mothers and fathers. Stress scores for the parents of children was found to be highest.

Upadhyay and Singh (2009) study on perception of parents of mentally retarded children regarding the psychological problems and needs in providing care to them specifically related with mild and averagely retarded children. The study was conducted on a purposive sample of 100 parents of mentally retarded children in Varanasi. Tools used were parents problems Inventory (PPI) developed by investigators and Family needs schedule adopted from Peswaria (1995) Results showed that the level of psychological problems faced by parents of mentally retarded increased with the level of mental retardation of the child. Parents of averagely retarded children registered more problems in all aspects compared with the parents of mildly retarded children.

Osborne and Reed (2009) examined the interaction between parenting stress and behavior problems in 137 children with autistic spectrum disorders. (ASD) study focused on very young children and study 2 employed a wider range of child ages. The researchers noted a strong association between parenting stress and child behaviour problems when they controlled for factors such as ASD severity and intellectual functioning. Study 1 indicated that when the children were very young (2.6 – 4.0 years) ASD severity related most strongly to parenting stress. In addition both study 1 and study 2 indicated that parenting stress at Time 1 was a stronger predictor of child behaviours problems at Time 2, rather than vice versa.

The research also shows that the earlier in a child's educational process parent involvement begin, the more powerful the effects will be. Educators frequently point out the critical role of the home and family environment in determining children's school success, and it appears that the earlier this influence is 'harnessed,' the greater the likelihood of higher student achievement. Early childhood education programs with strong parent and family involvement components have amply demonstrated the effectiveness of this approach.

Worrell *et al.* (1999) concluded that students with learning disabilities are more likely than other students to have problems doing homework. Family and school factors that may exacerbate or ameliorate their problems as well as the intervention research that has included students with learning disabilities. An emerging area of intervention research suggested that effective efforts to improve homework completion, accuracy and test performance may require parental involvement, peer cooperation, self monitoring or all.

The family environment itself provides both risk and protective factors; risk factors include activity level of the child, parental expectations and disappointment with academic performance, lack of flexibility to meet the normal developmental challenges and special needs, over protection, parent child enmeshment and rigidity.

Skotko *et al.* (2004) in their study on 4 girls with Rett. Syndrome were made to participate with their mothers in four phases of story book readings at home for 4 months. It was seen that the girls and their mothers developed an increased synergy in their communicative interactions.

Ayvazoglu *et al.* (2006) studied 6 children with visual impairments from mid western school USA/UK for the blind. They provide insight into the perspectives of how disability may interact with family physical activity care givers involvement, peer involvement and safety emerged to be the important factors in the physical activity of the children. Better the interaction with family better was their physical activity.

Nachshen *et al.* (2005) on problem behaviour in children studied the parenting stress, empowerment and school service. The child behaviour checklist was used to examine the relationship between child behaviour problems and various positive and negative stress and support outcomes in 100 Canadian parents of children with intellectual disability. The highest scores were observed on the thought, attention and social problems. The parents of 43 percent children with clinically significant scores on the total problems scale reported more stress and lower levels of well-being, social support, and family centered services than parents of children without significant scores on the total problems scale, parents who reported both Internalizing and Externalizing problems in their children reported the most negative experiences.

In homes with a child with disabilities, siblings may establish rigidly defined roles. Roles frequently adopted by the siblings of children with LD are the "super achiever" and the "mediator" (Atkins, 1991). No matter what role these siblings assume, they feel in no way special or important and thus develop a low self-concept (Atkins, 1991). Moreover, because siblings influence each other, they may also develop low self-concept through identification with their brother or sister with learning disabilities, expect these children's younger siblings not only to do well on academic, perceptual and memory tasks, but also make less progress during the school year than younger siblings of non-disabled students (Richey and Ysseldyke, 1983).

Dyson (1996) examined parental stress, family functioning and sibling and self-concept in families with children with learning disabilities. Qualitative and quantitative measures of 19 parents and 19 siblings of school age children with learning disabilities totaling 38 siblings and parents. The children with disabilities consisted of 16 males and 3 females, ages 8 to 15 (M=10.6, SD=1.7). measures used were Wechsler Intelligence Scale for Children-Revised (Wechsler, 1974) Social Competence Scale of the Child Behavior Check List (Achanbach, 1981), Questioner on Resources and stress-short Form (QRS-F; Crnic, 1983) on Resources and Stress (Holroyd, 1974). Results revealed that functioning of the families and the self-concept of the siblings were comparable to that in families of non disabled children but the parents in the former group experienced greater stress than did the parents of non-disabled children.

## 2.8 Intervention and treatment of problem behaviours

Preparing the child for success in the future environment is an essential component of transition. Early identification of the handicap, assessing the child's "Strengths and Weaknesses and early intervention and teaching of skills are essential" for proper around development of challenged children.

In India Verma and Shekar Rao (1996), Kumaraiah and Prasad Rao reported about the use of different therapies in use of behaviour disorders.

Before treatment of challenging behaviour some of the tips for parents are:-

1. Management needs to be tailored to the individual person, taking into account the particular behaviour and the setting in which it occurs.
2. Multi-agency, multi-disciplinary involvement is necessary and it is essential to gather detailed information about the nature and outcome of previous intervention.
3. Different treatment modalities like pharmacotherapy, psychological and social interventions alone or in combinations may be required. Only one treatment should be introduced at a time.
4. The safety of the person displaying the challenging behaviour and of others must be considered carefully.
5. Treatment in a safe and secure environment is necessary
6. Drugs should not be introduced but only after knowing the evidence of underlying mental illness.

### 2.8.1 Psychological treatments

#### 1. Behaviour modification

Treatment within a behaviour modification framework is based on the systematic analysis and application of reinforcement. Reinforcement is the process by which new responses are acquired and existing ones are strengthened. Restructuring the environment to remove significant contingent events may also be viewed as necessary, for example social relationships associated with patterns of addictive behaviour may be avoided until the individual feels confident about renewing acquaintances without riveting to former patterns of behaviour. The person is encouraged to substitute alternative behaviours in settings that would usually elicit the target behaviour. This is called solution analysis and is a treatment approach of established therapeutic value.

#### 2. Cognitive-behavioral therapy

The cognitive model and its practical application in clinical psychology have allowed psychological interventions to become more targeted in their use of internally generated material as a focus for treatment. Cognitive behavioural therapy (CBT) encompasses a wide range of interventions offered to clients within the frame work of collaborative empiricism, as well as behavioural strategies for managing symptoms, thoughts, beliefs and feelings are perused and examined for relevance and validity.

CBT as an effective intervention has encouraged clinicians and researchers to investigate and apply its techniques in a wide range of clinical problems, which include depression, (Watkins & Williams 1998) panic (Clark *et al.* 1994) psychotic symptoms (Garety *et al.* 1994) and personality disorders. (Nelson-Gray and Farmer 1999).

More recently the efficacy of CBT as a treatment for adults with learning disability has been established (Lindsay *et al.* 1993).

#### 3. Psychodynamic and systemic therapies

Individual, family and group psychotherapeutic approaches based on systemic or psychodynamic therapies have been used in the treatment of challenging behaviour, either alone or as an adjunct to other therapeutic modalities.

## Studies on intervention and treatment of problem behaviour

Grigal *et al.* (2003) in their study mentioned that a critical matter of success of special education services is the degree to which students with disabilities become a guiding force in their own lives. "if the transition process is to be successful it must begin with helping students to gain a sense of empowerment with respect to their own transition planning. As the process of creating and implementing transition plans for students with disabilities evolved it became increasingly evident that students with disabilities needed instruction in gaining this sense of empowerment as well as in how to evaluate options and advocate for themselves. A sample of 984 parents and 698 special education teachers were selected for the study who provided education to specific learning disability, mild/ moderate mental retardation, emotional disability, speech language disability. Parents and teachers supported that self determination of students led to students opportunity to make choices and express interests.

Kauffman (1999) in their article stressed the need for preventive educational intervention for emotional and Behavioural disorders. Children and youths may show earliest signs of E/BD in non school settings, and education alone cannot address the problem of prevention adequately, moreover special education and general education must work together to implement best educational preventive practices. Thus sound prevention programs require intervention in multiple environments by multiple agencies more than special education alone can offer.

Sinclair *et al.* (2005) in an experimental research design examined the effectiveness of a targeted, long term intervention to promote school completion and reduce dropout among urban high school students with emotional or behavioural disabilities. African American (67 per cent males) were the sample study participants included 144 ninth graders randomly assigned to the treatment or control gp. The majority of the youth were followed for 4 years. Program outcomes included lower rates of dropout and mobility, higher rates of persistent attendance and enrollment status in school.

Arwood *et al.* (2005) evaluated the effects of a reading intervention on the reading achievement and social behaviours of 6 third grade students with emotional/ behavioural disorders in South Eastern metropolitan school. Reading instruction occurred 4 days a week using the horizons fast track reading program and peer assisted learning strategies. Analyses indicated variable improvements in basic reading skills with limited transfer to oral reading fluency, outcomes for social behaviours indicated that changes in total in appropriate behaviour were not directly related to the reading intervention, improved engagement appeared related to intervention but not necessarily reading achievement.

Dave *et al.* (1993) suggested that the importance to control abnormal behaviour and hyperactivity and improve cognition in mentally retarded children, which would help in their education, training and rehabilitation. It is known fact that protracted use of anti-convulsant medication induces cognitive and behavioural dysfunction with other side effects in mentally retarded epileptics. So in a placebo-controlled study the efficacy of a herbal preparation BR-16 A (Mentat) was introduced to 40 mentally retarded children. The efficacy of this remedy was further evaluated in 19 children with epilepsy. Results indicated that with active drug Br-16A it was possible to note a reduction in seizure frequency. Patients with higher frequency responded better. There was no further increase of antiepileptic drugs. There was significant control of other abnormal behaviour as shown by reduction in rating score on the children's Behavioural inventory test. BR-16 A, was effective in controlling abnormal behaviours especially hyperactivity and incongruous behaviour in mentally retarded children with and without epilepsy.

Virginia *et al.* (1995) discussed about Isolation Timeout used with students with emotional disturbance, subjects were 156 students with emotional disturbance in New York. Results indicate that 13,000 separate timeout occurred over the academic year. Average time in isolation was 2 - 3 hrs./ student. Older students in more restrictive placements were found to spend significantly more time in isolation than were other groups, because of influence of time out used in schools.

Fox *et al.* (1991) studied the star parenting model for helping parents effectively deal with behavioural difficulties. Star parenting techniques teach parents specific strategies for dealing with their children's behaviour problems in variety of situations .

There were seventy five participants and the star program consisted of child development knowledge, behaviour management principles, adult cognitive learning strategies and most important common sense to produce a realistic and integrated approach to parent education. Results indicated parents success in applying the new strategies to specific problems encountered with their young children.

Thompson (1992) studied, effects of parent training program which is an effective intervention with parents and their children. Findings suggest that parent training was most effective with conduct problem children. In addition parents were interviewed to assess acquisition of skills taught, relative effectiveness of training methods and generalization of effects to the child's home. Results indicated significant pre to post test improvements in parent reported child behaviour problems, attitude towards their children and problem solving skills.

Perlman and Ross (1997) examined the impact of parental intervention on quality of children's conflict behaviour sample consisted of forty English speaking Canadian families with two to four year old children. Parental intervention was associated with their children using fewer strategies coupled with an increase in the use of more sophisticated negotiation moves. It was concluded that parental intervention in sibling conflict has beneficial effects in terms of the immediate quality of the children's fightings.

Further Walker *et al.* (1998) reported about intervening at the point of school entry to prevent anti social behaviour patterns, for antisocial behaviour due to the risk factors to which they have been exposed. The program had three modular components: proactive, universal screening, school intervention and parent training. These components were applied in concert with each other to teach at risk target child an adequate pattern of school related behaviour.

Aman *et al.* (2004) recommended prevention and intervention methods for psychiatric disorders and target behaviour symptoms. They suggested strategies of environmental changes by reducing chances for emergence of problem behaviour by rearranging physical and social conditions that seem to provoke them by changes in activities by restructuring tasks to be easier to complete, changes in work, social groupings or routines. Changes in physical environment eg. Noise temperature, lighting and crowding and enrichment of environment through social or sensory stimulation. They also suggest education for individual and family by teaching ways to manage behavioural and psychiatric problems that may accompany developmental disabilities, behavioural training for parents, teachers and staff, social and communication skills training and instruction in coping (self-control) skills. Applied behaviour analysis by changing antecedents and consequences of target behaviours by building of propriety problem behaviour by accelerating and decelerating differential reinforcement procedure response interruption for problem behaviour and timeout.

Stephanie *et al.* (2011) study contributes to ongoing scholarship at the nexus of translational research, education reform and the developmental and prevention sciences. It reports 2 year experimental impacts of a universal, integrated school-based intervention in social emotional learning and literacy development on children's social emotional behavioural and academic functioning. The study employed a school-randomized, experimental design with 1,184 children in 18 elementary schools. Children in the interventional schools showed improvements across several domains, like self-reports of hostile attributional bias, aggressive interpersonal negotiation strategies and depression and teacher reports of attention skills and aggressive and socially competent behaviour. In addition there were effects of the intervention on children's mathematics and reading achievement of those identified by teacher at baseline at highest behavioural risk. These findings are interpreted in light of developmental cascades theory and lead support to the value of universal, integrated interventions in the elementary school period for promoting children's social emotional and academic skills.

## 2.9 Different types of therapies for developmental outcomes of mentally challenged children

There are many therapies which are needed to improve the condition of special children. The mentally retarded with associated handicaps require therapies like physiotherapy for treatment of gross motor skills, occupational therapy for improving activities of daily living especially fine motor skills, speech and language therapy for treatment of communication disorders, oral-motor therapy for improving oral structures like jaw, tongue, lips or palate, Hydrotherapy for improving mobility and gross movement, sensory integration for improving sensory motor skills, and reduction of hyperactivity, psychotherapy to find out psychological problems, Hippotherapy for improving psychomotor ability and balance of the body, music therapy stimulates the mind and body and enhances rhythm, dance therapy which enhances abilities in performance, yoga therapy which offers exercise of mind and body and helps in meditation, Image therapy which helps in control of the nervous system, cognitive therapy, which helps in development of cognition and problem solving abilities in the children, play therapy which develops physical skills as well as help the child to express his emotions through play, pyramid therapy which refreshes and recharges the body, sand therapy which helps in emotional healing and personal development of the child, color therapy which helps in therapeutic healing, vitamin therapy for proper nutrition and parent counseling which is needed for parents of exceptional children to enhance parent child relationships and also to solve some of the problems related with their children. Hence depending upon the child's problem specific therapies are provided to the child .

### 2.9.1 Physical Therapy (physio therapy)



The rehabilitative treatments to improve motor skills, primarily gross motor skills, are the focus area of the Physical Therapist (called as Physiotherapist).

The physical therapist evaluates the child's overall motor function, including locomotion and activities of daily living. The evaluation includes observation of primitive and protective reflexes, muscle tone, posture, and joint motion. Following the assessment, the therapist is involved with the child, with the family, in a center based program to improve motor function and prevent contractures or deformity.

In addition to assessment and direct therapy, the physical therapist also works with the pediatric orthotist. Assistive devices for children who need them include ankle foot orthoses, foot inserts, and special seat inserts, walkers, canes and wheelchairs. With these the focus is on loco-motor system and treating the cerebral palsy component, which is an associated disorder with mental retardation. Equipment like vestibular ball are used for physiotherapy.

## 2.9.2 Occupational Therapy



The activities of daily living, those skills requiring fine motor skills, especially those involving the upper extremities and trunk are the areas the occupational therapist will work on. The occupational therapist will evaluate primarily the muscle strength, tone, reflexes, posture, and joint motion of the upper extremities and trunk.

The therapist assesses self-help skills, such as feeding, and dressing and perceptual motor skills, which can include pre-academic or academic abilities, such as writing and drawing. In the older children and adolescent, prevocational skills are assessed and implemented into a training or therapy program.

The therapist must be aware of the child's mental age or developmental level in order to plan appropriate intervention and therapeutic strategies.

The Physical therapist and Occupational work in concert to develop both gross motor development and fine motor development. The class teachers are trained by the occupational therapist in designing the curriculum for the child. Evaluation and monitoring is an ongoing process.

## 2.9.3 Speech and Language Therapy



Speech and Language intervention is a dynamic process that follows a systematic progression. It begins with the diagnosis of a communication disorder and is followed by the selection of appropriate therapy targets. The therapy is to develop expressive vocabulary and receptive vocabulary. It concentrates on the linguistic concepts, sentence structure, oral directions, word structure, Syntax, syllables, articulations etc.

#### 2.9.4 Oral Motor development



Some children with speech impairments may exhibit deficits in oral-motor function that affect the neuromuscular control and organization needed for the production of intelligible speech. These deficits may manifest themselves as hyposensitivity (reduced reactions to sensation); hypersensitivity (overly strong reactions to sensation); or weakness or incoordination of oral structures, including the jaw, tongue, lips, or palate.

It is important to realize that speech is not an isolated act but the product of a highly complex and synchronized oral-motor system. Further oral-motor treatment is conducted with regard for a child's overall neuromuscular profile. The therapy generally consists of a variety of tongue, lip and jaw exercises.

Training for non speech motor patterns like sucking, chewing, and swallowing, intervention for the oral control and understanding the basis of sensory issues.

- Heighten conscious awareness of the oral mechanism.
- Normalize (increase or decrease) sensitivity to stimulate the oral area.
- To inhibit primitive or abnormal reflex patterns in the oral mechanism, while enhancing normal movement patterns.
- To increase differentiation and stabilization of the oral structures.
- To refine articulation movement by increasing the strength and range of motion of oral mechanism.
- To increase jaw control so as to provide a stable base for finely graded movements of the lips and tongue, strengthen lip movement/ improve muscle tone, improve tongue control for elevation and lateralization.

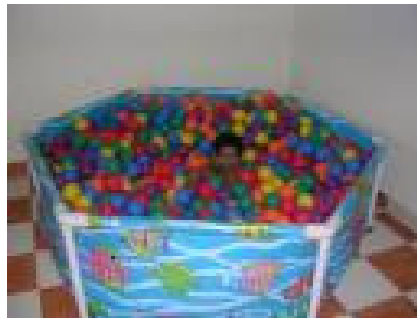
#### 2.9.5 Hydro Therapy



Water is fun! The majority of people enjoy water and it is an integral part of life. Water allows us all to achieve marvelous feats of movement which can be performed on land only with difficulty if at all. New knowledge regarding the physiology of hydrotherapy and new techniques using patterns of movement adapted to water and more water specific exercises are ensuring that hydrotherapy is becoming increasingly accepted as a medium for rehabilitation in its own right.

One authority believes that the use of hydrotherapy antedates that of all other modalities employed in physical medicine. To go into water -one of only two environments available to the human-is a unique experience. Here the body is simultaneously acted upon by two forces-gravity (or down thrust) and buoyancy (or up thrust)- providing us with the possibility of three dimensional exercise not available in the medium of air, and allowing movement and non-weight bearing activities to occur before they are possible on land.

### 2.9.6 Sensory Integration



It is a neurological process that organizes sensation from one's own body and from the environment and makes it possible to use the body effectively within the environment. The theory focuses on the vestibular, proprioceptive, and tactile systems.

Until recently, the role of vision in sensory integration theory was reduced primarily to form and space perception, construction, and visual-motor coordination (i.e. paper and pencil task). The new theory on conceptualization of visual spatial ability and relate it more clearly to sensory integration.

The therapist identifies patterns of dysfunction among children with sensorimotor learning problems and tailor specific intervention strategies. The sensory integration is a theory of brain-behavior relationships. Sensory integration theory has three components. The first pertains to development and describes typical sensory integrative functioning; the second defines sensory integrative dysfunction; and the third guides intervention programs. Each component, in turn has a major, over reaching postulate. The three major postulates of sensory integration theory are:

- i. Learning is dependent on the ability to take in and process sensation from movement and the environment and use it to plan and organize behavior.
- ii. Individuals who have a decreased ability to process sensation also may have difficulty producing appropriate actions, which, in turn, may interfere with learning and behavior.
- iii. Enhanced sensation, as a part of meaningful activity that yields an adaptive interaction, improves the ability to process sensation, thereby enhancing learning and behavior.

### 2.9.7 Psycho Therapy

Children with developmental disabilities often manifest unusual behaviors associated with an abnormal central nervous system or environment, the psychologist assesses behavior and plan implementation strategies.

Various instruments provide a more quantitative evaluation of behavioral concerns than the diagnostic interview or informal observation. Thus the psychological assessment of intrinsic abilities, academic achievement levels, and behavior is an integral part of the interdisciplinary team evaluation. The establishment of IQ by the psychologist and knowledge of the child's adaptive behaviors are essential to prioritization and coordination of other therapeutic interventions.

### 2.9.8 Hippo Therapy

From the Greek work "hippos" meaning horse, the term literally means "treatment with the help of a horse" and refers to the use of the horse's movement as a treatment tool to improve neuromuscular function.

The therapeutic qualities of riding are recognized by many medical professionals, including the American Physical Therapy Association, American Occupational therapy Association, and Speech-Language Therapists.

The horse's walk provides sensory input through motion, which is variable, rhythmic and repetitive. The resultant responses in the patient are similar to human movement patterns of the pelvis while walking. The variability of the horse's gait enables the therapist to grade the degree of sensory input to the patient, and then use this movement in combination with other treatment strategies to achieve desired results.

Hippo therapy has shown tremendous results for children with neuro-musculoskeletal dysfunction. It has improved the child's abnormal muscle tone, improved impaired balance responses, improved their coordination, and improved their communication, an improvement in sensorimotor function, postural asymmetry, poor postural control, decreased mobility and limbic system issues related to arousal, motivation, and attention.

### 2.9.9 Music Therapy

It offers a flexible temporal structure for processing temporal information. If timing is an ability that is failing, then musical form offers an alternative form within which timing can be temporarily recovered and practiced. The expression of timing in communication will utilize gestural abilities, including utterance, that spontaneously bind events together and are indicative of performed ability.

Gestures are seen within this context as attempts to regain cognition not solely as failed abilities. An emotional regulation is a common core problem with our children; attempts to regulate emotion positively will have benefits for both sufferers and curers.

Emotional arousal is located within a context of attention and action whereas needs may be unmet, and unable to be expressed or fail to be recognized. The expression of emotion, and similarly the ability to inhibit arousal, will contribute to communicating needs effectively.

Communicative abilities are essential. This mutual need is usually achieved through speech. When speech fails, then it is important to utilize those properties of human communication that are not speech dependent. Attention, arousal, affect and action all occur in musical performance. Music therapy has the potential to promote communication, stimulate cognitive abilities and alert us to residual communicative abilities.

Barrett (2009) revealed that music engagement was central to young children's experience of the everyday and ways young children and their families engage with and use music in their daily live. The data generated in a three year longitudinal project investigating the role of invented song making and music engagement as singers, listeners and performers in young children (aged 18-48 months) identity work and self-making. Participants were recruited from two settings a kinder music programme (12 children and their families) and a day long child care centre (six children and their families). Findings identify the parenting education role of early music programs the function of joint music making in the regulation of children's behaviour and emotional states, the contribution of joint and individual music making to children's language development, the role of individual music making in children's self-making and the function of joint music making in fostering family unity.

## 2.9.10 Dance Therapy



The body is central for interaction. We perform most of our actions in daily life without reflecting on how we do them. Everyday skills are the basis of the knowledge that we need to perform our lives, knowledge is done, and it is based on interaction with others and is the background from which we achieve understanding of what others are doing. Therefore the performance possibilities that we offer others will enhance the abilities that they have.

Gestures are a central feature of a communicative setting for the ecology that we call understanding. To repair performance we have to offer a structure in time. That is what we do in Dance Therapy. The south Indian dance called "Bharatanatyam" is a unique blend of - it has gestures, postures, movements called as "Adavus" and Mudras. It has not only the use of these gestures it also has "Abhinaya" that is expression of different moods and emotions is called as "Navarasa".

The dance therapy has helped our children in visual -motor and spatial perceptions, hand movements, body movements, leg coordination and expressing of emotions. The rhythmic "Mudras" which stimulates brain also has the concept of acupressure.

## 2.9.11 Yoga Therapy



Life begins and ends with breath. Slight bodily changes are brought about by alteration in the mechanism of breathing. In addition mental changes are also influenced by breath. Our general condition of well being is dependent upon the rhythmic cycles of breathing within us.

Similarly, emotions change the rhythm of breathing- when we become overexcited we lose control over the breath. Pranayama- a technique in breathing and controlling a Vedic method in yoga helps in gaining mastery of mind body. Not only that we establish a connection with the world around us, of we are part through the breath.

It is breathing that provides the foundation of human communication upon which that coherence of being called health is built. Yoga offers a temporal structure for events that facilitates cognition: rhythm as the basis of consciousness. At the heart of this temporal coherence is the rhythm of breathing.

Through the control of breathing we achieve coherence. Different yogasanas are done for spatial orientation and to relax various muscle tones. The yoga exercises are done everyday morning for 45 minutes. This has definitely helped the mentally retarded children to develop cognitively.

Gupta *et al.* (2007) studied the effects of yoga on three mentally retarded children. It was suggested that yoga if properly practiced may help to co-ordinate the activities of the mind and body of the mentally challenged persons. It also tends to reduce the distracted state of mind, help in mind concentration on present activity and improves his activities of daily living to a degree of which could not be achieved otherwise. The mentally challenged children may be taught asana and pranayama. The type of asana which currently being used in case of mentally challenged children for their better development and growth are Tad asana, Parsva-utarasana, Aparasana, urdhvapras Sarvangasana, Bhujangasana, Dhanurasana, Paschimatanasana, Cakravakarasana, Utakatasana, Vajrasana, Adhomukh Svanasana, Dvipadapittam, Trikonasana, Apanasana, Sukhasana, Vinayasakasana.

The individual doing an asana should experience comfort and should also maintain a certain amount of steadiness in a given posture without much effort or tension.

To achieve both these qualities a long period of practice is needed. The comfort and steadiness in a posture is most often achieved through total concentration of the mind on the posture. The practice of an asana must coordinate with breathing.

Pranayama means regulated breathing. It is an extremely important part of asana practice. In pranayama the individual deliberately controls and directs his breathing in a planned way. Pranayama is usually practiced in a comfortable sitting position.

Some other studies have been conducted among the retarded persons to find the effects of yoga therapy. A significant improvement was reported in general health from yogasanas practices even in a short period of time. As a result of this gain, absenteeism came down, thereby time available for learning increased, and improved general health facilitated the persons to learn more effectively without disruption and disturbance in their training schedule.

Results from other studies were improvement in motor skills and in postures (Vimala, 1982) Reduction of obesity, control of dribbling (Usha, 1982) Disappearance of facial-tics (Annamma, 1982) Reduction in hyperactivity (Jeyachandran, 1981). Improvement in appetite, sleep and improved health (Pushpa, 1982).

Hence due to the significant positive effect of yogasana practice on the mentally challenged persons it is being provided as an individual therapy in collaboration with the clinical departments like physio-therapy, occupational therapy, cerebral palsy and speech therapy to control dribbling.

### 2.9.12 Image Therapy

The nervous system is unique in the sense that it receives literally millions of bits of information from different sense organs and integrates these to determine the response to be made by the body. The information from the receptors over the entire surface of the body and deep structures enters the central nervous system through the spinal cord nerves at all levels, including the reticular substance of the medulla, pons, and the encephalon, the cerebellum, the thalamus and soma esthetic areas of the cerebral cortex.

Additionally the signals are relayed to essentially all other parts of the nervous system as well, beyond the multiple primary sensory areas called the somatic portion of the sensory system. The ultimate role of the nervous system is control of body activities through control of skeletal muscles and control of the smooth muscles in the internal organs secretions( both exocrine and endocrine glands), in various parts of the body.

A major function of the nervous system is to process the incoming information in such a way that appropriate motor response occur. This goal is achieved by discarding 99% of all sensory information as irrelevant or unimportant and channeling the selected sensory information into proper motor regions of the brain to cause the desired response.

### 2.9.13 Cognitive Development

The most defining characteristic of people with mental retardation is impaired cognitive ability. This trait has pervasive effects, whether the disability is mild or severe. It makes simple task difficult to learn. It can interfere with communicative competence because the content of the message is harder to deliver and comprehend.

The degree of cognitive impairment determines the types of curriculum content these individuals are taught: academic or life skills. Teaching such skills is special education. It is an individualized and tailor made education for a child with special need. It is a specially designed instruction to meet the unique needs of a child with disability.

The main aim is to help people with special needs to achieve their maximum potential and continue to grow and learn throughout their lives, special education provides them with opportunity to learn to read, write and compute.

Following skills to be achieved are:

- Motor Skills: Which includes Gross Motor and Fine Motor development  
Self Care Skills: This includes Toilet Training, Grooming Skills, dressing skills and eating skills.
- Social Skills: skills related to social exchanges, including interaction with others, as well as the initiation and termination of this interaction.
- Communication Skills: Expressive and Receptive language development
- Pre-academic Skills: Pre-writing, Pre-Reading, Pre-Mathematics
- Academic Skills: Writing, Reading, Mathematics
- Self Direction skills: skills related to making choices, completing tasks, seeking assistance and resolving problems.
- Home Living skills: relating to housekeeping, property maintenance, cooking, money concept, home safety and scheduling.
- Leisure Skills: recreational interests and activities that may involve social interaction, mobility skills, taking turns and playing appropriately
- Pre-Vocational Skills:
- Vocational Skills

### 2.9.14 Play Therapy

Play is an important lifelong occupation; it is also a powerful tool for intervention. Playfulness is a style, an approach to daily life events. Play therapy is medium to develop other skills and abilities. It involves three elements- internal control, intrinsic motivation, and freedom from some constraints of reality.

Play is a transaction between an individual and the environment. These transactions represent a continuum of behaviors that are more or less playful. Play and playfulness are powerful therapeutic tools, play promotes competence. The playfulness of the therapist and the client helps create an atmosphere in which play occurs. When play and playfulness are coupled with skilled therapeutic intervention, they can make a real difference in the lives of clients.

Play therapy can have different meanings and focuses depending on the needs of the child. For children without disabilities it most often refers to a type of behavior modification that is used to improve emotional and social development, reduce aggression; improve cooperation with others. For children with Cerebral Palsy, and mentally challenged play therapy has the added benefit of developing physical skills. Play is an essential activity for all children. This is where real learning begins.

A child's earliest independence comes from exploring the world, using whatever mobility he has, from a position where he is free to do so. No matter how old the child is, playing is a very valuable area of their therapy. It not only helps to release stress, it can also help their development, and sometimes speed it up.

Play also makes children laugh, which we all know is the best medicine. Playing also increases hand-eye coordination, can aid in developing fine motor skills, and as they get older, can aid in developing their gross motor skills, such as playing with balls, or other backyard athletics. Children must have the chance to learn from experience. It should be offered a lot of stimulation, there has to be an opportunity for them to show what they have learned (input and output) by being allowed to roam free occasionally.

### 2.9.15 Pyramid Therapy



When Greek conquerors saw the huge, triangular, sky - rocketing structures of the pyramid in Egypt, they were flabbergasted. The pyramids significance has grown multifold due to unraveling of utility and curative power of the pyramids. Indian Vastu is based on scientific foundation and its theory of "five great Elements" and ten directions.

The elements are Earth, Water, Sky(Space), Fire, and Wind. All these five elements form the edifice and philosophy of Indian Vastu. When all the five elements get mingled in an exact proportion, "Bio - electric Magnetic Energy " gets generated which bestows excellent health, wealth and prosperity to all the human beings.

Pyramid represents space (Sky) element only out of five elements. Pyramid energy lies spread over all the four sides in the under ground and moves upwards, that is it moves towards the upper power-point (the conical portion).

Pyramid accumulates the energy at its top, from where it percolates to walls and come to the surface in a confide form it all happens as all the walls of the pyramid are uniform and slide in identical fashion in a uniform patterns of the Pyramid, which has been scientifically proved.

Pyramid therapy can also be utilized alongside, without any apparent risk and doubt. If a tired person sits in a pyramid, even for a few minutes, his fatigue disappears and he feels as if the body has been recharged with renewed energy.

### 2.9.16 Sand Therapy



Sand therapy is a process intended to facilitate to control the involuntary movement of a child with cerebral palsy. Sand therapy is useful for the emotional healing and full personal development of the child. It has proved great results for children with loco-motor issues, vestibular stimulus and hyperactivity.

Importantly, however, the client is given the opportunity to choose from hundreds of tiny objects and figures in order to create in a sand tray a picture of the inner "world."

The scenes that take shape in the tray are comparable to the symbolic images that occur in dreams. The activity is multidimensional—using eyes, hands, body, mind, and spirit—and thus has a profound resonance with the client. The therapist "witnesses" the scene without direction or interpretation, responding only to the client's comments.

### 2.9.17 Color Therapy

The following colors have various therapeutic values. RED stimulates brain wave activity, increases heart rate, respirations and blood pressure. It warms us and awakens us physically and energizes our blood. ORANGE is the color of joy and wisdom. It gives energy, stimulates appetite. Spiritually it is the color of joy. It connects us to our emotional self. YELLOW energizes, relieves depression, improves memory, stimulates appetite and helps in digestive problems.

Spiritually it is the color of wisdom and connects us to our mental self. GREEN has a calming effect and balances the nervous system. Spiritually it is the color of love and connects us to perfect love. BLUE is a good color in respiratory illness or throat infections. Blue is calming and cooling to our system. Spiritually it is the color of health and connects us to holistic thought.

INDIGO is a good color for sinusitis, immunity problems. Spiritually it is the color of intuition and connects us to our unconscious self. VIOLET is for cleansing, strengthening, and awakening, suppresses appetite, and provides a peaceful environment. It affects the skeletal system of the body. It is a good color for improving immunity. Spiritually it is the color of faith and connects us to our spiritual self.

### 2.9.18 Vitamin Therapy

Vitamin therapy is an administration of vitamins and minerals in amounts that exceed the recommended daily dietary allowance as determined by the Food and Nutrition Board of the National Research Council (1980) in order to promote positive changes in physical health, appearance, and functioning.

Pruess *et al.* (1989) recommended vitamin therapy for children with down syndrome. vitamins like thiamine (B<sub>1</sub>), nicotinamide (B<sub>3</sub>), pyridoxine, cyanocobalamin (B<sub>12</sub>), biotin (H), ascorbic acid (C) and folic acid in curing mental retarded patients.

Belief in the effectiveness of vitamin therapy finds its theoretical rational in "Orthomolecular medicine" which is based on the idea that augmented concentration of nutrients normally present in the human body are important for the treatment of mental disorders.

Pauling (1968) stated the orthomolecular hypothesis with reference to mental illness which is viewed in resulting from insufficient amount of specific vitamins in the brain cells. These vitamins included thiamine (B<sub>1</sub>), nicotinamide (B<sub>3</sub>), Pyridoxine, cyanocobalamin (B<sub>12</sub>) biotin (H), ascorbic acid (C) and folic acid.

### 2.9.19 Parent Counseling

Parent's acceptance and awareness is the major hurdle in the development of the special child. Parents are counseled to accept the reality and to act upon. The goal of parent counseling is to help parents understand, accept, live with, and support their child.

Parents must learn that the child is not usually trying to embarrass them, and that manipulating behavior often stems from an underlying neurological disorder. In some cases family therapy will be indispensable for the entire family. If the home environment is a reactive one, successful habilitation will require the family to change to a proactive and flexible yet structured interactive style.

### **3. MATERIAL AND METHODS**

A study on “Emotional behaviour of Mentally Challenged Children attending in Special Schools: Parental Educational Intervention for Enhancing Knowledge on Behavioural Management” was conducted during 2006-2008 in Hubli-Dharwad. Municipal Corporation, District Dharwad, Karnataka. The procedures followed to conduct the research is described as follows.

- 3.1 Research design
- 3.2 Population and Sample
- 3.3 Tools used for the data collection
- 3.4 Classification of variables selected for the study
- 3.5 Data collection procedures
- 3.6 Statistical analysis
- 3.7 Operational definition
- 3.8 Hypothesis

#### **3.1. Research Design**

The study aimed to assess the status of special education programme for mentally challenged in twin cities of Hubli- Dharwad. Hence a survey research design was employed.

The quality of special education programme offered by the schools for mentally challenged was studied through case study design. The study also aimed to assess the emotional behaviour of mentally challenged children and to determine influencing factors such as IQ, gender, age of the child, ordinal position, socioeconomic status, family size, and maternal knowledge regarding special children, education and age for which a correlation design was adopted.

Based on the situational analysis a need based educational package for mothers to handle problem behaviour in mentally challenged children was developed. The model was validated for content by experts . A non- experimental research design with single group pre and post test design was taken up to determine the efficacy of the package i.e impact of educational intervention provided to mothers of mentally challenged children for reducing behavioural problems by administering a developed educational package.

#### **3.2. Population and sample**

From child welfare department it was reported that there were thirteen schools for mentally challenged children. Out of these, information regarding special schools in Hubli-Dharwad was gathered from eight selected schools for knowing the status of special education for mentally challenged children, managed by private sectors. All the eight schools were considered for collection of basic information .Out of eight schools two most popular day schools which had large number of enrolled children were selected to study the emotional behaviour of children. A sample of 60 children (30 boys and 30 girls) were selected who were educable and trainable between the age group of 6-15 years with writing skills. School 1 had 104 children and school 2 had 44 and out of these 38 children and 22 children were selected randomly.

#### **3.3. Tools used for the Data collection**

The tools employed for the study are enumerated and description of the same is given below.

1. A pretested interview schedule was used for collection of basic information and logistic facilities available for special education (proforma for survey of Private schools for mentally challenged children in Dharwad-Hubli cities) (Appendix II).
2. A structured interview schedule was used to elicit parent and child information (Appendix III and Appendix IV).

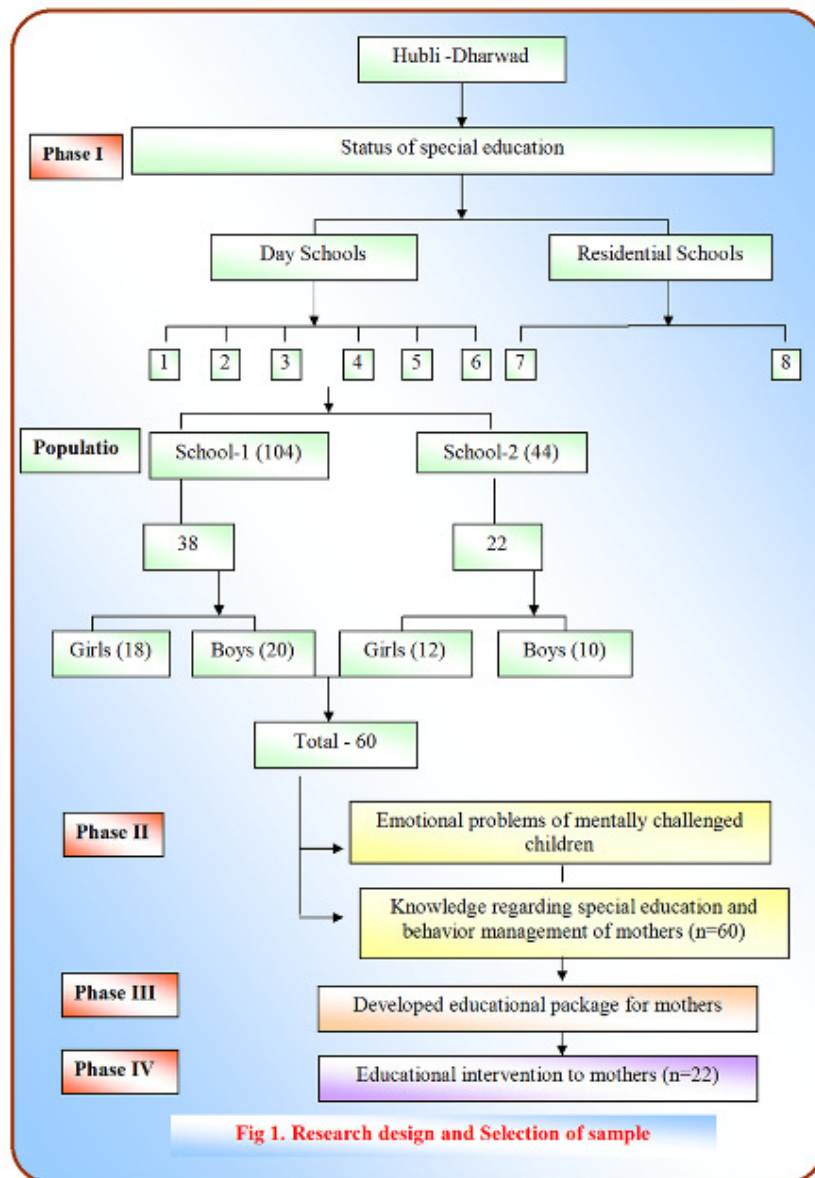


Fig. 1. Research design and selection of sample

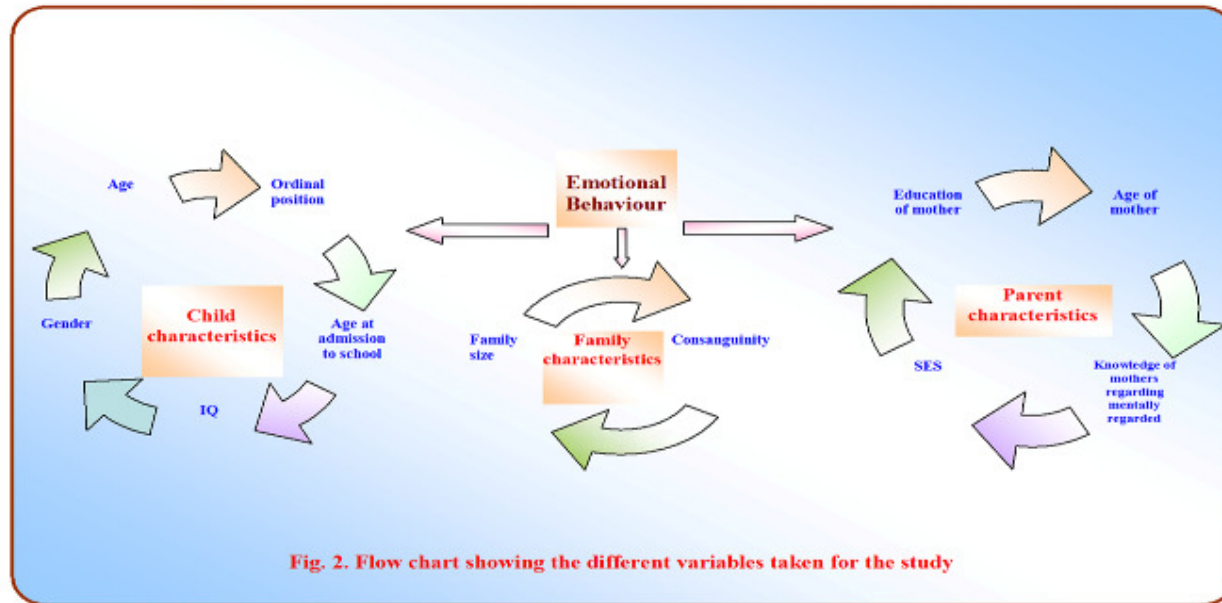


Fig.2. Flow chart showing the different variables taken for the study

3. Emotional problem scale developed by Prout and Strohmer (1985) (Appendix V)
4. Basic-MR developed by Peshawaria (Part-B) and Venkatesan (1992) (Appendix VI).
5. NIMH-GEM Questionnaire developed by Peshawaria, Menon and Stephenson (1994) (Appendix VII).
6. Socioeconomic status schedule was used for eliciting demographic profile (Appendix VIII).
7. A developed Educational package for imparting education to mothers
8. Structured questionnaire to assess gain in knowledge regarding problem behaviour and behaviour management (Appendix IX).

### 3.3.1. Survey of children with special needs in Dharwad-Hubli

A proforma was self structured to collect information about the school such as financial assistance, reason for establishing the school, goal of the school, disabilities present in the enrolled children and total number of girls and boys below and above 10 years, total number of teachers in the schools, trainings provided for teachers, qualification and service experience of teachers, medical, referral, diagnostic/ assessment and check ups provided by schools, facilities such as educational, play, indoor and outdoor equipment, recreation, mode of interaction with parents, follow-up of the students sent to normal schools, number of children with disabilities employed, problems encountered by the school with respect to behaviours of children, therapies provided, duration, methods and techniques used by teachers for management of problem behaviours (Appendix - II).

### 3.3.2. Baseline information regarding mentally retarded children

A questionnaire was prepared for collecting information from parents. This consisted of three parts: a) General Information, b) Additional information about the child and c) parental awareness regarding special education. (Appendix – III & IV)

### 3.3.3 Emotional problem scale

The emotional problem scale developed by Prout and Strohmer (1985) was used. This scale consists of 120 statements. The child was evaluated on four point scale as almost-never, rarely, occasionally, and often, in terms of demonstrated problem behaviour of the child and scored with a rating of 3,2,1,0 respectively (Appendix – V) . The scale consisted of 11 clinical subscales as follows :

#### a. Thought / Behaviour Disorder (TD)

Individuals may appear confused and disoriented to the environment. It is also associated with self reports of feeling jumpy, agitated or out of control.

#### b. Verbal Aggression (VA)

Individuals who perceived as loud, boisterous, argumentative.

#### c. Physical Aggression (PA)

Individuals who bully or physically provoke others, typical of this behaviour pushing, hitting, slapping, pulling hair of other people.

#### d. Non compliance (NC)

Individuals are likely to display rebellious, stubborn, un cooperative behaviour, little respect for authority and are likely to be disobedient.

#### e. Hyperactivity (HY)

Individuals who appear impatient, impulsive and easily excitable. They are restless, fidgety and may jump from one activity to another.

f. Distractibility (DS)

Poor concentration and a short attention span, difficulty in listening to others, following directions and staying on task are characteristics of individuals who have this problem.

g. Anxiety (AN)

Difficulty in relaxing and staying calm as evidenced by trembling, shaking or other nervous habits and problems with self-esteem may be common characteristics displayed by individuals possessing this problem.

h. Somatic concerns (SC)

Frequent health complaints and excessive requests to see a nurse or a doctor, sometimes over react and become dramatic about minor aches, pains, illnesses and injuries, others may perceive these complaints as way to avoid participating in tasks or activities.

i. Withdrawal (WD)

Individuals who appear aloof or disoriented in others, appear socially isolated and spend much of their time alone, and describe themselves as sad and unhappy.

j. Depression (DP)

Individuals appear sad, gloomy and unhappy to others, A sense of hopelessness, loss of interest in previously pleasurable activities and a general dissatisfaction with life are commonly reported.

k. Low self esteem (SE)

Insecurity and excessive dependence on other people.

These subscales were combined to form Externalizing (PA+NC+HQ+VA ) and for Internalizing (AN+DP+SE) scores.

The details of the tool are presented in the tabular form below.

Sl. No.	Subscales of Emotional problems	Max Score	Item No.
1	Thought / behaviours disorder	45	01-15
2	Physical Aggression	30	16-25
3	Non compliance	45	26-40
4	Anxiety	33	41-51
5	Distractibility	30	52-61
6	Depression	24	62-69
7	Hyperactivity	30	70-79
8	Withdrawal	24	80-87
9	Low Self-Esteem	42	88-101
10	Verbal Aggression	21	102-108
11	Somatic concerns	36	109-120
		Total	120 items

Note minimum score=0

The raw scores were converted to standard scores on the basis of the norms developed by the author.

The higher the scores the more the problems, and the lower the scores reveal lesser problems among the children .

#### 3.3.4. Behavioral Assessment scales for Indian children with Mental Retardation (Basic - MR) Part. B. developed by Peshawaria and Venkatesan (1992 ) (Appendix VI)

The items/Domains of this scale consist of

1. Violent and Destructive Behaviours
2. Temper Tantrums
3. Misbehaves with others
4. Self Injurious behaviours
5. Repetitive behaviors
6. Odd Behaviour
7. Hyperactivity
8. Rebellious behaviour
9. Antisocial behaviours
10. Fears

Each domain consists of sub items and each item was scored based on three levels of severity of frequency of problem behaviors as Never (N), Occasionally (O), frequently (F) with a score of 3,2,1. The frequencies and percentages were computed.

3.3.5. NIMH-GEM Questionnaire developed by Peshawaria *et al.* (1994). This scale was used in assessing knowledge of parents regarding mental retardation. The scale consists of 30 statements relating to mentally retarded or handicapped conditions. If the respondent agrees with the statement it was encircled 'Yes' and if respondent did not agree with the statement it was encircled 'No'. The score of '1' was given to right answers and '0' for wrong answers. (Appendix -VII). The range was 0 – 30 categorized into three levels Low (0-10) Medium (10-20), and High 20 – 30 )

#### 3.3.6. Schedule on Socio-Economic Status

The schedule developed by AICRP-CD (2002) was used to assess socio economic status of the family. Parameters included were annual income, family composition, family type, family size, father's and mother's education, father's and mother's occupation, caste, house type, size of house, drinking water facility, electricity facility, sanitation type, membership in socio-political organization and material possession. These were considered with weightage scores. (Appendix VIII).

#### 3.3.7. Educational package

Educational package was developed for parents and caregivers. The package dealt with providing information regarding problem behaviours of children, causes, and types. Management of problem behaviour and techniques for handling problem behaviour , by parents and caregivers .

The topics covered were need for early intervention, information and behaviour of children, causes of problem behaviour, problematic behaviour, types of problem behaviour, analysis of problem behavior. behaviour modification and techniques of behaviour management by parents and care giver.

### 3.3.8. Questionnaire to assess parental knowledge regarding. Behavioral management

Questions eliciting information on causes of problem behaviour, problematic behaviour, types of problem behaviour, behaviour modification and techniques of behaviour management with a total of 15 questions were framed for assessment. The right answer was given a score of "1" and "0" for wrong answer with a maximum score of 15 (Appendix - IX). First set of questions were on types of problem behaviour, causes of problem behaviour techniques of behaviour modification, conditions of problematic behaviour and different therapies for behaviour modification. The second set of questions consisted of statements mainly on behaviour modification techniques and problem behaviour and the respondents were asked to state as true or false with a score of 1 and 0 respectively.

## 3.4 Classification of variables selected for the study

The variables that were selected for the study were categorized as child, parent and family characteristics.

### 3.4.1 Child Characteristics

3.4.1.1. Age: Based on the chronological age the children were classified into two groups (years)

1. Younger children - 6.00 to 10.00 years
2. Older children more than - 10.00 to 15.00 years

3.4.1.2. Gender: Based on gender, children were classified into two groups as

1. Boys
2. Girls

3.4.1.3 Mental Retardation Category: Based on IQ levels children were classified as suggested by Kirk (1962).

1. Educable Mentally Retarded (EMR) or Mildly mentally challenged : IQ score 50– 75
2. Trainable Mentally Retarded (TMR) Moderately mentally challenged: IQ score 25 – 50

3.4.1.4. Age at admission to school: The age at which the mentally challenged child was sent to school was categorized :

1. 6 years or less
2. Above 6 years

3.4.1.5. Ordinal position of the child: The ordinal position of the child was categorized as follows

1. First born
2. Second born
3. Third and later born

### 3.4.2 Parent's Characteristics

3.4.2.1. Education of mother: The formal education of mothers of mental retarded children was noted & classified as follows :

Education	Score
1. Illiterate	01
2. Primary	02
3. High School	03
4. PUC/ Undergraduate	04
5. Graduate	05
6. Post Graduate	06

3.4.2.2. Age of mother: The mothers age was classified :

Group	Category
1. Young	- Less than 30 years
2. Old	- Above 30 years

### 3.4.3 Family Characteristics

3.4.3.1. Family size: the size of the family of mentally challenged child was categorized as follows

Category	No. of family members
Small family	1 – 4 member
Medium family	5 - 8 members
Large family	Above 9 members

2. Consanguinity: The parents marriage was categorized as follows

1. Consanguineous	– Marriage within blood relation
2. Non-consanguineous	– Marriage outside blood relation

## 3.5 Data Collection Procedure

The study was conducted in four phases

I phase (a) : A baseline survey of schools of mentally challenged in Hubli- Dharwad twin cities

(b) : Selection of two mentally retarded schools for evaluating the existing facilities and management of problem behaviour in children.

II phase : Selection of mentally retarded children both educable and trainable category and administration of the Emotional problem scale and (Basic MR 1992) for assessing problem behaviours.

: A pretest to assess the parents knowledge and awareness regarding special children.

III phase :Development of Educational package for maternal intervention

IV phase : Testing the efficacy of the package by assessing knowledge gained by mothers

The Women and Child development Office section was approached to get the list of special schools for mentally challenged children in Hubli-Dharwad cities

A preliminary survey was done to identify the popular and preferred mentally challenged schools in Hubli-Dharwad. The teachers were briefed about the purpose of research. Survey of eight mentally challenged schools was made through a developed proforma.

Assessment of the special education programme was done by interviewing teachers by survey proforma. The emotional behavior of mentally challenged children was assessed by selecting children from two day schools. Children were recruited on the basis of age(6-15) years and mental ability (EMR and TMR). Emotional problem scale and Basic-MR for problem behaviours was administered to the teachers for rating the children. The mothers were given a questionnaire at school or in their homes sent through their children for eliciting the information regarding them and their child.

Their awareness regarding special children and special schools was noted through NIMH-GEM questionnaire which was administered to literates and by interviewing the illiterate parents. The missed information was collected by telephonic conversations. SES was assessed in the same manner. Additional information regarding these children was collected from the mothers of the children.

On the bases of results of the present study an educational package was developed to provide knowledge on management of behaviour problems. The efficacy of the package was tested on 22 parents of children recruited for the study.

### 3.6 Statistical Analysis

Frequencies, mean and standard deviations were calculated for all the variables under study. Descriptive analysis was carried out regarding information on special education school.

Karl Pearson's correlation Co-efficient was used to calculate the relation between components of emotional behavior. Student 't' test was computed to know the mean differences between the groups on selected factors IQ, age and gender.

1. To study the difference between the means of two groups 't' test was calculated using the formula.

$$t' = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{S^2 (1/n_1 + 1/n_2)}}$$

Where

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

$X_1$  = Mean of the first group

$X_2$  = Mean of the second group

$n_1$  = No. of observations in the first group  $n_2$  = No. of observations in the second group

$S_1^2$  = Variance of first group

$S_2^2$  = Variance of Second group

$S^2$  = Pooled variance of first and second group

2. Karl Pearson's product moment correlation coefficient analysis was carried out to assess the degree of relationship between demographic variables, and emotional behaviour using the formula

$$r' = \frac{n \sum x Y - \sum x \sum Y}{\sqrt{[n \sum X^2 - (\sum X)^2] [n \sum Y^2 - (\sum Y)^2]}}$$

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

$\sum X Y$  = Sum of product of  $x$  and  $y$

$n$  = Number of pairs of observations

To test the difference in the pre-test and post-test after giving the educational package paired 't' test was calculated.

The efficacy of Educational package was tested by using the formula

$$\bar{d} = \frac{\sum di}{n}$$

$$sd^2 = \frac{1}{n-1} [\sum di^2 - \frac{(\sum di)^2}{n}]$$

$$t = \frac{|\bar{d}|}{\sqrt{sd^2/n}}$$

Where

$\sum di$  = Sum of difference between pretest and post test

$n$  = Number of participants

$sd^2$  = Variance

### 3.7 Operational definitions

#### 1. Emotional Problems

The teachers ratings on 120 items with 11 sub scales by administering EPS scale assessed physical aggression, verbal aggression, distractibility, withdrawal, anxiety, hyperactivity, noncompliance, somatic concerns, depression, and low self esteem and were further characterized as externalizing and internalizing problems.

#### 2. Externalizing problems

Overt feelings emotions, verbal expressions and physical aggression, hyperactivity, non compliance, were assessed by summation of scores of the above emotions

#### 3. Internalizing problems

The teachers rating of the problems as neurotic , excessive anxiety, depression and feeling of low self esteem and low self worth were considered as internalizing problems and was assessed by summing scores on anxiety, depression, and low self esteem obtained by administering emotional problem scale.

#### 4. Educable mentally retarded

The mentally challenged child having minimum educability in academic, social and occupational areas and having an IQ of 50-75 as obtained from the school records.

#### 5. Trainable mentally retarded

The mentally challenged child having potentialities in learnings self care, and adjustment at home and school, and having an IQ of 25-50 as obtained from the school records.

#### 6. Problem behaviour

The behaviours which are harmful for the development of the child and presence of the behaviour interferes with teaching / learnings process of children assessed through scale Basic-MR Part-B.

### 3.8. Hypothesis

1. The Schools do not differ in the special education programmes and facilities provided, and management of behaviour problems for mentally challenged in Hubli Dharwad twin cities.
2. Emotional behaviour of mentally challenged children may not be normal.

3. Child's age, ordinal position ,gender and degree of mental retardation has no influence on emotional behaviour
4. School factors such as age at admission to school has no effect on emotional behaviour.
5. Factors such as mother's age, education, knowledge and socio economics status has no influence on emotional behaviour
6. Familial factors such as size of the family has no influence on emotional behaviour

## 4. RESULTS

The data collected for the present study on “Emotional behaviour of Mentally Challenged Children attending Special Schools: Parental Educational Intervention for Enhancing Knowledge on Behavioural Management” was subjected to analysis and the results are presented under the following headings.

- 4.1 Evaluation of Special Education Schools for mentally challenged children in Hubli Dharwad twin cities
- 4.2 Emotional behaviour of mentally challenged children attending special education
- 4.3 Parents awareness, opinion and conceptions regarding mental retardation
- 4.4 Development of the educational intervention package
- 4.5 Testing the efficacy of the developed education package for enhancing parental knowledge regarding care & education of Mentally Challenged

### 4.1 Comparison of Special Education Schools for mentally challenged children in Hubli Dharwad twin cities

Eight popular mentally challenged schools in Hubli-Dharwad were studied to know the special education programme (Table -1). Two schools had better facilities in Hubli and one school better than other schools in Dharwad, the remaining schools were average and one school was attended by only economically disadvantaged children and had poor facilities.

All the schools were run on donations and fees, whereas only one school had Government aid.

Out of 46 teachers who were working in special schools, 20 per cent belonged to less than 30 years of age while 80% per cent were above 30 years.

Regarding qualification in special education 73.91 percent were qualified i.e. with either a diploma or PG course in special education while 26.08 percent were graduates but did not have special training. There were 42.22 percent of teachers with 1 – 10 years experience, 33.33 percent with 11 – 20 years and 24.44 percent with 21 – 30 years of experience. Majority of teachers (73.91 %) had periodic training in care and education of children with special needs and only 26.08 percent were not trained even once.

Total number of mentally challenged children in eight schools were 380. Out of these 35.26 per cent were boys who were below 10 years age and 27.10 percent were above 10 years. Girls below 10 years were 18.68 percent and remaining 18.94 percent were above 10 years of age. The strength of students for each school is presented in table1, two schools had more than 60 – 80 children, while two schools had less than 20 children.

Data presented in Table 2 depicts the facilities provided by the schools. Among eight schools, six schools had adequate space and two were congested. Water supply was adequate in seven schools and less in one school. All the eight schools had good lighting and ventilation. Food was provided only in residential schools. All the schools had sufficient educational materials, indoor and outdoor equipment, sufficient play activities, recreation materials and also materials required for extra curricular activities, self-help training. Medical checkups were regularly done, periodic assessment were made to know the improvement in academic, motor, and to know the therapeutic impact in all the schools except three schools.

Mode of interaction with parents was by having Parent Teacher Association (yearly) by seven schools meeting with individual parents (monthly) by eight schools, participation of parents in seminars and conferences (yearly) by five schools, participation of parents in school activities (whenever required) by six schools and other aspects like counseling, cultural, and sports (yearly) by five schools.

Table 3 provides Information of Therapies given by the schools. Occupational therapy, Hydrotherapy, Hippo therapy, Image therapy, Pyramid therapy, Sign language therapy, prevocational therapy, sand, therapy mirror therapy. Clay work and Dynamic painting were provided by one school.

**Table 1: Characteristics of special schools for mentally challenged children**

Sl. No.	Schools									Total
	Characteristics	1	2	3	4	5	6	7	8	
1	Year of establishment	1991	1994	1997	2002	1971	1977	2008	2003	--
2	Organization- Government/ Private	Private	Private	Private	Private	Private	Private	Private	Private	-
3	Sources of funding	Donation	NGO	Donation & Fees	NGO Donation	Govt. aid & NGO	Donation & Fees	Fees & self funding	Fees & self funding	--
4	Reason for establishing	Need of the society	Provide state of art, training and Rehabilitation services	Social Service	Social Service	As there were no schools for MR children	Need of society	As there are no centre for rehabilitation, training and residential facility	Concern for Mentally retarded children	--
5	Goal of school	Transcending the level of the life of children with special needs and giving knowledge based product to society	mainstreaming and protect their rights	Upliftment of mentally challenged childrens and awareness for society and parents	For progress of MR children	As MR children are also member of society to help them	Allow children to grow in fearless atmosphere, overall dev make them self sufficient academic and vocational training counseling, support to parents awareness to society	To make MR children to feel accepted and to socialize them and for their rehabilitation	For education and care of poor children	--

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6	Day school/ Residential	D	R	D	D	D	D	R	D	Day – 6 Resid -2
Age of teachers (Number)										
	< 30 years	--	--	--	1 (33.3)	--	6 (66.6)	2 (40.00)	--	9 (19.56)
	> 30 years	8 (100)	8 (100)	5 (100)	2 (66.6)	5 (100)	3 (33.3)	3 (60.0)	3 (100.0)	37 (80.43)
Years of experience of teachers in special education										
	1 – 10	6	2	4	1	3	3	--	--	19 (41.40)
	11 – 20	2	6	1	1	2	3	--	--	15 (32.60)
	21 – 30	--	--	--	1	--	3	5	3	12 (26.08)

Figures in parenthesis indicates percentages

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8	Special Trainings received										
	Trained	7 (87.5)	8 (100)	5 (100)	3 (100)	5 (100)	6 (66.6)	--	--	34 (73.91)	
	Not trained	1 (12.5)	--	--	--	--	3 (33.3)	5 (100)	3 (100)	12 (26.08)	
9	Total No. of Children in the School	104	87	44	30	48	45	04	18	380	
	Age (in years)										
	Boys	< 10	37 (35.60)	47 (54.00)	9 (20.50)	11 (36.70)	15 (31.25)	15 (33.30)	--	--	134 (35.26)
		> 10	40 (38.50)	6 (7.00)	10 (22.70)	8 (26.70)	13 (27.08)	13 (28.90)	4 (100.00)	9 (50.00)	103 (27.10)
	Girls	< 10	14 (13.40)	30 (34.40)	10 (22.70)	5 (16.6)	6 (12.50)	3 (6.70)	--	3 (16.70)	71 (18.68)
		> 10	13 (12.50)	4 (4.60)	15 (34.10)	6 (20.00)	14 (29.17)	14 (31.10)	--	6 (33.30)	72 (18.94)

Figures in parenthesis indicates percentages

**Table 2: Facilities provided by the schools**

Sl. No.	Facilities	Schools							
		1	2	3	4	5	6	7	8
1	1. Space	Spacious	Spacious	Spacious	Congested	Spacious	Spacious	Spacious	Congested
	2. Water storage facility	Adequate	Adequate	Adequate	Adequate	Adequate	Adequate	Adequate	Less
	3. Light	Bright	Bright	Bright	Bright	Bright	Bright	Bright	Bright
	4. Food available	No	Yes	No	No	No	No	Yes	No
2	Educational	Preprimary primary secondary vocational care (Early Intervention)	Special education preprimary vocational materials	Pre primary materials, Books, colours, shapes, Flash Cards, Charts, Block, Board AV aids	Pre-academics, Academics motor, self care, domestic, prevocational materials	Reading, writing, personal, General knowledge, music, craft, exercise, drawing, painting, colour activities	Self help education, Basic education, pre vocational training, Arts and Craft, music, Drawing, dance, yoga	Writing, reading, painting, envelop making, Rehabilitative - training	Alphabets Numbers (Kannada and English) personal care
3	Indoor equipment	Carrom, gym, cycle, Chinese checkers, snake and ladder different playing items, bowling, putting rings	Carrom, Table Tennis, Handball	Carrom, Ludo, Toys, blocks, balls, exercise materials, cycle, vibrator	Games for motor activities, carrom, putting ball in basket, lemon and spoon	Sports equipment, clay, alphabets, mirror	Carrom, bowling, ring game, other indoor activities	--	--
4	Out door	Swimming pool, cycle, softballs, long jump, running track	Slides, sea saw, badminton and sports	Swing, ladder, team games, equipments for outdoor play	Skipping, ropes cycles, exercise equipment	Cycles, skipping ropes, tyre games for balancing	Basket balls, volley ball, bocche, kho-kho, kabaddi, cricket	Tennicoit ring	Running balling

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5	Play/Recreation/ Therapeutic activities	Recreational outdoor, Indoor, swimming, Horse riding,	Dance, Music Yoga Magnetic Dyan	dance, music, Yoga, Sports	Tennis, Dance, yoga, Early Intervention, parent counseling, and meetings	Arranging team games, Picnics sports, going for fairs, temple visits, Nature study, School functions, puppet show, festival celebrations	Running race Music, dance, games, sports, picnics, Stories, rhymes (CD) Yoga, cooking class, buttoning, craft, paintings	Throw-ball, running, Prayers, singing, Meditation, Yoga, painting	Sweeping movement,
6	Play/Recreation/Th erapeutic materials	TV, music, video, games, teaching aids, audio tapes, toys, dance, gym, Sensory integration materials, physio balls	Indoor and outdoor play materials, Magnetic Dyan Mandir	Play materials for outdoor and Indoor play, TV, Tape recorder, video games, story books, pictures charts	-		TV, Dolls, carom, Beads, Balls, Bat, , short-put, skipping, Kerchief, bags, greetings, decorative lamps, paper bags	Balls	Bat-ball, foot ball
7	Checkups								
	1. Health Check ups	√	√	√	√	√	√	√	√
	2. Referral Services	√	√	√	√	X	X	√	X
	3. Overall progress	√	√	√	√	√	√	√	√

...Contd.

8	Mode of Interaction with parents									Frequency
1	Parent Teacher Meeting	√	√	√	√	√	√	X	√	7
2	Meeting with Individual parents	√	√	√	√	√	√	√	√	8
3	Participation of parents in school activities	√	√	√	√	√	√	X	X	6
4	Counseling	√	√	X	√	X	√	√	X	5
5	cultural, sports	√	√	X	√	X	√	√	X	5

**Table 3: Therapies provided by the schools**

Sl. No.	Particulars	Schools								Total		
		1	2	3	4	5	6	7	8			
I	Type of Therapies											
1	Physiotherapy	√	√	--	√	--	Refers to therapists		--	3		
2	Occupational	√	--	--	--	--			--	1		
3	Speech and language	√	√	--	√	√			--	4		
4	Sensory Integration	√	√	√	--	√			--	4		
5	Hydrotherapy	√	--	--	--	--			--	1		
6	Hippotherapy	√	--	--	--	--			--	1		
7	Yoga	√	√	√	√	--			--	4		
8	Dance	√	√	√	√	√			--	5		
9	Music	√	√	√	√	√	√	√	--	7		
10	Image	√	--	--	--	--			--	1		
11	Pyramid	√	--	--	--	--			--	1		
12	Sign language/ Speech therapy	√	--	--	--	--			--	1		
13	Oral-motor	√	√	√	√	√			--	5		
14	Colour and light	√	√	√	√	√			--	5		
15	Behaviour modification	√	√	√	√	√			√	7		
16	Painting	√	√	√	√	√			√	√	-	7

...Contd.

17	Play therapy	√	√	√	√	√			--	5
18	Sand therapy	X	--	--	--	√			--	1
19	Mirror, clay work	X	--	--	--	√			--	1
II	Duration of each therapy	45 mins.- 1hr/day	3-4 Months	1 hr/day.	1 hr/day.	45 Mins/ day	--	1 hr/day.	--	--
III	Opinion of teachers regarding improvement by therapies	Yes	Yes	Yes	Yes	Yes	--	Yes	--	--
IV	Trainings given									
1	Prevocational Training	√	--	--	--	--			--	1
2	Vocational Training	√	√	√	√	√			--	5

\* All these therapies given have impact on children

**Table 4: Follow up of students by schools**

Sl. No.	Particulars		Schools								Total
			1	2	3	4	5	6	7	8	
I	1. Number of students sent to normal schools	Boys	04	--	--	03	01	02	--	02	11
		Girls								1	01
	2. Age (in years)	< 10	03	--	--	--	--	--	--	--	03
		> 10	01	-	-	03	01	02	-	02	09
	3. Reason for placement		Improved adaptive behaviour	--	--	can read and write	Improved IQ	Scholastic improvement	--	Scholastic improvement	-
II	1. Number of students employed	Boys	03	04	--	01	04	04	--	--	16
		Girls	-	-	-	01	02	-	-	-	03
	2. Type of employment		<ul style="list-style-type: none"> <li>• Helper (Sheltered workshop)</li> <li>• Swimming coach,</li> <li>• Office assistant</li> </ul>	<ul style="list-style-type: none"> <li>• Assistant in Kirani shop</li> </ul>	--	<ul style="list-style-type: none"> <li>• Sports coach</li> <li>• Dancer</li> </ul>	<ul style="list-style-type: none"> <li>• Helper in Biscuit factory</li> <li>• Gardner</li> <li>• Milk booth helper</li> </ul>	<ul style="list-style-type: none"> <li>• Helper in textile shop</li> <li>• Factory worker</li> <li>• Helper in hardware shop</li> <li>• Part time worker in garage</li> </ul>	--	--	-
	3. Marriage	--	--	--	--	03	--	--	--	03	

**Table 5. Most preferred method of management of behavior problems by schools**

Sl. No.	Problems	Schools							
		1	2	3	4	5	6	7	8
1	Hyperactivity	Sensory Integration Horse ride	Play therapy	Energy spending activity	Lock in chairs	Bead threading ball play	Love and affection	Lot of activities	Lot of games
2	Less sensitive	Sensory Integration swimming	Give solitary play activities	Giving interested activity	Music	Sound drum	Songs and music	Music and play	Play
3	Aggressive behaviour	Change of environment	Attractive activity play	Physical restraint	Scolding and restraint	Concentration	Love and affection	Lots of physical activity	Scolding verbally
4	Poor self help skills	Help to develop self help skills	By teaching and training	Training	Training	By teaching and training	Practice and training	Teaching and training	Teaching and training
5	Attention Deficit Hyperactive Disorders	Sensory integration activities	Alternative activity therapy	Give work	Lots of activity	Physical play	Physical activities	Play activities	Play activities
6	Temper tantrums	Anger management sand therapy	Activity reinforcement	Make him sit in one corner	Leave him alone	Scolding	Physical restraint	Play activities	Scolding

...Contd.

Sl. No.	Problems	Schools							
		1	2	3	4	5	6	7	8
7	Destructive / violent behaviour	Sensory integration timeout music play therapy rewards	Rewards punishment physical restraint	Rewards and punishment	Timeout scolding beating	Music picture reading	Scolding physical restraint	Time out	Scolding and beating
8	Poor motor ability	Hydrotherapy Hypotherapy sand and pyramid therapy	Physiotherapy	Ball, blocks	Activities in motor control	By helping to control activities	Motor activities	Training	--
9	Poor cognitive ability	Puzzles and different concepts	Education and training	Teaching by 1:1 pupil teacher ratio	Teaching	Play materials	Teaching	Teaching and education	Teaching
10	Traunt	Sensory integration hydrotherapy behavior modification	Physical restraints	Lock in chairs	Bring him back	Close doors	Close doors	Safe custody	Scolding and punishment
11	Behaviour problems	Sensory integration hydro therapy hippotherapy	Behavior modification	By controlling strictly	Behavior modification	Behavior modification	Refer therapist	Love and affection	Behavior modification

...Contd.

Sl. No.	Problems	Schools							
		1	2	3	4	5	6	7	8
12	Poor discipline	Behaviour modification teaching	Training	Rewards, comparing	Education rewards punishment	Teaching	Training	Teaching	Scolding
13	Fits	Medicine by doctors first aid	Medicine	Fit management	Wait till convulsion subside	Make him sleep	Calm him and make him sleep	Sleep	Hold iron keys in child's hands
14	Mischief	Rewards and training for good behaviour	Time out techniques	Scolding	Time out	Ball and bat play	Time out	Teaching and education	Scolding
15	With drawn behaviour	Disciplining social skills	Social skills	Talking to the child	Mix in group activities	Doll play	Misic and games	Painting, envelop making	--
16	Autism	Using attention therapies	Training	--	Training	Give single play activities	Love and affection	Refer to psychiatrist	--
17	Specific learning disability	SLD techniques	Remedial education	Teaching	Teaching	Teaching	Teaching	Teaching	--
18	Impulsive behaviour	Sound therapy, water play	Meditation	Scolding	Rewards and punishment	Play therapy	Scolding verbally	Involve in songs	Scolding

...Contd.

Sl. No.	Problems	Schools							
		1	2	3	4	5	6	7	8
19	Non-cooperation	Peer group motivation	Reinforcement	Group activities	Group activities	Rewards	Love and advice	Painting activities	--
20	Poor concentration	Cognitive skills teaching task analysis	Alternative activity	Give new activity	Give more activities	Give interesting task	Scolding verbally	Rehabilitative training	--
21	Emotional problems	Colour therapy sensory integration counseling	Counseling	Counseling	Counseling and behaviour therapy	By different therapies	By therapies	By good rapport of child and care taker	--
22	Problem behaviour	Giving therapies suitable for the problem behaviour	Behaviour modification	By rewards and punishment	By teaching	Behaviour modification	By rewards and punishment	Involve in play activities	Scolding hitting advising and ordering

Physiotherapy was provided by three schools speech and language therapy, sensory Integration and yoga by four schools and Dance therapy, oral motor therapy, colour and light therapy, vocational training, play therapy, and counseling by five schools and music therapy and Behaviour modification by seven schools.

Table 4 presents the follow up of students who completed schooling. There were 11 males and one female who were sent to normal schools, 3 children were below 10 years age and 9 children above 10 years. They were sent to normal schools or they had improved in adaptive behaviour, could read and write, had shown scholastic improvement. There were 19 male students who were placed for employment and two females were married and one was earning as a dancer. The employed children (15 numbers) worked in sheltered work shop, grocery shop as assistants, swimming coach, office assistants, sports coach, worker in Biscuit factory, KEL gardner Govt. org, milk booth helper, Textile shop helper, factory worker, helper in hardware shop, and part time worker in garage. Two schools did not have any student who were employed or who joined the mainstream (normal schools)

Table 5 highlights the different management programmes of mentally challenged children by eight schools in Hubli-Dharwad. The schools differ in the ways in which the problem behaviour is controlled or managed. Table-5 is descriptive and self explanatory and relates the simple ways of management by eight mentally challenged schools .

Table 6 shows the techniques preferred by schools. Almost all (100 %) teachers followed the technique of coaxing child and by love or advice in controlling the misbehaviour. Physical restraint was used for aggressive behaviour.

Next technique that was commonly used was diverting the child's attention and this was used by seven schools. Changing environment in favour of the child, verbally threatening the child and using time out was followed by five schools. Punishing the child by not allowing him to play or feed was followed by 50 percent and Ignoring the problem behaviour, comparison of the child to other children and physically abusing or hitting the child was used by three schools, waiting for the child to mend his ways, shouting or scolding the child and not rewarding the child for misbehaviour was used by two schools. Yielding to the demands of the child and reprimanding the child was used by only one schools.

## 4.2 Emotional Behaviour of mentally challenged children attending special education

The results are presented under the following subheadings

4.2.1 Characteristic of the sample selected for the study

4.2.2 Emotional problem behaviour of mentally retarded children

### 4.2.1 Characteristic of the sample selected for the study

Characteristics of the sample are presented in Table 7 under three sub units as follows

- a) Child characteristics
- b) Parental Characteristics
- c) Familial Characteristics

#### a. Child Characteristics

The sample of mentally challenged children were from age group 06 – 15 years. Among the children in both schools boys and girls were in different proportions. School 1 had 52.63 percent of boys and 47.37 percent of girls. Out of which 26.32 percent were boys and 28.94 percent girls who were 6 – 10 years of age and 26.32 percent boys and 18.42 percent girls were of 10 – 15 years age. School 2 had 45.45 percent boys and 54.55 percent girls. Out of which 22.73 percent were boys and 18.18 percent were girls in 6 – 10 years age and 22.73 percent boys and 36.36 percent girls were 10 – 15 years age.

**Table 7: Characteristics of the sample**

N=60

Sl. No.		Characteristics		Category	Day School 1		Day School 2		Total			
					F	%	F	%	F	%		
1	Child's Characteristics	Gender		Boys	20	52.63	10	45.45	30	50.00		
				Girls	18	47.37	12	54.55	30	50.00		
		Age (in years)		Boys								
				06-10	10	26.32	05	22.73	15	25.00		
				10-15	10	26.32	05	22.73	15	25.00		
				Girls								
				06-10	11	28.94	04	18.18	15	25.00		
				10-15	07	18.42	08	36.36	15	25.00		
		Ordinal position		First born		30	78.95	12	54.55	42	70.00	
				Second born		06	15.79	06	27.27	12	20.00	
				Third born		02	05.26	02	09.09	04	06.67	
				Later born		--	--	02	09.09	02	03.33	
		Category of mental retardation		EMR		19	50.00	15	68.18	34	56.67	
TMR				19	50.00	07	31.82	26	43.33			
2	Parental Characteristics	Education		Father		Illiterate	--	--	03	13.64	03	05.00
						Primary	--	--	03	13.64	03	05.00
						High school	09	23.68	07	31.82	16	26.67
						PUC/ Undergraduate	08	21.05	02	09.09	10	16.67
						Graduate	17	44.74	06	27.26	23	38.33
						Post graduate	04	10.53	01	04.55	05	08.33
				Mother		Illiterate	--	--	03	13.64	03	05.00
						Primary	03	07.89	04	18.18	07	11.67
						High school	16	42.11	07	31.82	23	38.33
						PUC/ Undergraduate	06	15.79	05	22.72	11	18.33
						Graduate	11	28.95	02	09.09	13	21.67
						Post graduate	02	05.26	01	04.55	03	05.00

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		Occupation	Father	Unemployed	--	--	00	--	0+3	--
				Labourer	--	--	04	18.18	04	06.67
				Caste occupation	--	--	00	--	00	00.00
				Shop, Cultivation, Business	07	18.42	04	18.18	11	18.33
				Low paid Govt. service	18	47.37	07	31.82	25	41.67
				High paid Govt. officer,	07	18.42	02	09.09	09	15.00
				Engineer, teacher and Doctor	06	15.79	02	09.09	08	13.33
			Mother	Unemployed	34	89.47	20	90.91	54	90.00
				Labourer	--	--	02	09.09	02	03.33
				Caste occupation	--	--	--	--	--	--
				Shop, Cultivation, Business	--	--	--	--	--	--
				Low paid Govt. service	--	--	--	--	--	--
				High paid Govt. officer,	--	--	--	--	--	--
				Engineer, teacher and Doctor	04	10.53	--	--	04	06.67
Consanguinity	Consanguineous	16	42.11	15	68.18	31	51.67			
	Non-Consanguineous	22	57.89	07	31.82	29	48.33			

...Contd.

3	Familial Characteristics	Type of family	Nuclear	24	63.16	12	54.55	36	60.00
			Joint	14	36.84	10	45.45	24	40.00
		Family size	Small (1-4)	20	52.63	09	40.91	29	48.33
			Medium (5-8)	14	36.84	13	59.09	27	45.00
			Large >9	04	10.53	00	--	04	06.67
		Religion	Hindu	37	97.37	20	90.91	57	95.00
			Muslim	01	2.63	02	9.09	03	05.00
		Caste	SC/ST	02	05.26	01	04.55	03	05.00
			Backward caste	04	10.53	01	04.55	05	08.33
			Upper caste	32	84.21	20	90.90	5.2	86.67
			Dominant caste	--	--	--	--	--	--
		Socio Economic Status	Low income group	01	02.63	05	22.73	06	10.00
			Middle income group	35	92.11	16	72.73	51	85.00
			High income group	02	05.26	01	04.54	03	05.00

Among both the schools majority of children were firstborn (78.95 and 54.55 percent) second born were 15.79 percent and 27.27 percent in school 1 and 2 respectively. Third born were 5.26 percent and 9.09 percent in school 1 and 2 respectively. Later born were 9.09 in school 2 and none from school 1.

From the selected sample there were 50 percent and 68.18 percent educable mentally retarded in school 1 and 2 respectively, while 50 percent and 31.82 percent were Trainable from school 1 and school 2 respectively.

#### b. Parental Characteristics

The characteristics such as consanguinity education of mother occupational SES were considered.

In concern to consanguinity, majority i.e. 57.89 percent were non consanguineous and 42.11 percent were consanguineous in school 1 and 31.82 per cent and 68.18 percent were non consanguineous and consanguineous in school 2 respectively. Totally 51.67 per cent were consanguineous marriages

Regarding education of parents majority of fathers were Graduates (44.74 %), undergraduates were 21.05 percent and 10.53 percent were Post graduates from school 1 and from school 2, 31.82 percent had High school education and 27.26 were graduates. But 13.64 percent were illiterate and primary and 9.09 percent and 4.55 percent were undergraduates and post graduates respectively. Totally the sample consisted of 8.33 per cent fathers who were graduates and above.

Regarding mother's education 42.11 percent had High school education, 28.95 percent were Graduates, 15.79 percent undergraduates, 7.89 percent had primary schooling from school 1. From school 2, 31.82 percent were with High school education 22.72 percent PUC/ undergraduates, 18.18 percent primary, 13.64 percent illiterate and 4.55 percent postgraduates. The trend was similar with respect to occupation of parents most of the fathers. (47.37 %) were in low paid govt. service, 18.42 percent were cultivators or business group, 18.42 percent were High Govt. officers and 15.79 percent were engineers or Doctors or teachers in school 1. In school 2, 31.82 percent were in occupation of low paid Govt. service, 18.18 percent were labourers, another 18.18 percent were having shop, cultivation or Business. 9.09 percent were High paid Govt. officers, engineers, doctors or teachers. The total sample consisted of 70 per cent in paid jobs.

Majority of mothers were housewives forming 89.47 percent in school 1 and 90.91 percent in school 2. Only 10.53 percent were teachers in school 1 and 9.09 percent were labourers (school 2). The sample consisted of 10 per cent working mothers.

In school 1 majority (ie 92.11 %) were of middle socio economic status and 72.73 percent in school 2 and 2.63 percent and 22.73 percent of low income and 5.26 and 4.54 percent of high income families in school 1 and school 2 respectively. Among the total sample 10 per cent were from low economic group.

#### c. Familial Characteristics

Majority of families were nuclear with 63.16 percent and 54.55 per cent in school 1 and 2 respectively. Joint families were 36.84 per cent and 45.45 percent in school 1 and 2 respectively.

Regarding family size school 1 had 52.63 percent small, 36.84 percent medium and 10.53 percent large families and school 2 had 40.91 percent nuclear and 59.09 per cent medium sized families.

In case of caste, majority of sample were from dominant and upper caste (Lingayat) 84.21 percent and 90.90 were upper caste in school 1 and school 2 respectively. Only 10.53 and 5.26 percent from school 1 and 4.55 percent from school 2 were from backward and SC/ST caste respectively. The total sample consisted of five percent of Muslims and 95 per cent of Hindus.

## 4.2.2 Emotional problem behavior of mentally retarded children

### 4.2.2.1 Levels of emotional problem behaviour

### 4.2.2.2 Components of emotional problem behaviour

### 4.2.2.3 Qualitative analysis of emotional problem behaviour

### 4.2.2.4 Comparison of emotional problem behaviour by selected factors

#### 4.2.2.1 Levels of emotional problem behaviour

From table 8 it is seen that depression ranked first among children, IInd in thought disorder, IIIrd in Hyperactivity IVth in Distractibility, Vth in low self esteem, VIth in Non-compliance, VIIth in withdrawal symptoms, VIIIth in Anxiety, IXth in physical aggression, Xth in somatic concerns and XIth in verbal aggression. The mean scores were very high (11.25) indicating the severity of the problem behaviour.

#### 4.2.2.2 Components of emotional problem behaviour

On correlation analysis (Table 9) it was found that thought disorder was significantly correlated with Non compliance, Anxiety, Distractibility, Depression, Hyperactivity, Withdrawal, Low self esteem and somatic concerns.

Physical aggression was correlated significantly with Non compliance, Depression, Hyperactivity, Verbal aggression.

Non compliance was significantly correlated with physical aggression, anxiety, Depression, Hyperactivity, withdrawal, low self Esteem, verbal aggression, somatic concerns.

Anxiety was significantly correlated with thought disorder, Non compliance, Hyperactivity, withdrawal, low self Esteem, verbal aggression, and Somatic Concerns.

Distractibility was significantly correlated with Thought disorder Depression, Hyperactivity, and Somatic Concerns.

Depression was significantly correlated with thought disorder, Physical aggression, Non compliance, Distractibility, Hyperactivity, Withdrawal, Low self Esteem, and Somatic concerns.

Hyperactivity was significantly correlated with thought disorders physical aggression, Non compliance, Anxiety, Distractibility, depression, Withdrawal, Low self esteem, Verbal aggression, and Somatic concerns.

Withdrawal was significantly correlated with thought disorder, Non compliance, Anxiety, Depression, Hyperactivity, Low self Esteem, and Somatic concerns.

Self Esteem was significantly correlated with thought disorder, Noncompliance, Anxiety, Depression, Hyperactivity, Withdrawal, Verbal Aggression and Somatic concerns.

Verbal aggression was significantly correlated with physical aggression, Noncompliance, Anxiety, Hyperactivity and low self esteem.

Somatic concern was significantly correlated with thought disorders, Non compliance, Anxiety, Distractibility, Depression, Hyperactivity, Withdrawal, Low self esteem and verbal aggression. The total mean score was between 8 to 11.25 indicating that depression, thought disorder and hyper activity were in high level.

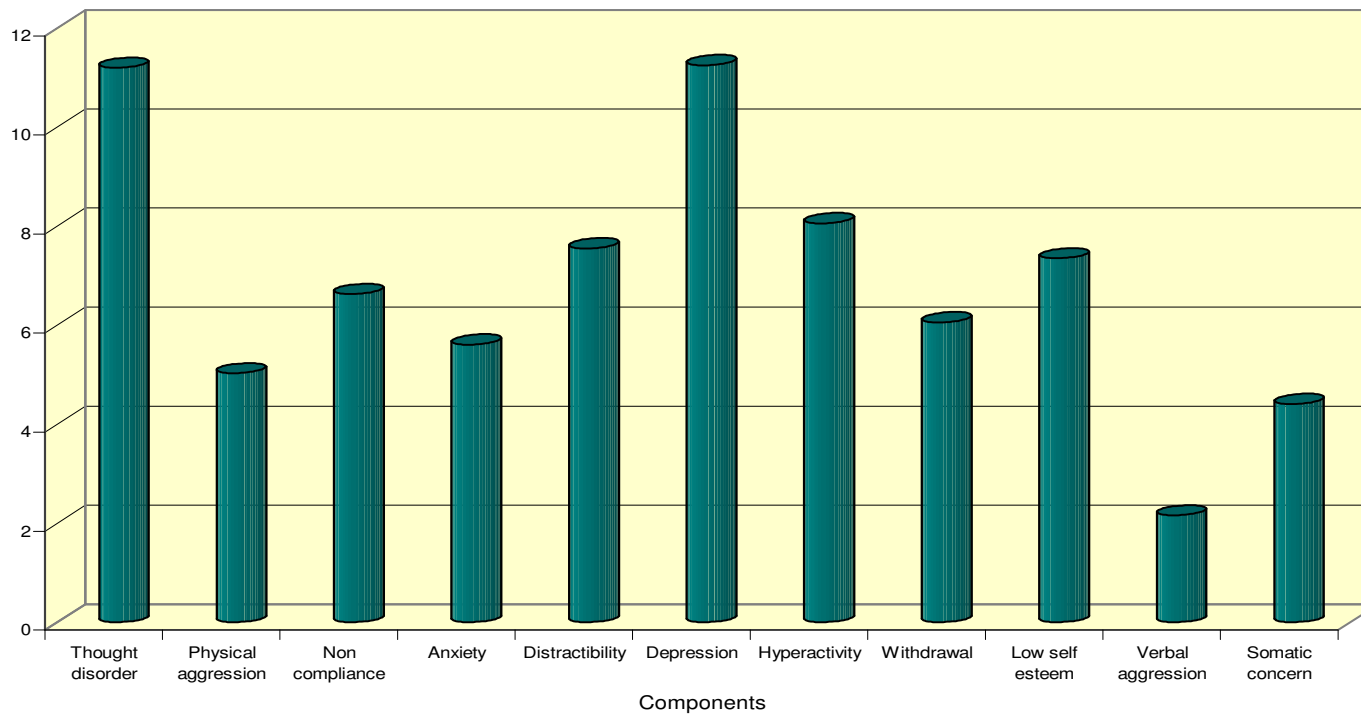
#### 4.2.2.3 Qualitative analysis of problem behaviour in mentally challenged children

In school 1 the problem behaviour which were more than 25 percent and above were pushing others, Hitting, Banging objects, laughing to self and laughing inappropriately, refusing to obey commands, where as the other problem behaviours were less than 25 percent. (Table 10 and 11)

From school 2 the problem behaviours which were above 25 per cent were Nods head, takes long time to complete a task, smells objects, Does not pay attention to what is told, wanders outside class and fear of objects, animals, places and persons, while the other problem behaviours were less than 25 percent. (Table 10, 11).

**Table 8. Mean scores of components of emotional problems among mentally challenged children**

Sl. No.	Components	Mean	SD
1	Thought disorder (TD)	11.20	06.50
2	Physical aggression (PA)	05.03	04.87
3	Non compliance (NC)	06.63	05.60
4	Anxiety (AN)	05.61	06.09
5	Distractibility (DS)	07.55	04.87
6	Depression (DP)	11.25	05.69
7	Hyperactivity (HY)	08.06	04.67
8	Withdrawal (WD)	06.06	05.33
9	Low self esteem (SE)	07.35	05.66
10	Verbal aggression (VA)	02.16	03.56
11	Somatic concern (SC)	04.41	04.89



**Fig. 3. Mean scores of components of emotional problems among mentally challenged children**

**Fig. 3. Mean scores of components of emotional problems among mentally challenged children**

**Table 9. Correlation between components of emotional problems of mentally challenged children**

Components	TD	PA	NC	AN	DS	DP	HY	WD	SE	VA	SC
TD	--	.205	.507**	.443**	.376**	.567**	.590**	.535**	.459**	.241	.508**
PA	.205	--	.366**	.014	-.074	.266*	.260*	.101	-.073	.483**	-.030
NC	.507**	.366**	--	.498**	.198	.581**	.521**	.450**	.331**	.447**	.607**
AN	.443**	.014	.498**	--	.232	.218	.358**	.505**	.584**	.345**	.701**
DS	.376**	-.074	.198	.232	--	.395**	.319*	.233	.240	-.090	.351**
DP	.567**	.266*	.581**	.218	.395**	--	.788**	.453**	.299*	.241	.457**
HY	.590**	.260*	.521**	.358**	.319*	.788**	--	.532**	.496**	.475**	.659**
WD	.535**	.101	.450**	.505**	.233	.453**	.532**	--	.468**	.227	.503**
SE	.459**	-.073	.331**	.584**	.240	.299*	.496**	.468**	--	.323*	.691**
VA	.241	.483**	.447**	.345**	-.090	.241	.475**	.227	.323*	--	.414**
SC	.508**	-.030	.607**	.701**	.351**	.457**	.659**	.503**	.691**	.414**	--

n=60

\*\* Correlation is significant at the 0.01 level

\* Correlation is significant at the 0.05 level

On the entire sample the emotional problems with highest frequency were on fear of sharp object and moving vehicles.

#### 4.2.2.4 Comparison of Emotional behaviour by selected factors

The mean emotional behaviour of mentally challenged children is compared by selected factors as follows

- A. Child's characteristics
- B. Factors associated with schooling
- C. Familial and maternal factors

#### A. Child's characteristics

##### A.1. Comparison by age

There were 30 children in 6 – 10 year age group and 30 children in 10 – 15 years age group. The mean scores of younger group was 66.03 and among the older age group it was 85.76. The younger children were lower in emotional problem score when compared to older group years (Table 12). The result of statistical analysis revealed significance at 0.001 level indicating that the emotional problems of older children (10 -15 years) were significantly higher than younger children (6 – 10 years group).

##### A.2. Comparison by gender

The sample consisted of 30 males and 30 female mentally retarded children. The mean of total emotional scores, externalizing and internalizing scores are presented in table 13. It can be seen from the table that the mean scores of the total emotional scores of males was 70.66, and females was 61.40.

The emotional problem was higher in males, when compared to females in the 6 – 10 years age group whereas in 10 – 15 years age group the mean of the total emotional scores and mean of the internalizing scores were higher in females when compared to males. But mean externalizing score was higher in males in 10 – 15 years age group.

The differences between the gender was significant at 0.001 level for the total emotional mean scores, internalizing scores and externalizing behaviour problems indicating that males had higher scores on total emotional problems and on externalizing behaviour problems while females were significantly higher on internalizing problem behavior than boys.

##### A.3. Comparison by degree of Mental retardation

There were 34 educable mentally retarded children and 26 trainable mentally retarded (Table 14).

The educable mentally retarded of 6 to 10 years were lower on total, emotional problem scores in internalizing score and externalizing score than trainable mentally retarded, where as in 10 -15 year old age group the internalizing score was higher among EMR. While the total mean score, and externalizing score was higher among TMR (Table 14). The statistical analysis was also found significant in case of both the age groups.

##### A.4. Comparison of emotional scores of mentally challenged children according to ordinal position

The emotional scores of mentally challenged children according to ordinal position is presented in table 15. The mean scores of total, Internalizing and externalizing emotional problems was lower among first born when compared to second born and later borns. The second born had higher mean internalizing score when compared to first born and later borns. The mean externalizing score was higher in later born children and was found highly significant.

**Table 10. Common symptoms of problem Behaviour in mentally challenged children**

Sl. No.	Type of Problem behaviour	School 1		School 2	
		F	%	F	%
	Violent and destructive behaviour				
1	Kicks others	06	15.78	01	04.54
2	Pushes others	10	26.32	05	22.72
3	Pinches others	07	18.42	03	13.63
4	Pulls hair	07	18.42	01	04.54
5	Slaps others	06	15.78	05	22.72
6	Hits others	10	26.32	02	09.09
7	Spits on others	02	05.26	01	04.54
8	Bangs objects	14	36.84	--	--
9	Bites others	01	02.63	--	--
10	Pokes others with pencil or sticks	01	02.63	--	--
11	Throws objects at others	03	07.89	--	--
12	Tears or pulls clothing	01	02.63	01	04.54
13	Tears book, papers	--	--	02	09.09
14	Breaks objects, toys	03	07.89	--	--
15	Damages furniture	04	10.52	04	18.18
	Temper Tantrums				
16	Cries excessively	06	15.78	04	18.18
17	Screams	07	18.42	02	09.09
18	Stamps feet	07	18.42	02	09.09
19	Rolls on floor	01	02.63	--	--
	Misbehaves with others				
20	Pulls objects from others	04	10.52	02	09.09
21	Interrupts in between when others are talking	02	05.26	01	04.54

Contd...

22	Catches others	01	02.63	--	--
23	Makes loud noise when others are working or reading	04	10.52	01	04.54
24	Makes face to tease others	03	07.89	04	18.18
25	Uses abusive language	02	05.26	--	--
26	Bossy	02	05.26	01	04.54
	Self Injurious behaviour				
27	Bangs head	02	05.26	--	--
28	Bites self	01	02.63	02	09.09
29	Scratches self	01	02.63	--	--
30	Eats inedible things	01	02.63	--	--
31	Peels wounds, skin	--	--	04	09.09
32	Bites nails	--	--	03	13.63
	Repetitive behaviour				
33	Rocks body	01	02.63	01	04.54
34	Nods head	02	05.26	12	54.54
35	Sucks thumb	02	05.26	02	09.09
36	Makes peculiar sounds	03	07.89	01	04.54
37	Bites pencil / pen	--	--	01	04.54
38	Shakes body	01	02.63	--	--
39	Grinds teeth	02	05.26	--	--
	Odd behaviour				
40	Laughs to self	10	26.32	--	--
41	Laughs in appropriately	10	26.32	--	--
42	Talks to self	04	10.52	--	--
43	Hoards unwanted objects	--	--	01	04.54

Contd...

44	Picks nose	--	--	04	18.18
45	Plays with objects like chappals	01	02.63	--	--
46	Smells objects	--	--	10	45.45
	Hyper activity				
47	Does not sit at one place for required time	06	15.78	05	22.72
48	Does not pay attention to what is told	06	15.78	10	45.45
49	Does not continue with the task for required time	09	23.68	05	22.72
	Rebellious behaviour				
50	Refuses to obey command	11	28.94	01	04.54
51	Does apposite of what is requested	02	05.26	01	04.54
52	Takes long time to complete a task	05	13.15	08	36.36
53	Wanders outside class	--	--	13	59.09
54	Runs away from school	--	--	01	04.54
55	Argues	01	02.63	01	04.54
	Antisocial behaviour				
56	Lies	01	02.63	--	--
57	Steals	--	--	01	04.54
58	Makes obscene gestures kisses	01	02.63	--	--
59	Touches own private parts in public	01	02.63	--	--
	Fears				
60	Fears of objects	03	07.89	16	72.72
61	Fears of animals	07	18.42	19	86.36
62	Fears of places	05	13.15	08	36.36
63	Fears of persons	04	10.52	13	59.09
64	Fears of gravity	01	02.63	--	--
65	Fears of judging levels	01	02.63	--	--

**Table 11. Percentage Classification of problem behaviour**

< 5%	Pokes others with pencil or sticks
	Throws objects at others
	Tears book, papers
	Breaks objects, toys
	Pulls objects from others
	Uses abusive language
	Bangs head
	Scratches self
	Eats inedible things
	Catches others
	Nods head
	Shakes body
	Grinds teeth
	Hoards unwanted objects
	Plays with objects like chappals
	Runs away from school
	Argues
	Lies
	Steals
	Makes obscene gestures kisses
Touches own private parts in public	
Fears of animals	
Fears of gravity	
Fears of judging levels	

Percentage Classification of problem behaviour

5 - 10 %	Slaps others
	Spits on others
	Tears or pulls clothing
	Damages furniture
	Interrupts in between when others are talking
	Makes loud noise when others are working or reading
	Bossy
	Bites self
	Peels wounds, skin
	Bites nails
	Makes peculiar sounds
	Bites pencil/ Pen
	Talks to self
	Picks nose
	Does apposite of what is requested

Percentage Classification of problem behaviour

10 - 20 %	Kicks others
	Pinches others
	Pulls hair
	Hits others
	Bites others
	Cries excessively
	Screams
	Stamps feet
	Rolls on floor
	Makes face to tease others
	Laughs to self
	Laughs in appropriately
	Smells objects
	Does not sit at one place for required time
	Refuses to obey command

Percentage Classification of problem behaviour

21 - 30 %	Pushes others
	Bangs objects
	Sucks thumb
	Does not pay attention to what is told
	Does not continue with the task for required time
	Takes long time to complete a task
	Wanders outside class
	Fear of places
	Fear of persons

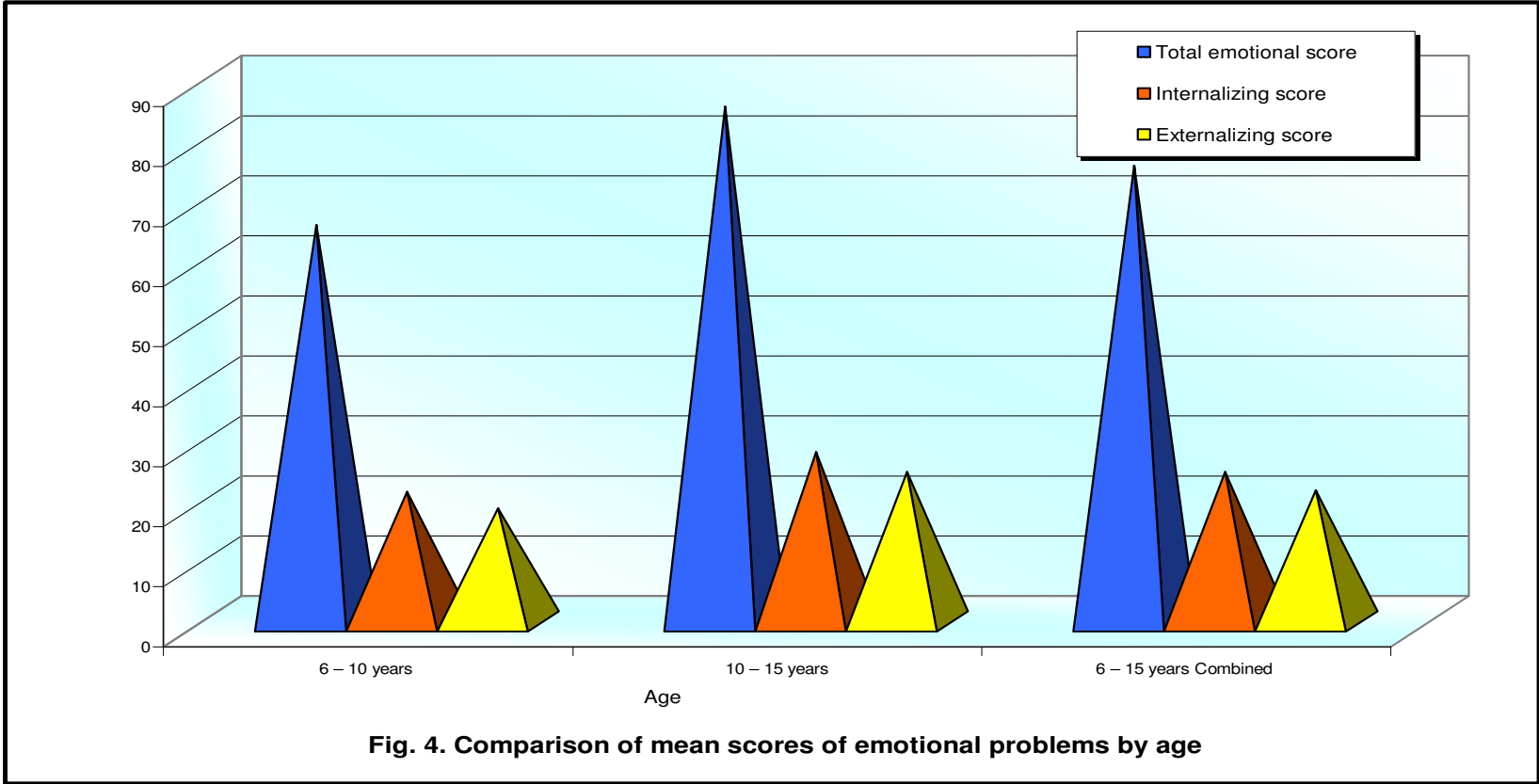
Percentage Classification of problem behaviour

31 - 40 %	Fear of objects and moving vehicles
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**Table 12. Comparison of mean scores of emotional problems by age**

Age		Total emotional score	't' value	Internalizing score	't' value	Externalizing score	't' value
6 – 10 years	N	30		30		30	
	Mean	66.03		21.66		18.86	
	SD	03.48		10.42		15.98	
			20.55***		01.89 <sup>NS</sup>		01.69 <sup>NS</sup>
10 – 15 years	N	30		30		30	
	Mean	85.76		28.26		24.93	
	SD	04.00		16.00		11.44	
6 – 15 years Combined	N	60		60		60	
	Mean	75.90		24.96		21.90	
	SD	03.85		13.79		14.11	

\*\*\* Significant at 0.001 level



**Fig. 4. Comparison of mean scores of emotional problems by age**

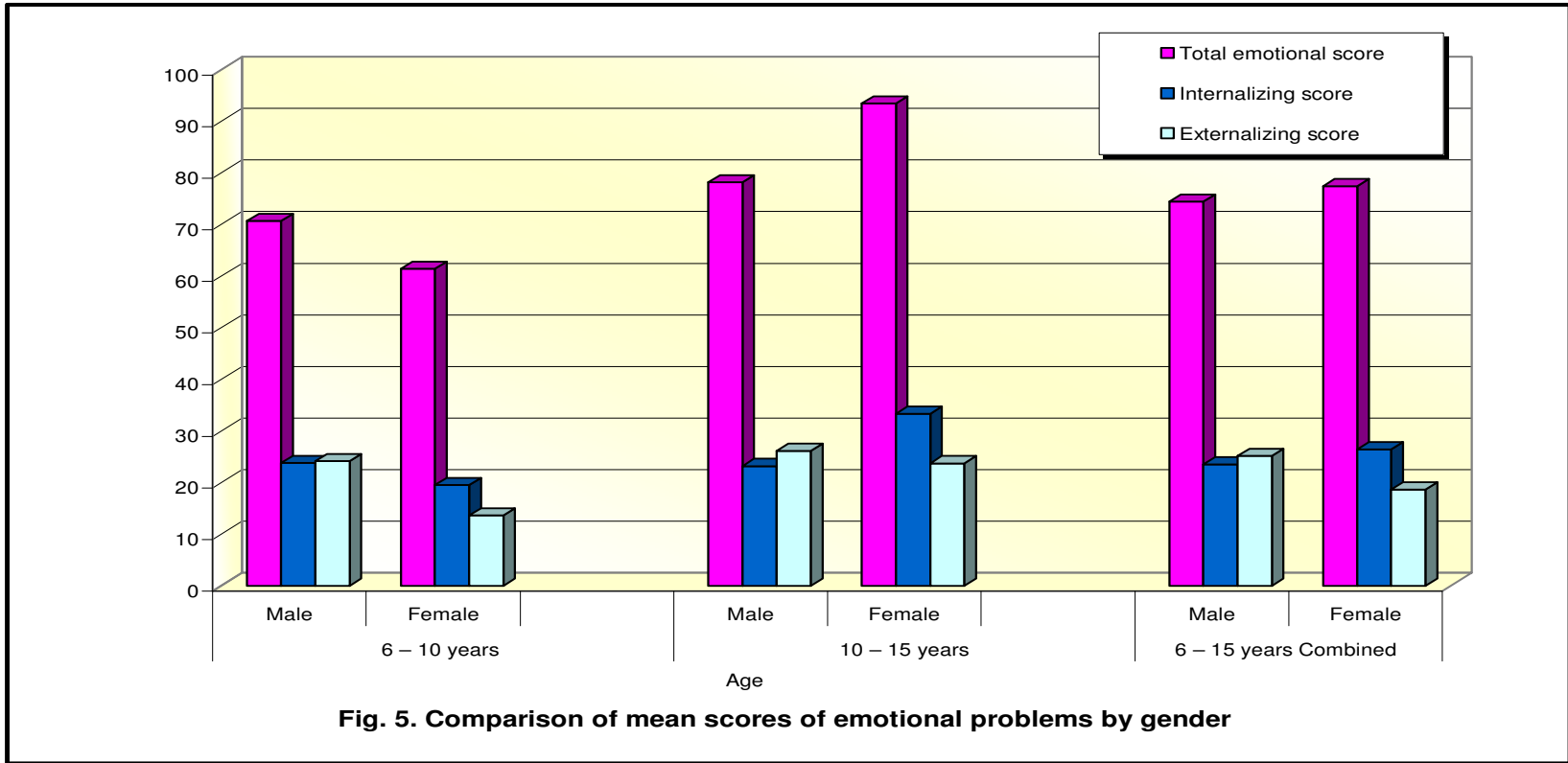
**Table 13. Comparison of mean scores of emotional problems by gender**

Age		Total emotional score	't' value	Internalizing score	't' value	Externalizing score	't' value
6 – 10 years Males (n=15) Females (n=15)	Males						
	Mean	70.66		23.80		24.13	
	SD	03.96		10.55		18.99	
			07.24***		01.13 <sup>NS</sup>		01.75 <sup>NS</sup>
	Females						
	Mean	61.40		19.53		13.60	
	SD	02.98		10.20		10.43	
10 – 15 years Males (n=15) Females (n=15)	Males						
	Mean	78.13		23.20		26.13	
	SD	03.67		14.92		10.20	
			10.46***		01.79 <sup>NS</sup>		00.51 <sup>NS</sup>
	Females						
	N	15.00		15.00		15.00	
	Mean	93.40		33.33		23.73	
SD	04.29		15.89		12.80		
Total Males (n=30) Females (n=30)	Gender wise						
	Male						
	Mean	74.40		23.50		25.13	
	SD	03.77		12.70		15.01	
			03.00**		00.82 <sup>NS</sup>		01.81 <sup>NS</sup>
	Female						
	Mean	77.40		26.43		18.66	
SD	03.98		14.88		12.57		

't' value between ages

Males	5.37*	0.01	0.36
Females	24.621**	2.83*	0.19

\*\*\* Significant at 0.001 level



**Fig. 5. Comparison of mean scores of emotional problems by gender**

**Table 14. Mean scores of emotional problems by degree of retardation**

Age		Total emotional score	't' value	Internalizing score	't' value	Externalizing score	't' value	
6 – 10 years EMR (n=17) TMR (N=13)	EMR							
	Mean	61.23		18.82		17.70		
	SD	03.47		10.30		15.74		
	TMR							
	Mean	72.30		25.38		20.38		
	SD	03.53		09.73		16.80		
			08.65**		01.77		00.45	
10 – 15 years EMR (N=17) TMR (N=13)	EMR							
	Mean	84.76		29.11		24.88		
	SD	04.55		16.98		14.11		
				01.54		00.33		00.03
	TMR							
	Mean	87.07		27.15		25.00		
	SD	03.33		15.22		07.12		
Combined (6 – 15 years) EMR (N=34) TMR (N=26)	EMR							
	Mean	73.00		23.97		21.29		
	SD	04.16		14.78		15.16		
				06.69***		00.63 <sup>NS</sup>		00.38 <sup>NS</sup>
	TMR							
	Mean	79.69		26.26		22.69		
	SD	03.45		12.55		12.86		

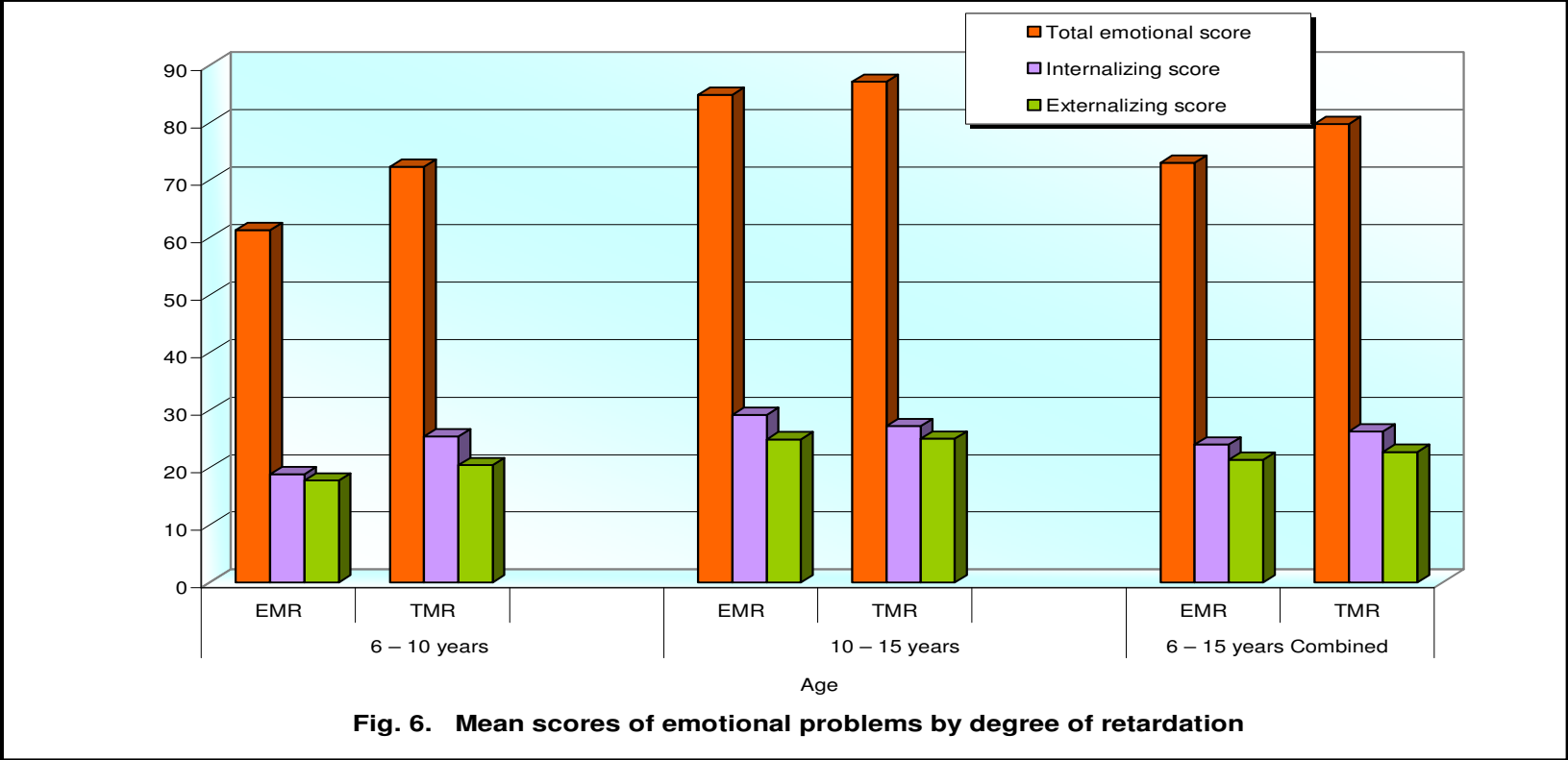
't' value between ages

EMR	17.05**	02.14	01.40
TMR	10.98**	00.75	00.91

\*\* Significant at 0.01 level

\*\*\* Significant at 0.001 level

NS – Non significant



**Fig. 6. Mean scores of emotional problems by degree of retardation**

## B. Factors associated with schooling

### B.1. Comparison according to age at admission to school

Table 16 shows the mean values of emotional scores of mentally challenged children according to children's age at admission to school. The mean of total emotional problem score (79.40) the internalizing problem score (26.35) and externalizing problem score (23.71) was higher in children who were admitted to school when they were less than 6 years. The children who were admitted to school late i.e above 6 years, their emotional scores were lower.

### B.2. Comparison between schools

#### Age wise

In school 1 there were 21 children in younger age group (6 – 10 years) and 17 in older age group (10 – 15 years). In school 2 there were 9 children in younger age group and 13 children in older age group. In both the schools the total mean score was lower in younger age group. However, the result was significant at 0.05 level only in school 1 and no difference were observed in school 2 (Table 17).

On internalizing problems the younger age children (6 – 10 year age group) had lower internalizing mean score when compared to older age group 10 – 15 years (Table 18). But the results were not significant for both the schools. While in case of externalizing problems the mean score was lower for younger age group (6 – 10 years) in school 1 whereas in school 2 the score was higher in younger age group when compared to older age group (10 – 15 years). The result was significant at 0.01 level for school 2 only (Table 19).

#### Gender wise

In school 1 the total mean score was almost equal between males and females. Where as in school 2 the mean score was higher in case of males than females (Table 17). The females had higher internalizing mean score when compared to males (Table 18). However the results were not significant. The externalizing mean score was higher in case of males when compared to females in both the schools. The result was significant at 0.05 level only for school 2 (Table 19).

#### By degree of mental retardation

The comparison of total emotional problems by degree of disability revealed that the total mean score of EMR was lower than TMR in both the schools. However, result was significant only in school 1 (Table 17). The Internalizing mean score was also lower in EMR when compared to TMR. But significant difference (0.001 level) was seen only in school 1 (Table 18).

The externalizing mean score was lower in EMR from school 1. But in school 2 the externalizing mean score was higher in EMR. However the differences were not significant (Table 19).

The overall total mean score, internalizing score and externalizing score was lower in case of school 1 when compared to school 2. indicating that school 1 may be managing the emotional problems of children better than school 2 (Table 20). The differences were highly significant.

## C. Familial and Maternal Factors

### C.1. Comparison according to family size

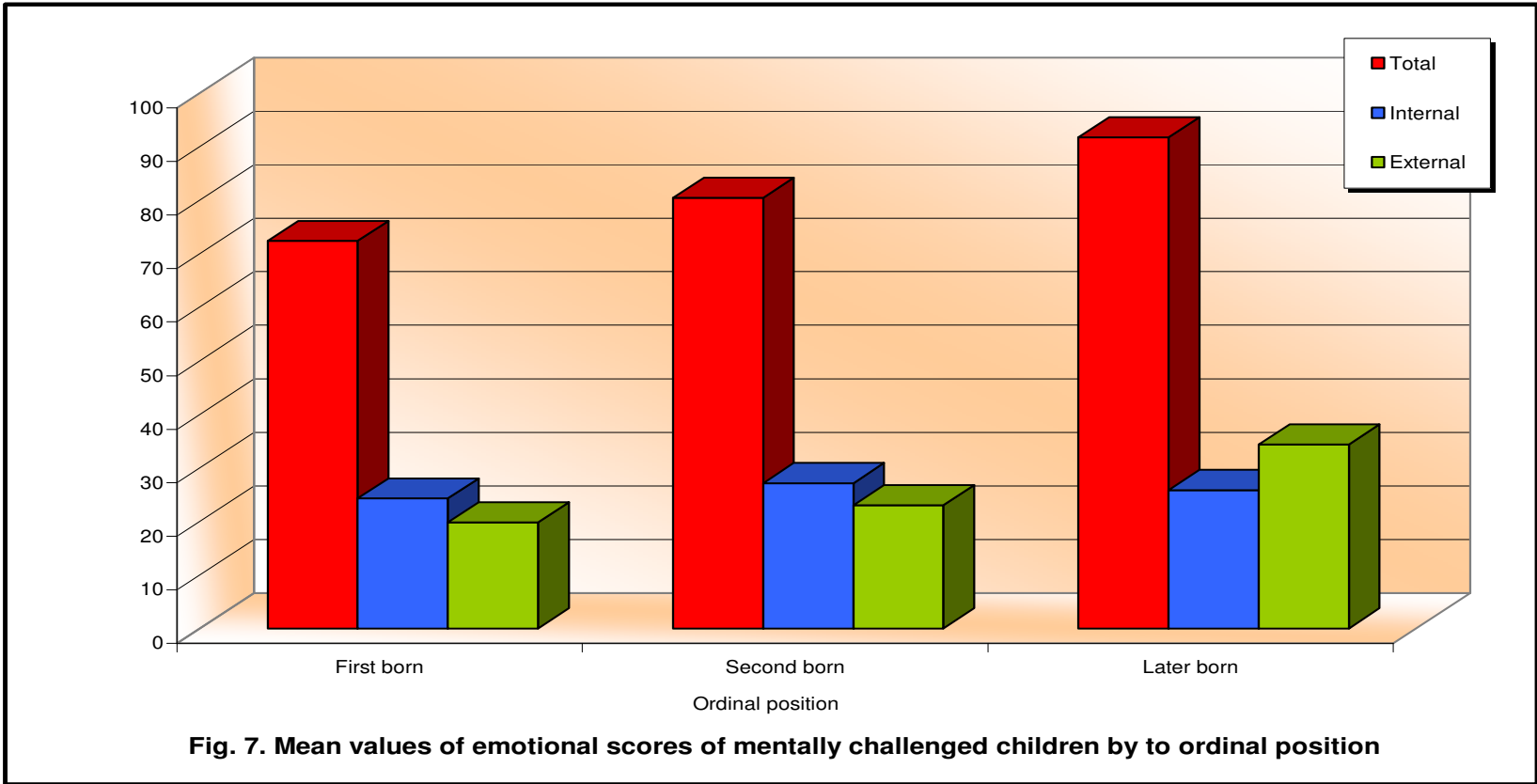
Table 21 shows the mean values of emotional scores of mentally challenged children according to family size. The emotional scores of children from large families were lower than small families and this difference was found highly significant. Between small and medium families the mean of total emotional problem score, Internalizing problem score, and Externalizing problem score of the children was comparatively higher in small families when compared to large or joint families and was also highly significant indicating that as the family size increased the emotional problem decreased.

**Table 15. Mean values of emotional scores of mentally challenged children by to ordinal position**

Sl. No.	Ordinal position		Total	Intern	Extern	t' value Between 1 & 2		
						Total	Internal	External
1	First Born	N	42	42	42	Between 1 & 2		
		Mean	72.35	24.23	19.80			
		Std. Deviation	3.85	1.40	1.18	6.47***	6.33***	8.00***
2	Second Born	N	12	12	12	Between 2 & 3		
		Mean	80.41	27.08	23.00			
		Std. Deviation	3.62	1.405	1.45	5.79***	1.81 <sup>NS</sup>	13.02***
3	Later born	N	6	6	6	Between 3 & 1		
		Mean	91.66	25.83	34.33			
		Std. Deviation	4.43	1.35	2.27	11.29***	2.66*	25.05***

\*\*\* Significant at 0.001 level

\* significant at 0.05 level



**Fig. 7. Mean values of emotional scores of mentally challenged children by to ordinal position**

**Table 16. Mean values of emotional scores of mentally challenged children according to age of admission to school**

Admission to school		Total	Intern	Extern
< 6 Years	N	42	42	42
	Mean	79.40	26.35	23.71
	Std. Deviation	4.07	1.48	1.49
> 6 Years	N	18	18	18
	Mean	67.72	21.72	17.66
	Std. Deviation	3.24	1.06	1.11
	't' Value	14.24***	12.18***	15.51***

\*\*\* Significant at 0.001 level

**Table 17. Comparison of mean score of emotional problems of mentally challenged children by school**

School		Classification	N	Mean	SD	t-value
1	Category	EMR	19	44.75	19.32	2.701*
		TMR	19	62.72	19.39	
2		EMR	15	98.11	40.18	1.236
		TMR	07	117.88	30.58	
1	Gender	Male	20	54.15	17.30	0.037
		Female	18	54.42	26.38	
2		Male	10	114.90	35.13	1.142
		Female	12	97.50	39.30	
1	Age	Younger	21	46.73	19.52	2.520*
		Older	17	63.80	19.70	
2		Younger	09	99.3636	30.07	0.547
		Older	13	107.73	43.63	

\* Significant at 0.05 level

**Table 18. Comparison of Mean Score of Internalising Emotional Problem of mentally challenged children by school**

School		Classification	N	Mean	SD	t-value
1	Category	EMR	19	13.50	6.16	2.747**
		TMR	19	21.55	10.17	
2		EMR	15	33.27	13.99	0.639
		TMR	07	36.87	11.20	
1	Gender	Male	20	16.55	6.18	0.904
		Female	18	19.50	12.65	
2		Male	10	29.90	8.03	0.926
		Female	12	37.66	15.24	
1	Age	Younger	21	16.89	8.58	0.605
		Older	17	18.86	10.41	
2		Younger	09	29.90	8.03	1.533
		Older	13	37.66	15.24	

\*\* Significant at 0.01 level

**Table 19. Comparison of Mean Score of Externalising Emotional Problems of mentally challenged children by school**

School		Classification	N	Mean	SD	t-value
1	Category	EMR	19	13.06	8.17	1.851
		TMR	19	19.00	10.24	
2		EMR	15	31.54	18.26	0.353
		TMR	07	27.73	13.87	
1	Gender	Male	20	18.65	8.71	1.822
		Female	18	12.71	10.20	
2		Male	10	38.10	16.90	2.475*
		Female	12	23.87	12.39	
1	Age	Younger	21	11.52	8.43	3.751**
		Older	17	22.13	7.85	
2		Younger	09	38.10	16.90	0.606
		Older	13	23.87	12.39	

\* Significant at 0.05 level\*\* Significant at 0.01 level

**Table 20. Comparison of mean scores of emotional problems of mentally challenged children by school**

	School	N	Mean	SD	t-value
Total Score	1	38	54.26	21.13	6.470***
	2	22	104.19	38.02	
Internalising score	1	38	17.76	9.34	5.741***
	2	22	34.38	13.08	
Externalising score	1	38	16.20	9.67	4.002***
	2	22	29.34	15.65	

\*\*\* Significant at 0.001 level

## C.2. Comparison according to consanguinity

The Table 7 shows the percentage distribution of mentally challenged children according to consanguinity. There were 51.67% consanguineous families.

Mentally retarded children born to parents with consanguineous marriage were more than non consanguineous.

### Influence of SES on Emotion of children

SES and emotional problems were significantly and negatively correlated at one percent level indicating that as SES increased, the Emotional problems decreased.

The internalizing and externalizing scores were also correlated negatively with SES and significant at five percent level (Table 23). Education of mother and Emotional problem score was also negatively correlated indicating that as the education of mother increased the Emotional problems decreased.

Hence, there were less emotional problems in the children, when mothers education and SES was high.

### Mothers Age and Awareness

Mothers age was negatively correlated with awareness, SES and education of mother, but was found non-significant.

## 4.3 Parents awareness opinion and conceptions regarding mental retardation

### 4.3.1 Additional information regarding disability and etiological factors

Most of the children (81.58 %) from school 1 were born in Private Hospitals and only 15.79 percent and 2.63 percent were born in government hospitals and at home respectively. In school 2, 50.00 percent each were born in Private and government hospitals (Table 24).

There were 81.58 percent with normal delivery, 7.89 percent with forceps and 10.53 percent Caesarian deliveries from school 1. From school 2, 90.91 percent of the children were born from normal delivery and 9.09 percent from caesarian.

Regarding problem during delivery 55.26 percent and 72.73 percent did not have any problem whereas 44.74 percent and 27.27 percent of mothers had problems like worries, tension and physical illness from school 1 and 2 respectively.

There were 63.16 percent mothers who reported to have normal diet in school 1 and 95.45 percent from school 2. The remaining 36.84 percent and 4.54 percent reported poor diet during pregnancy. Most of the mother were normal and only 13.16 percent and 9.09 percent suffered high Blood pressure.

Mental retardation with associated handicap were 34.21 percent and 13.64 percent from school 1 and 2 respectively.

Most of the children were identified as mentally retarded at age 1 – 3 years (42.11 %) in school 1 and 22.73 % in school 2 respectively.

The other children i.e. 21.05 percent were identified at birth, 10.53 percent at 6 months, 15.79 percent at 6 – 12 months, 7.89 percent at 3 – 6 years and 2.63 percent at above 6 years and above (school 1) similarly. From school 2, 18.18 percent at birth, 13.64 percent at 6 months, 13.64 percent at 6 -12 months, and 31.82 percent at 3 – 6 years.

Regarding ailment 68.18 percent and 26.32 percent of the mothers of children from school 1 and school 2 experienced repeated stress. Some mothers had constant headache (45.45 % and 7.89 %) Some complained of no sleep (27.27 % and 7.89 %) from school 1 and school 2 respectively, because of their child's problem and cure.

Most of the parents (65.79 % and 77.27 %) sent their child to school when the child was 3 - 6 years and 34.21 percent and 22.73 percent respectively from School 2 sent when their child was above six years.

**Table 21. Mean score of emotional problems of mentally challenged children by to family size**

Sl. No.	Family size		Total	Intern	Extern	(t-Value)		
						Total	Internalizing	Externalizing
1	Small (1-4)	N	29	29	29	Between 1 & 2		
		Mean	76.68	23.41	22.17			
		Std. Deviation	4.07	1.22	1.61	1.05 <sup>NS</sup>	9.82 <sup>***</sup>	0.60 <sup>NS</sup>
2	Medium (5-8)	N	27	27	27	Between 2 & 3		
		Mean	77.40	26.85	22.40			
		Std. Deviation	3.83	1.47	1.22	9.15 <sup>***</sup>	2.59 <sup>***</sup>	1.17 <sup>NS</sup>
3	Large (> 9)	N	4	4	4	Between 3 & 1		
		Mean	60.00	23.50	16.50			
		Std. Deviation	2.48	1.96	1.16	7.94 <sup>***</sup>	4.13 <sup>***</sup>	6.83 <sup>***</sup>

\*\*\* Significant at 0.001 level

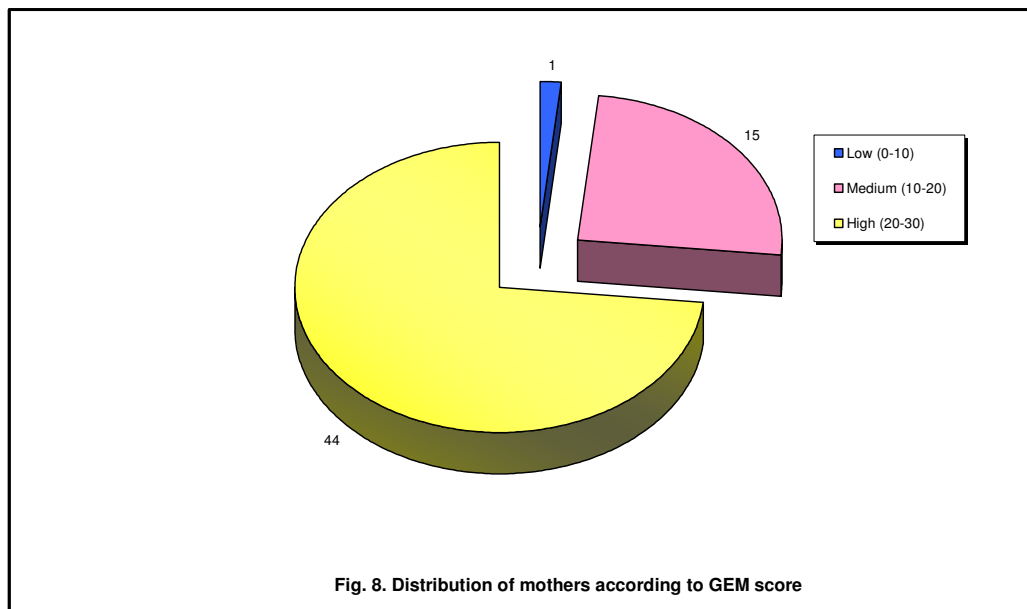
NS non-significant

Table 22. Interrelation of Awareness regarding special education, SES, Education and age of mother

	Awareness	SES	Edu. of Mother	Age of Mother
Awareness	1.000	0.279*	0.197	-0.191
SES	0.279	1.000	0.729**	-0.033
Edu. of Mother	0.197	0.729**	1.00	-0.030
Age of Mother	-0.191	-0.033	-0.030	1.000

\* Correlation significant at 0.05 level

\*\* Correlation significant at 0.01 level



**Fig. 8. Distribution of mothers according to GEM score**

**Table 23. Inter relation of emotional problems of mentally challenged children with awareness, SES, Education, and Age of mother**

	Awareness	SES	Edun. of mother	Age of mother
EPS total	0.022	-0.355**	-0.304*	0.016
Internalizing score	0.038	-0.294*	-0.296	0.004
Externalizing	-0.116	-0.305*	-0.223	0.065

\* Correlation significant at 0.05 level

\*\* Correlation significant at 0.01 level

#### 4.3.2 Parents awareness regarding special education

Influence of maternal and familial factors on Emotional problems of mental retarded children

There were 73.3 per cent mother who had high score on awareness regarding mental retardation, 25 per cent medium and 1.67 per cent with low awareness. From table 22 it can be seen that maternal awareness regarding disability and SES status were significantly correlated (5 % level of probability). As SES increased, awareness of the mothers regarding disability and special children increased.

Only 50 percent of mother mentioned that special schools helps in skill development, disciplining, social development and control of problem behaviours.

It is seen from table 25 that almost all (81.58 %) in school 1 and cent percent of the parents in school 2 did not know about the disability act.

Most of the mothers (68.42 % and 86.36 %) did not favour inclusive education. The mothers agreed that schools are needed for personal development, and for education of children. About 28.95 percent from school 1 and 21.05 percent from another school expected schools to improve Intellectual development and for sports. All most all (90.91 %) sent their child to school for development of Intellectual capacity and not for sports.

Most of the mothers expressed the need for training in handling the mentally challenged child. (73.68 % and 68.18 % in school 1 and school 2 respectively). The remaining 26.32 percent and 31.82 percent did not want training.

#### 4.3.3 Opinion of disability

Table 26 shows the opinion of mothers regarding disabled child disability. Most of the people (65%) reacted in sympathetic, affectionate, and loving manner (40%) towards the mentally challenged children. About 15.79 percent and 45.45 percent avoided the retarded children from school 1 and school 2 respectively and only 1.67 per cent were abusive towards the mentally challenged child.

Most of the mothers (73.68 % and 86.36 %) expressed that there was no loss of support, whereas 26.32 percent and 13.64 percent experienced loss of support from in laws, family, friends and relatives, neighbors and others for having given birth to a child with disability.

**Table 24. Additional Information from parents of mentally challenged children**

Sl. No.	Characteristics	School 1		School 2		Total	
		F	%	F	%	F	%
1	Place of Delivery						
	Govt. Hospital	06	15.79	11	50.00	17	28.33
	Private Hospital	31	81.58	11	50.00	42	70.00
	At home	01	02.63	--	--	01	01.67
2	Type of Delivery						
	Normal	31	81.58	20	90.91	51	85.00
	Forcep	03	07.89	--	--	03	05.00
	Caesarean	04	10.53	02	09.09	06	10.00
3	Problem during delivery						
	Yes	17	44.74	06	27.27	23	38.33
	Worries / Tension	16	42.11	04	18.18	20	33.33
	Physical illness	03	07.89	02	09.09	05	08.33
	No	21	55.26	16	72.73	37	61.67
4	Diet						
	Normal	24	63.16	21	95.45	45	75.00
	Poor diet	14	36.84	01	04.54	15	25.00
5	Suffering during pregnancy						
	Normal	31	81.58	20	90.91	51	85.00
	High B.P.	05	13.16	02	09.09	07	11.67
	Other	02	05.26	--	--	02	03.33
6	Type of disability						
	Mental retardation	25	65.79	19	86.36	44	73.33
	Mental retardation with -associated handicap	13	34.21	03	13.64	16	26.67
7	Age when the child was identified as MR						
	Birth	08	21.05	04	18.18	12	20.00
	6 Months	04	10.53	03	13.64	07	11.67
	6 – 12 Months	06	15.79	03	13.64	09	15.00
	1 – 3 years	16	42.11	05	22.73	21	35.00
	3 – 6 years	03	07.89	07	31.82	10	16.67
	> 6 years	01	02.63	--	--	01	01.67
8	Type of ailment						
	No sleep	06	27.27	03	07.89	09	15.00
	Constant headache	10	45.45	03	07.89	13	21.67
	Repeated stress	15	68.18	10	26.32	25	41.67
9	Age at which child was sent to school						
	6 years	25	65.79	17	77.27	42	70.00
	> 6 years	13	34.21	05	22.73	18	30.00

**Table 25. Parental awareness regarding special education for mentally challenged children**

Sl. No.	Characteristic	School 1		School 2		Total	
		F	%	F	%	F	%
1	Parental awareness regarding disability						
	Yes	07	18.42	--	--	07	11.67
	No	31	81.58	22	100.00	53	88.33
2	Special school help in						
	Skill development	23	60.53	17	77.27	40	66.67
	Disciplining	27	71.05	18	81.82	45	75.00
	Social development	24	63.16	21	95.45	45	75.00
	Control of Problem behaviour	19	50.00	17	77.27	36	60.00
3	Inclusive education						
	Yes	07	18.42	02	09.09	09	15.00
	No	26	68.42	19	86.36	45	75.00
	Don't know	05	13.16	01	45.45	06	10.00
4	Special schools are needed for development of						
	Personal	28	73.68	20	90.91	48	80.00
	Social	28	73.68	19	86.36	47	78.33
	Educational	27	71.05	19	86.36	46	76.67
	Intellectual	11	28.95	20	90.91	31	51.67
	Sports	08	21.05	--	--	08	13.33
5	Training needed						
	Yes	28	73.68	15	68.18	43	71.67
	No	10	26.32	07	31.82	17	28.33

**Table 26. Opinion of mothers regarding child with disability**

Sl. No.	Characteristic	School 1		School 2		Total	
		F	%	F	%	F	%
1	Other's reaction						
	Loving	11	28.95	13	59.09	24	40.00
	Avoid	06	15.79	10	45.45	16	26.67
	Sympathetic	22	57.89	17	77.27	39	65.00
	Embarrassment	01	02.63	--	--	01	01.67
	Affectionate	12	31.58	07	31.82	19	31.67
	Abusive	--	--	01	04.54	01	01.67
2	The mother feels loss of support from others						
	Yes	10	26.32	03	13.64	13	21.67
	Inlaws	--	--	--	--	--	--
	Family	--	--	--	--	--	--
	Friend and relatives	--	--	--	--	--	--
	Neighbors & others	--	--	--	--	--	--
	No	28	73.68	19	86.36	47	78.33
3	Mother feels restricted to attend social function						
	Yes	19	50.00	10	45.45	29	48.33
	No.	19	50.00	12	54.55	31	51.67
4	Mother have negative feelings	--	--	--	--	--	--
	Yes	11	28.95	16	72.73	27	45.00
	No	27	71.05	06	27.27	33	55.00
5	Mother has positive feelings						
	More patience	21	55.26	20	90.91	41	68.33
	More empathy	--	--	06	27.27	06	10.00
	More support	17	44.74	11	50.00	28	46.67
	More strength	05	13.16	06	27.27	11	18.33
	God chosen	15	39.47	--	--	15	25.00
6	Mother has problems in managing the child						
	Yes	18	47.37	07	31.82	25	41.67
	No	03	07.89	01	04.54	04	06.67
	Sometimes	17	44.74	14	63.64	31	51.66
7	Marriage for mentally challenged is good						
	Yes	00	00.00	05	22.73	05	08.33
	Not good	20	52.63	10	45.45	30	50.00
	No idea	18	47.37	07	31.82	25	41.67

Nearly 45-50 percent mothers from both the schools felt restricted to attend social functions due to stigma and 28.95 percent from school 1 and 72.73 percent from school 2 had negative feelings and school 1 had higher per cent of parent with positive feeling while only 27.27 from school 2 had positive feeling like more patience (55.26 % and 90.91 %) from school 1 and 2 respectively expressed more support (44.74 % and 50.00 %) from school 1 and 2, and parents who felt they developed more strength were 13.16 percent and 27.27 percent from school 1 and 2 and 39.47 per cent stated that God had chosen them to take care of the challenged child.

About 47.37 percent and 31.82 percent had problem in managing the child (school 1 and 2 respectively) and 44.74 percent and 63.64 percent had problem some times. While the remaining 7.89 percent and 4.54 percent did not have problem in managing their child (School 1 and 2 respectively).

Regarding marriage the mothers did not prefer to get their child married. Only 22.73 percent of mothers from school 2 wanted to get their children married when the child grew to maturity and 50 per cent felt it was not good for the challenged children to get married.

#### 4.3.4 Parents conceptions regarding behaviour problem

Table 27 shows the conception of parents towards behaviour problems of mentally challenged children.

The mothers reported that Behaviour problem, ill temper, or bad behavior are all a question of parents fate. More mothers of school 2 (81.82 %). While from school 1 the mothers were lesser in number (45.26%).

The mother's concept was that it is quite natural for children to misbehave (92.11 percent from school 1 and 100 percent of mothers from school 2)

Children outgrow their behaviour problem as they grow older was expressed by 76.32 percent and 86.3 percent of school 1 and 2 respectively.

The root cause of all behaviour problems in children was the faulty or deficient parenting skills which almost 50 percent of parents agreed from school 1 and 90.91 percent agreed from school 2.

The developmental disability in the child may itself be a cause of behaviour problem was understood by 84.21 percent and 95.45 percent of mothers from school 1 and 2 respectively.

### 4.4 Development of the Educational intervention package

The process of developing the educational package was started first by surveying the mentally challenged schools in Hubli-Dharwad. After the survey of the schools two schools were selected on the basis of popularity of the schools. The educable and trainable mentally retarded children (thirty males and thirty females) were selected and tested for the emotional problems by interviewing the teachers. After finding out the emotional and problem behaviours in the selected children the techniques of management of the problems by the schools were listed and an educational package was developed for parents and care-givers. From the pre-test it was found that parents did not have much knowledge regarding problem behavior and its management at home. Hence the educational package includes information on need for early intervention, definition of behaviour and how the children acquire behaviour classification of behaviours of children like skill behaviours and their importance in life and problem behaviours and its effect on development. A brief knowledge on the causes and types of problem behaviour in mentally challenged children was also given. The last part of the package consisted of a simple analysis of identifying a problem behaviour from a normal behaviour. Behaviour modification and simple techniques of management of problem behaviours which can be used by parents were also listed. This package was given to parents of mentally challenged children and from the post test of the efficacy proforma the scores were calculated and analyzed and it was found that this educational intervention revealed highly significant results in the post test. Hence the package is effective in educating the parents.

**Table 27. Parents perceptions regarding behaviour problem**

Sl. No.	Characteristic		School 1		School 2	
			Agree	Disagree	Agree	Disagree
1	Behaviour problem in children and illtempered or badly behaved are all a question of parents fate	F %	18 (47.37)	20 (52.63)	18 (81.82)	04 (18.18)
2	It is quite natural for children to misbehave	F %	35 (923.11)	03 (07.89)	22 (100.00)	00 (0.00)
3	Children outgrow their behaviour problem as they grow older	F %	29 (76.32)	09 (23.68)	19 (86.36)	03 (13.64)
4	The root cause of all behaviour problems in children lie in faulty or deficient parenting skills	F %	19 (50.00)	19 (50.00)	20 (90.91)	02 (09.09)
5	The developmental disability in a child may itself be a cause of behaviour problem	F %	32 (84.21)	06 (15.79)	21 (95.45)	01 (04.55)

**Table 28. Paired 't' test for testing the efficacy of Educational package**

	Mean	Mean difference	Standard deviation	't' value
Pretest	07.76	03.17	05.92	6.096***
Post test	10.89			

\*\* Significant at 0.001 level

#### 4.5 Testing Efficacy of the Developed Educational package for enhancing parental knowledge regarding care education of mentally challenged

The mean score of educational intervention of mothers in pre-test was 7.76 and at post test it was 10.89 an increase / difference between pretest and post test was 3.17 with a standard deviation of 5.92. The paired 't' test analysis also showed highly significant difference (Table 28).

## 5. DISCUSSION

The results of analysis of “Emotional behaviour of Mentally Challenged Children attending Special Schools and Parental Educational Intervention for Enhancing Knowledge on Behavioural Management” of children is discussed under the following headings.

- 5.1 Status of special education offered for Mentally challenged in Hubli - Dharwad cities
- 5.2 Emotional behaviour of Mentally challenged Children attending special schools
- 5.3. Parental knowledge about Intellectual disability and behavioural management of mentally challenged children
- 5.4 Development of Educational package on care and behaviour management of mentally challenged children for parents
- 5.5 Impact of educational intervention on mothers knowledge regarding problem behaviour and management of emotional/behavioural problems.

### 5.1 Status of special education offered for Mentally challenged in Hubli - Dharwad cities

There were eight Special schools for Mentally challenged children in Hubli - Dharwad. A total of 380 mentally retarded children attended the special schools. For these students a more targeted, individualized intervention addressing their emotional and problem behaviour is required. Compared with peers without disabilities children with disabilities placed in regular preschools tend to be more socially rejected by peers, display more social isolation, place more demands on teacher's time, are less attentive and are more often recipient of negative behaviours than normally developing children. This bias is reduced in special schools as children go to special school. As children of similar developmental level they develop relationship with their friends. Friends become increasingly important providers of multifaceted social support as children grow. Mentally retarded children benefit more from schools for independent living and the learning is at a than normal children. They are less capable of mastering abstract and complex concepts.

By early intervention abusive violence, for example, can be reduced when youthful mothers are provided with one-on-one child development information about development of infants and toddlers in a supportive and respectful manner (Carey, 1997). Children with poor social and behavioural skills can be identified as early as 3 year of age, and the earlier these children and families receive intervention, the more successful these efforts can be (Walker *et al.*, 1995). So it is important for schools to report to parents, monitor and address the precursor behaviours and problems that may lead to violence. This is supported by Safran and Oswald (2003) who reported that the violence prevention curriculum, the social skills lessons and incentives help in reducing problem behaviour and they also report the importance of teaching positive behaviour supports which help to lesser the negative aspects in the child.

The emotional behaviours of mentally challenged children to a very great degree affect their social lives, and also healthy development. Research also suggests that children who have difficulty regulating emotions and therefore experience high levels of negative emotional arousal may have trouble concentrating in class and recalling things they have learned (Raver *et al.*, 2007). There is a great deal of evidence that poor academic achievement co-occurs with disruptive and aggressive behaviours (Masten *et al.*, 1995) and is a predictor of future maladaptive behaviours (Williams *et al.*, 1994). Personal social networks include those people surrounding the child with whom the child exchanges affection or material things (Cochran and Brassard, 1979). These are his siblings, neighbours, peers, relatives and teachers and care takers who affect his later behaviour and development. Social networks have important roles in social adaptation, mental health and development, (Fischer 1982). Hence, it is important how well the emotions are managed by the personnel who provide care and education to children so that they will have acceptable behaviour.

Therefore, the child's progress in social life is facilitated in a school setting. Schools can provide Primary Prevention, Early Intervention and Targeted Intervention for tapping the child's potential. Research suggests that approximately 1-7 per cent of students in schools have chronic problems with disruptive, destructive, or violent behaviours and will account for between 40 per cent and 50 per cent of the major behavioural disruptions at school (Colvin *et al.* 1993).

The schools offering special education for mentally challenged children which were observed on the basis of space and facilities provided, Therapies offered, the qualified staff, management of problem behaviour and behaviour modification techniques practiced by the teachers is discussed under the following sub headings .

5.1.1. Space and facilities provided by schools

5.1.2. Staff and their qualification

5.1.3. Therapies

5.1.4. Management of problem behaviour

5.1.5. Behaviour modification techniques preferred by schools

#### 5.1.1: Space and facilities provided by schools

Out of eight schools offering special education programme for mentally challenged, five schools had sufficient space for children's activities. Three schools had very limited space. However two schools had some outdoor space for conducting out door activities.

Space is an important factor in providing a conducive environment to conduct activities for physical and motor development. Therapies like Physiotherapy, Hydrotherapy with swimming activities, Hippotherapy with horse riding require adequate outdoor space. Space is required to store and use the equipment and materials familiar activities.

All schools had sufficient light, except one school. All the schools except two had enough educational, Indoor, outdoor, play and recreation equipment and materials (Table 2). Medical checkups, referral, and assessments were done regularly by all schools except one school. Mode of interaction with parents like Parent Teacher Association, meeting with Individual parents, counseling, cultural and sports were attempted by all the schools.

So the facilities and programs offered by the special schools for education of mentally retarded was highly satisfactory in case of two schools, satisfactory in case of four schools and less satisfactory in case of two schools. Hence government and public should provide support financially to the schools in upgrading the programmes for mental retarded.

#### 5.1.2 Staff and their qualification

Results revealed that all the schools except two schools had trained and qualified teachers for offering special education program. The staff student ratio was better than recommended practice in all the schools. In one school the ratio of teachers and students was 8:104 that is 1:13 while in rest of the five schools it was 1:10 (8:87, 5:44, 3:30, 5:48, 9:45). other two schools had still lower ratio of 1:6 and 1:1( 5:4, and 3:18) So in all the eight schools it was satisfactory. Francis *et al.* (1982) stated that infants and toddlers are more likely to imitate adult gestures and speech – a critical mechanism for learning when there are fewer children per adult so it implies the importance of pupil teacher ratio to be low which is supported by Gupta (1996).

Qualification, with knowledge in child growth and development and strategies for effective teaching and facilitating stimulation for optimum development of young children is essential. In the present study the schools had 74 percent of qualified and trained teachers. In addition to this qualification, training in handling special needs of children and special education skills is required. Basic information, understanding, knowledge, skill and appreciation can only be secured through education and training. The teacher has to possess the skills of educating and managing an exceptional child. If the teacher is knowledgeable and has the right and professional aptitude, she can be effective (Mohanty and Mohanty, 2002). Ramsey *et al.* (1991) suggested the importance of teacher qualification, Bridget *et al.* (2005) stated the importance of teacher's role for at risk children. Also Govinda

and Verghese (1993) stated the importance of teacher quality education and qualification in special education which is required for teaching special children. Hence school staff strength and qualification add to the quality of special education and is needed for the development of positive behaviour in children.

### 5.1.3 Therapies provided for mentally challenged children by schools

Results revealed that only one school had employed different and many therapies like physiotherapy, occupational therapy, speech and language, sensory integration, Hydrotherapy, Yoga, Dance, Music, Image, Pyramid, Sign language, Oral motor, Colour, light and play therapies. One school, referred to local therapist and another school employed paintings with a purpose of providing an expression of pent up emotions and also music. One school catered to children from very low socio- economic status but did not provide any therapy .

All the schools except one employed behaviour modification, counseling, play therapy, and occupational therapy. Therapies are necessary for reducing the effects of the disabilities of the Mentally challenged children. Gupta *et al.* (2007) suggested the effect of yoga therapy on persons with mental retardation. They state that if properly practiced it helps to co-ordinate the activities of the mind and body of the mentally challenged person. It also helps to reduce distracted state of mind and helps in concentration.

Dave *et al.* (1993) suggested 16 A (Mentat) a complex herbal preparation prepared as per knowledge of Ayurvedic science that contained ingredients like Ashwagandha, Malkaguni, Mandookaparni, Shenkh Pushpi and Jalbrahmi which are of known value in management of nervous disorders. Similarly Mehta (1991) revealed that the compound mentat used in the trial that contained reputed indigenous components which was given in syrup form thrice a day showed that out of 62 children, 27 had improvement, 11 had mild improvement and 24 had no improvement Four children started attending normal school. Remarkable improvement in the above stated disorders was found after treatment of one year. Improvement was seen in emotional disturbances (92.5%) personal habits (84.6%) enuresis (100%), epileptic fits (90%), speech defects (91%) non-cooperation (80%), unfriendly attitude (75%), aggressiveness (69%) learning ability (66%) and general progress (64%).

Baker (2003) suggests that in planning and providing a therapeutic horse riding program for a person with MR "it is ability, not disability that counts". The riding center is a wonderful opportunity for persons with MR to learn, grow and become more fully members of their community.

Chanswc (2007) suggested multisensory therapy (MST) which aims to induce sensory stimulation, leisure, enjoyment, relaxation in people with learning difficulties and enable more positive behaviours. The nurses in the study perceived positive changes in subjects behaviour and emotions after the therapy, such as mentally more stable, being happier, more active and had better social interaction. Those exposed to MST explored the environment with others, learnt to relate to each other and improved social skills during the intervention. Many informants agreed that the MST provided sensory stimulation to clients. The room contained several different types of sensory-stimulating equipment, such as lamps and bubble tubes that seemed to improve their sense of well being and positive emotions. On touching the equipment, lights and colours changed, inducing a sense of more control over the environment which also promoted positive emotions. The dim lights and soft music helped subjects relax and be happier and less anxious.

Naderi *et al.* (2010) revealed that play therapy decreased ADHD and Anxiety but increased social maturity. The results authenticated that play therapy as an effective therapeutic procedure and a conceivable intervention for children experiencing a broad range of problems such as ADHD and anxiety involving no significant risk. Play can be used as a medium to help therapist interact with children and help them express their feelings and emotions. Play therapy is widely used as an intervention for children's emotional and behavioral problems. Children communicate and express their inner conflicts and feelings through play (Landreth, 2002).

Children release emotions through action, problems, learn about themselves and gain clarity regarding their lives, feelings and abilities. Play therapy interventions were found to be effective in increasing children's self-concepts, improving anxiety symptoms, improving social skills and decreasing clinical behavioral problems (Bratton and Rayi, 2000). Brandt (2001) revealed that seven to ten sessions of play therapy help children to improve their internalizing behaviour problems such as withdrawal, somatic complaints, anxiety and depression. Additionally play helps to reduce externalizing behaviour problems such as aggression, delinquent behaviours and parenting stress.

Rashkin (2005) found play therapy to be an effective therapeutic approach for a variety of children's difficulties including adjusting to family changes such as separation, making friends, excessive anger, fear, sadness, worry and shyness, aggression and school difficulties.

#### 5.1.4 Management of problem behaviour

The core task for a service provider or a manager for people with intellectual disability is to provide support in living and work, daily activities to the clients in order that their quality of life is optimized. By providing more active and more elaborate daily programs, opportunity is given to personal development and self determination. In this approach emphasis is on the competences of the person so that they can have perspective and a rational purpose in life (Hemmings, 2007).

The results of the present study revealed that the schools differed regarding the management of emotional problem behaviour except for a few techniques which were common to all the schools like dealing with love and affection and aggression by physical restraint. Each school had their own way of controlling emotional problem behaviour. Two schools used several therapies along with the techniques in management of problem behaviours. These were physiotherapy, occupational therapy, speech and language, sensory integration, yoga, dance, music, oral motor, colour and light. Behavior modification, play therapy, counseling and vocational training was also employed. This is supported by Chandler *et al.* (1999) who reported that functional assessment uses interventions to prevent and remediate challenging behaviour and facilitates the development of appropriate behaviour.

#### 5.1.5 Behaviour Modification techniques preferred by schools

Results revealed that most of the schools tackled the problem behaviour by diverting the child's attention by love and tender care, Time out, changing the environment in favour of the child and threatening the child. Time out is found to be effective in behaviour modification (Virginia *et al.*, 1995). Two schools used Ignoring the behaviour, comparison to well behaved children, physical abuse or hitting the child, punishing the child by not allowing him to play his favorite game and not allowing to eat his favorite food and not rewarding the child. All these techniques are not recommended for use neither for normal or for children with low intelligence. Instead of physically abuse physical restraint is better.

Behavior modification techniques like yielding to the demands of the child, ignoring the problem behavior, waiting for the child to mend his ways, were not used by many of the schools. Hence it can be stated that most of the schools were managing the children's problems effectively. However teachers of two schools need training for effective management. Teachers should attend periodic workshops, training schools should arrange for these trainings.

### 5.2.A. Emotional Behaviour of mentally challenged children attending special schools

Research indicates that the mentally retarded children have greater risk of developing psychiatric disorders as compared to children with normal Intelligence (Aman *et al.* 2004). Temperament traits are also responsible for certain disorders. Certain neuro-physiological mechanisms have been considered to be responsible for this vulnerability. Besides cognitive deficits, associated abnormal behaviour especially restlessness, hyperactivity, distractibility, aggressiveness and destructive nature are the major complicating factors as observed by Dave *et al.* (1993). These interfere with educational and training activities of mentally retarded individuals.

Forness (2003) emphasised an early detection and prevention of disorders, and acknowledging the early trajectories that children establish as they begin to evidence Emotional Behaviour Disorder. He suggested that special educators begin to use the science from developmental psychopathology such as information on childhood factors that place children at risk for Emotional Behaviour Disorder in screening and intervention planning.

The study of risk factors is part of a relatively new discipline of developmental psychopathology that "represents a movement toward comprehending the causes and determinants, course and treatment of childhood disorders" (Cicchetti and Toth, 1995). Risk factors are those variables that when present in a child, increase the likelihood that the child will subsequently evidence Emotional Behaviour Disorder. A risk factor approach is based on the belief that significant exposure to key risk factors is associated with negative, long-term life outcomes (Patterson *et al.*, 1992). Empirical evidence suggests that this process likely operates in the following manner: (a) Children and youth are exposed to a host of risk factors over time (e.g., family problems, child neglect/abuse); (b) risk factors are associated with the development of maladaptive behaviours (e.g., restlessness, overactivity, aggression); (c) short term outcomes include truancy, peer and teacher rejection, low academic achievement, and school discipline, contacts and referrals; and (d) these short-term outcomes, in turn, are predictive of much more serious, long-term outcomes (e.g., Emotional and behaviour disorders, school failure, and dropout; Cicchetti and Nurcombe, 1993). Certain physiological and medical factors experienced early in life such as premature birth, low birth weight, and slow neurological development, place children at risk for Emotional and behaviour disorders (Mc-Cormick, Mc Carton, Brooks-Gunn *et al.*, 1998). Children who demonstrate difficult temperament such as impulsiveness, distractibility, irritability, inflexibility, and attention deficit problems are also likely to evidence problem behavior (Brier, 1995). Also, as one would predict children who as infants and toddlers evidence externalizing problem behavior such as aggression, destructiveness, and conduct problems have a high probability of demonstrating problem behavior in school (Gresham *et al.*, 2000). Family factors such as parental mental health and substance abuse histories, marital discord, child maltreatment, and parenting styles are strong predictors of later problem behavior in school (Eckenrode *et al.*, 1995). None of these risk factors alone is likely to lead to the onset of problem behavior; more than likely it is the presence of several of these variables working together that leads to the development and maintenance of problem behavior. Further, it is likely that there are reciprocal interactions between and among risk factors. For example, a child who has a difficult temperament may not evidence problem behavior if they have parents who have outstanding management skills and are not impacted by family stressors (e.g., changes in family composition, maternal depression); whereas, such a child may evidence problem behavior if they have parents who lack parent management skills and are impacted by family stressors. This is true even among mentally retarded. This is supported by Vineeta and Khadi (2010) also regarded that parental involvement in mentally retarded children's up bringing was low so the attainment in social and personal skills was low.

In the present study most of the children had problem behaviour like pushing others, Hitting, Banging objects, laughing to self, laughing inappropriately, refusing to obey commands, excessive Nodding head, taking long time to complete a task, smelling objects, wandering outside class, and fear of objects, animals, places and persons. Boys had more problem behaviour than girls. Similarly Ritter (1989) found that problematic conduct was seen more in boys than girls. Malhotra (1990) who studied the temperament profiles of MR and normal group indicated that children with mental retardation were found with negative mood distractibility, withdrawing and poorly adaptable.

Schools can prevent violence as well as the less serious behaviours that can lead to violence by addressing early the behaviour problems children present and by providing a supportive foundation. The percentage of mental retarded children with different emotional and behaviour problems were thought disorder (11.20), verbal aggression (2.16), physical aggression (5.03), Non-compliance (6.63), Hyperactivity (8.06), Distractibility (7.55), Anxiety (5.61), somatic concerns (4.41), withdrawal (6.06), depression (11.25) and low self esteem (7.35). The other problem behaviours were violent and destructive behaviour, temper tantrums, misbehaviour, self injurious behaviour, Repetive behaviour, odd behaviour, Hyperactivity, Rebellious behaviour, Antisocial behaviour, and Fears. The emotional problem behaviour were significantly correlated with each other.

Challenging behaviour can however occur across the intellectual spectrum and can occur in the absence of a psychiatric disorders and not all people with mental retardation exhibit challenging behaviour.

It was found that mentally retarded children had highest mean scores on depression followed by thought disorder hyperactivity, distractibility, low self-esteem, non-compliance, withdrawal symptoms, anxiety, physical aggression, somatic concerns and verbal aggression.

Overall children with mental retardation were found temperamentally to be withdrawing, and depressive, poorly adaptable with predominantly negative mood and low distractibility (Table 8). This result is similar to Malhotra's (1990) findings.

### 5.2.1. Comparison of emotional/ behaviour problems by Gender

Significant difference between gender and emotional problems of mentally retarded children was observed, Girls were higher on Internalizing problems and lower on externalizing problems than the boys. Girls did not show or act outwardly. They had more of inward way of expressing problems, whereas Boys showed their anger and aggressive behaviour in external way. Gender differences were also found by Abramowic *et al.* (1975) Researches have stated gender differences were attributed to differences in rates of maturation (Ounsted and Taylor). Heath *et al.* (2000) who compared girls and boys with and without learning disabilities reported that girls with Learning Disability were with higher levels of depressive symptoms and higher prevalence of depression than girls without Learning Disability, whereas there was no difference in mean levels of depression in boys. Liederman *et al.* (2005) reviewed studies and reported that male prevalence of reading difficulties is not a myth but reliable phenomenon. Ritter (1989) found that problematic conduct was seen more in boys than girls. Xeniditis (2001) also reported that the prevalence of challenging behaviour was more with males than females.

### 5.2.2 Comparison between educable mentally retarded and trainable mentally retarded on emotional problem behaviour

The results revealed that the Educable mentally retarded were lower on both internalizing and externalizing problem behaviour when compared to Trainable Mentally retarded children. This shows that children with lower intelligence had higher emotional problems. Xeniditis (2001) found prevalence of challenging behaviours such as aggression and self injurious behaviour greater in people with more severe learning disability. Results are on par with the findings of Bevington *et al.* (1999) who reported the association between poor academic achievement and behavioural problems on classroom performance in children with identified learning difficulties. Maag *et al.* (2006) found that students with learning disabilities obtained statistically higher scores on measures of depression than their peers without learning disabilities.

Delello (1998) investigated classroom dynamics and young children identified as at risk for the development of serious emotional disturbance as compared to 'not at risk' peers. Results indicated that these children were experiencing a significantly different reality in the classroom than 'not at risk' peers. Adams (1999) observed a significant relationship between behavioural problems and academic attainment in a large UK primary school. Pro-social behaviour was positively correlated with reading and arithmetic whereas hyperactivity and conduct problems were negatively correlated.

Shanti (1999) found that children had higher rate of externalizing internalizing, learning and miscellaneous problems. Merrell (2001) observed that those who were exceptionally inattentive, hyperactive, or impulsive in the classroom were lower in reading and mathematics skills. Similarly Nelson (2004) revealed that students with Emotional and Behavior disorders were more likely to be characterized by significant externalizing behaviours as rated by teachers. Plauche *et al.* (2006) also observed that the prevalence of behavioral problems increased as cognitive skills decreased.

### 5.2.3 Comparison of emotionally behaviour problem by age.

The results revealed that the relation between age and emotional problem scores was positively correlated where in with increase in age, the problem scores also increased.

The problems were more in 10-15 years age group than among 6-10 years and was found significant for total behaviour problems. This may be because in adolescent stage (10-15 years) due to glandular changes the adolescent might be affected and may therefore experience different emotions which lead to problem behaviours. Nachsen *et al.* (2005) found that behaviour problems begin to develop in children with intellectual disability as young as two years, remain stable across time and develop again in adolescents. Xeniditis (2001) also reported that the overall prevalence of emotional problems increased with age during childhood and reached a peak during the age range of 10 to 20 years thereafter declined.

#### 5.2.4 Comparison of emotional behaviour problems by Ordinal position

Later born mentally retarded children had higher total mean emotional scores when compared to first born and second born. The second born had higher Internalizing score and later born were having higher externalizing score. The differences were highly significant. This may be because the first borns receive more attention and care compared to later borns. Being youngest children may also be more pampered by parents and others. These siblings also develop low self-concept which makes them to commit problem behaviours (Atkin, 1991).

#### 5.2.5 Influence of Family size on emotional/behaviour problems

The mentally retarded children residing in small (1 – 4 members) and medium family size (5 – 8 members) had higher total mean emotional problem behaviour score when compared to larger size or joint (above 9 members) family. The internalizing and externalizing score was also higher among nuclear when compared to large family size. The differences were highly significant. This trend may be because of less parental/adult care and attention and so poor management of behaviour problems.

#### 5.2.6. Influence of SES on emotional behaviour of the child

The present study revealed that socioeconomic status and Emotional problem score of the children was significantly but negatively related, indicating that as socio economic status increased the emotional problem score decreased. Similarly Shenoy (1992) and Razio (1991) revealed that a majority of children were found to have specific learning disabilities coming from lower and middle socio economic status. Brander (2004) reported that low socio economic status was found to impact children's learning and development. Socially, physically, and mentally these homes had the tendency to be lacking in positive developmental factors. These factors had the potential to influence children in a variety of negative ways including lower IQ scores, increase in behaviour problems, lower speech and language ability and problems with academics. Schofield *et al.* (2011) reported that SES influences human development and also individual characteristics affect SES and dimensions of human development indicative of healthy functioning across multiple generations.

#### 5.2.7. Influence of Education of mother on emotional problem of child

The present study revealed that education of the mother was negatively related to Emotional problem score of the child. The higher the education of mothers lower was the emotional problem score among children. NCERT (1978) has also indicated that parents education was related to the child's development. Parents play a very important role in minimizing the incongruence between home and school. Clarke *et al.* (1984) reported that children score better on tests of cognitive and social competence when their caregivers have higher levels of child related training and formal education. Kochnek *et al.* (1990) found that parental traits and (maternal education) were more accurate predictors of adolescent status from birth to three years

#### 5.2.8 Influence of Child's age at admission to school on emotional problem of child

The mentally retarded children who were admitted to school when they were below 6 years were having significantly higher total mean emotional scores, Internalizing scores and externalizing scores when compared to mentally retarded children who were admitted to school at or above 6 years. This may be because as Nachsen *et al.* (2005) have observed that behaviour problems begin to develop in children with Intellectual disability as young as two years.

These children being developmentally delayed are quite young to adjust to school while older children seem to adjust better. Therefore, emotional problems were seen during the age 2 – 6 years, remain stable during 6 – 10 years and again develop more during 10 – 15 years (Xenditis, 2001).

Learning to interact positively with one's peers is an important skill that children usually acquire during the preschool years. For young children with disabilities development of peer social interaction skills is often delayed. Hence schools provide good socialization opportunities to children. Teachers provide instruction/training directly to children on skills that they may use in social interactions with peers. Schools also focus on behavioral interventions for treating children's mild to severe behaviour problems (Odom, 1993). The success of students with special needs in general education classrooms is related to the extent that teachers are willing to provide the necessary accommodations like timely attending to the child, and providing learning and teaching materials and coaching and controlling the activities of the child. Student-teacher and peer interactions influence student school outcomes (Delello, 1998).

### 5.2.B. Impact of emotional/problem behaviour of mentally challenged on parents and family members

In the present study about 42 per cent mothers reported that they experienced stress in handling the challenged child. Stress is defined as any physical or emotional demand that one feels unable to handle. Giving birth to a mentally challenged or other disabled child is an unexpected stressful event which affects the whole family. Parents go through intense emotional and psychological stress and they have fewer resources of emotional gratification. They face uncommon emotional stress and as a result frequently experience fear, confusion, stigma and isolation (Peterson and Mathieson, 2000).

Parents reactions were characterized by both love and rejection towards their mentally challenged child. The impact of mentally challenged child on their own lives was negative. Scott *et al.* (1997) stated that the presence of a disabled child in the family resulted in negative influence on the life pattern of all the members.

Dhillon and Babu (2008) reported that the stress scores for the parents who had young children was found to be highest when compared to parents who had adult children. Upadhyay and Singh (2009) found that the level of psychological problems faced by parents of mentally retarded increased with the level of mental retardation of the child. The higher the degree of retardation the higher was the stress of parents especially for the mothers.

Cameron *et al.* (1991) state that parents of normal children report less parenting stress when compared to parents of disabled children. Dumas *et al.* (1991) who studied parents of children with behaviour disorder, autism, Down Syndrome and normally developing childrens observed significant differences in parenting stress among mothers which suggests type of developmental disability may affect parents perception of stress. Firat *et al.* (2002) found that depression rate was 72.5 per cent in mothers of autistic children whereas it was 44.70 per cent in mothers of mentally retarded children which shows that parents differ in psychological stress depending on the disability of their child. Baker *et al.* (2003) found that parenting stress was higher in delayed group and was related to the extent of behaviour problems than the child's developmental delays. Osborne and Reed (2009) who examined the interaction between parenting stress and behavioral problems when children were as young 2-4 years found that autistic spectrum disorders related most strongly to parenting stress and was strong predictor of child behaviour problems later on.

Recent studies have indicated that stress could be overcome by attribution of responsibility and readiness to utilize social support and also by mothers positive belief system (Frey *et al.* 1989).

### 5.3 Parental knowledge about Intellectual disability and behavioural management of mentally challenged children

Earlier research with parents of mentally challenged children indicates that the presence of a disabled child in the family influences the life pattern of all members (Sarimski, 1997, Scott *et al.*, 1997, Orsmond and Seltzor, 2000) and mothers are usually more concerned with the personal consequences of parenting and with interpersonal and familial issues involved (Roach *et al.* 1999, Gosch, 2001). The reasons for this differential impact may be women are generally greater involved with family. Mamta and Punia (2003) found that parents of mentally retarded children had high and moderate knowledge on all aspects except facilities available for special children.

Maternal knowledge regarding disability enables in better care and management of the child. It was found that though most of the parents had awareness regarding mental retardation, they did not have enough knowledge regarding causes of problem behaviour and its management among mentally retarded children.

Basu *et al.* (2004) in their study found cognitive and affective responses of the mothers of mentally challenged children to the disability and their child. Results revealed that the mothers were aware of the scientific status of the disability in terms of its clinical status and prognosis. Kolb (2003) in a qualitative research where in he explored parental views about critical social skills for adolescents with high incidence disabilities reported that parents shared their beliefs that emotional intelligence and character play critical roles in the social and emotional development of their children. Findings indicated that parents wanted their children to develop interpersonal and intrapersonal skills which included skills such as communicating, listening, interpreting and also develop morals which includes areas of character, empathy and perseverance or motivation.

#### 5.3.1 Influence of socio economic status on parental knowledge Regarding disability/ special education

It was noticed that as socio economic status of the families increased, knowledge and awareness of the mother regarding intellectual disability also increased significantly .

Currier (2004) who found that parental knowledge of ADHD and opinions of commonly used treatments increased after a brief knowledge intervention in a low SES, minority population seeking initial services at a multidisciplinary behaviour clinic for ADHD among 48 female guardians.

### 5.4 Development of educational package on care and behaviour management of mentally challenged children

For any family a goal of paramount importance is creating a successful daily routine in which they feel competent as caregivers and their children are competent as learners.

Parents as primary care takers spend most of their time with the child and thus represent the greatest potential influence in the child's life (Shonkoff 1992). The importance of parent child interactions and many early intervention models rely heavily on parents as the primary providers of teaching and therapeutic experiences. (McCullum and Hemmeter 1997). It is assumed that parents of infants with disabilities often face special challenges in their care giving roles because of their child's temperament, developmental delays or difficulty in reacting to the child's cues (Dunst 1985). The parents depend upon schools for development and discipline of their children in order to shape their children's behaviour but their role is also important because they are the first teachers. Families draw benefits of intervention as it is clear from the study that in the pre-test parents were not aware of the causes of problem behaviour and management. Hence the need arose to develop an educational package for parents of MR children. Therefore the content of educational package covered the concepts and causes of emotional/behaviour problem and management techniques with pictorial presentation.

## 5.5 Impact of educational intervention on mothers knowledge regarding problem behaviour and management of emotional / behavioural problems

Any serious attempt to improve the behaviour of children needs to address the quality of parenting that children receive as well as the quality of their family relationships. There is substantial evidence linking parenting and family risk factors to the development of serious conduct problems in children. These include the lack of a warm, positive relationship with parents, insecure attachment, harsh, inflexible, rigid, or inconsistent discipline practices, inadequate supervision, and involvement with children, marital conflict and breakdown, and parental psychopathology particularly maternal depression and high levels of parenting stress. These factors increase the risk of children developing major behavioural and emotional problems, including conduct problems, substance misuse, antisocial behaviour and participation in delinquent activities (Coie, 1996, Patterson, 1982). Additionally for many children, there is increasing evidence of a link between internalizing disorders (such as anxiety and depression) and externalizing disorders (Han Weiss and Weisz, 2001) specifically when children develop conduct problems in association with internalizing disorders, their risk of developing significant depression and anxiety in adolescence and young adulthood is increased. Parents of children, with or who are at risk of developing emotional or behavioural problems are often less confident in their parenting role, find parenting to be stressful, demanding and depressing, and experience more conflict with relationship partners over parenting issues. (Sanders *et al.* 1999).

Similarly, Nachshen *et al.* (2005) also reported that parents of children with Intellectual disability experience higher incidence of socio-economic disadvantage, physical illness and mental effects including worry, tiredness and depression. The behavioural family intervention (BFI) highlights the importance of including parenting interventions in any comprehensive preventive intervention designed to reduce behavioural and emotional problems in children. Provision of brief behavioural counseling for child behavioural problems and increased access to early intervention for dysfunctional family interaction patterns could help prevent later more serious problems.

Hence, parent education and support in preventing and managing emotional and behavioural problem becomes vital, as parents also play a role to minimize risk through early and appropriate intervention .

Bhatia (2005) also observed that with family interventions or training of parents there was a significant increase in the outcome scores and clinical improvement in the total parental attitude score, orientation towards child rearing, knowledge towards intellectual disability and attitude towards management. This exemplifies the importance of parents role in the development of their children. Hence in the present study parents of mentally challenged children were educated with the help of educational package.

Mothers at pre-test had mean value of 7.76 and at post-test 10.89. The Educational Intervention through developed package on problem behaviour brought about an increase of three units from pre to post test and the results were highly significant indicating an increase in knowledge of mothers regarding disability and management of emotional behaviour. Hence, this shows that the intervention package had positive effects. The results of intervention by Kauffman (1999) has emphasized the need for preventive educational intervention for children/parents with emotional and behavioral disorders. Fox *et al.* (1991) reported the star parenting model for helping parents to deal effectively with behavioural difficulties which brought together child development knowledge, behavioural management principles, adult cognitive learning strategies and most common sense to produce a realistic and integrated approach to parent education. Parents responded very positively to star parenting and many experience success in applying the new strategies to specific problems they were encountering with their young children.

Thompson (1992) studied multiple effects of parent training program research that indicated that behavioural parent training was a very effective intervention with parents and their children with conduct problems Pre to Post test improvements in parent reported child behaviour problems, attitude towards their children and problem solving skills were found after the intervention.

Thus Behaviour modification programmes emphasize that parents and teachers are a valuable resource and by proper guidance and education they can be effective agents of behaviour change in children.

## 6. SUMMARY AND CONCLUSIONS

The present investigation on “Emotional behaviour of Mentally Challenged Children attending Special Schools: Parental Educational Intervention for Enhancing Knowledge on Behavioural Management” was undertaken during the year 2007-08 with the objectives to study the existing special education programmes for mentally challenged children in Dharwad-Hubli, to assess the parental awareness and knowledge of special education, to study the emotional behaviour of mentally challenged children, and to develop an educational package for parents and caregivers regarding behaviour management of problem behaviour of mentally challenged children and to test the efficacy of the package on knowledge gained by mothers regarding problem behaviour and its management.

The population of the study comprised of mentally challenged children attending special schools in Dharwad-Hubli of Karnataka state. Among 8 institutions two day schools were selected. Totally there were 148 children of which 60 children were selected based on IQ and who were educable or trainable seen from school records and having writing skills between the ages of 6 – 15 years. Out of 60 children there were 30 boys and 30 girls.

Information about emotional behaviour was collected with the help of Emotional problem scale by Prout and Strohmer (1995) and problem behaviours were studied by Basic-MR by Peshwaria *et al* (1992) by interviewing teachers and parents of the children.

The mentally challenged schools were evaluated using questionnaire developed by the investigator. Parents awareness regarding mental retardation was assessed by NIMH-GEM Questionnaire by Peshawaria *et al* (1994). To collect the additional information a proforma was prepared for parents and a schedule was used to collect, socio economic status and demographic profile in order to collect information from parents regarding the sample. The emotional problem of the sample selected (EMR and TMR children) was studied by scale of Prout and Strohmer (1985) and basic MR by Peshwaria and Venkatesan (1992.) An educational package was developed to educate the parents of mentally retarded children regarding problem behaviours and management. Also an educational intervention was conducted and by pre-test and post test by the efficacy questionnaire the knowledge gained by mothers was assessed.

The major findings of the study are as follows:

1. Status of special school for mentally challenged children in Hubli – Dharwad Municipal Corporation.
  - Five schools had enough space for childrens educational activities. Three schools had least facilities and space was also not sufficient to conduct the activities. Regarding facilities provided by schools only three schools provided good program with Indoor, outdoor, play and recreation equipment and materials, while the other three schools were satisfactory and remaining two schools had poor program.
  - Services such as medical check ups referral and assessment were done regularly by all the schools except one school.
  - Only one school provided different and many kinds of therapies needed for mentally challenged children, while the others had few therapies.
  - All the schools except two had trained and qualified teachers for offering special education program.
  - The techniques followed for controlling problem behaviour were appropriate and were managed mainly with love and affection. Aggressive behaviour was controlled mainly by scolding and physical restraint in all the schools.
  - About (74%) teachers were qualified and trained and almost all the schools had monthly meeting with parents of challenged children.
  - Most of the parents of mentally challenged children participated in school activities, When required and insisted by the schools.

2. The emotional problems in mentally challenged were noticed in the following order

Emotional problems

1. Depression
2. Thought disorder
3. Hyperactivity
4. Distractibility
5. Low self esteem
6. Non compliance
7. Withdrawal
8. Anxiety
9. Physical aggression
10. Somatic concern
11. Verbal aggression

3. Comparison of emotional problems of children by child's factors.

- ✓ Girls had higher score for Internalizing problems and boys had higher score on externalizing problems.
- ✓ Educable mentally retarded children (IQ 50-75) had lower emotional problem when compared to trainable (IQ 25-50)
- ✓ Children at age 6 – 10 years had lesser emotion problems, when compared to 10 – 15 years age group
- ✓ Higher the IQ of the child lesser were the emotional problems.

4. Problem Behaviour

Regarding problem behaviour 21 to 30 percent of EMR children showed problems like pushing others, banging objects, sucking thumb, not paying attention, not continuing a task for required time taking long time to continue a task, wandering outside class, fear of places and persons. About 31 to 40 percent showed fear of sharp objects and moving vehicles. The other behaviours were found in less than 21 percent of children.

5. Association of other factors with emotional problems.

- ❖ Children with early admission to school had higher emotional score than children attending late (> 6 years).
- ❖ Small (1-4 members) and medium family size (5 - 8 members) had challenged children with higher emotional mean score when compared to large or joint family (above 9 members).
- ❖ First borns had lower emotional problem than later borns.
- ❖ Higher the Socio-economics status lower was the emotional problem score of the children.

6. Parental characteristics and knowledge regarding special education

- Higher the SES higher was the awareness and knowledge of mothers regarding special education.
- Higher the education of mothers lower was the emotional problem score in the child.
- Correlation of emotional score of the child with age of the mother was not significant.
- Correlation of education of mother and SES was highly significant.
- Age of the mother and knowledge awareness regarding mental retardation was not significantly related.

## Implications and recommendations

It was found from the study that there are very few schools for mentally challenged children hence involvement by teachers, doctors, and NGO's are required to help the mentally challenged children and their parents. Counselling is very much necessary for parents of mentally retarded children.

Further for successful prevention of birth of mentally challenged children adolescents and mothers have to be educated regarding the causes of mentally challenged children. Because in the present study most of the children (70%) were born in private hospitals and most of the mothers (85%) had normal delivery and mothers (38%) had problems during pregnancy like worries, tension, and physical illness like high or low blood pressure and constant headache.

Since children in the present study were mostly from middle income families, Nuclear families, Upper caste, Consanguineous marriages, Graduate fathers, high school and PUC studied mothers, fathers with low paid Govt. Service and mothers who were housewives or unemployed, intervention programs should be conducted to this type of target group training programmes need to be conducted to educate these people and further provision of support services by the government and other institutions for helping these kind of families is necessary.

Majority of the parents (88%) were not having awareness regarding their child's disability, and believed that schools were very important for teaching their children in all developments. The parents (75%) reported that inclusive education would not help their mentally retarded children, and preferred special schools for their children.

Majority of the mothers (71%) wanted trainings to handle their challenged children and 41 percent had problem in managing their child, 65 percent of the people were sympathetic towards the mentally challenged children. However 78% the mothers did not feel loss of support from others like, in-laws, family, friends and relatives and neighbors.

More percentage of mothers (55%) had negative feelings regarding their MR child and reported that it was their fate in having a MR child. Almost all mothers considered that marriage was not good for the mentally retarded child. Hence parents of mentally retarded children require educational intervention, counseling from doctors, teachers, psychiatrists, psychologists, and professional counselors which would help them to develop positive attitude towards their mentally retarded child and build their strength and confidence and remove their guilt feelings.

Emotions are an important aspect of an individual. Sadness, happiness, anger, aggression, anxiety, fear, affect a mentally challenged child more than a normal child. The challenged child also has a right to live a good and happy life. Hence, our study stresses on the emotional problems, problem behaviours and management of the behaviours in a proper way so that the mentally retarded child well learn to his emotions by managing them to the best as possible in his own way so that he can become a self regularized individual to live as an adolescent and adult in the society.

Problem behaviours during childhood, adolescents and adulthood are stressful and harmful for both the mentally challenged children and the other people associated with the child. The results of the study revealed that 21 to 30 percent of the EMR and TMR children had problem behaviours like pushing others, banging objects, sucking thumb, not paying attention, and fear of places persons and sharp objects. So there is a need for interventions to reduce problem behaviours at an earlier stage itself.

Over the last two decades developmental science has made significant progress in understanding children's trajectories toward social-emotional and academic outcomes (Duncan *et al.*, 2007). At the same time there has been dramatic growth in the design, implementation and rigorous evaluation of school based interventions to promote positive social emotional development and academic achievement (Brown *et al.*, 2010).

Teachers also can create a rich learning environment and encourage mentally retarded students to participate in the school program and help the challenged child to develop his inherent potentials and positive behaviours. Current Canadian law has confirmed that school boards must accommodate the needs of children with developmental disabilities in

order to provide an appropriate educational environment. Parents are expected to participate in this process. They are encouraged to speak out for their child's needs, which can be an empowering experience. The degree to which the schools are family centered in their interactions with families is especially important. The relevant goals of family centered practices include the provision of emotional and educational supports to families, opportunities to participate in services and make decisions and the enhancement of family strengths and capabilities. Also parents being connected to informal services of support can 'buffer' the effects of a stressor. Hence higher levels of empowerment is needed to lower the parental stress of economic disadvantaged parents. Schools are important institutions where the child is oriented towards systematic learning. The schools should provide enough space, facilities needed for education, good program, trained and qualified teachers for good management of behaviours, and for the development of the children. Parents of children with emotional problems associated with academic and learning difficulties and disabilities require counseling. Conveying the important message and knowledge for parents of children with disabilities in proper management and coping strategies is effective means for both the child and families to overcome the problems through timely intervention and efforts. According to Education policy (2002) "Education for all" is the right of every child to be shaped to live a normal life and for sound and optimum around development of an individual.

Special education for children with mental retardation has grown rapidly in the last two decades. Specific individualized educational programmes are tailored for each of the children based on the current level of performance of the child. The progress is monitored periodically and fresh programmes are developed. Techniques have been evolved to quantify progress and precisely measure improvement or problems in the child. The recent development in special education has been the development of functional, age appropriate and community referenced goals and objectives for children with mental retardation. This would help a person with retardation to acquire those skills that are necessary for independent living in the community. In other words training should be given in skills that are necessary in school, home, vocational and community environment.

The child could be directly trained on a particular activity that he needs to perform more frequently. Another aspect of functional programming is the age appropriate skills should be taught to the child. For example an adolescent can be taught depending on his physical ability, interest and other details. Age appropriate skills such as gardening, packing or sorting may be taught. Zigler and Hodapp (1986) in their study found that through direct teaching, observation of others and the influence of television, retarded people like every one else learn that at certain ages one should engage in a repertoire of age appropriate behaviour. In addition to obvious age role behaviour, there should be a wide variety of tasks whose performance is enhanced through sheer repetition and learning.

From the study it was found that almost all the mentally retarded children had emotional problems. When children are feeling competent, when their minds, bodies and emotions are in the proper gear and they are functioning well – they are ready to learn. But they can drop out of this competent state at any time. Anxiety is a kind of early warning system that something is amiss, and if it continues it can give way to agitation, aggressive behaviour or even assaultive behaviour. The signs of anxiety are subtle and different in each child, when parents, siblings or teachers don't respond to their signs of anxiety or when communication is not effective children's behaviour may escalate to agitation. Their reactions grow bigger, they upset other children, and they seem to be losing control. This leads to problem behaviours in the child. Hence the first principle of teaching and limiting response is to be positive, tell the child what to do, don't use 'stop' 'dont' and no (except to keep a child safe in an emergency). Hence functional assessment is a wonderful tool to use with children with challenging behaviour, one way is to find out the events that take place right before the problem behaviour and seem to trigger it. The research literature mentions that demands, requests, difficult tasks, transitions, interruptions and being left alone are triggers for problem behaviour. Peers actions can be antecedents too like teasing, bullying, showing off, coming too close or being left out. Hence there is need for better supervision of children by teachers.

Setting events like the set-up of the room, the number of children in the group, the noise level, the type of activity and time of day can all act as setting events. So can the child's physical or emotional state like being hungry, tired or sick, or being forbidden to perform an activity. If the child gets attention from an adult or peer, or if the child escapes from

something, or if the child is not able to control himself and the problem behaviour helps to satisfy him the child might repeatedly perform the behaviour. Therefore parental involvement, monitoring and supervision by teachers and parents and maintaining earlier student ratio of 1:5 or 1:8 children, is necessary. Safran and Oswald (2003) and Stephanie *et al.* (2011) reported importance of positive supports like violence prevention curriculum, the social skills lessons, incentives which help in reducing problem behaviour.

Mental health can be impaired by psychiatric disorders as well as by problem behaviour. Therefore a state of complete physical, mental and social well-being and the ability to love and to work, psychological well-being and cognitive functioning in which the individual realizes his or her non-abilities to be able to cope with normal stresses of life and to work productively and fruitfully is very much necessary for all children.

So, despite the best efforts sometimes a child may go out of control. Hence in order to help the parents and care givers to build proper behaviour in their children and suitable emotional outlets, an educational package was prepared which would help guide the caretakers to understand what is problem behaviour and how best they would be able to handle the problem behaviour. Parents can help the child for appropriate way of controlling his behaviour to attain his/her maximum potential and become a economically independent than being a burden to the society. The findings of the study are useful contribution in the field of research and proper management of problem behaviour and education of challenged children, for parents as well as for teachers.

Our research work with help the policy makers, administrators and academicians whose new aim of 2011 is of creating awareness and capacity building among the persons with disabilities and their improvement. Badthe Kadam (2010) is an initiative of the National Trust (NT) which is a statutory body under the ministry of social justice and empowerment (Government of India) which is working with the objective of creating awareness and capacity building amongst. The persons with disabilities and the larger society in context of various facilities, laws, provisions for empowering persons with disabilities. The state policy recognized education for all children as a fundamental right including children with special needs and children with disabilities.

Hence our study focuses on the schools for mentally challenged in Hubli-Dharwad providing education to the challenged children.

The important areas where improvement in special schools of Hubli-Dharwad is necessary are:

Four schools are good but four other school need improvement in all areas on financial assistance, food, clothing for children of poor families, academics like proper teaching of self-care and personal hygiene, discipline and control of emotional behaviours and social development.

Another problem is the children are engaged in schools till they are role, but after they get out of the school they don't have facilities for empowerment and they are a burden to the family and they don't have good means of spending their life and time. Hence, involving them in some constructive work and rehabilitation is very much necessary.

Suggestions for further research

1. The impact of parental training programs for children with other special needs.
2. The effect of each type of therapy on the development of mentally challenged children.
3. Early Intervention and its effect on child's development.
4. Study of different types of empowerment suitable for educable mentally retarded youth.
5. Intervention studies to develop positive behaviours by operant conditioning of Mentally Retarded children.

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## APPENDIX - I

### Schools for Mentally Challenged in Hubli-Dharwad cities

Sl.. No.	Name of Schools	Place	Type of School
1	Usha's centre for exceptional children	Hubli	Day School
2	Manovikas for mentally challenged children	Hubli	Residential + day school
3	Mamta school for children with special needs	Dharwad	Day School
4	Anugraha Institute for special needs	Hubli	Day School
5	Stanier's school for mentally challenged	Dharwad	Day School
6	The NLE society's Rotary school for slow learners	Hubli	Day School
7	Disha Foundation	Dharwad	Residential
8	Parivarthan school for mentally challenged	Hubli	Day School



9. Trainings provided to the teachers

Name of the Teacher	Trained	Types of trainings received	Specialized in which subject

10. Does the school provide regular medical check-up of children and follow up and referral service where ever necessary if yes. List in detail the services provided

1. Medical

2. Referral

3. Diagnostic/Assessment

4. Any other

11. Facilities provided by the school

Educational	Play

Indoor equipment	Out door equipment

Recreational	Any other

12. Mode of Interaction with parents

- |   |        |
|---|--------|
| 1. PTA meeting conducted for parents          | Yes/No |
| 2. Meeting individual parents                 | Yes/No |
| 3. Having seminar and conferences for parents | Yes/No |
| 4. Participation of parents in school         | Yes/No |
| 5. Any other                                  |        |

13. Follow up of students sent to normal schools

Name of the student	Age	Reason for placement

14. How many of the children with special needs employed

Name	Aged	Type of employment

15. Problems encountered by the school with respect to behavior of children (Since last 2 years)

16. Therapies provided to the children

Sl. No.	Name of therapy	No. of children receiving therapy	Type of disability	Improvement After the therapy	
				Yes	No
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					

17. Duration of therapies

- 1.
- 2.
- 3.

18. No. of children with disabilities

Sl. No.	Disability	Girls	Boys
1.	EMR		
2.	TMR		

19. Methods used by the teacher and school for the management of problem behavior

Sl. No.	Enlist the problem behaviour	How it is managed
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		

20. Technique used by the teacher to manage the problem behavior (Tick the ones you use frequently)

1. Ignore the problem behavior
2. Yield to the demands of the child
3. Change environment in favour of the child
4. Wait for the child to mend his ways
5. Divert the child's attention to something else.
6. Coax, cajole, love or advise
7. Clueless about what to do
8. Compare the child to other children who behave well.
9. Laugh away the child's misbehavior as a joke.
10. Shout or scold the child
11. Threaten the child verbally
12. Curse the child
13. Reprimand the child
14. Physically abuse or hit the child
15. Physically restrain by catching hold of the child
16. Punish the child by not allowing him to play or feed
17. Use timeout by making him stand in one corner
18. Don't reward the child

## APPENDIX - III

### Baseline Information Regarding Mentally Retarded Children (Parents)

General Information

1. Name of the child :
2. Address :
3. Religion \_\_\_\_\_ Caste \_\_\_\_\_
4. Family composition

Sl. No	Name of member	Gender	Age	Relation to mother	Occupation	Education

Additional Information about your child

1. Where was your child born?
  - a. Government hospital
  - b. Private hospital
  - c. At home
  
2. Did you have normal delivery?
 

Yes/ No.
  
- If no what type of delivery you had
  - a. Forcep b. Caesarea n
  
3. During pregnancy did you suffer any physical problem?
  - a. Yes
  - b. No

If yes what (specify)

  - a. Worries/ Tension
  - b. Physical illness
  
4. Did you have an adequate diet and nutrition throughout pregnancy?
  - a. Yes
  - b. No.
  
5. What type of disability the child has
  - a. Mental retardation
  - b. Mental retardation and associated handicap
  
6. At what age of the child you came to know that your child has a mental disability
  - a. At birth
  - b. 6 months
  - c. 6-12 months
  - d. 1-3 years
  - e. 3-6 years
  - f. 6 and above
  
7. a. Do you suffer any health related problem?
  - a. Asthama
  - b. High Blood Pressure
  - c. Heart Problem
  - d. Any other

7. b. Do you experience often the following because of child rearing
- a. Sleeplessness
  - b. Constant headache
  - c. Repeated Stress

8. What problems do you have in taking care of your child?

Sl. No.	Particular	Daily	Occasionally	Rarely
1	Personal problems like a. Cleaning    b. Bathing c. Toileting   d. Eating e. Clothing    f. Dressing g. Walking    h. Sitting			
2	Behavioral management a. Disciplinary b. Managing problem behavior			
3	Medical a. Giving medicine b. Swallowing tablets c. Physiotherapy			
4	Academic/Schooling a. Reading b. Writing c. Language d. Making crafts			
5	Financial a. Fees to give to school b. Extra finance of medical c. Sending to school			
6	Any other a. b. c.			

9. How do you punish your child if he or she misbehave (Tick the ones you use)

Sl. No.	Particular	Destructive behavior	Aggressive behavior	Repitative behavior	Hyper activity	Antisocial behavior
1	Ignore the problem behavior					
2	Yield to the demands of the child					
3	Change environment in favour of the child					
4	Wait for the child to mend his ways					
5	Divert the childs attention to some thing else					
6	Coax, Cajole love or advice					
7	Clueless about what to do					
8	Comparing with well behaved children					
9	Shout/scold					
10	Threatening the child verbally					
11	Curse the child					
12	Reprimand the child					
13	Hit or beat the child					
14	Physically restrain by catching hold of the child					
15	Punish the child by not allowing him to play or eat					
16	Making the child stand in one corner					
17	Avoid rewarding the child					

10. Tick the Behavior problems which were present or are present in your child

Sl. No.	Behavior problem	Past	Present
1	Crying excessively		
2	Refusal to eat		
3	Stranger anxiety		
4	Separation anxiety		
5	Sibling rivalry		
6	Jealousy		
7	Bed wetting		
8	Excessive shyness		
9	Unhappiness		
10	Temper Tantrums		
11	Obstinacy		
12	Laziness		
13	Bullying and teasing		
14	Cheating		
15	Stealing		
16	Day dreaming		
17	Truancy		
18	Telling lie		
19	Vulgarity		
20	Destroying behavior		
21	Getting nervous		
22	Rebellion against parents, teachers		
23	Excessively moody and unhappy		
24	Excessive carelessness		
25	Objectionable behavior towards opposite sex		

11. At what age your child was sent to special school

12. What government facilities are availed for your child?

- a. Stipend
- b. Scholarship
- c. Financial
- d. Assistance/help
- e. Any other

13. How do you reward your child if he/she behaves properly?

- a. Praise the child
- b. Give sweets
- c. Pat him/ hug him
- d. Take him out
- e. Any other (Mention)

- 1.
- 2.
- 3.

## APPENDIX - IV

### Parental awareness regarding special education

1. Are you aware of persons with disability act? (PDA)
  - a. Yes
  - b. No.
2. Can you manage a child with problem behavior
  - a. Yes
  - b. No.
  - c. Sometimes
3. What measure do you suggest to ensure safety for your child to live in society.
4. Do you think marriage for the disable person will be good?
  - a. Yes
  - b. Not good
  - c. No idea
5. Do special school help in management of behavior of your disabled child
  - a. skill behavior
  - b. Disciplining
  - c. Social behavior
  - d. Problem behavior
6. Do you think children with disability can be educated along with normal children in the school. Yes / No. / Don't know
7. How do you think special schools are useful in the development of the child – explain
  - a. Personal
  - b. Social
  - c. Educational
  - d. Intellectual
  - e. Sports
8. Do you think you require training in order to handle a child with problem behavior? Yes/ No.
9. How the other normal children and parents react to the presence of a mentally disabled child in the family?
  - a. Loving
  - b. Avoid
  - c. Sympathetic
  - d. Embarrassing
  - e. Affectionate
  - f. Abusive

10. Are you experiencing any loss of support from your family members in the case of education of this child?

- a. Spouse
- b. Family
- c. Relatives
- d. In-laws
- e. Friends
- f. Neighbors
- g. any other (Specify)

11. Are you feeling restricted from attending social functions along with this child

- a. Yes
- b. No.

12. Do you get negative feelings such as grief/despair/guilt due to the birth of this child?

- a. Yes
- b. No.

What are these feelings elaborate

(Burden/Very expensive/ Useless/ grief/ despair/ guilt)

13. Do you feel positive effects after rearing this child?

- a. More patience
- b. More empathy
- c. More support
- d. More strength
- e. God has chosen me to take care of this child

14. Behavior problem in children and ill-tempered or badly behaved are all a question of parents fate – Agree/Disagree

15. It is quite natural for children to misbehave – Agree/Disagree

16. Children out grow their behavior problem as they grow older- Agree/Disagree

17. The root cause of all behavior problems in children lie in faulty or deficient parenting skills- Agree/Disagree

18. The developmental disability in a child may itself be a cause of behavior problem – Agree/ Disagree

# APPENDIX - V

## Emotional Problem Behaviour Rating Scale

Name of the child \_\_\_\_\_

Sex \_\_\_\_\_ Age \_\_\_\_\_ Religion \_\_\_\_\_ Date of test \_\_\_/\_\_\_/\_\_\_

Class \_\_\_\_\_ division \_\_\_\_\_

Name of the teacher \_\_\_\_\_

Name of the school \_\_\_\_\_

### Directions

This booklet contains 120 statements. Read each statement carefully and decide whether or not it is accurate statement about the child. When rating the child's behaviour, base your ratings on how he/she compares with other children in the classroom.

For each statement, enter the number that best represents your opinion. Use the following scale when making your ratings:

Enter "0" if the behaviour is ALMOST NEVER observed or reported

Enter "1" if the behaviour is RERELY observed or reported

Enter "2" if the behaviour is OCCASSIONALLY observed or reported

Enter "3" if the behaviour is OFTEN observed or reported

Be sure to rate each statement. Do not leave any statement blank

0=ALMOST NEVER    1=RARELY    2=OCCASIONALLY    3=OFTEN

- |    |   |                          |    |   |                          |
|----|---|--------------------------|----|---|--------------------------|
| 1  | Thinking appears mixed up or confused.....                    | <input type="checkbox"/> | 16 | Confused thinking impairs work ability .....                  | <input type="checkbox"/> |
| 2  | Seems obsessed or preoccupied with certain ideas.....         | <input type="checkbox"/> | 17 | Fights with others.....                                       | <input type="checkbox"/> |
| 3  | Is physically aggressive .....                                | <input type="checkbox"/> | 18 | Exhibits repetitive behaviour                                 | <input type="checkbox"/> |
| 4  | Hits others .....   | <input type="checkbox"/> | 19 | Is feared by others because of aggressive behaviour.....      | <input type="checkbox"/> |
| 5  | Feels persecuted .....  | <input type="checkbox"/> | 20 | Seems to have strange impulses....                            | <input type="checkbox"/> |
| 6  | Pushes others.....  | <input type="checkbox"/> | 21 | Seems overly suspicious.....                                  | <input type="checkbox"/> |
| 7  | Engages in peculiar or bizarre behaviors.....                 | <input type="checkbox"/> | 22 | When angry, slams doors, bangs tables etc.....                | <input type="checkbox"/> |
| 8  | Appears disoriented.....                                      | <input type="checkbox"/> | 23 | Describes things that do not match reality.....               | <input type="checkbox"/> |
| 9  | Bullies others .....  | <input type="checkbox"/> | 24 | Tries to pick fights.....                                     | <input type="checkbox"/> |
| 10 | Relates peculiar and strange experiences .....                | <input type="checkbox"/> | 25 | Displays inappropriate affect.....                            | <input type="checkbox"/> |
| 11 | Physically provokes others.....                               | <input type="checkbox"/> | 26 | Is stubborn.....  | <input type="checkbox"/> |
| 12 | Openly strikes back when angry at others.....                 | <input type="checkbox"/> | 27 | Seems jumpy; is easily startled or frightened.....            | <input type="checkbox"/> |
| 13 | Is unaware of what is going on in the immediate environment.. | <input type="checkbox"/> | 28 | Does not cooperate with requests from supervisors..           | <input type="checkbox"/> |
| 14 | Seems out of touch with reality....                           | <input type="checkbox"/> | 29 | Expresses concerns about bad things happening to him/her..... | <input type="checkbox"/> |
| 15 | Memory and concentration seem poor due to confusion.....      | <input type="checkbox"/> | 30 | Displays a rebellious attitude.....                           | <input type="checkbox"/> |

0=ALMOST NEVER    1=RARELY    2=OCCASIONALLY    3=OFTEN

- |    |   |                          |    |  |                          |
|----|---|--------------------------|----|--|--------------------------|
| 31 | Trembles, shakes, or appears restless when nervous.....                           | <input type="checkbox"/> | 46 | Tries to get away with as much as possible.....                  | <input type="checkbox"/> |
| 32 | Does not take responsibility for own actions.....                                 | <input type="checkbox"/> | 47 | Appears tense and nervous  | <input type="checkbox"/> |
| 33 | Prefers to do things own way .....  | <input type="checkbox"/> | 48 | Worries about many things  | <input type="checkbox"/> |
| 34 | Is unable to relax or stay calm.....  | <input type="checkbox"/> | 49 | Does not like being told what to do.....                         | <input type="checkbox"/> |
| 35 | Does not take suggestions.....  | <input type="checkbox"/> | 50 | Shows little respect for property of others.....                 | <input type="checkbox"/> |
| 36 | Displays nervous habits (e.g. fingernail biting, tics, pulling at hair, etc)..... | <input type="checkbox"/> | 51 | Lies.....  | <input type="checkbox"/> |
| 37 | Cannot accept constructive criticism .....  | <input type="checkbox"/> | 52 | Appears sad, depressed....                                       | <input type="checkbox"/> |
| 38 | Is fearful in new situations .....  | <input type="checkbox"/> | 53 | Never smiles.....  | <input type="checkbox"/> |
| 39 | Engages in rule violation .....   | <input type="checkbox"/> | 54 | Has poor concentration.....                                      | <input type="checkbox"/> |
| 40 | Worries about performance on different tasks; is afraid of making mistakes .....  | <input type="checkbox"/> | 55 | Is easily distracted.....  | <input type="checkbox"/> |
| 41 | Displays little respect for authority   | <input type="checkbox"/> | 56 | Appears disappointed or disgusted with self feels worthless..... | <input type="checkbox"/> |
| 42 | Is often in trouble.....  | <input type="checkbox"/> | 57 | Has poor attention span....                                      | <input type="checkbox"/> |
| 43 | Gets along poorly with those in charge .....                                      | <input type="checkbox"/> | 58 | Has lost interest in normally pleasurable activities.....        | <input type="checkbox"/> |
| 44 | Appears nervous in group or social situations.....                                | <input type="checkbox"/> | 59 | Appears to daydream.....   | <input type="checkbox"/> |
| 45 | Displays or talks about fears.....  | <input type="checkbox"/> | 60 | Has difficulty staying on task.....                              | <input type="checkbox"/> |

0=ALMOST NEVER

1=RARELY

2=OCCASIONALLY

3=OFTEN

- |    |  |                          |    |   |                          |
|----|--|--------------------------|----|---|--------------------------|
| 61 | Appears unhappy, gloomy.....                     | <input type="checkbox"/> | 76 | Is easily excitable.....                              | <input type="checkbox"/> |
| 62 | Has difficulty following directions..            | <input type="checkbox"/> | 77 | Seldom talks to others.....                           | <input type="checkbox"/> |
| 63 | Complains of sleeping difficulty....             | <input type="checkbox"/> | 78 | Is overly active.....                                 | <input type="checkbox"/> |
| 64 | Is always looking around.....                    | <input type="checkbox"/> | 79 | Has difficulty engaging in normal social conversation | <input type="checkbox"/> |
| 65 | Appears agitated or slowed down..                | <input type="checkbox"/> | 80 | Jumps from an activity to another.....                | <input type="checkbox"/> |
| 66 | Doesn't seem to listen.....                      | <input type="checkbox"/> | 81 | Appears socially isolated....                         | <input type="checkbox"/> |
| 67 | Appears tired, fatigued.....                     | <input type="checkbox"/> | 82 | Is always talking out.....                            | <input type="checkbox"/> |
| 68 | Needs constant supervision.....                  | <input type="checkbox"/> | 83 | Is impatient; has trouble waiting.....                | <input type="checkbox"/> |
| 69 | Is distractible.....                             | <input type="checkbox"/> | 84 | Appears disinterested in others.....                  | <input type="checkbox"/> |
| 70 | Avoids group activities.....                     | <input type="checkbox"/> | 85 | Has difficulty in organizing tasks.....               | <input type="checkbox"/> |
| 71 | Is restless, squirmy; fidgets.....               | <input type="checkbox"/> | 86 | Often sits alone or away from others.....             | <input type="checkbox"/> |
| 72 | Disturbs others.....                             | <input type="checkbox"/> | 87 | Does messy and sloppy work.....                       | <input type="checkbox"/> |
| 73 | Does not initiate relationships with others..... | <input type="checkbox"/> | 88 | Seems to have poor self-concept.....                  | <input type="checkbox"/> |
| 74 | Spends much of his her time alone                | <input type="checkbox"/> | 89 | Argues with peers.....                                | <input type="checkbox"/> |
| 75 | Is impulsive; acts before thinking               | <input type="checkbox"/> | 90 | Seems to have little confidence in own abilities      | <input type="checkbox"/> |

0=ALMOST NEVER    1=RARELY    2=OCCASIONALLY    3=OFTEN

- |     |  |                          |                                     |  |                          |
|-----|--|--------------------------|-------------------------------------|--|--------------------------|
| 91  | Seems to be insecure.....  | <input type="checkbox"/> | 108                                 | Has a low personal expectation.....          | <input type="checkbox"/> |
| 92  | Describes self as clumsy or always making mistakes.....                | <input type="checkbox"/> | 109                                 | Overreacts to minor injuries or pain.....    | <input type="checkbox"/> |
| 93  | Threatens others.....  | <input type="checkbox"/> | 110                                 | Is concerned about physical health.....      | <input type="checkbox"/> |
| 94  | Doubts own abilities.....  | <input type="checkbox"/> | 111                                 | Complains about headaches.....               | <input type="checkbox"/> |
| 95  | Verbally provokes others.....  | <input type="checkbox"/> | 112                                 | Complains about stomachaches.....            | <input type="checkbox"/> |
| 96  | Complain that others don't like him/her; says he/she is unpopular..... | <input type="checkbox"/> | 113                                 | Requests to see nurse or doctor.....         | <input type="checkbox"/> |
| 97  | Says that he/she has no friends..                                      | <input type="checkbox"/> | 114                                 | Complains of poor health..                   | <input type="checkbox"/> |
| 98  | Talks back.....  | <input type="checkbox"/> | 115                                 | Uses health complaints to avoid tasks.....   | <input type="checkbox"/> |
| 99  | Puts self down; downgrades self..                                      | <input type="checkbox"/> | 116                                 | Talks about having a serious illness.....    | <input type="checkbox"/> |
| 100 | Is overly dependent.....   | <input type="checkbox"/> | 117                                 | Becomes dramatic about minor illnesses.....  | <input type="checkbox"/> |
| 101 | Is reluctant to try new things.....                                    | <input type="checkbox"/> | 118                                 | Complains about minor aches and pains .....  | <input type="checkbox"/> |
| 102 | Interrupts others.....   | <input type="checkbox"/> | 119                                 | Complains about dizziness or faintness ..... | <input type="checkbox"/> |
| 103 | Gives up easily.....   | <input type="checkbox"/> | 120                                 | Complains about being tired.....             | <input type="checkbox"/> |
| 104 | Criticizes or teases others.....                                       | <input type="checkbox"/> | EXT (PA___ +NC___ +HY___+VA___=___) |  |                          |
| 105 | Describes self as "dumb" or "stupid".....                              | <input type="checkbox"/> | INT (AN___ +DP___ +SE___ =___)      |  |                          |
| 106 | Worries a lot before starting something.....                           | <input type="checkbox"/> |                                     |  |                          |
| 107 | Is loud, boistenous, and bossy....                                     | <input type="checkbox"/> |                                     |  |                          |

## APPENDIX - VI

Behavioural Assessment Scales for Indian Children With Mental Retardation,  
(BASIC-MR) Part B

### RECORD BOOKLET

Name of the student \_\_\_\_\_ Age \_\_\_\_\_

Level/Class \_\_\_\_\_ Sex \_\_\_\_\_

#### Instructions

- Tick the problem behavior – Never (N), Occasionally (O) and Frequently (F)

Item No.	Domains/Items	
	Violent and Destructive Behaviour	
1	Kicks others	<input type="checkbox"/>
2	Pushes others	<input type="checkbox"/>
3	Pinches others	<input type="checkbox"/>
4	Pulls hair, ear, body parts of others	<input type="checkbox"/>
5	Slaps others	<input type="checkbox"/>
6	Hits others	<input type="checkbox"/>
7	Spits on others	<input type="checkbox"/>
8	Bangs objects	<input type="checkbox"/>
9	Slams doors	<input type="checkbox"/>
10	Bites others	<input type="checkbox"/>
11	Attacks or pokes others with weapon (blade, stick, pencil)	<input type="checkbox"/>
12	Throws objects at others	<input type="checkbox"/>
13	Tears/pulls threads from own or others clothing	<input type="checkbox"/>
14	Tears up own or others books, papers, magazines	<input type="checkbox"/>
15	Breaks objects/glass/toys	<input type="checkbox"/>

Item No.	Domains/Items	
16	Damages furniture	<input type="checkbox"/>
	Temper Tantrums	
17	Cries excessively	<input type="checkbox"/>
18	Screams	<input type="checkbox"/>
19	Stamps feet	<input type="checkbox"/>
20	Rolls on floor	<input type="checkbox"/>
	Misbehaves with others	
21	Pulls objects from others	<input type="checkbox"/>
22	Interrupts in between when others are talking	<input type="checkbox"/>
23	Makes loud noise when others are working or reading	<input type="checkbox"/>
24	Makes face to tease others	<input type="checkbox"/>
25	Uses abusive/ vulgar language	<input type="checkbox"/>
26	Takes others possession without their permission openly	<input type="checkbox"/>
27	Tells others what to do and wants his/her way (bossy)	<input type="checkbox"/>
	Self injurious behaviours	
28	Bangs head	<input type="checkbox"/>
29	Bites self	<input type="checkbox"/>
30	Cuts or mutilates self	<input type="checkbox"/>
31	Pulls own hair	<input type="checkbox"/>
32	Scratches self	<input type="checkbox"/>
33	Hits self	<input type="checkbox"/>
34	Puts objects into eyes/nose/ear	<input type="checkbox"/>
35	Eats inedible things	<input type="checkbox"/>

Item No.	Domains/Items	
36	Peels skin/wounds	<input type="checkbox"/>
37	Bites nail Repetitive behaviours	<input type="checkbox"/>
38	Rocks body	<input type="checkbox"/>
39	Nods head	<input type="checkbox"/>
40	Sucks thumb	<input type="checkbox"/>
41	Makes peculiar sounds	<input type="checkbox"/>
42	Bites ends of pen/pencil	<input type="checkbox"/>
43	Shakes parts of the body repeatedly	<input type="checkbox"/>
44	Grinds teeth	<input type="checkbox"/>
45	Swings round and round Odd behaviours	<input type="checkbox"/>
46	Laughs to self	<input type="checkbox"/>
47	Laughs inappropriately	<input type="checkbox"/>
48	Talks to self	<input type="checkbox"/>
49	Hoards unwanted objects (sticks, thread, pieces of old clothes)	<input type="checkbox"/>
50	Picks nose	<input type="checkbox"/>
51	Plays with unwanted objects like chappal, strings, faeces and dirt excessively	<input type="checkbox"/>
52	Kisses, hugs, and licks people unnecessarily	<input type="checkbox"/>
53	Smells objects Hyperactivity	<input type="checkbox"/>
54	Does not sit at one place for required time	<input type="checkbox"/>
55	Does not pay attention to what is told	<input type="checkbox"/>

Item No.	Domains/Items	
56	Does not continue with the task at hand for required time Rebellious behaviours	<input type="checkbox"/>
57	Refuses to obey commands	<input type="checkbox"/>
58	Does opposite of what is requested	<input type="checkbox"/>
59	Takes very long time intentionally to complete a task	<input type="checkbox"/>
60	Wanders outside school	<input type="checkbox"/>
61	Runs away from school	<input type="checkbox"/>
62	Argues without purpose Antisocial behaviours	<input type="checkbox"/>
63	Lies or twists the truth to his own advantage or blames others	<input type="checkbox"/>
64	Cheats in games or no sense of fair play	
65	Steals	<input type="checkbox"/>
66	Makes obscene gestures	<input type="checkbox"/>
67	Exposes body parts inappropriately	<input type="checkbox"/>
68	Makes sexual advances towards members of opposite sex	<input type="checkbox"/>
69	Touches own private parts in public	<input type="checkbox"/>
70	Touches others private parts in public	<input type="checkbox"/>
71	Gambles	<input type="checkbox"/>
	Fears	<input type="checkbox"/>
72	Fear of objects	
73	Fear of animals	<input type="checkbox"/>
74	Fear of places	<input type="checkbox"/>
75	Fear of persons	<input type="checkbox"/>
	Any others:	<input type="checkbox"/>
		<input type="checkbox"/>

## APPENDIX - VII

National Institute for the Mentally Handicapped  
Manovikas Nagar P.O., Secunderabad – 500 009. A.P. India

NIMH – Gem Questionnaire

Authors: Dr. Reeta Peshwaria, Dr. D.K. Menon, Ms. Loraine Stephenson

### Instructions

As you well know that some persons are very intelligent while some are average and some below the average in intelligence. When the intelligence of a person is exceptionally below the average this condition is known as mental retardation or mental handicap. In Hindi and in kannada this condition is known as Manda Buddi.

The following 30 statements are given, relating to the mentally retarded or mentally handicapped persons in general and do not pertain to any particular individual. If you agree with the statement, please encircle 'YES' and if you do not agree with the statement, please encircle 'No'. It is important that you complete the questionnaire quickly.

1	The problem of mental retardation is found only in children	YES	NO
2	Individual differences exist among mentally retarded persons	YES	NO
3	Mental retardation is an infectious disease	YES	NO
4	Some of the persons with mental retardation can be as energetic as normal persons	YES	NO
5	Persons with mental retardation are able to manage themselves to some degree	YES	NO
6	Mental retardation is mental illness	YES	NO
7	Persons with mental retardation can be fully cured	YES	NO
8	Most of the Mentally retarded individuals can become capable of helping other persons in simple tasks	YES	NO
9	As the mentally retarded child grows up he would gradually become normal	YES	NO
10	Persons with mental retardation usually remain unhappy	YES	NO
11	The problem of mental retardation does not exist in our society	YES	NO
12	The condition of mental retardation may not always be transmitted from parents to children but can also be caused by factors during pregnancy, after birth, during childhood or adolescence	YES	NO
13	Mental retardation is due to fate or Karma	YES	NO
14	Children suffering from fits may not suffer from mental retardation	YES	NO
15	A child with mental retardation is born due to the sins of parents	YES	NO

16	Mentally retarded individuals are disobedient	YES	NO
17	Mental retardation is due to black magic or spells	YES	NO
18	Mental retardation is caused as an effect of Lunar eclipse at the time of pregnancy or birth of the child	YES	NO
19	Accidents, high fever, fits causing brain damage in childhood may cause mental retardation	YES	NO
20	Malnutrition in pregnant women can cause mental retardation	YES	NO
21	Medicines only can cure mental retardation	YES	NO
22	The mentally retarded individuals require continuous training to learn various simple activities	YES	NO
23	Marriage can cure a persons with mental retardation	YES	NO
24	Many of the persons with mental retardation are capable of looking after their basic needs	YES	NO
25	Traditional healers, poojaries can cure mentally retarded person	YES	NO
26	The only solution to the problem of mentally retarded person is to put him in a residential school/hostel	YES	NO
27	Involvement of the parents is essential in the training of the child with mental retardation	YES	NO
28	Mentally retarded individuals will not improve without any amount of training	YES	NO
29	A mentally retarded individual can become as capable as a normal individual	YES	NO
30	Love alone will not benefit a mentally retarded individual	YES	NO



### House types

Shed thatched	-	1	Brick wall and tiled	-	3
Modulated & thatched	-	2	Concrete house	-	4
Concrete and double storied	-	5			

### Size of house

1 room -	0	4-6 rooms	-	10
2 room -	2	7-8 rooms	-	15
3 room -	5	9-10 rooms	-	18
		More than 10 rooms	-	20

### Drinking water facility

Water purifying unit	-	5	Community tap/bore well	-	2
At home	-	4	In front yard/well	-	3
Open tank	-	1			

### Electricity facility

Electricity	No	0
	Yes	1
If yes, Solar/Gobar gas etc.		2

### Sanitation

Pacca	2
Kacha	1
No facility	0

### Membership in socio-Political organizations

➤ Without any official position in socio-politico organization	0
➤ Official position in one or more organization	1
➤ Financial contribution or raising fund for common work	2
➤ Active office bearer	3
➤ Involvement in community work	4

### Material possession

Scooter	Cell phone
Car	Refrigerator
Table chair	TV
Cupboard	Miner grinder
Cot	Cooker
Sieving machine	Pump set
Fan	Flour mill
Tube light	Newspaper
Telephone	Magazines

# APPENDIX - IX

## Questions to Test Efficacy of Educational Package

Name of parent:

Age:

Name of Child:

Education

Occupation

Mother

Father

I.

1. Mention some of the problem behaviours in your child

1

2

3

4

2. Mention the causes of these problem behaviours

1

2

3

4

3. Mention the techniques for behaviour modification

1

2

3

4

4. Mention the conditions when a behaviour can be considered problematic

1

2

3

4

5. Which therapies are useful for behaviour modification?

1

2

3

4

II. State whether the statements are True or False

1. Behaviour is any activity which is observable and measureable (T/F)

2. Skill behaviours are good and desirable (T/F)

3. Behaviour modification refers to bringing about desirable change in behaviour (T/F)

4. If the problem behaviour is used to seek the attention of others then we should ignore the behaviour (T/F)
5. We should not yield to the demands of the child (T/F)
6. We should punish the child if he shows problem behavior and not wait till he mends his ways (T/F)
7. Love and advice are best ways to control a child's problem behaviour (T/F)
8. Physical restraint is better than beating the child if he shows Violent or destructive behaviour (T/F)
9. Rewards should not be used in controlling problem behaviour (T/F)
10. Timeout means removing the child from a rewarding situation(T/F)

## APPENDIX - X

### Emotional Problem Score of the Sample Selected for the Study

	Normal Range		Within Elevated Range		Elevated range and above
6 – 10 years					
	N	%	N	%	
TD	28	93.33	2	6.66	Nil
VA	30	100.00	-	-	"
PA	25	83.33	5	16.66	"
NC	30	100.00	-	-	"
HY	30	100.00	-	-	"
DS	28	93.33	2	6.66	"
AN	30	100.00	-	-	"
SC	29	96.66	1	3.33	"
WD	30	100.00	-	-	"
DP	24	80.00	6	20.00	"
SE	30	100.00	-	-	"
Ext.	30	100.00	-	-	"
Int.	30	100.00	-	-	"
10 – 15 Years					
TD	26	86.66	4	13.33	Nil
VA	30	100.00	-	-	"
PA	25	83.33	5	16.66	"
NC	30	100.00	-	-	"
HY	29	96.66	1	3.33	"
DS	30	100.00	-	-	"
AN	28	93.33	2	6.66	"
SC	27	90.00	3	10.00	"
WD	29	93.33	2	6.66	"
DP	21	70.00	9	30.00	"
SE	29	96.66	1	3.33	"
Ext.	30	100.00	-	-	"
Int.	28	93.33	2	6.66	"

The EPS is designed to identify maladaptive behaviours and emotional problems who have mild mental retardation and borderline intellectual abilities.

IQ. Scores 55-83

So in the present study the sample was collected by purposive sampling selecting children who were educable and trainable mentally retarded.

Hence most of the sample fell in Normal range in emotional problem scale and few within elevated ranged and none in above elevated range.

TD	Tought/ Behaviour disorder
VA	Verbal aggression
PA	Physical aggression
NC	Non-compliance
HY	Hyperactivity
DS	Distractibility
AN	Anxiety
SC	Somatic Concerns
WD	Withdrawal
DP	Depression
SE	Low self-esteem
Ext.	Externalizing behaviour problem
Int.	Internalizing behaviour problem

EDUCATIONAL PACKAGE ON TECHNIQUES OF BEHAVIOR  
MANAGEMENT OF MENTALLY CHALLENGED CHILDREN

For  
Literate Parents and Teachers



*By*

Mrs. Jabeen M. Khatib  
**I.D. No. PGS05RHS3953**  
**Dept. of Human Development**

*Major Advisor*

Dr. (Mrs.) Pushpa B. Khadi  
**Professor & Head (HDV)**

COLLEGE OF RURAL HOME SCIENCE,  
UNIVERSITY OF AGRICULTURAL SCIENCES,  
DHARWAD – 580 005

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3	How are behaviours acquired	
4	Classification of Behaviours of Children	
5	Causes of problem behaviour	
6	When a behaviour can be considered problematic	
7	Types of problem behaviours	
8	Analysis of problem behaviour	
9	Behaviours modification	
10	Techniques of Behaviour modification and management of problem behaviour	
11	References	

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**Dharwad**

**(JABEEN KHATIB)**  
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# **NEED FOR EARLY INTERVENTION**

## **Introduction**

The first three years, known as critical period are very important in the life of any child. Most learning in all the developmental areas eg. sensory, communication, cognitive, motor and social takes place during this period. About 80 per cent of learning occurs through vision and Imitation and observation of people, places and things around them. It is also established that provision of appropriate intervention at earliest possible stages will definitely improve their developmental skills, optimize abilities and lay a foundation for life long learning. Such intervention is equally important for the family members as home is a convenient and comfortable venue for learning and training for the child.

## **Why are emotions important**

Children show emotions through their behavior. These emotions may be innate or learnt. Children express their emotions by Internalizing and externalizing behaviours. By internalizing children control their emotions inwardly. And by externalizing children show their reactions outwards. Children unknowingly show certain behavior which might be undesirable or injurious. Hence these emotions and behavior needs to be managed and controlled by teaching the child acceptable ways of expressing the behavior or reaction. Schools have facilities and therapies which manage their behavior. These therapies help the child to mould his ways and present his reactions in an accepted way. As most of the time the child is at school or home, the parents and teachers need to teach the children the approved pattern to manage and model their behavior.

Parents and teachers are the most important people in the lives of children giving love, care and continuity. Hence Educators and other service providers stress the importance of parents and teachers role for successful, habilitation of children.

## **What is behaviour**

Behaviour refers to the actions of an organism, usually in relation to its environment which includes the other organisms around as well as the physical

environment. It is the response of an organism to various stimuli, whether internal or external, conscious or subconscious, overt or covert and voluntary or involuntary. In humans behaviour is believed to be controlled by the endocrine system and the nervous system. Human behaviour can be common, unusual, acceptable or unacceptable. Behaviour is any activity which is observable and measurable. In our daily lives we perform so many activities, we sit, stand, chew, cry, comb, appreciate, swallow, fear and dislike. All these are examples of the activities we perform in our daily life. Some of our activities are directly observable while some are not directly observable. For example happiness cannot be seen directly. It can be expressed through behaviour such as smiles and laughs. Hence humans evaluate the acceptability of behaviour using social norms and regulate behaviour by means of social control.

### **How are behaviour acquired**

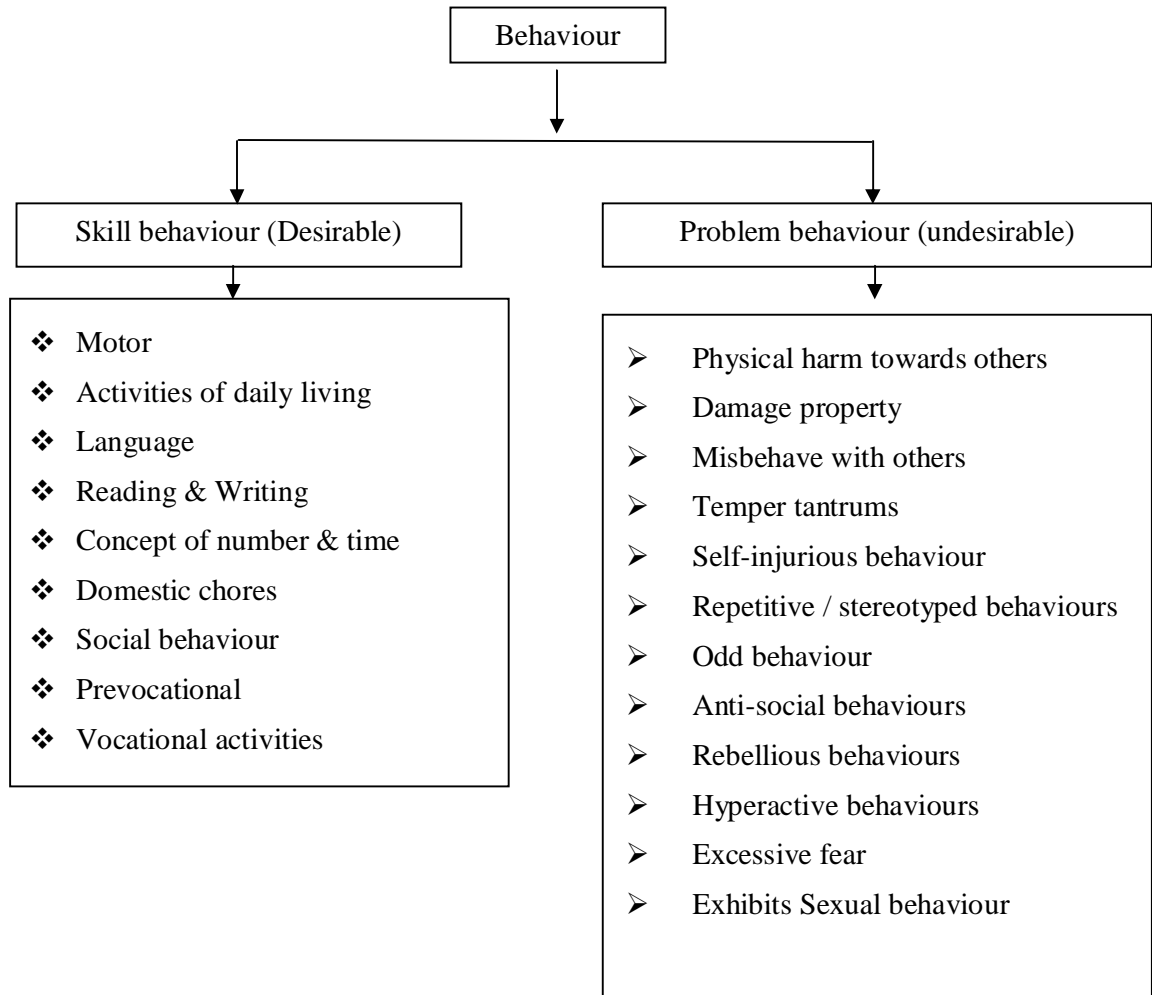
Behaviours in children are learnt. There is a reason behind every behaviour or misbehaviour children learn behaviours by imitation from parents, siblings, peers, T.V. and films, Behaviour once learnt is difficult to change if it has already become a habit. Hence behaviour can be corrected or a misbehaviour can be stopped if it is controlled in first six years of life. Rewards and punishments play an important role in the child's behaviour, Behaviours which are followed by pleasant consequences such as rewards/praise tend to be repeated and are thus learnt. Care must be taken to understand the behaviour of mentally challenged and disabled children because the child's mental and physical health may itself affect the child to act in a particular way. Hence if parents and caregivers act early they can diminish risks of behavioural problem, bolster self esteem and help children learn social behaviours.

Fortunately there are many ways to intervene early by manipulating the physical environment, the school curriculum and program, the balanced work and play activities, the social surroundings, changing the approach towards the child and looking at things from the child's perspective. This will help children with problem behaviour to learn social skills needed to protect them in future.

## Classification of Behaviours in Children

All behaviours in children 'with' or 'without disabilities' can be divided into two categories.

- a. Skill Behaviour (Desirable behaviour)
- b. Problem Behaviour (Undesirable behaviour)



### **Skill behavior are desirable behaviors needed in daily life**

Most of the children with disabilities show deficits in skill behaviors depending on nature and severity of the disability. The skill behaviors are classified into following domains.

<b>Sl. No.</b>	<b>Domains</b>	<b>Examples</b>
1	Activities of daily living	Eating, Toileting, Brushing, Bathing, Dressing, Grooming.
2	Motor	Running, Skipping, Jumping, Walking, riding bicycle, unscrewing a bottle lid.
3	Language	Listening and Understanding (Receptive language) Expressing in words and action (expressive language).
4	Reading and Writing	Reads sight words, reads own names, writes address, and writes own name.
5	Concept of Numbers and Time	Counting, identifying numbers, names, day and date.
6	Domestic chores	Washes utensils, dries clothes, does household work
7	Social behaviour	Greets people, says thank you, talks or expresses his feelings and emotions
8	Prevocational	Concept of work, money
9	Vocational activities	Fulfilling job requirement and work accomplishment

### **What causes problem behavior ? (Challenging behaviour)**

Problem behaviors are negative behaviors. Problem behaviors of the child create or are likely to create difficulties in the learning activities of the child and the instructional programme and discipline at home, in the school and outside.

#### **For Example:**

Aggressive behavior is a problem behavior.

Aggressive behavior may be due to social learning, cognition, problem-solving or poor attachment to parents.

### **Problem Behaviors**

Generally children with disabilities show behaviours that may interfere with learning in the classroom. These are problem behaviors which are due to lack of communication skills, cognitive skills, problem solving skills or improper handling of the child.

### **When is a behavior problematic?**

#### **A behavior is problematic if it is**

- ✓ Injurious/ dangerous to self (bangs head, pulls own hair, bites self).
- ✓ Injurious/dangerous to others (hits or bites others)
- ✓ Interferes with learning (cries excessively, does not sit at one place, does not attend to the task on hand within required time)
- ✓ Inappropriate for age (sixteen year old boy has thumb sucking)
- ✓ Socially deviant/unacceptable (steals, cheats, lies)

Causes of Behaviour Problems: The causes are classified into biological and environmental factors

### **Biological risk factors**

- **Temperament:** Three types of temperament are 'easy', 'difficult' and 'slow to warm up', Serious problems are more likely to arise, when the temperament of the child and the expectations of the parent or are too much. A child's temperament has a major impact on his environment.
- **Gender:** Gender plays a role in problem behaviour. Boys are rated higher than girls on physical aggression in every age group.

- **Developmental delays:** especially language delays, are often associated with problem behaviours. Sensory integration problems – which include poor motor coordination, hypersensitivity to sensation, distractibility, hyperactivity and slow speech may also be linked to problem behaviours.
- **Body constitution:** The child's disability and body constitution and mental setting may itself affect the child to act in a particular way. Sometimes children may be genetically susceptible and hence may show problematic behaviour. Sometimes mental retardation in the child may affect unfavourably.
- **ADD/ADHD:** Attention Deficit Disorder (ADD) and Attention-Deficit Hyperactivity Disorder (ADHD) can also contribute to antisocial and violent behaviour. ADD/ADHD is a neurological syndrome with symptoms like inattention, impulsivity and sometimes hyperactivity. Now thought to be largely genetic isn't usually diagnosed until a child is at least five, although the hyperactive symptoms appear earlier.
- **Drugs, Alcohol and Smoking:** When mothers use drugs, drink alcohol or smoke during pregnancy, their children are at increased risk for behavioural, cognitive, learning and developmental problems. Babies exposed to cocaine and babies with Fetal Alcohol Syndrome (FAS) or Fetal Alcohol Effects (FAE) may exhibit severe and long-lasting effects of behavioural problems.
- **Neurological damage:** Pregnancy complications, perinatal stress, prematurity, birth trauma and congenital defects may put children at risk by causing neurological damage.

## **Environmental risk factors**

- ❖ **Poverty and Social Condition:** Poor housing, poor nutrition, parental unemployment, victimization, discrimination – provide fertile ground for problem behaviours.
- ❖ **Exposure to violence:** Children who witness violence at home or physically, emotionally or sexually abused are especially vulnerable and are at higher risk for problem behaviour.
- ❖ **Parenting style and family factors:** When one or both parents use harsh or inconsistent discipline, and when they respond negatively, when they model antisocial ways to resolve disagreements and when they don't supervise their children, the children may respond with defiant, aggressive, impulsive behaviours.
- ❖ **Viewing television:** Children who are aggressive tend to watch even more violent scenes in television which justify their increasingly aggressive behaviour.
- ❖ **Low quality care:** Groups that are too large, spaces that are too small or too big, untrained or too few educators, lack of structure, not enough or too many junk toys, can all contribute to low quality care which can put a child at risk for problem behaviour. So too many transitions, too much noise and too many demands on children who aren't developmentally ready to handle them can be unfavourable to children.

## **Types of Problem Behaviors in Mentally Challenged Children**

### **I. Violent and Destructive Behavior (physical harm towards others)**

1. Kicks
2. Pushes
3. Pinches
4. Pulls hair, ear, body parts
5. Slaps
6. Hits
7. Spits
8. Bangs objects
9. Slams doors
10. Bites
11. Attacks or pokes others with weapon (Blade, stick, pencil)
12. Throws objects

### **II. Damage property**

1. Tears/ pulls threads from own or others clothing
2. Tears up own or others books, papers, magazines
3. Breaks objects/ glass/ toys
4. Damages furniture

### **III. Temper Tantrums**

1. Cries excessively
2. Screams
3. Stamps feet
4. Rolls on floor

### **IV. Misbehaves with others**

1. Pulls objects from others
2. Interrupts in between when others are talking
3. Makes loud noise when others are working or reading
4. Makes facial grimaces to tease others
5. Uses abusive/vulgar language
6. Takes others possession without their permission openly
7. Tells others what to do and wants his/her way (Bossy)

## **V. Self injurious behaviours**

1. Bangs head
2. Bites
3. Cuts or mutilates
4. Pulls own hair
5. Scratches
6. Hits
7. Puts objects into eyes/nose/ear
8. Eats inedible things
9. Peels skin/ wounds of his body
10. Bites nail

## **VI. Repetitive behaviours**

1. Rocks body
2. Nods head continuously
3. Sucks thumb
4. Makes peculiar sounds
5. Bites ends of pen/pencil
6. Shakes parts of the body repeatedly
7. Grinds teeth
8. Swings repeatedly

## **VII. Odd behaviours**

1. Laughs to self
2. Laughs inappropriately
3. Talks to self
4. Hoards unwanted objects (sticks, thread, pieces of old cloths)
5. Picks nose
6. Plays with unwanted objects like chappal, strings, faeces and dirt excessively
7. Kisses, hugs, and licks people unnecessarily
8. Smells objects

## **VIII. Hyperactivity**

1. Does not sit at one place for required time
2. Does not pay attention to what is told
3. Does not continue with the task at hand for required time

**IX. Rebellious behaviours**

1. Refuses to obey commands
2. Does opposite of what is requested
3. Takes very long time intentionally to complete a task
4. Wanders outside school
5. Runs away from school
6. Argues without purpose

**X. Antisocial behaviours**

1. Lies or twists the truth to his own advantage or blames others
2. Cheats in games or no sense of 'fair play'
3. Steals

**XI. Exhibits Sexual behavior**

1. Makes obscene gestures
2. Exposes body parts inappropriately
3. Makes sexual advances towards members of opposite sex
4. Touches own private parts in public
5. Touches others private parts in public

**XII. Fears**

1. Fear of objects
2. Fear of animals
3. Fear of places
4. Fear of persons
5. Fear of any other

## **Analysis of problem behavior – reorganization of problem behaviour**

### **Find out - observe**

1. When the problem behavior usually occur
2. In whose presence the problem behavior occurs more.
3. Which place the problem behavior occur
4. Why the problem behavior occur

### **Behavior modification**

Behavior modification refers to bringing about change in behavior. Behavior modification techniques are used both to increase desirable behaviors and decrease problem behaviors.

All of us live in a society and we need to develop socially desirable behaviour to lead a meaningful life. A child may develop an undesirable behaviour when there is no goal directed activity or due to poor communication and problem solving skills. These undesirable behaviours can be modified effectively by using behaviour modification technology, which aims at bringing about change in behaviour based on learning principles.

A child's performance in academic and in the areas (personal skills, social skills) may get adversely affected because of the presence of undesirable behaviour. Behaviour modification techniques help the teacher, parent or caregiver to deal with problem behaviour in an effective manner and enhance the child's performance in education as well as overall personality development.

## **Management of Problem Behavior : Techniques of Behaviour Modification**

There are several techniques for management of problem behaviour in children. Note that selection of an appropriate technique for management of a problem behaviour depends on the specific functions underlying them. The technique selected should bring the desired behavior in the child and eliminate the problem behavior. Several techniques of managing problem behaviour and modifying behaviour can be used by parents and care givers. Some times a combination or methods is more effective than single one method. Change in methods is also effective and these methods used should depend upon the degree of the problem in the child.

### **Techniques of Behavior modification and management of problem behaviour**

1. Ignore the problem behavior.
2. Respond to the demand of the child.
3. Change environment in favour of the child.
4. Wait for the child to mend his/her ways
5. Diverting attention
6. Love and advice
7. Comparing
8. Shout / scold
9. Conveying displeasure
10. Hitting or beating
11. Physical restraint
12. Punish the child by not allowing him to play or eat
13. Time out
14. Differential rewards
15. Restitution
16. Ordering authoritatively
17. Therapy
18. Activity scheduling
19. Modelling and teaching/ proper behaviour
20. Medical consultation
21. Needs proper disciplining



**1. Ignore the Problem behavior:** This is the technique of first choice for use with all attention-seeking problem behaviours. When you identify that a particular problem behaviour is meant to seek the attention of others (either positive or negative), ignore the behaviour.

- Never pay any attention to the occurrence of such behaviours.
- Note that you should not provide even negative attention.
- Be consistent in the use of ignoring procedures each and every time the attention-seeking problem behaviour occurs in the child.
- Negative and bad behaviours should not be ignored
- Never use extinction for behaviour problems that involve harming the self or others.
- Avoid giving lengthy sermons or lectures on how to behave well.
- Also, note that when you use. Extinction techniques, your child may initially show an increase of the attention-seeking problem behaviour. But soon the child will realize that his behaviour is not paying the same dividends as it used to earlier.

**Example:**

Jaya makes grunting noises every now and then in front of guests. The guests laugh at these peculiar sounds and this makes Jaya very happy. Her mother has understood that jaya's noise making is an attention-seeking behaviour. She decides to implement extinction techniques. The guests as well as everyone at home are advised to refrain from laughing or paying any attention to her behaviour. Soon Jaya gives up making grunting noises.



## 2. Respond to the demands of the child:

- ✓ If the child cries or has temper tantrums then he /she can be asked the reason.
- ✓ Sometimes yielding to the demands of the child and giving him what he asks for will help in solving the problem of the child.
- ✓ The child may be wanting your attention to a particular task hence don't neglect.
- ✓ The child may be hungry or he may be having an internal or medical problem hence at that time it must immediately be attended.



**3. Change environment in favour of the child:** Some behaviour problems are precipitated by certain antecedents or causal factors.

- If you select teaching goals that are too difficult/easy for a given child, it may lead to a teaching situation where he throws up some problem behaviours.
- The skill training programme, schedule, materials used or even actual practice of teaching by the parent are all contributory antecedent factors in problem behaviours.
- Whenever you encounter an antecedent-controlled problem behaviour in your child, immediately try to discover the trigger that initiates it. Obstruct the occurrence of the trigger by changing their place, person, time or location.

**Example:**

Whenever Sunil settles down to study in his room, Anil interferes by snatching his books or talking with him. Their mother observes that the very act of Sunil carrying his books to his room is a sufficient trigger for his handicapped brother to go after him. In this example, there is a clear antecedent and trigger behind the occurrence of Anil's problem behaviour. Sunil is advised by his mother to lock his room before setting down to study.

Another example Ashwini is reported to throw away all the teaching material whenever her mother settles down to teach her. She finds it very difficult to commence any teaching activity. During baseline observation, it was seen that the trigger for her problem behaviour is an antecedent involving the act of spreading all the materials in front of her. The mother is recommended to take only one teaching material at a time for teaching Ashwini.



#### **4. Wait till the child mends his ways:**

- The child might not be mature enough physically, or mentally to understand hence he may behave in a particular way. So the parents or caregiver needs to give him time to cope up and mend his ways.



#### **5. Divert the child's attention to something else:**

- If the child demands to have something or persists like for eg. asking for a knife or dangerous or delicate item the child can be diverted his attention to something else by giving him some other item that is safe.



#### **6. Love and advice:**

- ✓ With love and affection some of the problem behavior can be controlled. The child can be advised by telling him or requesting him not to do an act. His attention can be diverted by giving him some eatable or sweets which will help him to stop the problem behaviour.



#### **7. Comparing with well behaved children or friends:**

- ❖ A problem behavior like rebellious behavior, or damaging behavior or misbehavior with others can be controlled by comparing other children who behave well.



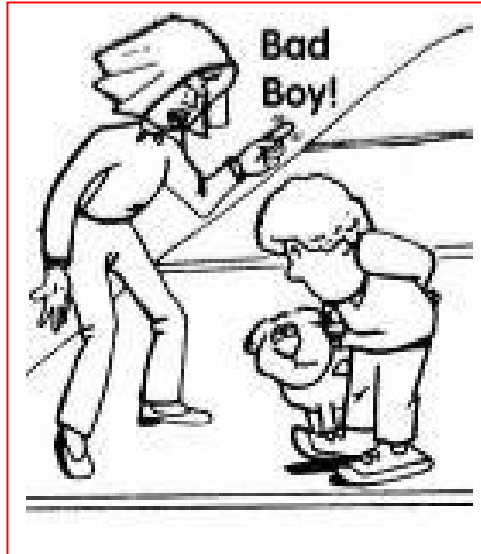
### 8. Shout/scold:

- ✓ Sometimes shouting or scolding the child verbally helps to stop a problem behavior. But it should be seen that the child should not be scolded in front of guests or some others with whom the child is not familiar with.



### 9. Conveying Displeasure:

- ✓ This involves telling your child that his behavior is not good in clear and explicit terms whenever he indulges in problem behaviour. This technique is also known as 'reprimand'.
- ✓ Reprimand is not merely telling your child how not to behave; it also means telling your child how he is expected to behave.
- ✓ Reprimands are implemented immediately following your child's problem behaviour.
- ✓ Be firm in your voice and looks when you use reprimands for specific problem behaviours.
- ✓ Remain calm and composed yourself when you use reprimands.
- ✓ Never reprimand a child in public.



#### **10. Hitting or beating:**

- Sometimes violent and destructive behavior can be controlled by physically hitting or beating the child to stop his behavior.
- The child should be made to understand that his behavior is not approved by others and hence he should not repeat the act.
- The children should not be beaten hard as it is fatal or damaging.



### **11. Physical Restraint:**

- ✓ Violent and destructive behavior in a child may not be amendable to mild forms of behaviors control. Then you have to resort to strong techniques like physical restraint.
- ✓ Physical restraint involves catching hold of the child and restricting the physical movements of your child for some time following the problem behaviour.
- ✓ Self-injurious behaviour, behaviour involving physical harm to others, hitting, slapping, etc., are amenable to physical restraint techniques.
- ✓ Apply physical restraint only for a very brief time.



## **12. Punish the child by not allowing him his favorite dish or play activity:**

- It should be kept in mind that a mentally challenged child does not know that his behavior is problematic. And he should also not be tortured by not giving him to eat. But this method can be used for problems like self injurious behavior which tells him that this behavior if it is repeated will affect him if he is not given a particular food item he likes or he will not be allowed to play his favorite game with other children.



### 13. Time out:

- Some problem behaviours are so serious that mild techniques like extinction or changing of antecedents may not be sufficient. When the child pulls the hair of others and throws or breaks things, you cannot just wait for things to take their own course. At such times, a more active technique for use by parents is time out.
  
- Time out simply means removing your child from a rewarding situation or removing a rewarding situation from the child. No child would prefer to keep away from a rewarding experience for long. Therefore, time out can act as a powerful deterrent against violent, destructive or aggressive behaviour.
  
- There are many forms of time out. A simple procedure involves separating the child from the sphere of playing activity to the corner of the room for a specified amount of time. The child may be asked to sit heads down or with finger on lips and so on. For aggressive children shutting them away in a solitary place for sufficient time may be required.

**Example:**

Rajiv was brought in with complaints of throwing things, hitting his sister, falling on the floor and crying for every small unfulfilled demand. Behaviour analysis revealed that his demands were met most of the time. A behavioural programme was initiated wherein his parents were instructed not to fulfill any demand if it was accompanied by his problem behaviours. Additionally, a time out technique was suggested if he become violent towards others. All the members in Rajiv's house were counseled to follow the techniques in mutual agreement. Though there was an initial increase in Rajiv's behaviour problems, thanks to the perseverance of his family in consistently using time out techniques all his problems subsided in two-weeks time. Remember time out is not merely shutting the child in a room away from other friends or rewards. There are several rules and guidelines to be understood in the implementation of time out techniques in home setting.

**Guidelines for implementation of Time Out**

- ❖ The child must know the reason for time out.
- ❖ Remember not to talk to your child when he or she is in the time out area.
- ❖ Place the child in the time out area only for a brief time.
- ❖ If you are using a time out room, make sure that it does not have any danger spots like exposed wires or other things that could harm your child. In a moment of emotional agitation, the isolated child may end up doing something rashly.
- ❖ Do not lose your temper while implementing the time out technique.
- ❖ Do not pity, sympathize or discuss on time out experience after the child has come out of the room.
- ❖ Note that 'time out' only teaches your child 'what not to do'.



#### 14. Differential rewards:

- Differential rewards involve use of rewards for non-occurrence of problem behaviours.
- Just as it is crucial to use, say 'time out' for assaulting behaviours, it is equally important to use rewards when your child does not manifest the same behaviour. It is apt for you to convey to the child that he or she has not shown a given problem behaviour for quite some time and hence deserves a reward.



### 15. Restitution:

- ✓ The use of this technique not only decreases occurrence of problem behaviours in your child, but it also gives him a chance to learn alternate skill behaviours.
- ✓ If your child throws things all around the house, you must insist on him not only clearing the mess, but also clearing the entire area.
- ✓ You must be firm in implementation of restitution. There is no point in your giving instructions and the child ignoring them or you yourself clearing the mess later.
- ✓ This technique is useful only with children who can follow instructions.
- ✓ Never reward a child at the end of complying with over-correction procedures. This would mean that you are indirectly rewarding the child's problem behaviour.
- ✓ Do not nag, talk, lecture, sermonize or argue as you implement this technique.



#### **16. Ordering authoritatively:**

- ❖ Sometimes the child fears some elders at home or his teachers. Hence such elders can help him to learn the desired behavior if he is ordered to stop a particular behavior and perform the desired behavior.
  
- ❖ School teachers can also help him to mend his way if he has rebellious behavior.



### 17. Therapy:

- Problems like repetitive behaviors such as motor problems, thumb sucking, teeth grinding, and antisocial behavior like lying and stealing, fears and exhibiting sexual behavior requires a proper therapy in order to control.
- Behavior therapy, play therapy, physiotherapy can be used to control the problem. Some require speech therapy.



### **18. Activity Scheduling:**

- ✓ One of the reasons of the occurrence of problem behaviours in children is lack of adequate stimulation. This is typical for most children with Developmental disabilities.
  
- ✓ These children do not have enough opportunities to learn or show their limited skills. Even if they did, rewards are not sufficiently forthcoming. Therefore, appropriate scheduling of the daily timetable of activities is necessary to keep the child constructively engaged.
  
- ✓ Often when your child is engaged in training activities appropriate for his or her age/ level, the scope for occurrence of problem behaviours reduces considerably.

### **Example:**

Varsha's therapy started with activities requiring her to point at various pet animals, vegetables, vehicles, fruits and household articles on picture cards. Every time the therapist settled down to teach her with picture cards, Varsha would look around and seem easily distracted. An intensive behavioural observation and assessment revealed that Varsha had long since acquired enough competence in picture reading. What she required were activities involving picture arrangement, sequencing pictures depicting her daily routines, arranging pictures on fables, etc. The faulty programming was immediately rectified. Her therapeutic activities were rescheduled, and her behaviour problems were no more observed during the therapy sessions.



### **19. Modelling and teaching of proper behavior:**

- ✓ The child who has more number of problems requires good education program where teachers and specialists handle and give the proper training so that the child will learn the desired behavior.
- ✓ If the child is sent to school early it is easier to correct his poor habits and develop good habits and behavior.



## 20. Medical Consultation:

- Some children need doctors advice for problems arising out of motor dysfunctioning, handicaps, like, physical, mental, visual, learning, or multiple handicaps.
- Parents and the disabled child require counseling from doctors
- Some children require medical treatment and medicine to stop an ailment.
- Attention Deficit Hyperactive Behavior (ADHD) needs doctors treatment in controlling behavior problems.



## 21. Needs proper disciplining:

- ✓ Parents use Authoritarian, or permissive or democratic discipline in order to control the behavior of their children. Democratic disciplining has good control and the problem is tackled with love and warmth and is considered the best method.
- ✓ The mentally challenged child might be performing a particular act by imitating his siblings or peers or parents.
- ✓ Parents must first see why the child is doing the behavior. If it is due to their faulty parenting or if other children are also acting in the same way then it may be due to their defect in disciplining.
- ✓ Hence the parents can go to counseling bureaus or to schools for advice to their children's problems.

# **EMOTIONAL BEHAVIOUR OF MENTALLY CHALLENGED CHILDREN ATTENDING SPECIAL SCHOOLS : PARENTAL EDUCATIONAL INTERVENTION FOR ENHANCING KNOWLEDGE ON BEHAVIOURAL MANAGEMENT**

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## **ABSTRACT**

The study was undertaken during 2007-08 with objectives to study the existing special education programmes for mentally challenged children in Dharwad-Hubli, to assess the parental awareness and knowledge of special education, to study the emotional behaviour of mentally challenged, to develop an educational package for parents and teachers regarding behaviour management and test the efficacy of the package on knowledge gained by mothers regarding problem behaviour and management.

The study comprised of mentally challenged children attending special schools in Dharwad-Hubli. Among 8 institutions two day schools were selected. Totally these were 148 children of which 60 children were selected who were educable and trainable, between the ages of 6-15 years. Emotional behaviour was studied by Prout and Strohmes scale (1995) and Peshwaria *et al.* Basic-MR (1992) by interviewing teachers and parents of the children. The schools were evaluated by questionnaire developed by the investigator. Parents awareness regarding mental retardation was assessed by NIMH-GEM questionnaire by Peshwaria *et al.* (1994).

The results revealed that six schools out of eight had good facilities. Internalizing problems were higher in girls and externalizing problems were higher in boys. Children with IQ 25-50 had higher emotional problems when compared to educable IQ 50-75. Children at age 6-10 years had lesser emotional problems when compared to 10-15 years age group. Children with early admission to school had higher emotional problems than children attending late (above 6 years) small families and medium size families had children with higher emotional score when compared to large or joint families. First borns had lower emotional problems than later borns. Higher the socio-economic status lower was the emotional problem score of children. Mother's knowledge and awareness was positively correlated with SES. Education of mother was negatively correlated with emotional problem of their children.

Parental educational intervention was found to be highly significant, indicating an increase in knowledge of mothers regarding disability and management of emotional behaviour. Hence the educational package was found effective in promoting knowledge to parents.