

STUDY OF MENTAL HEALTH OF THE MOTHER'S WHOSE CHILDREN HAVE EITHER AUTISM OR DOWN SYNDROME

V.Bhavani

(Research scholar in psychology), PRIST UNIVERSITY, TAMILNADU

Abstract: The present study was conducted to study the level of mental health among the mothers whose children have either Autism disorder or Down syndrome. The mental health of mothers, who are primary care givers of these 'special' children is of great importance. The review of literature collected was compared to the present study. The tool selected for this research was Mental health inventory developed by Jagadish and A.K Srivastava. Totally 60 subjects were taken for this study and disturbed as 30 mothers of children with Autism disorder and 30 mothers of children with Down syndrome. Purposive sampling technique was used for collecting the data.

The validity of the tool has been, already established by the author. The pilot study was conducted on 30 subjects (15 mothers of children with Autism and 15 mothers of children with Down syndrome) to test the reliability of the tool. Fifteen hypothesis were formulated for collecting and analyzing the data. The data collection was done in four 'special' schools. They were located at Alwarpet, Raja Annamalaipuram, Besant nagar and Neelankarai. The test was administered to mothers of children with either Autism or Down syndrome. It took almost a month to finish the data collection. The collected data was tabulated and statistically analyzed. The formulated hypothesis was tested and the conclusions were drawn from the findings.

The results of the data analysis have shown that mental health affects the psychological well being of the mothers. The overall results proved the following.

- The mothers of children with either Autism disorder or Down syndrome have almost the same level of Mental health.
- Mothers in the higher age bracket had better mental health than those who were younger.
- Working mothers showed better mental health when compared to mothers who are housewives.
- Urban mothers showed better mental health than mothers from the rural background.
- From the socio-economic stand point the mothers from the higher financial strata showed better mental health than those from the lower financial group.
- The mental health of mothers from the different education backgrounds were almost at par. Post graduates showed slightly better mental health than graduates and undergraduates.
- There was no difference in the mental health of mothers from the joint and nuclear family set up.
- The number of children the mother had, had no bearing on her mental health. The mental health of mothers with single children and those with more children, were on par with each other.
- The mental health of mothers whose children are from the different age groups (ie) below 10 years, between 10 years-20 years and those above 20 years, were almost equal.
- The gender of the 'special' child makes no difference to the psychological well being of the mother.
- Mothers of children with or without associated problems had the same level of mental health.
- Irrespective of the birth order of the child the mothers had the same level of mental health.
- The number of years the child attended school had no bearing on the mental health of the mothers.
- Irrespective of whether the child was medicated or not the mother's mental health levels were at par. Irrespective of whether the child exhibited behavior problems or not the level of mental health for those mothers were almost similar.

1. INRODUCTION

1.1 'Special' child in the family

God, grant me the serenity to accept the things I
cannot change,
The courage to change the things I can,
And the wisdom to know the difference.

This is the spirit with which every human being has to live one's life. Insurmountable problems can be varied for different individuals. One such, could be nurturing a 'Special' child. The serenity to accept it has a lot to do with one's mental make-up.

The birth of a baby is usually anticipated with great excitement and expectations, of a future filled with happiness and success. This exuberance may become muted with the birth of a mentally or physically challenged infant. It does not matter if the handicap is mental abnormality or physical abnormality. The family into which this child is born will change in some ways.

Accepting a child with mental handicap becomes difficult to parents and the whole family particularly when competence and achievement are very much valued in modern world. Thus when it suddenly becomes necessary for parents to support someone who has a very limited capacity the parents are put into a conflicting situation which results in a great deal of stress.

Having a 'Special' child in a family is at times one of the most stressful experiences a family can endure. Parental reactions to the realization that their child is exceptional usually includes shock, guilt, anger, sadness and anxiety. Individuals handle each of these stages differently and may stay in certain stages longer than others. Some parents perceive the 'challenged' infant as an extension of themselves and may feel shame, social rejection, ridicule or embarrassment. Almost all parents who have a 'special' child suffer from chronic sorrow throughout their lives. The extent of this sorrow may differ from one parent to another but most would have manifestations of sorrow in varying degrees. Parental reactions may be affected by economic status, personality traits and marital stability. Initial parental response may be in the form of emotional disintegration. Some parents cannot cope beyond this disintegration.

A number of practical problems may make living with a 'challenged' child especially demanding. For example, there may be financial strain, to provide necessary medical expenses, special equipments, special education and employing caretakers in the parent's absence; deprivation of rest and leisure for the parents etc. The parents may find it difficult to special equipment has to be transported with the child. Especially for mothers, management of the daily needs of a 'special' child may constitute a time consuming task. The cumulative impact of daily parenting hassles and difficulties in dealing with 'special' children represent significant stressors that may subsequently affect parent and family functioning.

In short, parents have to give their 'challenged' child 24 hours of attention, for 365 days of the year.

1.2 AUTISM

Features

The essential features of Autism Disorder are the presence of abnormal or impaired development in social interaction and communication and a restricted repertoire of activity and interests. Manifestations of the disorder vary greatly depending on the developmental level and chronological age of the individual. Autism Disorder is sometimes referred to as early infantile autism, childhood autism, or Kanner's autism.

The impairment in reciprocal social interaction is gross and sustained. There may be marked impairment in the use of multiple nonverbal behaviors (e.g., eye-to-eye gaze, facial expression, body gestures and postures) to regulate social interaction and communication. There may be failure to develop peer relationships, appropriate to developmental level, that may take different forms at different ages. Younger individuals may have little or no interest in establishing friendships. Older individuals may have an interest in friendship but lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g., not showing, bringing, or pointing out objects they find interesting). Lack of social or emotional reciprocity may be present (e.g., not actively participating in simple social play or games,

preferring solitary activities, or involving others in activities only as a tools or mechanical aids). Often an individuals awareness of others is impaired. Individuals with this disorder may be obvious to other children (including siblings), may have no concept of the need of others, or may not notice another person's distress.

The impairment in communication is also marked and sustained and affects both verbal and non-verbal skills. There may be delay in, or total lack of developmental of the spoken language. In individuals who do speak, there may be impairment in the ability to initiate or sustain a conversation with others, or may use a stereotyped and repetitive use of language or idiosyncratic language. There may also be a lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level. When speech does, develop the pitch, intonation, rate, rhythm, and stress may be abnormal. A disturbance in the comprehension of language may be evidenced by an inability to understand simple questions, directions, or jokes. Imaginative play is often absent or impaired.

Individuals with autistic disorder have restricted, repetitive, and stereotyped patterns of behavior, interests and activities. There may be an encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus; an apparently inflexible adherence to specific, nonfunctional routines or rituals; stereotyped and repetitive motor mannerisms; or a persistent preoccupation with parts of objects.

Associated Disorders

• In most cases, there is an associated diagnosis of Mental Retardation, commonly in the moderate range (IQ 35-50). Approximately 75% of children with Autism Disorder function at a retarded level. Individuals with Autistic Disorder may have a range of behavioral symptoms, including:

- Hyperactivity
- Short attention span
- Impulsivity
- Aggressiveness
- Self-injurious behaviors
- Temper tantrums
- Odd responses to sensory stimuli
- Abnormalities in eating or sleeping
- Abnormalities of mood
- Lack of fear in response to real dangers
- Excessive fearfulness in response to harmless objects.

Prevalence

Epidemiological studies suggest rates of Autistic Disorder of 2-5 cases per 10,000 individuals.

Difficulties faced by mothers of children with autism

- Raising a child with autism is a very stressful task. The strain it can put on the mother is tremendous. A child with Autism requires almost constant supervision. Siblings of children with Autism tend to feel neglected by the mother, Hence it is imperative she spends quality time with her other children as well, otherwise they may take to negative pursuits as attention seeking methods.
- Autism can be very hard on a marriage. Parents almost lose all their personal time because of the care, their Autistic child requires. This can lead to depression, withdrawal of one parent from care giving and may lead to even divorce or abandonment. Under undue stress small problems can fester and lead to resentment or angry outburst.
- Mothers who isolate themselves from the outside world will only make themselves feel more alone in dealing with their autistic child.
- Most people do not understand Autism, as the children look normal. Socializing is practically impossible due to the disruptive of the child in public

1.3 DOWN SYNDROME

Down Syndrome is a condition with a chromosomal abnormality. The children suffering from Down syndrome can usually be identified at birth or shortly thereafter.

The human body is made of cells which contain a center, called a nucleus. The genetic material is stored in these cells and is known as Genes. These are responsible for our inherited characteristics.

Genes are grouped along X like structure called chromosomes. The nucleus of each cells contain 23 pairs or 46 chromosomes, half of which are inherited from each parent. Thus we get 23 chromosomes from our mother and 23 from our father.

In Down Syndrome, however, the cells usually contain not 46, but 47 chromosomes. In most cases, the extra chromosome occurs in the chromosome pair number 21. This excess genetic material, in the form of additional genes along the 21st chromosome, results in Down Syndrome.

As 95 percent of all cases of Down's syndrome occur because there are three chromosomes, instead of two in the 21st pair, it is normally referred to as "Trisomy 21".

Types of Down Syndrome

a) Nondisjunction : This happen either prior to or at conception. The 21st pair of chromosome, either in the ovum or the sperm fails to separate. This results in an embryo with three number 21 chromosomes instead of two. As the embryo develops, the extra chromosome is replicated in every cell of the body This is responsible for 95 percent of all cases of Down Syndrome.

b) Mosaicism : This occurs when nondisjunction of the 21st chromosome takes place in one of the initial cell incisions after fertilization. When this happens, some cells end up containing 46 chromosomes and some containing 47. Those cells with 47 chromosomes contain an extra 21st chromosome. Due to the "mosaic" like pattern of the cells, the term mosaicism is used. Mosaicism is responsible for only one or two percent of all cases of Down Syndrome.

c) Translocation : As with nondisjunction trisomy 21, translocation occurs either prior to or at conception. This is a different type of chromosomal problem and occurs in only three to four percent of people with Down syndrome. It occurs when part of the pair 21 chromosome breaks off during cell division and attaches to another chromosome which is either the pair 13, 14, 21 or 22nd. When this happens, the total number of chromosomes in the cells remain 46, the presence of an extra part of the number 21 chromosome causes the features of Down syndrome.

Clinical Features

- The baby is short statured and has defective articulation with a guttural low-pitched voice.
- Muscle hypotonia, low muscle tone
- The baby has a small head (brachycephaly)
- Flat facial profile, a somewhat depressed nasal bridge and a small nose.
- There are extra folds of skin over the upper eyelids (epicanthal folds).
- Oblique palpebral fissures, an upward slant to the eyes.
- Dysplastic ear, an abnormal shape of the ear.
- A single deep crease across the center of the palm. The hands are short and broad and have a single crease on the palm (simian crease).
- Hyperflexibility, an excessive ability to extend the joints.
- The fifth finger of the hand is curved in (clinodactyly).
- Excessive space between large and second toe.

- Enlargement of tongue in relationship to size of mouth.
- There are associated abnormalities of the heart

Down syndrome and associated medical problems

- Cognitive hypothyroidism
- Reduced basal metabolism
- .Enlargement of thyroid gland
- Disturbance of autonomic nervous system.
- Hearing less
- Congenital heart disease
- Vision disorder
- Hypotonia or poor muscle tone
- Atlanto axial instability (malformation of the upper part of the spine)
- Mental retardation

Problems faced by mothers of children with Down Syndrome

- Mothers of children who are affected by Down syndrome have to contend with the child's level of mental retardation and delayed milestones.
- A child with Down syndrome can have severe mood swings and can be emotionally draining on the other.
- Congenital problems of the child with Down syndrome can be an added anxiety for the mother.
- Poor muscle tone of the child with Down Syndrome may need the mother to assist physically in a big way. This could become physically exhausting on the mother.

1.4 Mental health

Mental health is an important component of an individual's overall health and wellbeing. It is important to maintain good mental health as it is to maintain good physical health.

Mental health is a state of successful performance of mental functions resulting in productive activities, fulfilling relationships with other people and the ability to adapt to changes and to cope with adversity.

Mental health refers to a person's ability to deal with events in his daily life, his functional responsibility in society and his experience of personal satisfaction and enjoyment. It includes a sense of self-esteem as well as a feeling of contentment and inner peace. Mental health is necessary for the complete functioning of the human mind. As it is a basic condition for the growth of the mind.

Mental or emotional health is something everybody has. It includes how people feel, think, behave and also what people think about themselves.

Definitions

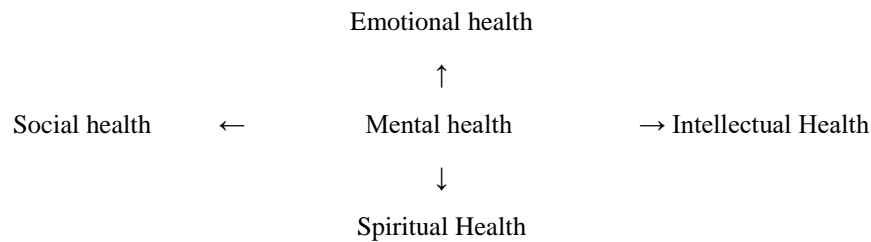
World Health Organization (W.H.O) defines mental health in terms of 'complete physical, mental and social well being and not the mere absence of diseases or disability'.

According to **Goldensen** (1920) mental health is the ability to handle everyday demands and situations without excessive strain and stress. A person who is mentally has a sense of well being and functions effectively in life. He can work quickly, think clearly, manage his emotions, enjoy life and be on reasonably good terms with most other people.

Klein (1960) defines mental health in terms of integrated personality, which is manifested in terms of emotional maturity, integrated self concept and the capacity to deal with emotional problems.

Chaplan (1961) defines mental health as the 'capacity of an individual to solve his problems in a socially accepted way'.

Dimensions of mental health



Emotional Health

This deals with healthy feelings, one has towards oneself, others and to life situation. An emotionally healthy person is able to understand his/her emotions and express them appropriately. Such individuals can adjust to change, solve problems and cope with life successfully.

Intellectual Health

This deals with a person's ability to make effective use of his or her intellectual capacity. To perform such functions as, evaluating information and taking decisions.

Social Health

This deals with person's ability to perform comfortably and effectively in a variety of social roles. This requires ability to assume responsibility, communicate effectively and adapt successfully to one's environment.

Spiritual Health

This can be expressed through deep religious faith, a feeling of oneness with nature, a sense of inner peace or loving and supportive relationships. They have a purpose in life and are able to experience love, joy and fulfillments.

FACTORS RESPONSIBLE FOR POOR MENTAL HEALTH

a. Hereditary Factors

Sometimes the roots of the mental ailments are found in the defective genes inherited from the parents. Inherited potentialities in terms of intellectual abilities, physiological structure, appearance etc. put limits on one's mental health and the deficiency and inappropriateness of any sort in these potentialities furnish a fertile soil for the development of mental and nervous diseases.

b. Physiological Factors

Physical health of an individual affects his mental health. Poor health, physical defects, ailments and diseases brings deterioration in one's strength and stamina for performing one's duties. It arouses inferiority feelings and mental complexes that creates serious adjustments problems. Improper physical and physiological conditions provides a fertile soil for the growth of poor mental health.

c. Environmental Factors

Social and emotional maladjustment has been found to be the root cause of all mental illness and disorders. Noncongenial environmental conditions at home, neighbourhood, community and society have a direct bearing on one's mental health causing inferiority complexes, unusual conflicts, anxieties and complexes that lead to mental illness ad disorders.

d. Developmental Goals

The act of fixing goals which are unrealistic and faulty may lead to frustration and developmental of poor mental health.

e. Negative Thinking

The impact of negative thinking affect one's skills, confidence and also develops the fear of failures. All these create stress on one's performance affecting one's positive ways of thinking.

Mental Health includes

- Feeling good about oneself and one's life
- Being able to respond constructively to stress in one's life.
- Being able to cope with crisis situations.
- Self esteem and confidence.
- How one views oneself and one's future.
- The state of one's mental health affects their relationships, work, responsibilities and commitment. In reality one's mental health is affected by everything and everyone, one has contact with. That means everything in one's life can have a positive or a negative affect on one's mental health or emotional wellbeing. Stress, anxiety and depression affect the mental health of mothers who are primary care givers of 'special' children.

• Stress

Stress within normal parameters is acceptable for a person's functioning, but when they are too high or for prolonged periods, then the person has to be taught to cope with it. Every individual has a coping capacity. When the stress goes beyond that level, the person could get ill. It's like a scale that needs to balance.

What causes stress?

Every individual is different and respond differently to situations. Some people get stressed about matters that do not worry other people.

- Family breakdown
- Death of dear ones
- Too many responsibilities
- Natural calamities
- Deadlines to meet
- Unable to express one's true feelings
- Caring for a child with special needs requirement

Stress can create

- Physical exhaustion
- Loss of self confidence
- Depression
- Hair loss
- Skin eruptions

Body's response to stress

- Headaches
- Sore muscles
- Indigestion
- Sleeplessness
- Palpitation

Emotional response to stress

- Nervousness
- Sadness
- Aggression and anger
- Tiredness
- Tension

◆ Anxiety

Anxiety is a normal feeling that people have when they are faced with something that could be dangerous, difficult, embarrassing or stressful. The feeling of anxiety can include feeling upset, tense and uncomfortable.

◆ Depression

Everyone feels sad and low from time to time; this is normal, but a persistent feeling of 'sadness' is damaging to one's health both physical and emotional.

Symptoms of Depression

- Feeling sad and down
- Feeling anxious
- Feeling hopeless
- Feeling empty and numb
- Having no energy
- Feeling lonely
- Being bad tempered
- Unable to sleep properly

◆ Low self esteem and confidence

Self esteem is how much you value yourself. Most people have days when they value themselves highly, feel confidently and believe in themselves. Some others have doubts and are unsure of their worth. Self esteem and confidence is affected when one is blamed for things that are not due to one's fault. Constantly comparing themselves to others can give some people low self-esteem. Low self esteem can damage one's general feeling of well being.

Need for this study

Mothers shoulder many responsibilities. They play different roles within the confines of the home and outside too. They handle the role of being the emotional support system for their husbands; are the care giver for the elders at home; carry the major responsibility of being an affectionate mother who moulds her children to be good human beings, who have to contribute to society; but not the least she manages her domestic and career responsibilities too. A 'special' child in the family means additional responsibility for the mother, as she is the primary care giver. All of these, take away some of her personal time, leaving her over stressed, anxious and fatigued most of the time. In the long run, it may affect her physiological well being. Compared to other disabilities, mental retardation seems to be the worst, because mentally retarded children become life long dependents for their parents. Beside mental retardation, disabilities like autism, seem to be more complicated. So far, training has been on a trial and error method and no fool proof methodology is available for training these children. Hence the mothers of these children are especially worried about them. These mothers are at times frustrated and lose their hope. Children with Down Syndrome seem to have more potential when compared with other categories of mental retardation, as they are educable and trainable to a certain extent. But the mothers of those children too, do not see a ray of hope with reference to the future of their children. Hence these factors may certainly affect their health, physically and psychologically.

Therefore with this in mind, the present researcher wanted to find out the psychological well being of the mothers of children with Autism and those with Down Syndrome.

2. REVIEW OF RELATED LITERATURE

Need for the review of related literature

An essential aspect of the research project is the review of related literature. A researcher undertakes the survey of literature related to the problem as it gives information. This chapter includes facts, concepts, theories and previous research findings.

Significance of the review

This helps the researcher in stating the sample size, choosing tools, procedure for collecting the data and selecting the statistical tools, analyzing and interpreting the results.

Miller and Keirn (1978) compared MMPI (Minnesota Multiphase Personality Inventory) profiles of parents of emotionally disturbed with mentally retarded and non-clinic children. Fifty (50) mothers and fathers from each group of mentally retarded, emotionally disturbed and normal children were chosen as the sample. Parental adjustment using MMPI scores was assessed. Mothers of mentally retarded and emotionally disturbed had elevated scores. Mothers of emotionally disturbed children mostly differed from mothers of the normal children. Fathers did not significantly differ in any group.

Narayan (1978) studied the impact of mentally retarded children on their families. The study explored the nature and type of problems experienced by the parents of mentally retarded children in their day-to-day living. Forty Four (44) consecutively registered cases (38 boys and 6 girls) of mental retardates aged 6-10 years with tested I.Q., below sixty seven (67) were taken. The tools used were an interview schedule based on that of Tizard and Grad (1961) and a modified form of Leeds Anxiety and Depression Scale of mothers. Mothers of mentally retarded kids were more prone to anxiety and depression.

Seth (1979) conducted a comparative study of maternal attitude of retarded children and normal children. The findings of the study clearly revealed that mothers of mentally retarded children evinced more severe and pathological attitudes than mothers of normal children.

Beckman's (1963) focus of study was to examine the relationship between child characteristics and stress reported by mothers. The child characteristics considered were rate of development, social responsiveness, temperature, repetitive, stereotypic behaviors and additional care giving demands. The sample consisted of 31 infants and mothers. The age range of the infants was 6.6-36.6 months. The tools used were questionnaire on resources and stress (Holroyd, 1974) Holmes and Rehe (1967) Schedule of Recent experience. The results of Beckman indicated that four of the child characteristics, temperature, responsiveness repetitive behavioral patterns and care-giving demands, were significantly related to the amount of stress reported by the mothers.

Kazak (1987) studied the stress and social networks of families with disabled children in three samples. Comparison of 125 parents of handicapped children to 127 parents of non-disabled children from a separate samples with respect to personal stress, marital satisfaction, social network size, and density. Only mothers of disabled children experienced higher levels stress than comparison parents. Few differences were found in social networks variables.

Donovan (1988) investigated the mothers perceptions of family stress ways of coping with adolescents who were autistic or had mental retardation. Sample comprised of thirty six (36) mothers of each group. Stress was measured with Questionnaire on resources an stress (QRS) Revised Form (Fredrich, Greenberg and Crinc). The Locke Wallace Marital Adjustment Scale Short Form (Locke and Wallace (1959) was used as the measure of marital adjustment and an indirect measure of the extent to child stress impacted on broader family functioning. The coping Health Inventory for parents Form D (McCubbin and Cauble, 1979) was used as the measure of parental coping. Results indicated group differences among maternal reports of family stress. All comparisons of child related stress revealed that mothers with an adolescents who was autistic perceived greater level of family stress than did mothers with an adolescent who had mental retardation. Marital adjustment did not differ by group. Further, maternal coping styles were consistent across groups, indicating that mothers with adolescents who had a handicap rely heavily on community resources and professional help for coping.

Singer, et.al., (1988) studied stress management training for parents of children with severe handicaps ad mental retardation. They examined the scope of coping skills training as a very handicaps. 36 parents of school aged children (Age 4-16 years) with severe handicaps were randomly assigned to a treatment group and a waiting list control group. The intervention consisted of a series of 8 classes on self monitoring, progressive muscle relaxation, use of relaxation as an active coping skill, and cognitive reframing. The treatment group improved significantly on measures of depression and anxiety. Results suggest that a psycho educational approach to coping skills offered in the context of support group can be effective means of assisting parents.

Sandra, N, et.al., (1989) investigated greater stress and depression and lower marital intimacy for mothers of autistic children than for mothers of normal children or mothers of Down Syndrome children.

Liwag E.M. (1989) studied the family stress and coping of mothers and fathers of autistic children. 13 mothers and 12 fathers participated in a study that explored the stresses coping experiences of families of autistic children undergoing therapy. In phase 1 parents responded to a questionnaire that assessed family parental demographic characteristics. In phase 2, a sentence completion form (SCF) and in depth interviews elicited parents emotional reactions toward the autistic child and attitudes toward the handicap. Content analysis of SCF data reveal that families were most stressed by the defects and disabilities association with autism itself, including lack of speech, hyperactivity, and tantrum behavior. A second source of stress was the permanence of the child's condition and the anxiety that the child will never be normal. Two forms of family coping was identified, instrumental adjustment and emotional acceptance.

Ryde – Brandt and Brita (1990) studied the anxiety and defense strategies in mothers of children with different disabilities. They administered the hospital anxiety and depression scale (HAD) to 18 mothers of psychotic children, 18 mothers of children with various motor handicaps, 13 mothers of children with Down Syndrome and 13 mothers without handicapped children. High scores of anxiety were particularly common in mothers of psychotic children. All Ss were also tested with a Precept Genetic Technique aimed at demonstrating anxiety evoked by a threatening stimulus and defense strategies activated. Ss characterized by such anxiety signs and few defense strategies had high 'HAD' scores. 50% of mothers with HAD anxiety scores had this response pattern. This combination was unusual (8%) in mothers of children with other handicaps with high HAD anxiety scores.

Steven. J. et.al., (1990) studied maternal characteristics and perceptions of pervasive and situational hyper actives and normal boys within the age limit of 6 years to 9n years showed that mothers of pervasive hyper active boys reported significantly more overall stress in their relationship with their sons as displaying more behavioral problems compared to mothers compared to mothers of situational hyper actives and non hyper active children. Mothers of pervasive also rated themselves as more depressed less competent, more restricted and frustrated compared to control mothers. Mothers of situational hyper actives indicated that their sons displayed more behavior problems and reported more maternal stress, compared to mothers of normal controls. Normal control mothers were rated as more socially skilled than mothers of situational hyper active boys.

Sequeira E.M. et.al., (1990) investigated the perceived burden and coping styles of the mothers of mentally handicapped children. There was no differences in the perceived burden with regards to the sex of the child. Ss reported extensive disruption in routine family activities. When the children had a large number of associated problems. 70.9% of mothers showed severe strain on their psychological health. Denial, rehearsal of alternative outcomes, findings a purpose , and seeking support were the most common coping styles used by the Ss.

Jan. L. Wallander, et.al., (1990) investigated the contribution of child functional independence and maternal psychological stress to the adaptation of 119 mothers of physically on sensorially handicapped children. Maternal stress was uniquely associated with maternal mental health. Daily hassles and handicap related to psychological stress in particular put mothers at risk for mental health problems.

Patricia Sloper, et.al., (1991) studied that psychosomatic symptoms of parents were due to high stress levels. For mothers the children's behavior problems, excitability and level of self sufficiency were strongly related to psychosomatic problems.

Non Homes and Janet Carr (1991) investigated the pattern of care in families of adults with Autism and Down Syndrome. Most of the care giving fell on the mothers, with fathers helping mainly with supervision rather than physical care or domestic tasks. Autistic adults exhibited significantly more behavior problems that Down Syndrome adults.

Tangri and Verma (1992) studied the social burden felt by mothers of the handicapped children. The sample consisted of mothers of 50 physically handicapped and 50 mentally handicapped children were in the range of 35-70. Physically handicapped children suffered from orthopedic handicap and had more normal intelligence. Social Burden Scale was used; It consists of 24 items arranged in 6 different categories: Financial Burden, Disruption of routine family activities, Disruption of family leisure, Disruption of family interaction. Effect on physical health of others and Effect on mental health of others. The mothers of mentally handicapped children reported, higher social burden than those of the physically handicapped children.

Dyson (1993) studied parental stress and family functioning over time in families of children with disabilities. Seventy four(74) of the hundred and ten (110) families in the original study have participated in this study. Thirty eight families (38) families were from the disability group because of the presence of disability in their children]n and thirty six (36)

families were from the non-disability group. Instruments used for the study were questionnaire on resources and stress (Fredrich and Greenberg, 1983), and the Family Environment Scale (Moos and Moos, 1981). Results showed a higher level of stability in parental stress and a modest degree of consistency over time in family functioning of families with disabled children. Families of children with Disabilities were distinguished by the exceedingly greater amount of stress.

Krauss (1993) designed a study to determine whether there are significant differences between mothers and fathers of young children with disabilities in the amount of the child related and parenting stress. Subjects were one hundred and twenty one (121) mothers and fathers of toddlers with disabilities. Instruments used were Parenting Stress Index, child improvements locus of control scales, Parent Support Scale, Family Adaptability and Cohesion Evaluation Scales 2 and Bayley Scales of Infant Development. Mothers reported more stress from the personal consequences of parenting.

Orr et.al., (1993) studied experienced by families with a child who has development delay. Mothers with children ranging in age from 2 to 18 yrs were assigned to a pre-school, middle childhood group and the adolescent group. Parenting Stress Index (Abidin), was used to measure the stress. Hollingshead's, Four Factors Index Social Status was used to measures social status of families. Results indicated that children belonging to all the three groups were strong sources of stress for mothers. The second trend that is evident was that mothers in the middle childhood group reported consistently higher stress scores than did mothers in the other two groups.

Mary Roach and Orsmond (1999) discovered that parents of Down Syndrome children perceived more care giving difficulties and parent related stress(incompetence, depression, health problem and role restriction) than parents of normal developing children. Mothers who reported more responsibilities for child care, perceived difficulty with health, role restriction and spousal support.

Anneren and Wikblad (2000) researched into the self perceived health of parents of children with Down Syndrome. The survey assessed domains including physical functioning, vitality and mental health. Results showed that mothers of Down Syndrome children reported significantly lower vitality and mental health than did fathers of these children.

Hedov.G. and Anneren.G (2002) studied the adjustment ability in parenthood among parents of children with Down Syndrome and normal control groups. Individuals with higher coherence levels managed stress better. Mothers of children with Down Syndrome perceived more stress, affecting their general mental health than mothers of normal control groups.

Greenberg, et.al., (2004) investigated the quality of the relationship between maternal care gives and their adult child with disabilities on maternal well being and whether this effect is mediated by dispositional optimism. The three groups were children with Autism, Down syndrome and schizophrenia. For all three groups optimism was related to better mental and physical health. The findings highlighted the importance of dispositional optimism, a psychological resource that has been virtually ignored in studies of family caregivers of adults with disability.

3. METHODOLOGY

Researcher in common parlance refers to the search for knowledge. Research is the scientific and systematic search for pertinent information on a specific topic. Research is an art of scientific investigation. It is actually a voyage of discovery. This chapter contains statement of problem, objectives of the study, hypothesis, tools selected for the study, sampling technique, statistical analyses used to test the formulated hypotheses.

3.1 STATEMENT OF THE PROBLEM

To find out the level of Mental Health of mothers whose children are having either Autism or Down Syndrome.

3.2 OBJECTIVES OF THE STUDY

1. To study the level of mental health of mothers whose children have either Autism or Down Syndrome.
2. To compare the level of mental health of mothers whose children have either Autism or Down Syndrome based on the demographic variables.

3.3 HYPOTHESES

1. There would be a significant difference in the level of mental health between the mother's of children with wither Autism disorder or Down Syndrome.
2. There will be a significant difference in the level of mental health among the different age groups of mothers with wither Autism disorder or Down Syndrome.

3. There will be a significant difference in the level of mental health between the mothers possessing different educational qualification whose children have either Autism or Down Syndrome.
4. There will be a significant differences in the level of mental health between working and mom-working mothers whose children have either Autism or Down Syndrome.
5. There will be a significant differences in the level of mental health between the rural and urban mothers whose children have either Autism disorder or Down Syndrome.
6. There will be a significant differences in the level of mental health among the mothers from different family backgrounds whose children have either Autism disorder or Down Syndrome.
7. There will be a significant difference in th level of mental health of mothers who have only a single Autistic or Down Syndrome child and those have other children along with their 'special child'.
8. There will be a significant difference in the level of mental health among the mothers of different socio- economic strata whose children have either Autism disorder or Down Syndrome.
9. There will be a significant differences in the level of mental health among the mothers of children from different age groups who suffer from either Autism disorder or Down syndrome.
10. There will be a significant differences in the level of mental health between the mothers of children from either gender who suffer from either Autism disorder or Down syndrome.
11. There will be a significant difference in the level of mental health between the mothers of children with/without associated problems linked to either Autism or Down syndrome.
12. There will be significant difference in the level of mental health between the mothers of children with Autism disorder or Down syndrome based on the birth order of the child.
13. There will be significant difference in the level of mental health between the mothers of children with Autism disorder and Down syndrome based on the number of years the child has attended school.
14. There will be a significant difference in the level of mental health between the mothers of children who are administered or not administered medication for the problems associated with either Autism or Down syndrome.
15. There will be a significant difference in the level of mental health between the mothers of children with or without behavior problems associated with either Autism or Down syndrome.

3.4 SELECTION OF TOOL

“The Mental Health Inventory” developed by Jagdish and Dr.A.K.Srinivastava was used for this study.

3.5 DESCRIPTION OF TOOL

Mental Health Inventory questionnaire developed by Jagdish and Dr.A.K.Srinivastava. This scale has six dimensions. They are :

1. Positive self evaluation
2. Realistic perception
3. Integration of personality
4. Autonomy
5. Group oriented attitudes
6. Environmental mastery

This inventory consists of a number of statements (totally 55 statements) relating to one's feelings about oneself in everyday's life. One has four alternatives to respond, to each of the statements, namely, always, most of the times, sometimes, r never, which most suitably indicate the frequency of one's feelings and views. The inventory expects all statements to be answered without leaving any statement unanswered.

3.6 RATIONALE

This test was administered to mothers since it was found suitable to assess the good mental health or psychological well-being of the individual. It was standardized on Indian population and hence the researcher used it for the present study.

3.7 ADMINISTRATION PROCEDURE

The questionnaire with 55 statements along with the bio-data requirement was neatly typed with enough space to enable the respondents to put a mark in the respective boxes or spaces. The questionnaire was distributed to a number of potential respondents after explaining to them the purpose of the study and the related instructions with respect to filling up the questionnaire.

SCORING

The questionnaire was divided into positive questions and negative questions and the marks for the respective positive and negative questions were allotted as follows :

Total no. of questions	Positive question number	Positive scoring if marked as
25	2,5,6,11,18,19,25,26,28,30,31,33,37,38,40,42,43,44,45,49,50,51,53,54,55	Always -3 Most of the times-2 Sometimes-1 Never-0

Total no. of questions	Negative question number	Negative scoring if marked as
30	1,3,4,7,8,9,10,12,13,14,15,16,17,20,21,22,23,24,27,29,32,34,35,36,39,41,46,47,48,52	Never- 3 Sometimes -2 Most of the times -1 Always -0

INTERPRETATION

A high score attributed to good mental health and a low score to poor mental health.

3.8 PILOT STUDY

To find out the feasibility of the test, the pilot study was conducted. The researcher initially administered the test to 30 subjects and obtained their responses. The procedure adopted is as follows.

Test administration procedure

The mental health questionnaire prepared in English was given to 15 mothers whose children have Autism and to another 15 mothers whose children have Down syndrome.

The subjects were selected from different 'Special Schools' in the city of Chennai. The researcher explained the procedure of the test and clarified their doubts. Accordingly the subjects answered the questionnaire and returned their responses sheets within a few days. The researcher enquired if they respondents faced any difficulty while answering them. All the respondents informed the researcher that they understood all the questions and had answered honestly, based on their feelings. Hence the researcher decided that the mental health questionnaire could be administered without making any notifications.

3.9 VALIDITY

The validity of the test has been already established by the author. Hence the present researcher did not make any attempt to find out the validity again.

3.10 RELIABILITY

The test-retest reliability was established for the mental health inventory during the pilot study test. The first test was administered to 15 mothers whose children have Autism and 15 mothers whose children have Down syndrome and again after a gap of 2 weeks, the researcher administered the same test to the same subjects and found out the correlation between the first test and the second test score. The correlation value was 0.85 which is significant at 0.01 level.

3.11 SAMPLING TECHNIQUES

Purposive sampling techniques was used to find out the levels of mental health between the mothers whose children have either Autism disorder or Down syndrome.

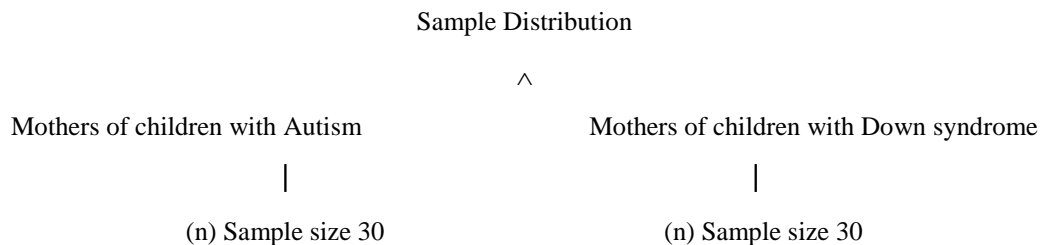
3.12 MAIN STUDY

To conduct the main study, 60 mothers whose children have either Autism Disorder or Down syndrome were selected. The researcher approached four special schools in Chennai, namely Mathru Mandir, Rasa, V-Excel and we can. The researcher sought the permission of the heads of these institutions to conduct this study. Mathru Mandir is an institution exclusively for children with Down syndrome; 'V-Excel' and 'We Can' are institutions catering to the needs of children with Autism and Rasa is an institution catering to the needs of children with varied disabilities. The researcher approached 10 mothers at Rasa and 25 mothers at Mathru Mandir and distributed the Mental health questionnaire along with the bio-data sheet. All the instructions were given to them orally. The filled in questionnaires were collected after a week. In the mean time to the Mental Health questionnaires and bio-data forms were distributed to 16 mothers in 'V-Excel' and to 9 mothers in 'We Can' on different days. Instructions were given orally each time. The completed questionnaires were returned after two weeks. The heads of the above mentioned institutions and their respective staff were extremely co-operative and helpful in this endeavor.

3.13 SELECTION OF SAMPLE

Institutions	Mothers of children with Autism	Mothers of children with Down syndrome
Rasa	5	5
Mathru Mandir	Nil	25
V-Excel	16	Nil
We Can	9	Nil

FLOW CHART



3.14 SELECTION CRITERIA

- Inclusive Criteria**

The researcher has considered mothers of children with Autism disorder and Down syndrome from different socio-economic backgrounds, age groups, educational levels and family set up.

- Exclusive Criteria**

Fathers, grand parents or siblings of 'special children'; Mothers of children who have other disabilities like cerebral palsy, mental retardation, visual or auditory impairment, or any other form of physical impairment.

4. RESULTS AND DISCUSSIONS

Table No. 1: Shows Mean, Standard Deviation of the level of mental health of the mothers of children with Autism disorder and those with Down Syndrome.

S. No	GROUP	N	MEAN	S.D
1.	Mothers of children with autism disorder	30	105.50	22.12
2.	Mothers of children with Down Syndrome	30	110.93	24.11

Table No. 2 Shows Mean, Standard Deviation S.E and 't' value of the mental health of mothers of children with Autism disorder and those with Down syndrome.

S.NO	GROUP	N	MEAN	S.D	S.E	't' VALUE	Level of Significance
1.	Mothers of children with Autism disorder	30	105.50	22.12	5.97	0.91	Not significant
2.	Mothers of children with Down Syndrome	30	110.93	24.11			

The above table reveals the 't' value of 0.91 which is not significant at any level. This findings indicate that there is no significant difference within the level of mental health between the mothers of children with either Autism disorder or Down Syndrome. This findings rejects the hypothesis No.1 (ie) 'There will be a significant differences difference in the level of mental health between the mothers of children with Autism Disorder and Down Syndrome'. From the above finding, we can say that irrespective of whether the child has Autism Disorder or Down Syndrome, the mothers of these children have to take care of all their needs, find solutions to solve their problems and cope with the day to day stress situations arising while rearing these children. These factors could be the possible reasons for having equal of mental health among these mothers irrespective of their children's disability. This is not in line with the findings of Sandra (1989) who found greater stress, depression and lower marital intimacy in mothers of Autistic children than in mothers of Down Syndrome children.

Table No. 3: Shows the Mean, Standard deviation of mental health of mothers of children with Autism disorder and those with Down Syndrome based on the mother's age.

S. No	GROUP	N	MEAN	S.D
1.	Mothers below 35 years	232	99.04	24.71
2.	Mothers between 36-50 years	27	111.0	17.51
3.	Mothers above 50 years	10	118.8	27.70

Table No. 4: Shows the analysis of variance of the level of Mental health of the mothers of children with Autism disorder and those with Down syndrome based on the mother's age.

Source of Variation	Sum of Squares	D.F	Mean square	F	Level of Significance
Between groups	3203.43	2	1601.71		
Within groups	27100.55	53	511.33	3.13	0.05
Total	30303.98	55			

The above analysis of variance shows 'F' value of 3.13 which is significant. It is possible to say from this finding that there is significant difference in the level of Mental health of mothers whose children have either Autism or Down syndrome based on the age group the mother falls into. Mothers below 35 years are the young mothers who are still in the stage of shock and denial; unable to accept the fact that their child is a 'special' child. Hence their mental health is lower when compared to mothers who fall between the age 36-50 years. The second group of mothers who fall between the 36-50 years have a ray of hope due to the professional help and assistance they are able to provide for their child. The mental health of mothers above the age of 50 is best as they already reconciled to their situation. By now the child may be inducted partially to main stream society and the mothers are less anxious and more relaxed, as they have done the best they would for their 'special' child.

Table No.5: Shows the mean, standard deviation of the mental health levels of mothers of children with Autism Disorder and those with Down Syndrome based on the mother's educational qualification.

S. No	GROUP	N	MEAN	S.D
1.	Mothers who have completed school education	16	102.75	26.42
2.	Mothers who are graduates	27	107.22	24.91
3.	Mothers who are post graduates	17	114.94	15.00

Table No.6: Shows the analysis of variance of the level of mental health of the mothers of children with Autism Disorder and those with Down's Syndrome based on the mother's educational qualification.

Source of variation	Sum of squares	D.F	Mean square	F	Level of Significance
Between the groups	1273.57	2	636.78		
Within groups	30214.61	57	530.08	1.20	Not Significant
Total	31488.18	59			

The above analysis of variance shows the 'F' value of 1.20 which is not significant at any level. It is possible to say from this finding that the level of mental health of post graduates, graduates and under graduate mothers are almost at par. Mothers with higher or lower educational qualification show similar levels of mental health. Hence the Hypothesis No.3 is rejected (ie) "There will be a significant difference in the level of mental health between the mothers possessing different educational qualification, whose children have either Autism disorder or Down syndrome". The Socio economic set up, the belief system, the emotional support the mothers gets and the resilience the mother has, have a bearing in this content rather than her educational qualification with regard to her psychological well being.

Table No. 7: Shows mean, standard deviation of the level of mental health of the mothers of children with Autism disorder and those with Down syndrome based on whether she is a house-wife or a working woman.

S. No	GROUP	N	Mean	S.D
1.	Mothers who are Housewives	40	103.83	25.03
2.	Mothers who are working	20	117.00	15.81

Table No.8: Show mean, standard deviation, S.E and 't' value of the level of the mothers of the children with Autism Disorder an those with Down syndrome based on whether she is a housewife or a working woman.

S. No	Group	N	Mean	S.D	S.E	't' Value	Level of Significance
1.	Mothers who are Housewives	40	103.83	25.03	5.31	2.48	0.01
2.	Mothers who are working	20	117.00	15.81			

The above table reveals the 't' value of 2.48 which is significant at 0.01. This finding indicates that there is a significant differences within the level of mental health of working and non-working mothers whose children have either Autism Disorder or Down Syndrome. This findings proves the hypothesis No. 4 (ie). "There would be a significant differences in the level of mental health between working and non- working mothers whose children have either Autism Disorder or Down syndrome". From the above finding it can be said that working mothers spend a few hours away from domestic responsibilities, interact with the outside world and also find avenues to maximize their potential, which give them a sense of accomplishment. Further they may have wider contacts and hence may find out different types of rehabilitation services for their children. Financially they are in a position to contribute towards these expenditure. These factors could be the possible reason for the working mothers having better mental health when compared to their non- working counterparts.

Table No. 9: Show the mean, standard deviation of the mental health of the mothers of children with Autism Disorder and those with Down syndrome based on their rural or urban background.

S. No	Group	N	Mean	S.D
1.	Mothers from rural background	5	90.00	18.84
2.	Mothers from urban background	55	109.87	22.88

Table No. 10: Shows the mean, standard deviation, S.E and 't' value of the mental health of the mothers of Autism disorder and those with Down syndrome based on their rural or urban background.

S. No	Group	N	Mean	S.D	S.E	't' value	Level of significance
1.	Mothers from rural background	5	90.00	18.84	8.97	2.21	0.05
2.	Mothers from urban background	56	109.87	22.88			

The above table reveals the 't' value of 2.21 which is significant at 0.05. This findings indicates that there is a significant difference in the mental health of mothers from the rural and urban background. This findings proves the Hypothesis. No.5 (ie) "There would be a significant difference in the level of mental health of between rural and urban mothers whose children have either Autism disorder or Down syndrome". From the above findings it is possible to say that mothers from the urban background offer better facilities for their 'special' child and get help at hand during her absence. The professional help the 'special' child gets in the form of 'special' school, therapy or individual care, far supersedes the facilities that a child from the rural background gets. Hence the mother from the rural background is more anxious about the future of her 'special' child than a mother from the urban background. Therefore Hypotheses No. 5 is accepted.

Table No. 11: Shows the mean, standard deviation of mental health of mothers of children with Autism disorder and those with Down syndrome based on whether she belongs to a joint or nuclear family.

S. No	Group	N	Mean	S.D
1.	Mothers who belong to joint families	15	105.20	29.67
2.	Mothers who belong to nuclear families	45	109.22	20.77

Table No. 12: Shows the mean, standard deviation, S.E and 't' value of levels of mental health of mothers of children with Autism disorder and those with Down syndrome based on whether she belongs to a joint family or nuclear family.

S. No	Group	N	Mean	S.D	S.E	't' value	Level of significance
1.	Mothers who belong to joint families	15	105.20	29.67	8.26	0.49	Not significant
2.	Mothers who belong to nuclear families	45	109.22	20.77			

The above table reveals the 't' value of 0.49 which is not significant at any level. It shows that there is no significant differences in the level of mental health of mothers based on the type of family she lives in. This finding rejects the hypothesis No. 6 (ie) 'There would be a significant difference in the level of mental health of mothers from different family backgrounds whose children have either Autism disorder or Down syndrome'. From the above findings it is possible to say that irrespective of the family background these mothers are from, they have learnt to cope with the situation all by themselves. They seem to derive strength from within themselves and rise up to the situation.

Table No. 13: Shows the mean, standard deviation of the level of mental health of the mothers of children with Autism disorder and those with Down syndrome based on the number of children they have.

S. No	Group	N	Mean	S.D
1.	Mothers who have only one child	26	107.23	22.19
2.	Mothers who have more than one child	34	108.97	28.08

Table No. 14: Shows the mean, standard deviation. S.E and 't' value of the level of mental health of the mothers of children with Autism disorder and those with Down syndrome based on the number of children they have.

S. No	Group	N	Mean	S.D	S.E	't' value	Level of significance
1.	Mothers who have only one child	26	107.23	22.19	5.94	0.29	Not significant
2.	Mothers who have more than one child	34	108.97	24.08			

The above table shows 't' value 0.29 which is not significant at any level. This shows that there is no significant difference in the mental health among mothers of both the groups. Hence Hypothesis No. 6 is rejected, (ie) 'There would be a significant differences in the level of mental health between the mothers of children with Autism disorder and Down syndrome' based on whether they have one child or more children. The level of mental health of the mothers from either group are almost equal. The 'special' child is always a cause of concern for the mother; having other children does not ease this pain.

Table No. 15: Shows the mean, standard deviation of the mental health levels of mothers of children with Autism disorder and those with Down syndrome based on the monthly family income.

S. No	Group	N	Mean	S.D
1.	Mothers who are from the family income group of 5000-10,000	20	102.90	24.03
2.	Mothers who are form the family income group of 10,000-20,000	28	105.39	24.40
3.	Mothers who are from the family income group of more than 20,000	12	123.66	8.39

Table No. 16: Shows the analysis of variance of the level of mental health of mothers of children with Autism disorder and those with Down syndrome based on the monthly family income.

Source of variation	Sum of squares	D.F	Mean square	F	Level of significance
Between groups	3653.03	2	1826.51	3.74	0.01
Within groups	27835.14	57	488.33		
Total	31488017	59			

The above table analysis of variance shows the “F” value of 3.74 which is significant at 0.01. It possible to say from this finding that the socio-economic status of the family has a bearing on the mental health of the mothers, whose children have either Autism disorder or Down syndrome. Hence the hypothesis No. 8 is accepted (ie) ‘There would be a difference in the level of mental health among the mothers of different socio-economic strata whose children have either Autism disorder or Down syndrome. The higher the family income the better the mental health of those mothers. Money to some extent an take care of certain expenses like a part time care taker for the child; special school needs; special equipment for the child or certain therapies the child needs like speech therapy, movement therapy etc. Lack of funds to meet the needs could mean regression for the ‘special’ child. This thought could weigh down on the mother’s mental well being. Hence mothers with better financial resources at their disposal tend to have better mental health.

Table No. 17: Shows the mean, standard deviation of the mental health levels of the ,mothers of children with Autism disorder and those with Down syndrome based on their child’s age.

S. No	Group	N	Mean	S.D
1.	Mothers of children are less than 10 years	32	104.28	22.58
2.	Mothers of children who are between 10-20 years	13	110.53	23.31
3.	Mothers of children are more than 20 years	20	114.60	23.86

Table No. 18: Shows the analysis of variance of the level of mental health of mothers of children with Autism disorder and those with Down syndrome based on child’s age.

Source of variation	Sum of squares	D.F	Mean square	F	Level of significance
Between groups	1176.89	2	588.44	1.10	Not significant
Within groups	30311.296	57	531.77		
Total	31488.17	59			

The above analysis of variance shows ‘F’ value of 1.10 which is not significant at any level. It is possible to say from this finding that the level of mental health of mothers of both the groups are equal, irrespective of the age of the ‘special’ child. Hence Hypothesis No .2 is rejected (ie) ‘There would be a significant difference in the level of mental health among the different age groups of mothers of children with Autism disorder or Down syndrome’. The possible reasons could be that the requirements or demands of the special child are varied from time to time. The mothers have to cater to these demands from time to time. It could be initially feeding and toilet training the child, in later years it could be adolescent

problems to contend with, later it may be the anxiety and worry of who would take care of the 'special' adult after the demise of the parents. Throughout life these mothers exchange one worry for another as the child grows up. This is in line with the findings of Orr (1993) that 'special' children belonging to any age group were a source of stress for mothers.

Table No. 19: Shows the mean, standard deviation of the level of mental health of mothers of children with Autism disorder and those with Down syndrome based on the gender of the child.

S. No	Group	N	Mean	S.D
1.	Mothers of female children	14	116.14	15.49
2.	Mothers of male children	46	105.80	24.60

Table No .20: Shows the mean, standard deviation, S.E and 't' value of the level of mental health of mothers of children with Autism disorder and those with Down syndrome based on the gender of the child.

S. No	Group	N	Mean	S.D	S.E	't' value	Level of significance
1.	Mothers of a female child	14	116.14	15.49	5.50	1.88	Not significant
2.	Mothers of a male child	46	105.80	24.60			

The above table reveals the 't' value of 1.88 which is not significant at any value. This finding rejects the Hypothesis No.10 (ie) 'There will be a significant difference in the level of mental health between the mothers of children from either gender who suffers from either Autism disorder or Down syndrome. From the above findings it is possible to say that the gender of the 'special' child makes no difference to the psychological well being of the mother. The complete responsibility and onus of taking care of a 'special' child falls on the mother and she has to be the source of strength irrespective of the gender of the child.

Table No.21: Shows the mean, standard deviation of the level of the, mental health of mothers of children with Autism disorder and those with Down syndrome based on whether there is an associated problem or not.

S. No	Group	N	Mean	S.D
1.	Mothers of children with associated problems	20	107.90	22.55
2.	Mothers of children without associated problems	40	108.88	23.63

Table No .22: Shows the mean, standard deviation, S.E and 't' value of the level of mental health of mothers of children with Autism disorder and those with Down syndrome based on whether there is an associated problem or not.

S. No	Group	N	Mean	S.D	S.E	't' value	Level of significance
1.	Mothers of children with associated problems	20	107.90	22.55	6.28	0.31	Not significant
2.	Mothers of children without associated problem	40	108.88	23.63			

The above table reveals 't' value at 0.31 which is not significant at any level. This finding indicates that there is no significant differences in the level of mental health among mothers from both the groups. This finding rejects the Hypothesis No. 11 (ie) 'There would be a significant difference in the level of mental health between the mothers of children with or, without associated problems linked to either Autism disorder or Down syndrome. From the above findings it is a possible to say that the mothers whose children have either Autism disorder or Down syndrome learn to cope with the disability of their child as a whole; whether the child has an associated problem or not is of least importance to the level of mental health of the mother. She learns to draw strength from within the cope with the situation as a whole rather than compartmentalising it. This is not in line with the findings of Sequiera (1990) who investigated the perceived burden and coping styles of mothers of mentally handicapped children. About 70.9% of mothers showed severe strain when the child had large number of associated problems.

Table No.23: Shows the mean, standard deviation of the level of mental health of mother of children with Autism disorder and those with Down syndrome based on the birth order of the child.

S. No	Group	N	Mean	S.D
1.	Mothers of children are not 'first born'	40	105.72	22.85
2.	Mothers of children who are not 'first born'	20	112.86	23.40

Table No. 24: Shows the mean, standard deviations, S.E and 't' value of the level of the mental health of mother of children with Autism disorder and those with Down syndrome based on the birth order of the child.

S. No	Group	N	Mean	S.D	S.E	't' value	Level of significance
1.	Mothers of children who are 'first' born	40	105.72	22.85	6.25	1.14	Not significant
2.	Mothers of children who are not 'first' born	20	112.86	23.40			

The above table reveals the 't' value of 1.14 which is not significant at any level. This indicated that there is no significant difference within the level of mental health between the mothers of children with their Autism disorder or Down syndrome, irrespective of the birth order of the 'special' child. Hence this finding rejects the Hypothesis No. 13 (ie) 'There will be a significant difference in the level of mental health between the mothers of children with, Autism disorder and down syndrome based on the birth order of the child From this finding it can be said that irrespective of whether the 'special' child was the first born in the family or not the mental health of the mothers from both the groups are at par. These mothers still have to cater to all the needs of the child while coping with their own anxiety and stress, at the same time.

Table No. 25: Shows the mean, standard deviation of the ,mental health levels of mothers of children with Autism disorder and those with Down syndrome based on the number of years the child has attended school.

S. No	Group	N	Mean	S.D
1.	Mothers of children who attended school for more than 10 years	17	116.82	23.77
2.	Mothers of children who attended school for less than 10 years	43	104.81	22.20

Table No. 26: Shows the mean, standard deviation, S.E and 't' value of the mental health levels of mothers of children with Autism disorder and those with Down syndrome based on the number of years the child has attended school.

S. No	Group	N	Mean	S.D	S.E	't' value	Level of significance
1.	Mothers of children who attended school for more than 10 years	17	116.82	23.77	6.68	1.80	Not significant
2.	Mothers of children who attended school for less than 10 years	43	104.81	22.20			

The above table reveals the 't' value at 1.80 which is not significant at any level. This findings indicates that there is no significant difference in the mental health between the mothers of both the groups, irrespective of the number of years their 'special' child has attended the Hypothesis No. 13 (ie) 'There would be a significant difference in the level of mental health between the mothers of children with either Autism disorder and those with Down syndrome based on the number of years the child has attended the school'. Irrespective of whether the child attended school, the mothers are always worried and anxious about their future. The irreversible permanence of the condition, is the main cause of anxiety of the mothers. The 'special' schools may not address all the concerns of the mothers; they have their limitations to.

Table No. 27: Shows the mean, standard deviation of level of mental health of the others of children with Autism disorder and those with Down syndrome based on whether the child is mediated or not.

S. No	Group	N	Mean	S.D
1.	Mothers of children who are mediated	18	110.67	23.98
2.	Mothers of children who are not mediated	42	107.17	22.93

Table No. 28: Shows the mean, standard deviation, S.E and 't' value of level of mental health of the mothers of children with Autism disorder and those with Down syndrome based on whether the child is mediated or not.

S. No	Group	N	Mean	S.D	S.E	't' value	Level of significance
1.	Mothers of children who are mediated	18	110.67	23.98	6.67	0.52	Not significant
2.	Mothers of children who are not mediated	42	107.17	22.93			

The above table reveals the 't' value of 0.52 which is not significant at any level. This finding indicated that there is no significant differences in the mental health levels of the groups. This rejects the hypothesis No. 4 (ie) 'There would be a significant differences in the level of mental health between the mothers of children with or without mediation for the problems associated with either Autism and Down syndrome'. Care giving primarily depends on the severity of the disability, the child has, rather than on whether the child is mediated or not. Medication could be to suppress a negative behavioral problem or to support life due to a congenital condition. Irrespective of the manifested behavior of the 'special' child the level of care giving cannot diminish. And hence the mental health levels of both the sets of mothers are almost at par.

Table No. 29: Shows the mean, standard deviation of the mental health levels of mothers of children with Autism disorder and those with Down syndrome based on whether the child has behavior problems or not.

S. No	Group	N	Mean	S.D
1.	Mothers of children with behavioral problem	30	107.00	22.76
2.	Mothers of children without behavior problem	30	109.43	23.77

Table No. 30: Shows the mean, standard deviation, S.E and 't' value of the mental health of mothers of children with Autism disorder and those with Down syndrome based on whether the child has behavior problems or not.

S. No	Group	N	Mean	S.D	S.E	't' value	Levels of significance
1.	Mothers of children with behavioral problem	30	107.00	22.76	6.01	0.41	Not significant
2.	Mothers of children without behavioral problem	30	109.43	23.77			

The above table shows the 't' value of 0.41 which is not significant at any level. Hence the hypothesis No. 15 is rejected (ie). 'There would be a significant difference in the level of mental health between the mothers of children with or without behavior problems associated with either Autism disorder and Down syndrome. The behavior of the child has very little impact on the mental health of the mothers from the above mentioned groups. The medical condition of the child is of greater concern to these mothers than their associated behavior problem.

5. SUMMARY AND CONCLUSION

The present study was conducted to study the level of mental health among the mothers whose children have either Autism disorder or Down syndrome. The mental health of mothers, who are primary care givers of these 'special' children is of great importance. The review of literature collected was compared to the present study. The tool selected for this research was Mental health inventory developed by Jagadish and A.K Srivastava. Totally 60 subjects were taken for this study and disturbed as 30 mothers of children with Autism disorder and 30 mothers of children with Down syndrome. Purposive sampling technique was used for collecting the data.

The validity of the tool has been, already established by the author. The pilot study was conducted on 30 subjects (15 mothers of children with Autism and 15 mothers of children with Down syndrome) to test the reliability of the tool. Fifteen hypothesis were formulated for collecting and analyzing the data. The data collections was done in four 'special' schools. They were located at Alwarpet, Raja Annamalaipuram, Besant nagar and Neelankarai. The test was administered to mothers of children with either Autism or Down syndrome. It took almost a month to finish the data collection. The collected data was tabulated and statistically analyzed. The formulated hypothesis were tested and the conclusions were drawn from the findings.

5.1 RESULTS

The results of the data analysis have shown that mental health affects the psychological well being of the mothers. The overall results proved the following.

- The mothers of children with either Autism disorder or Down syndrome have almost the same level of Mental health.
- Mothers in the higher age bracket had better mental health than those who were younger.
- Working mothers showed better mental health when compared to mothers who are housewives.
- Urban mothers showed better mental health than mothers from the rural background.
- From the socio-economic stand point the mothers from the higher financial strata showed better mental health than those from the lower financial group.
- The mental health of mothers from the different education backgrounds were almost at par. Post graduates showed slightly better mental health than graduates and undergraduates.
- There was no difference in the mental health of mothers from the joint and nuclear family set up.
- The number of children the mother had, had no bearing on her mental health. The mental health of mothers with single children and those with more children, were on par with each other.
- The mental health of mothers whose children are from the different age groups (ie) below 10 years, between 10 years-20 years and those above 20 years, were almost equal.
- The gender of the 'special' child makes no difference to the psychological well being of the mother.
- Mothers of children with or without associated problems had the same level of mental health.
- Irrespective of the birth order of the child the mothers had the same level of mental health.
- The number of years the child attended school had no bearing on the mental health of the mothers.
- Irrespective of whether the child was medicated or not the mother's mental health levels were at par. Irrespective of whether the child exhibited behavior problems or not the level of mental health for those mothers were almost similar.

5.2 MAJOR CONCLUSIONS

At times human beings are bound to succumb to external pressure, but the resilience has to surface at those times. Awareness of one's limitation is important but it should not dampen spirits. Moving forward with time is crucial to progress. Mothers are the pivot around which the lives of these 'special' children revolve. Hence these mothers can work in unison with the special educators who are handling their children. At the same time these mothers have to realize that they are individuals in their own right. Pursuing an interest would do a world of good to these mothers. Exercise, Meditation and yoga could help to distress in the philosophy 'When times are tough, the tough get going' should enable these mothers to derive strength from within.

5.3 LIMITATIONS OF THE STUDY

- More number of responders could have been included in the survey to minimize sampling errors.
- The rural areas have been almost unexplored.
- The personality traits, personal events and health of the responders were not taken into consideration.
- The responders were mostly from the middle and upper income groups. More of the lower income groups could have been included.

5.4 IMPLICATIONS

- This study helps the mothers of children with Autism and Down syndrome to be aware of their psychological well being. These mothers can foresee anxiety or worry and stay in good mental health.
- This study can be a useful resource to special educators and rehabilitation professionals involved in counseling these mothers and their family members.

5.5 SUGGESTIONS FOR FURTHER RESEARCH

The following are some of the suggestions for future researchers in the area of the present study.

- The same study could be done on a larger sample.
- The same study could be done for the mothers of children from all categories of mental retardation (ie) from mild to profound.
- The same study could be done for the mothers of children from rural background exclusively.
- The same study could be extended to mothers from different socio economic background.

5.6 RECOMMENDATIONS

- Special schools have to conduct periodic workshops, related to 'Stress Management Programme'. For these mothers. The module can contain segments relating to yoga, aerobics. Meditations, positive self-evaluation and time management to enhance a stable personality.
- Counseling sessions have to be made available, on a constant basis, for both parents, especially these mothers. This would go a long way in maintaining the psychological well being of these mothers.

REFERENCES

- [1] Annapurna M. Mentally Handicapped Children and Family Stress (1999).
- [2] Anneren. G., Hedov. G., Wikblad. K. Quality of life research. An international journal – Treatment care & Rehabilitation 9(4) 415-422 (2000). Self perceived Health in Swedish parents of children with Down syndrome.
- [3] Beckman, P.J. and Bell, O.(1981). Child related stress in families of handicapped children. Topics in Early Childhood Special Education, 1(3), 45-54
- [4] Beck, Steven. J.,(1990). Young Geoffery H and Tarnouski, Kenneth. J (Ohio State University; Columbus) – Journal of the American Academy of child and Adolescent Psychiatry, Vol.29(4) 558-565.
- [5] Donovan, A.M (1998). Family stress and ways of coping with Adolescents who have handicaps Maternal perceptions. American Journal on Mental Retardation, Vol. 92, No.6, 502-509.
- [6] Dyson, L.L.(1993). Response to the presence of a child with disabilities; Parental stress and family functioning over time. American Journal on Mental retardation, Vol. 98, No.2, 207-218.
- [7] Emrika Padus, The Complete guide to your emotions and your health; The staff of PREVENTION magazine.
- [8] Greenberg J.S., Marsha Mailick Seltzer, Mary Krauss. The effect of the quality of the relationship between mothers and Adult children with Schizophrenia, Autism or Down syndrome on Maternal Wellbeing.
- [9] Hedov. G. Anneren G., Wikblad. K . Parental stress and sense of coherence in relation to employment rate and time spent in child care (2002) Scandanavian Journal of caring sciences 16(4) 424.

- [10] Insight into Autism –Book-1 Dr.N.P. Karthikeyen DOAST Integrated Therpy Center, Chennai-600 010. INDIA.
- [11] Jagadish & A.K. Srinivastava Questionnaire /Department of Psychology, B.H.U.- Varanasi.
- [12] Kazak, A.E. and Marvin, R.S (1994). Differences, difficulties ad adaptation; stress and social net works in families with handicapped child. *Family Relations*,33, 67-77.
- [13] Krauss, M.W.. (1993). Child related and parenting stress; Similarities and differences between mothers and fathers of children with disabilities. *American Journal on Mental Retardation*, Vol.97, NO.4,393-404.
- [14] Liwag, M.E,(1989). Manila University, Philipines, *journal of Psychology* Vol.22;3-16.
- [15] Miller,W.H. and Keirn, W.C. (1978). Personality measurement in parents of retarded and emotionally disturbed children: A replication *JOURNAL OF Clinical Psychology*,34,686-690.
- [16] Nan Holmes and Janet Carr (1991). *Journal of Autism and Developmental Disorder* : The pattern of care in families of adults with a Mental Handicap. A comparison between families of Autistic adults and Down syndrome adults.
- [17] Narayanan, H.S. (1978). Impact of mentally retarded children on their families M.D. Thesis, NIMHANS, Bangalore University.
- [18] Orr,RR. Cameron, S,J., Dobson, L.A. and Day, D.M. (1993. Age related changes in stress experienced by families with a child who has developmental delays. *Mental Retardation*, Vol. 31, No.3., 171-176.
- [19] Patricia Sloper et al. (1991). *Journal of child psychology and psychiatry and Applied Disciplines* 32(4).655-676. Factors related to stress and satisfaction with life in families of children with Down syndrome.
- [20] *Research Methodology- P. Saravanavel – Pp.203. Sampling and sampling Design.*
- [21] Raoch, Mary. A; Orsmand G.I. (1999).*American Journal of Mental Retardation* 104(5). 422-436. Mothers and fathers of children with Down syndrome: Paternal Stress and involvement in child care.
- [22] Ryde – Brandt, (1990). Britain- *British JOURNAL OF Medical Psychology*, Vol.62(2) 183-192.
- [23] Sandra Fisman.N. et.al. (1989). Marital intimacy in parents of exceptional children – *Canadian Journal of Psychiatry*.
- [24] *Study Material – Diploma in Theatre for Holistic Development Rasa Special School (2004).*
- [25] Sequeira, E.M. Madhu Rao, P., Subbakrishna, D.K. and Prabhu, C.G. (1990).Perceived burden and coping styles of the mothers of mentally handicapped children. *NIMHANS Journal*,8(1). Jan., 63-67.
- [26] Seth,S. (1979). Maternal attitude towards mentally retarded children. In: E.G. Parameswaran and S.Bhogle (Ed), *Developmental psychology*, New Delhi, Light and Life Publishers.
- [27] Singer, G.H.S., Irvin.L.K. and Hawkins, N.(1988). Stress management training for parents of children with severe handicaps. *Mental Retardation*, Vol. 26, No.5, 269-277.
- [28] Singer, George, H, Irvin, Larry K AND Hawkins Nncy -1988 Oct. Oregon Research Institute, Erugene Vol. 26(5) 269-277.
- [29] Tangri, P. and Verma, P. (1992). A study of social burden felt by mothers of handicapped children. *Journal of Personality and Clinical Studies*, 8(2), 117-120.

INTERNET SITES

- [30] [http://www.altonweb.com/cs/down syndrome](http://www.altonweb.com/cs/down%20syndrome)
- [31] www.genesage.com