# SCHOOL REFUSAL FACTORS AND ITS PSYCHOSOCIAL CONCOMITANTS 

## THESIS

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## DOCTOR OF PHILOSOPHY

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## CERTIFICATE

This is to certify that the thesis "School Refusal factors and its psychosocial concomitants" submitted by Mrs. Sangeetha Madhu for the award of the degree of Doctor of Philosophy, The Tamilnadu Dr. M.G.R Medical University, Chennai, is a bonafide record of research done by her during the period of study under my supervision and guidance and that it has not formed the basis for the award of any Degree, Diploma, Associateship, Fellowship or other similar title. I also certify that this thesis is her original independent work. I recommend that this thesis should be placed before the examiners for their consideration for the award of Ph.D., Degree.

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## DECLARATION

I here by declare that this thesis entitled "School Refusal factors and its psychosocial concomitants" is an original research work by me and it was not used previously either partly or fully, for the award of any Degree / Diploma / Associateship / Fellowship or any other similar title.

Place: Chennai
Date:

## DEDICATED TO

* My parents - Mr.S.Sachithanandham and Mrs. S.Krishna Veni who gave me life.
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## CHAPTER I

## INTRODUCTION

The first issue, defining the essential features of school refusal behavior, began to evolve after $19^{\text {th }}$ century registration, mandated compulsory education for children in England and United States. Researchers first considered non-attendance as a sentential problem (illegal truancy) and later a clinical entity (psycho neurotic truancy / school refusal) in need of study (Broadwin, 1932; Partridge, 1939) Today problematic absenteeism is listed in DSM IV as one symptom of conduct ("Often truant from school") and separation anxiety ("persistent reluctance or refusal to go to school") disorder. (American Psychiatric Association, 1994) Unfortunately, previous definitions of school refusal behavior do not fare favorably in terms of explicitness or reliability.

Kearney and Silverman (1996) refer to 'school refusal behavior' as child motivated refusal to attend school or difficulties remaining in classes for an entire day. This definition excludes cases where a parent deliberately keeps a child home or with draws the child from school.

More specifically, school refusal behavior refers to those youngsters aged to 5-17 yrs who are

- Completely absent from school.
- Attend school but leave during the course of the school day.
- Go to school only after significant behavior problems in the morning.
- Display unusual distress about attending school that leads to pleas for future non- attendance.

School phobia is not a unitary syndrome, but a condition of varying symptomatology, severity and duration (Blagg, 1987; King and Ollendick, 1989 a, b, Hersov, 1977) Failure to agree on diagnostic criteria for school phobia has undoubtedly contributed to the continuing confusion over terminology and understandings of the condition. Following the analysis of the problem, Eysenck and Rachman (1965), British clinicians, were more ready to acknowledge both that some school phobic had genuine fears of certain aspects of school experience and that others had separation anxiety problems. The term 'school refusal' was preferred but this term has been taken to
imply a conscious decision for the part of the child to refuse school, and so there is still a need for one or more fully appropriate labels.

## Origin of the concept of school refusal

Until about 50 yrs, all forms of persistent absence from school were labeled as truancy. The word truant - comes from old French word means, 'an assemblage of beggars'. The truant school boy was also dubbed lazy, idle, neglectful of his duties and prone to antisocial acts.

In 1932 Broadwin first described what he considered to be a variant of truancy, a form of persistent non- attendance at school that was later labeled 'school phobia' by some (Johnson et al, 1941; Suttenfield, 1954; Eisenberg, 1958a) and school refusal by others (Warren, 1948; Hersov, 1960 a, b; Millar, 1961; Kahn and Nursten, 1962; Bowlby, 1973). Broad Win (1932) from his study of a small number of cases, considered the difficulties in school attendance as symptoms of a personality problem occurring in children suffering from a deep seated obsessional neurosis or displaying a neurotic character of the obsessional type. His original description has never been bettered for clarity and vividness and has been echoed in many subsequent papers in the literature.
"The child is absent from school for periods varying from several months to a year. The absence is consistent. At all times the parents know where the child is. It is with the mother or near the home. The reason for the truancy is in comprehensible to the parents and the school. The child may say that it is afraid to go to school, afraid of the teacher or say that it does not know why it will not go to school. When at home it is happy and apparently carefree when dragged to school it is miserable, fearful and at first opportunity runs home despite the certainty of corporal punishment. The onset is generally sudden".

Partridge (1939) in a study of truancy described a psychoneurotic group of ten cases which he maintained differed from the others; in others behavior was not a means of avoiding simple environmental difficulties or a revelation against unhappy circumstances. Warren (1948) further emphasized the distinction, between these 2 forms of persistent non attendance.

Johnson et al (1941) stressed the fairly sharp differentiation between absence from school stemming from deep-seated psychoneurotic disorder, and the more frequent and common development variety of non-attendance. They coined the term 'school phobia' which was taken up in subsequent papers (Van Houten, 1948;

Goldberg, 1953; Suttenfield, 1954; Coolidge et al, 1957; Talbot, 1957) and concluded that the syndrome was not a clear cut clinical entity but rather consisted of phobic tendencies overlapping within other hysterical or obsessional neurotic patterns. Both Johnson et al (1941) and Warren (1948) found that fear of school with refusal to attend occurred in family settings where maternal anxiety, marital disharmony and parental inconsistencies were significant. School refusal is not a true clinical entity with uniform etiology, psychopathology, course, prognosis and treatment, but rather a collection of symptoms or syndrome occurring against a background of a variety of psychiatric disorders (Hersov, 1960, b; Davidson, 1960; Millar, 1961; Kahn \& Nursten, 1962; Shapiro, 1973). The precipitating factors vary with age, school, family structure, function, psychosocial stage of development and personality factors in the individual child.

School phobia has been well described by Hersov (1974), who observed that, the problem often starts with vague complaints of school or reluctance to attend, progressing to total refusal to go to school or remain in school in the face of persuasion, entreaty, recrimination and punishment by parents and pressures from teachers, family doctors and education welfare officers. The behavior may be accompanied by overt
signs of anxiety or panic when the time comes to go to school and most children cannot even leave home to set out for school. Many, who do, return home half way there and some children once at school rush home in a state of anxiety. Many children insist that they want to go to school and they prepare to do so but cannot manage when the time comes.

Coolidge, Hahn and Peck (1957) in a study of 21 cases provided evidence to distinguish 2 types of school phobia 'neurotic and 'character logical'. The neurotic group consisted of younger children mostly girls who showed a dramatic onset of the condition. The character logical group was described as more disturbed and consisted mostly of older boys. The typology of Coolidge et al (1957) was expanded on by Kennedy (1965) who distinguished Type I and Type 2 school phobia according to the 10 differential symptoms.

## Figure - 1

## 10 differential school phobia symptoms

## Type I

1. Present illness it's the first episode
2. Monday onset, following an illness the previous Thursday or Friday.
3. Acute onset
4. Lower grades most prevalent
5. Expressed concern about death
6. Mother's physical health in question; or child thinks so
7. Good communication between parents
8. Mother \& father well adjusted in most areas
9. Father competition with mother in household management
10. Parents achieve understanding of dynamics easily

Type II

1. Present illness the $2^{\text {nd }}, 3^{\text {rd }}$ or $4^{\text {th }}$ episode.
2. Monday onset following minor illness.
3. Incipient onset
4. Upper grades most prevalent
5. Death theme not present
6. Mother's health not an issue
7. Poor communication between parents
8. Mothers show neurotic behavior, fathers a character disorder
9. Father shows little interest in household or management and children
10. Parents very difficult to work with.

Hersov (1961) classified school phobias into 3 groups according to predominant patterns of behavior in the father, mother and child. Shapiro and Jegede (1973) argue for a systems approach with attention to 1) chronological age in relation to developmental factors 2) transactions with mother, family and community 3) intrapsychic dynamics 4) child's personal view toward symptoms as ego alien or 'ego syntonic'. At the very least, these perspectives illustrate school phobia as a complex and heterogeneous problem (Blagg, 1987; King and Ollendick 1989 a, b; Ollendick and Mayer, 1984).

## Acute Versus Chronic School Refusal Behavior

Historical acute-chronic refusal behavior distinctions also fall short with respect to discriminant validity because of inconsistent research findings. Berg et al. (1969) and Baker and Wills (1978) reported that children with acute school phobia were older than children with chronic school phobia, a finding opposite Coolidge et al. (1957). Also, Berg et al. (1969) noted that a higher percentage of children with acute than chronic school refusal missed school without parental knowledge. This contradicted earlier research findings that those with chronic school refusal behavior are more likely to surreptitiously avoid school (Hersov, 1960). Problems with an acute chronic distinction were also highlighted by Kolvin et al. (1984),
whose statistical analysis did not support the discriminant validity of "acute versus chronic."

Duration of school refusal behavior can be classified into selfcorrective, acute, and chronic categories based primarily on length of problem. The term "school refusal behavior" thus coalesces outdated term such as truancy, psychoneurotic truancy, school avoidance, and school phobia. Exclusionary criteria include the presence of school withdrawal, where parents deliberately withhold a child from school, and other primary societal or familial conditions that maybe in a child's life (e.g., homelessness, running away to avoid abuse). In addition, should other behavior difficulties or mental disorders (e.g., poor academic performance, depression) supersede problematic nonattendance, and then potential exclusion from this taxonomy is allowed.

Cases of school refusal behavior that persist after two weeks but before one year, having been a problem for majority of that time, may be considered acute in nature and in need of treatment. Cases of school refusal behavior that persist after one year, having been a problem for a majority of that time when school is in session, may be considered chronic in nature. The latter criterion includes youngsters who have refused school across two grade levels, a sign of generalization that
likely impedes treatment progress (Kearney, 1995; McDonald and Sheperd, 1976). This tripartite (i.e., self-corrective, acute, chronic) taxonomic definition of school refusal behavior duration replaces vaguely defined dichotomies from previous literature (Sperling, 1967).

Categories of refusal to attend school are.
(a) Non problematic versus problematic.
(b) Parent-motivated or primary familial/societal cause versus childmotivated.
(c) Self corrective versus acute versus chronic.

Problematic school non-attendance in children and adolescents has been and will likely continue to be one of our most pressing social problems. Motivating children to stay in school (or at least removing the obstacles) has ramifications for all persons, because failure erodes our ability to function as a progressive society. Resources to provide systemic (e.g., alternative schools) and molecular (e.g., specialized clinics) solutions are thus considered imperative. Unfortunately, school district administrators and psychologists, educators, pediatricians, mental health professionals, and researchers often employ one set of criteria for problematic absenteeism and remain "locked" into that system. This prevents comparable data collection across settings and limits social activism. (Kearney, 1995).

## CHAPTER II <br> REVIEW OF LITERATURE

The review of literature is presented in the following sections
A. Epidemiology
B. Socio Demographic variables and school refusal
C. Clinical variables and school refusal
D. Psychological variables and school refusal
E. Indian studies on school refusal

## A.EPIDEMIOLOGY:

Most of the studies on the prevalence of school refusal have been in the form of surveys of schools or referrals to pediatric/child psychiatric clinics

An investigation of 500 referrals to a child psychiatric clinic in Sweden, up to age of 12 over a period of five years revealed that $7 \%$ of the children had school refusal and separation anxiety disorder (Flakierska et al, 1988).

In a study (Bools, Foster, Brown and Berg, 1990) done in the United Kingdom, interviews were conducted with parents of 100
children taken to a 'school attendance committee', because of persistent failure to attend school. Clinical assessment of the attendance problem was carried out so that children were categorized as 'school refusers' $(\mathrm{N}=24)$, 'truants' $(\mathrm{N}=53)$, 'both refusers and truants $(\mathrm{N}=9)$, or as 'neither' $(\mathrm{N}=14)$. Among the 24 school refusers half of them had an ICD-9 diagnosis.

Stickney and Miltenberger's (1998) survey of 288 schools in North Dakota, which included elementary, junior high, and senior high schools, found that $75 \%$ of schools reported having a school refusal identification system in place. Principals were most frequently reported to be responsible for the identification of school refusal. Overall, $2.3 \%$ of students were identified as "school refusers" (included truants).

In a study of a Venezuelan sample of 1034 children aged between 3 to 14 years (Granell de Aldaz, Vivas, Gelfand and Feldman, 1984), of the prevalence of school refusal and school related fears $0.4 \%$ had school refusal.

In the post world war era school refusal has become one of the most common diagnoses made in child psychiatry in Japan. Studies across Japan have shown rates in the range of 2-5\% (Honjo, Nishide, Niwa, Sasaki, Inoko and Nishide, 2001).

In surveys across primary and secondary schools in Australia the school refusal prevalence was found be around 1\% (Heyne, King, Tonge and Cooper, 2001). In summary school based studies have shown a prevalence of 5-6\% in the clinic samples.

## B. Socio demographic Variables and School Refusal

Most studies suggest that school refusal tends to be equally common in boys and girls (Granell de Aldaz, Vivas, \& Gelfand and Feldman, 1984; Kennedy, 1965). School refusal can occur throughout the entire range off school years, but it appears there are major peaks at certain ages and certain transition points in the child's life especially while joining school or while changing from primary to secondary school levels. Ollendick and Mayer (1984) concluded that school refusal is more likely to occur between 5-6 years and 10-11 years of age, indicating a bimodal distribution of age. For most cases of school refusal, the socioeconomic status of the family is considerably mixed (Baker and Wills, 1978; Last and Staruss, 1990).

## Sex differences in children with school refusal

In a study by Kuramoto (1995) items relating to neurosis showed little difference between sexes; antisocial scores were higher in boys
similar in tendency to junior high school students. Bools et al (1990) found that in children with school refusal generalized neurotic disorders were found mostly in girls and 'truancy' and conduct disorder were found mainly in boys. Last et al (1987) found more children with separation anxiety disorder were female, pre- pubertal and from families with low socioeconomic backgrounds.

## Parental education, occupation and socio economic status

Kuramoto (1995) found significant differences between school attendance group and non-attendance group in terms of mother's education and father's occupation. The clinic based studies on school refusal found children were from materially good homes where the emotional climate was more likely to be intense than lacking (Kahn et al, 1996). Parents tended to be rather ineffectual and over anxious, although there is a veneer of authority which the family colluded to protect (Eisenberg, 1958) and there were no obvious differences to the normal parental patterns of managing domestic affairs, leisure and work (Berg, Butler and Fairbairn, 1981).

## C. Clinical Variables and School Refusal

## Course of school refusal

Okuyama et al (1999) found that duration from absence to the first evaluation, patients character, and 'non presence of volition for school attendance' and 'frequency of school attendance' influenced the prolongation of school refusal.

## Scholastic Performance

Through various suggested etiologies the presenting picture has been of a youngster who is academically successful, generally near the top of the class, and liked by the teaching staff (Hersov, 1960), but with poor self image and a low level of self esteem (Nichols \& Berg, 1970). However a study by McShane et al (2001) indicated that academic difficulties and a diagnosis of social phobia were predictive of poorer outcomes (three years after treatment). Prior (1998) found that children with academic difficulties were not able to do work easily and had related behavior problems at the prospect of social embarrassment.

## Precipitating factors (somatic complaints) in children with school refusal

In a study by Bernstein (1997) 44 adolescents in a treatment study were evaluated at baseline with structured psychiatric interviews and measures of anxiety, depression and somatization. The most common somatic complaints were in the autonomic and gastrointestinal categories. In simple regression analyses, anxiety level as measured with the Revised Children's Manifest Anxiety scale and depression level as measured with the Beck depression inventory each significantly predicated the severity of somatic symptoms. The correlation between percentage of days absent from school and severity of somatic symptoms approached significance $(\mathrm{r}=.27, \mathrm{p}<.074)$. Knowledge that somatic complaints are commonly an expression of underlying anxiety and depression may facilitate more rapid referral for psychiatric assessment and treatment and thereby help avoid unnecessary medical workups and squealae from school refusal.

## Family Functioning in Children with School Refusal

In one of the earliest studies done on school refusal done by Berg et al (1969), there did not appear any social class bias or relationship between family size, number of single children and school
refusal. The typology given by Coolidge et al "neurotic" and "character logical" which was later expanded on by Kennedy (1965), distinguished type 1 and type 2 school phobias. Apart from characterizing the clinical profile of children they mainly classified school refusal according to the family characteristics- communication and adjustment between parents, personality profiles of parents and family pathology. However these subtypes have not been validated by well controlled studies. Other studies, like that of De Aldaz et al (1987) demonstrated that school refusers were more dependent on their mothers and the parents tended to reinforce the school refusal behavior.

In the study by Bools et al (1990), amongst the 24 who had school refusal half the subjects came from broken homes and the group as a whole showed social disadvantage, the rates of anxiety and depressive disorders being high amongst the parents though the exact prevalence rates have not been mentioned. In $32 \%$ of the families siblings had school refusal, in 7\% the mother had history of refusal, and in $3 \%$ both the mothers and the siblings had refusal. This study also found that the school refusal behavior was reinforced by the family members (53\%).

Problematic family functioning has been highlighted as contributing to school refusal in children and adolescents. Yet only a few studies systematically evaluate school refusal families with instruments designed to measure family functioning. These studies describe several different patterns of family functioning in school refusal families. The study by Kearney and Silverman (1995) is unique because it identified family subtypes (i.e. the enmeshed family, the conflictive family, the isolated family, the detached family, and the healthy family) which are supported by scores on the Family Environment Scale (FES). 64 parents of children with school refusal completed the FES. Healthy family profiles were found only in $39.1 \%$ of the sample as defined by scores of 60 or more on the FES Cohesion or Expressiveness subscales, with either score more than the Conflict score.

Bernstein et al (1990) used the Family Assessment Measure (FAM) in evaluating 76 school refusal families. Four diagnostic groups of school refusing children were evaluated: those with anxiety disorders only, those with depressive disorders only, those with co morbid anxiety and depressive disorders, and those with no anxiety or depressive disorders (primarily disruptive behavior disorders).

Significantly fewer family functioning difficulties were found in families in which the child met criteria for anxiety disorder only compared with families in the other diagnostic categories.

In a sample of 134 families with school-refusing children, the FAM was used to evaluate the relationship between family constellation (mother only versus family) and family functioning (Bernstein, Borchardt and Perwien, 1996). Single-parent families $(39.6 \%)$ were over represented in the sample compared with the general population. Significantly mothers of school refusers in singleparent families compared with mothers of school refusers in families with two biological parents reported more difficulties on the FAM in the areas of role performance and communication. Communication difficulties as measured on the FAM suggest inadequate or unclear communication with the family.

Bernstein et al (1999) focusing on school refusers with co morbid anxiety disorders and major depression, assessed family functioning with the Family Adaptability and Cohesion Evaluation Scale II (FACES II). FACES II was administrated to 46 adolescents with Comorbid anxiety and major depressive disorders and to their parents in a treatment study of school refusal. FACES II measures
cohesion and adaptability dimensions, as well as family type (balanced to extreme). Generally, adolescents and parents reported low cohesion (i.e.. disengagement) and low adaptability (i.e.. rigidity) on FACES II. Adolescents and parents described their ideal families as significantly less disengaged and less rigid than their own families. $50 \%$ of adolescents, $38 \%$ of fathers and $24 \%$ of mothers classifieds their families as extreme type. Adolescents in extreme families, when compared with adolescents in more balanced families, reported significantly higher scores on two of three depression instruments and on a measure of somatic symptoms. Family therapy to improve cohesion and adaptability and treatments focused on improving depression and somatic symptoms may improve family functioning and decreases the severity of school refusal.

Obondo et al (1990) found that out of the ten cases sampled for the study, nine were of school phobia and one of conduct disorder (truancy). Family characteristics significantly associated with school non - attendance in this study were neuroticism in parents, unstable family relationships occasioned by marital discord, parental expectations of high academic performance by the child and, to some extent poverty.

## Parental psychopathology

Martin et al (1999) examined anxiety and depressive disorders in the mothers and fathers of children with anxious school refusal to test for the existence of differences in familial aggregation between children suffering from school refusal related to separation anxiety disorder and that suffering from phobic disorder - based school refusal. Relationships between specific anxiety disorders in children and their parents revealed increased prevalence of simple phobia and simple and/or social phobia among the fathers and mothers of phobic school refusers, and increased prevalence of panic disorder and/or agoraphobia among the fathers and mothers of school refusers with separation anxiety disorder. Simple and/or social phobia in the father, simple phobia in the mother, and age of the father were associated with the group of phobic school refusers. The data show the high prevalence of both anxiety and depressive disorders in fathers and mothers of anxious school refusers. Significant differences were observed in familial aggregation considering the subgroups of anxious school refusing children.

## D. Psychological Variables and School Refusal

## Depression in Children with School Refusal:

Borchardt et al (1994) study describe children and adolescents with school refusal who were hospitalized and compare them to a matched group with school refusal who were treated as outpatients in order to examine the use of hospitalization in the treatment of this symptom presentation. The results showed the inpatient group had significantly more depressive disorder, a greater number of diagnoses, more severe symptoms, were more likely to reside in single - parent homes, and were more likely to have been physically abused.

Honjo et al (2003) conducted a survey on students enrolled in a junior high school affiliated with the Nagoya university school of education. The questionnaire consisted of the Children's Depression Inventory (CDI), a scale for evaluating feelings of school avoidance (School avoidance scale), and a scale for assessment of personality characteristics associated with school refusal (School Refusal Personality scale). The subjects were 425 first - year junior high to second - year high school students. Factor analysis of each scale revealed the CDI to consist of three factors; "core depression", "feelings of interpersonal mal adaptation", and 'self revulsion', and the
school avoidance scale to consist of two factors: 'school dislike', and 'school avoidance'. The School Refusal Personality Scale consisted of three factors: 'obsessive-compulsive', 'passive/unsocial', and 'socially introverted'. Mean CDI score and standard deviation (SD) was 19.44 +/- 7.49, and that for 'feelings of school avoidance' was $20.18+/-5$. 61. The two subordinate factors of the school avoidance scale were intimately associated with both 'feelings of interpersonal mal adaptation' and 'core depression' of the CDI, and negatively correlated with the 'obsessive - compulsive' factor of the School Refusal Personality scale.

A study by Honjo, Nishide, Niwa, Sasaki, Inoko and Nishide (2001) in Japan looked at children with school refusal with depressive symptoms ( $n=34$ ), depressed children with school in attendance ( $n$ $=10)$ and a normal control group $(\mathrm{n}=243)$. They hypothesized that school in attendance owing to depression should be precluded in discussing the phenomenon of school refusal, since the diagnosis of depression in adolescence is not always easy, and differentiating between depression and school refusal may become difficult in many cases. They reported that the CDI scores were highest in the depressed group, next in the school refusal group and the least in the control
group. However this was a cross sectional study and the exact relationship between school refusal and depression has not been clearly looked into, though the authors hypothesize that since the clinical characteristics like the CDI scores were different in the two groups they are different entities.

## Anxiety in Children with School Refusal:

Last et al (1987) compared children who met DSM - III criteria for separation anxiety disorder $(\mathrm{N}=48)$ or a phobic disorder of school $(\mathrm{N}=19)$ with respect to demographic characteristics, symptoms associated psychiatric disorders, and maternal psychiatric illness. More children with separation anxiety disorder were female, prepubertal, and from families with lower socioeconomic backgrounds. Children with separation anxiety disorder were less likely to exhibit school refusal than children with school phobia. However, they were more likely to meet criteria for an additional DSM - III diagnosis. Finally, their mothers had a rate of affective disorders four times greater than that of mothers of children with school phobia.

Kearney and Albano (2004) assessed 143 youth with primary school refusal behaviour and their parents to examine diagnoses that are most commonly associated with proposed functions of school
refusal behaviour. In general, anxiety related diagnoses were associated more with negatively reinforced school refusal behavior; separation anxiety disorder was associated more with attention-seeking behavior; and oppositional defiant disorder and conduct disorder were associated more with pursuit of tangible reinforcement outside of school. Assessment and management of school refusal requires a collaborative approach that includes the family physician, school staff, parents, and a mental health professional.

Sakuta et al (2003) using State - Trait Anxiety Inventory for Children (STAIC), examined 13 junior high school students with school refusal and indefinite complaints. Significant increase of the anxiety levels was higher in these children than in the control group. Serotonin reuptake inhibitors (SSRIs) were administered to 19 elementary and junior high school students with school refusal and indefinite complaints. The indefinite symptoms improved markedly in 2 children, moderately in 11, and mildly in 6 . High anxiety may cause indefinite symptoms in children with school refusal and that the treatment of indefinite symptoms with SSRI is an effective supportive therapy.

In two studies at the Minnesota school refusal clinic (Bernstein, 1991; Bernstein \& Garfinkel, 1992), half the children had anxiety disorders either separation anxiety or overanxious disorder. Half of this group also had depressive disorder and one quarter had a depressive disorder only.

Berg et al (1993), conducted a comprehensive DSM-III-R diagnostic evaluation of 80 youths, aged 13 to 15 years, who failed to attend school for at least $40 \%$ of a school term without satisfactory excuse. School attendance problems were classified as truancy, school refusal or neither. Evaluations showed that half the youths with attendance problems had no psychiatric disorder, a third had a disruptive behavior disorder, and a fifth had an anxiety or mood disorder. In contrast, one tenth of a control group of youths without school attendance problems were found to suffer from these psychiatric disorders. It is important to note that the sample was drawn from the normal school population.

Last and Staruss (1990) conducted a major investigation of anxiety based school refusal. The authors examined 63 school refusing children and adolescents (aged 7-17 years) referred to an out patient anxiety disorders clinic. According to DSM-III-R criteria, the most
common primary diagnoses included separation anxiety disorder (38\%), social phobia (30\%), and simple phobia (22\%). Less frequent diagnoses included panic disorder and posttraumatic stress disorder. Many children had multiple diagnoses, the most common co-morbid diagnosis being overanxious disorder. Age-of-onset data reevaluated that separation anxiety occurs at a much earlier age (mean $=8.7$ years) than either social phobia or simple phobia (means $=12.4$ and 12.9 years, respectively). In examining maternal histories, the researchers found that mothers of the children with separation anxiety were more likely to have experienced school refusal themselves than were the mothers of the combined simple and social-phobic group. By contrast, the phobic subjects tended to show more severe school refusal as determined by symptom severity ratings of clinicians relative to the separation-anxious children. The authors concluded that there are two primary diagnostic 'subgroups' of school refusers', separation anxious and phobic.

Hoshino et al (1987) conducted a study on DSM-III diagnoses in 50 cases of school refusal in Japan and reported the principal diagnosis as being separation anxiety disorder in seven (14\%), avoidance disorder in 13 (26\%), over-anxious disorder in eight (16\%), identity
disorder in five ( $10 \%$ ), and adjustment disorder in 11 (22\%) cases, among others, while also commenting on difficulties in applying DSMIII diagnosis to school refusal.

## Depression and Anxiety in Children with School Refusal:

In a study (Berg, Butler, Franklin, Hayes, Lucas and Sims, 1993) that looked at school attendance problems in eighty 13-15 year old children who failed to attend more than $40 \%$ of a school term, 25 had DSM-III-R disruptive behavior disorders and 15 had anxiety/mood disorders. School refusal was associated with anxiety/mood disorders and truancy with the former but both often occurred without any diagnoses. 14 had neither school refusal nor truancy. School refusal with anxiety disorders rarely received any treatment.

In a study by Atkinson et al (1989), 100 clinical files of children with school refusal were examined which gave three different clusters. The first one $(\mathrm{n}=15)$ consisted of children who feared separation from dependent, overprotective mothers. The second group ( $\mathrm{n}=28$ ) included children who were perfectionistic and depressed. The third ( $\mathrm{n}=29$ ) included children who were extensively disturbed from multi problem families who suffered early loss/separation and were fearful/depressed.

This study was a retrospective chart review type, so validity of diagnoses was not strong.

In a study by Bools et al, (1990) out of the 24 school refusers 10 had an ICD-9 diagnosis of an emotional disorder and 6 had a mixed disorder of emotion and conduct. This study specifically looked at children with attendance problems limiting the generalizabilitiy.

Several diagnostic studies have examined the co morbidity of anxiety and depression in clinic samples of school-refusing children. Bernstein et al (1991) compared four groups of school refusers: an anxiety disorder-only group (separation anxiety disorder and/or overanxious disorder, $\mathrm{n}=27$ ), a depressive disorder-only group (major depressive disorder or dysthymia, $\mathrm{n}=27$ ) an anxiety and depressive disorder group (co-morbid for anxiety and depression, $\mathrm{n}=24$ ), and a no-anxiety disorder or depressive disorder group (an absence of anxiety and depressive disorders, $\mathrm{n}=18$ ). The last group comprised mainly children with disruptive behavior disorders. Results showed that the group with co-morbid anxiety and depression scored the highest on rating scales of anxiety and depression, with the no-anxiety or depression group scoring the lowest. In general, the anxiety-only and depression-only groups scored similarly with scores that were
intermediate between the other two groups. The findings suggest that the co-morbidity of anxiety and depressive disorders is associated with more severe symptoms.

Borchardt et al, (1994) compared age- and gender- matched groups of inpatient $(\mathrm{n}=28)$ and out patient school refusers $(\mathrm{n}=28)$. While the inpatient and outpatient groups did not differ significantly on prevalence of anxiety disorders ( $75 \%$ and $85 \%$ respectively), they differed significantly on rate of major depression ( $86 \%$ and $46 \%$ respectively, inpatients were also more likely to have severe symptoms.

In an investigation of anxious/depressed adolescent school refusers $\quad(\mathrm{n}=44)$, Bernstein et al , (1997) reported that these teenagers frequently report moderate or severe somatic complaints. The most common somatic complaints were of the autonomic and gastrointestinal type. Although this study did not involve comparison groups, findings are consistent with the picture of substantial symptoms in anxious/depressed school-refusing youths.

In addition, Buitelar et al, (1994) investigated the DSM-III diagnoses at first visit of 25 school refusers, and report diagnoses of anxiety disorder in eight (32\%), depressive disorder in seven (28\%),
somatoform disorder in six (24\%), and conduct/personality disorder in four ( $16 \%$ ) cases. These studies regarding school refusal and DSM-III diagnoses do support a correlation between school refusal and the anxiety/depressive disorders.

In a study done at the Rivendell Child and Adolescent Psychiatry unit, Sydney, Australia (McShane, Walter \& Rey, 2001) probably the largest sample $(\mathrm{n}=192)$ of adolescents with school refusal examined for various DSM-IV psychiatric diagnosis, 101(54\%) had anxiety disorders, $99(53 \%)$ had mood disorders, $73(38 \%)$ had disruptive behavior disorders, 49(27\%) had other disorders like adjustment disorder and SLD (5.5\%). This study showed a high prevalence of mood disorders in adolescents with school refusal, which was in keeping with the other studies but a high prevalence of disruptive behavior disorders like ODD, CD, ADHD was seen which has not been highlighted in the previous studies. They also found that the major stressors were family or peer conflict. Inpatients were not found to be more impaired than out patients unlike previous studies (Borchardt et al, 1994). This study was retrospective in nature, had no control group, data was obtained from a single site-a specialist adolescent unit questioning the generalizabilitiy, and the raters were
not blind to the patient status since it was a chart review type study design.

Buitelar et al (1994) followed up 25 adolescents referred to an outpatient clinic because of school refusal in 1985-1986 after an average of 5 years. DSM - III diagnoses and scores on the Maudsley symptom checklist were obtained at initial contact and a follow-up. At follow-up, information was also gathered on psychosocial adjustment, and subjects completed self - ratings of anxiety and depression. At initial contact, school refusal was associated mainly with anxiety symptoms, and to a lesser extent with depressive and somatoform disorders. No specific relationship was found between diagnoses at baseline and at follow-up. About half of the sample still had a psychiatric disorder at follow-up. Out come was negatively associated with a history of previous psychological or psychiatric treatment and a small family size, and positively with a history of frequent somatic complaints.

From these diagnostic studies, it is clear that school refusal is complex, with variable presentations. School refusal is mainly associated with anxiety disorders in children and with anxiety and depressive disorders in adolescents. Other minor groups of school
refusers include children who might be characterized by other anxiety disorders. However, somewhat different trends are evident among non-clinic-referred youngsters with school refusal. A much larger proportion of these school refusers do not meet criteria for a diagnosis (Berg et al, 1993), compared with clinic samples.

## Behavioral Problems in Children with School Refusal:

Berg et al (1993) studied eighty 13 to 15 year - old children who failed to attend one of four schools for more then $40 \%$ of a term, without good reason. A systematic schedule (C.A.P.A.) was used in interviewing parents and children. 25 had DSM - III - R disruptive behaviour disorders and 15 had anxiety/mood disorders. Truancy was associated with the former and school refusal with the latter but both often occurred without any disorder. 14 children had neither school refusal nor truancy compared to controls; poor attendees came form materially disadvantaged homes. School refusal with anxiety disorders rarely received psychiatric treatment. A total of 376 people comprising students, parents, and professionals, were required to evaluate several treatment options in relation to a vignette. Despite its potential aversive ness, behavioral management was the most acceptable treatment approach followed, in order, by home tuition with psychotherapy,
hospitalization, and medication. A strong positive relationship was found between acceptability and perceived effectiveness.

Bools et al (1990) conducted interview with parents of 100 children taken to a "school attendance committee", because of persistent failure to attend school. Clinical assessment of the attendance problem was carried out so that children were categorized as "school refusers" $(\mathrm{N}=24),(\mathrm{N}=53)$, "both refusers and truants" ( $\mathrm{N}=9$ ), or as "neither" $(\mathrm{N}=14)$; any ICD - 9 psychiatric disorder was separately identified. Cluster analysis of information collected in a standard way indicated that there was a group of children with the features of "school refusal" who often had generalized neurotic disorders as well and who were mostly girls, another group with the features of "truancy" all of whom had conduct disorders who were mainly boys, and a third cluster of children who were usually "truants" but less often psychiatrically disturbed. The study provided evidence for the existence of school refusal with and without generalized neurotic disturbance in a non - clinical population.

Place and Kolvin (1986) found that up to $20 \%$ of the senior school pupils may be truant in a 2 - week period and teachers report
these youngsters to be more aggressive and to show more neurotic symptoms than the regular school attendees.

## Learning Disability in Children with School Refusal:

Naylor and colleagues (1994) found that 19 (70\%) schoolrefusing depressed adolescents on an inpatient psychiatric unit to have learning disabilities and 12 (44\%) language impairments compared with matched psychiatric controls, which was alarmingly high. Hence, the researchers concluded that "academic and communicative frustration and the adolescent's resulting inability to meet the academic and social demands in the school environment may play a role in the etiology of school refusal". This study looked at only depressed school refusers who bring in selection bias and limited generalizabilitiy.

In a study by McShane et al (2001) Specific Learning Disability was found in $5.5 \%$ of the children with school refusal

## E. INDIAN STUDIES ON CHILDREN WITH SCHOOL

## REFUSAL

Prabhuswamy et al's (2007) study at the National Institute of Mental Health and Neurosciences indicated the following findings The duration of the episode of school refusal ranged between 1 and 32
weeks. It was less than one month in $14(42.4 \%)$ of the subjects, between 1 and 2 months in $10(30.3 \%)$ of the subjects and greater than 2 months in $9(27.3 \%)$ of the subjects. $13(39.4 \%)$ of the subjects had changed schools before presentation. Depressive disorders only was found in $10(30.3 \%)$, of the subjects anxiety disorders only in $5(15.2 \%)$, both depressive and anxiety disorders in $9(27.3 \%) .5(15.2 \%)$ of the subjects were found to be having significant Specific Learning Disability. Psycho-social factors influencing the symptom of school refusal was found in $29(87.9 \%)$ of the subjects, the main factors being overindulgence $15(45.5 \%)$ inadequate/distorted interfamilial communications $13(39.4 \%)$, parental overprotection $11(33.3 \%)$, inadequate parental supervision/control $10(30.3 \%)$, anomalous parenting situation $10(30.3 \%)$ interfamilial discord among adults $8(24.2 \%)$, lack of warmth in parent-child relationship $7(21.2 \%)$. $29(87.9 \%)$ of the subjects received medication as a part of management of school refusal out of which 20 were prescribed SSRIs, 8 were put on a combination of anxiolytics and antidepressants/anticonvulsants and one was on lithium alone. The father's education was at the secondary level and above ( $72.7 \%$ ) and that of mother's being at the primary and secondary levels (69.7\%). The sex ratio in this study was, male to female 19:14 (1.35:1). An almost equal number of subjects were found
from middle and high socio-economic groups. Duration of school refusal, type of school refusal, change of school and scholastic performance did not significantly affect the outcome. Very few studies have followed the school refuser into adulthood and even fewer have looked at the prognostic implications of return to school.

Shastri (2001) examines definition, history, epidemiology, etiology, clinical presentation, differential diagnosis and management of school refusal in the Indian context in his article titled 'Behavior Disorders'. He discusses the role of parents, family, prevention aspects and management issues in psychotherapy and pharmacotherapy.

In a study by Chandra et al (1993), looking at the prevalence of mental disorders in school age children, though school refusal was not specifically looked into, learning disability and other school related problems were found in $28 \%$ and $27 \%$ of the children respectively. Due to continuing inconsistencies regarding clinical status of school refusal and paucity of research concerning the various issues in children with school refusal in the Indian Scenario, the current study was carried out.

## CHAPTER III <br> NEED AND OBJECTIVES OF THE STUDY

## Need for the Study

The topic of school refusal behavior is important for several reasons. First, primary school refusal behavior occurs with some frequency in youth (about $1 \%$ to 10\%; Kearney, 1995; King et al., 1996). In many other cases as well the behavior is identified by parents, teachers, and youth as the primary treatment target among several possible targets. Second, the behavior is associated with shortterm and long-term consequences if left unaddressed. Short-term consequences include family conflict and disruption, academic problems, and reduced social interaction (King, Ollendick, and Tonge, 1995). Possible long-term consequences include delinquency, occupational and marital problems, anxiety and depression, and the economic drawbacks of failing to finish high school (e.g., Buitelar, Van Andel, Duxy and Van Strien, 1994; Flakierska, Lindstrom and Gillberg, 1988). As such, school refusal behavior is often an initial gateway to more severe problems.

A critical evaluation of issues related to school absenteeism is important because the behavior represents a pressing social and clinical problem. Absenteeism is closely related to juvenile delinquency (Rutter and Giller, 1984) and nonattendance school places children at risk for several difficulties in adulthood. These include occupational (Hibbett, Fogelman, \& Manor, 1990) and marital problems (Hibbett \& Fogelman 1990), poor psychological functioning (Berg, 1970), anxiety and depression (Berg, Marks, McGuire, and Lipsedge, 1974; Tyrer and Tyrer, 1974), alcohol abuse and criminal behavior (Robins and Ratcliffe, 1980) and other difficulties requiring additional psychiatric assistance (Berg and Jackson, 1985; Flakierska et al., 1988).

## Statement of the Problem:

To assess the psycho social profile of school refusal behavior based on a functional, theory, driven model of assessment and the factors associated with school refusal behaviour.

## Objectives of the Study:

1 To assess psychosocial profile of children with school refusal.

2 To analyze socio -demographic variables with respect to school refusal factors.

3 To analyze clinical variables with respect to school refusal factors.

4 To analyze psychological variables with respect to school refusal factors.

5 To identify the most important variables contributing to school refusal factors.

## Hypotheses:

1 Children with school refusal have associated psycho social problems.

2 Socio- demographic variables influence school refusal factors.

3 Clinical variables influence school refusal factors.

4 Psychological variables influence school refusal factors.

## Operational Definitions:

## * School refusal behavior

School refusal behavior refers to those youngsters (includes children and adolescents), who are,

1. Completely absent from school.
2. Attend school but leave during the course of his school day.
3. Go to school after significant behavioral problems in the morning.
4. Display unusual distress about attending school that leads to future non -attendance (Kearney and Silverman, 1996).

## * School refusal factors

a. ANA - To avoid something at school that causes the child to feel general dread or negative affectivity (anxiety/depression). This refers to youngsters who often cannot say why they are upset about school but report an overall sense of malaise. These children are often trying to stay away from school because stimuli there cause them to feel upset and experience psychologically based symptoms such as nausea or trembling.
b. ESE - To escape aversive social and/or evaluative situations at school. This includes youngsters who experience difficulties making or keeping friends and thus feel isolated and also those who find evaluative situations unpleasant. Common situations that are avoided include tests, oral presentations, writing in front of others, recitals, athletic events, and peer interactions.
c. AGB - To get attention from significant others. This refers to youngsters who act out to stay home from school and to spend time with parents or others. In most cases, these children will act out in the morning. Some children, however, become disruptive at school so they will be sent home or call their parents several times a day from school.
d. PTR - To pursue positive tangible reinforcement outside school. This refers to youngsters, usually adolescents, who skip school because it is more fun to be out of school. In many cases, these youngsters leave school with friends to attend parties, shop, gamble, sleep, watch television, play sports, or travel.

## Socio- Demographic variables

Age, sex, mother tongue, religion, type of family, birth order, number of children, father's age, education, occupation, mother's age, education, occupation and parental monthly income.

## * Clinical variables

1. Course of school refusal: Acute versus chronic, Precipitating factors (scholastic, somatic, behavioral, multiple), frequency (intermittent, frequent, continuous).
2. Developmental History: Full term vs. pre term, delivery complications, birth weight, developmental milestones.
3. Temperamental History: Stubborn, temper tantrums, aggression, attention deficit, shy, sensitive, moody.
4. Educational History: Class, syllabus, change of school, academic performance, examination anxiety.
5. Family Functioning: Indulgent, inconsistent, overprotective parenting, sibling rivalry.
6. Life Events: Death of friends or family members, financial problems, family history of psychiatric illness, alcohol abuse in the father.

## * Psychological Variables

1. Depression:

A cut off score of 18 is used to distinguish between a clinically depressed and non-depressed individual on Children's Depression Inventory.
2. Anxiety:

State anxiety refers to subjectively consciously perceived feelings of apprehension, tension, and worry that vary in intensity and fluctuate overtime.

Trait anxiety refers to relatively stable individual differences in anxiety proneness. Elevations on state anxiety are expected in children who are exposed to stressful situations. Children who score high on trait anxiety are expected to experience state anxiety much more frequently on State Trait Anxiety Inventory for Children (STAIC).

## 3. Behavioral Problems:

It includes overall behavioral problems, externalizing symptoms, internalizing symptoms, learning and miscellaneous problems as assessed on Revised Child Behavior Checklist .

## 4. Learning Disability

A child who functions at two grades below his age appropriate grade can be considered to have specific learning disability. This could be either in reading, writing, spelling, arithmetic as assessed on NIMHANS Index of Specific Learning Difficulty.

Reading Errors: Reads word by word, ignores punctuation, adds words, omits words, cannot use phonetic cues, spells out words, guesses at words, and makes reversals.

Spelling errors: Spelling errors include substitution, reversal, omission and commission.

Writing: Common errors among the learning disabled children slowness, incorrect directionality of letters, too much or too little slant, spacing difficulty, messiness, and inability to stay on a horizontal line, illegible letters, too much or too little pencil pressure or mirror writing.

Arithmetic: Students with learning disabilities often have difficulty mastering arithmetic skills and concepts. Arithmetic problems are common at all age levels. During the pre-school and primary years they have difficulty in sorting objects by size, matching objects, understanding the language of arithmetic or grasping the
concept of rational counting or one to one relationship. During elementary school level, they have trouble with computational skills. In the middle and upper grades they have problems with fractions, decimals, and measurements. Also many secondary students face problems in place values and basic facts like addition, subtraction, multiplication and division.

## Theoretical Frame Work:

## KEARNEY \& SILVERMAN TAXONOMY FOR SCHOOL

 REFUSAL BEHAVIORSchool refusal behavior may be generally defined as childmotivated refusal to attend school or difficulties remaining in classes for an entire day. Specifically, school refusal behavior refers to youth aged 5 to 17 years who (a) are completely absent from school, and/or (b) initially attend then leave school during school days, and/or (c) go to school following behavior problems like tantrums in the morning, and/or (d) display unusual distress during school days that leads to regular pleas for future nonattendance (Kearney \& Silverman, 1996).

Despite the importance of school refusal behavior in child psychopathology there is little consensus about classifying, assessing
and treating this behavior. Several taxonomic models have been proposed, including psychodynamic, behavioral, family, diagnostic, and empirical approaches (Kearney \& Silverman, 1996). Although useful for a subset of youth who refuse school (e.g., those with fear and/or anxiety), the entire population is not generally covered by these taxonomies. This is partly due to the substantial behavioral heterogeneity shown by those who refuse school. In any particular case, for example, a variety of internalizing and externalizing behaviors are typically present (King et al., 1995). Thus, singular classification assessment, and treatment approaches for this population remain untenable.

Kearney and Silverman $(1990,1996)$ therefore proposed a compound functional analytic model of school refusal behavior (see Figure 2). A major theme of functional analysis is that behavior problems should be evaluated not only on the basis of unstable response topography, but also along similar, stable functions (Vollmer \& Smith, 1996). Kearney and Silverman's functional model of school refusal behavior, which emphasizes a circumscribed number of functions over the larger number of forms of the behavior, specifies four major reasons why children miss school: avoidance of stimuli that
provoke a general sense of negative affectivity, escape from aversive social and evaluative situations, attention-seeking, and/or positive tangible reinforcement. The first two conditions refer to school refusal behavior maintained by negative reinforcement; the latter two conditions refer to school refusal behavior maintained by positive reinforcement. Mixed functional profiles, where school refusal behavior is maintained by two or more of these reasons, are proposed as well.

Figure - 2
Refusal to Attend School
$\rightarrow$ Temporary/Non problematic
Problematic
$\rightarrow$ Parent-Motivated School


## Treatment

For youngsters who primarily refuse school to avoid negative affectivity-provoking stimuli, a combination of relaxation training, breathing retraining, and gradual reintegration in to the school setting may be helpful in reducing psychological aversion and extinguishing general feelings of dread (Eisen \& Kearney, 1995). For youngsters who primarily refuse school to escape aversive social/evaluative situations, a combination of modeling, role play, and cognitive restructuring may be helpful to increase social and coping skills and reduce cognitive distortions that often interfere with adequate performance at school (Cartledge \& Milburn, 1995).

For families of youngsters who primarily refuse school for attention, parent training in contingency management procedures may be helpful (Forehand \& McMahon, 1981). This would assist in specifying parental commands, verbal and physical attention for appropriate school attendance, and downplaying excessive reassurance-seeking, somatic complaints, or other undesirable school refusal behaviors. For conflictive families of youngsters who primarily refuse school for positive tangible reinforcement, familial contingency
contracting may be helpful (Sanders \& Dadds, 1993). This approach helps increase appropriate problem-solving abilities among family members and serves as a vehicle for negotiating increased incentives for school attendance and penalties for nonattendance. In cases where a child refuses school for multiple reasons, a combination of prescriptive treatments is warranted (Kearney and Albano, 2004; Kearney \& Sims, in press).

## CHAPTER IV <br> MATERIALS AND METHODS

Cross sectional ex -post facto research design was utilized for the current study. A purposive sample of 160 children was screened for school refusal behaviour at the Institute of Child Health and Hospital for Children and Stanley Medical College and Hospital from June to March 2005-2007. Children who fulfilled the criteria for 'school refusal' as the primary problem were assessed over 2 sessions lasting for 60 minutes each. Following parental consent children were interviewed first and separately from their parents; for children who were yet to read, questionnaires were read out aloud to these children.

## Setting:

This study was conducted in two centers. One was the Child Guidance Clinic at the Institute of Child Health and Hospital for Children Egmore, Chennai. It is a Government Hospital catering specifically to medical and psycho- social problems in children. Approximately $900-1000$ patients visit the out patient department at Child Guidance Clinic in a month. About $12,000-13,000$ visit the Child Guidance Clinic over period of one year. On an average 4-6 children with school refusal attend the out patient department of Child

Guidance Clinic in a month. The staffs who are involved in treatment programme are psychiatrists, nurses, and clinical psychologists, administrative and supportive staffs. Child Guidance Clinic offers treatment to children who are 12 years and below only. Hence the study was also conducted at the Psychiatry Department of Stanley Medical College and Hospital to obtain the adolescent sample of 13 to 15 years. Out of $20-30$ children who attend the Psychiatry out patient Department at Stanley Medical College and Hospital approximately 2 - 4 children present with school refusal in a month.

## Criteria for Sample Selection

## INCLUSION CRITERIA:

1. School going children of either Sex
2. Children with a full scale IQ of 80 and above on BKT.
3. Children who are accompanied by a parent and available for interview/assessment.
4. Children between the ages of $5-15$ yrs.
5. Children who were refusing to attend school with English as medium of instruction, for a minimum period of seven days.

## EXCULSION CRITERIA:

1. Children with pervasive developmental disorders, schizophrenia, epilepsy, and mental retardation.
2. Children who were not attending school for more than two years.
3. Children who were truant.

Through out the process of data collection certain ethical issues were taken care of:

* Informed consent from parents to participate in the study.
* Confidentiality would be ensured.
* Discussing the nature of the child's difficulties with the parents and school personnel.
* Psycho- social and psychopharmacological interventions when indicated.


## Description of the Instruments:

## Interview schedule to assess Socio demographic variables

An interview schedule was developed to assess the various socio demographic variables such as age, sex, education, religion, type of family, birth order, parent's income, age, education and occupation. The clinical variables included course of school refusal, developmental, temperamental and educational history, health status, family functioning and life events.

The following standardized instruments were utilized to assess the psychological variables. All these instruments, except assessment of Intellectual ability and Learning disability, were translated into Tamil language. Translation and back translation were done and evaluated by experts for content validity.

## School Refusal Assessment Scale (SRAS- Kearney and Silverman,

1995) 

The objective of the School Refusal Assessment Scale is to help clinicians and educators identify the primary reason or function for a particular child's school refusal behavior. Specifically, youngsters refuse school for one or more of the following reasons or functions:-

- To avoid something at school that causes the child to feel general dread or negative affectivity (anxiety/depression). (ANA)
- To escape aversive social and/or evaluative situations at school. (ESE)
- To get attention from significant others. (AGB)
- To pursue positive tangible reinforcement outside school. (PTR)

The first two functional conditions refer to youngsters who are refusing school for negative reinforcement (i.e., to get away from something negative at school). The latter two functional conditions refer to youngsters who are refusing school for positive reinforcement (i.e., to pursue something positive outside of school). Youngsters tend to be referred for treatment more of if they refuse school for positive reinforcement. Also about one - quarter of youngsters refuse school for two or more reasons or functions. For example, it is not uncommon to see a child initially refuse school to escape aversive social situations but then discover the amenities of staying home. Such children subsequently refuse school for such positive reinforcement as well.

The School Refusal Assessment Scale is a 24 - item measure that assess the degree to which four functions impact upon a child's school refusal behavior. Separate child (School Refusal Assessment Scale-C) and parent (School Refusal Assessment Scale -P) versions have been developed. Each item is rated on a 7-point Likert - type scale ranging from never (0) to always (6).

- Items $1,5,9,13,17$ and 21 comprise the first functional condition (avoidance of stimuli that provoke negative affectivity).
- Items 2, 6, 10, 14, 18 and 22, comprise the second functional condition (escape from aversive social/evaluative situations).
- Items 3, 7, 11, 15, 19 and 23 comprise the third functional condition (attention getting behavior).
- Items $4,8,12,16,20$ and 24 comprise the fourth functional condition (positive tangible reinforcement).


## Administration and Scoring Procedures:

When administering the school Refusal Assessment Scale, the child and parents are asked to complete the School Refusal Assessment

Scale -C and School Refusal Assessment Scale-P, respectively. This is done separately and takes about 5 minutes. For young children or those just learning to read, the School Refusal Assessment Scale items are presented verbally and allow them to answer on their own. Ideally, School Refusal Assessment Scale ratings should be obtained from the child, mother, and father, if all are available. However in the present study either of the parents who were available was interviewed.

Following the completion of each questionnaire, item means are derived for each function. On the School Refusal Assessment Scale -C and each School Refusal Assessment Scale -P scores are added for:

- Items 1, 5, 9, 13, 17 and 21 (first function);
- Items 2, 6, 10, 14, 18 and 22 (second function);
- Items 3, 7, 11, 15, 19 and 23 (third function);
- Items 4, 8, 12, 16, 20 and 24 (fourth function).

These four total scores are then each divided by 6 . This is done separately for ratings from the child and parents. After this is done, mean item scores are averaged across all off the School Refusal Assessment Scale versions administered.

The highest-scoring function is considered to be the primary reason a particular child is refusing school. Scores within 0.25 points of one another are considered equivalent. The School Refusal Assessment Scale represents a new strategy for classifying, assessing, and assigning treatment for youngsters with school refusal behavior. Rather than trying to find one "magic bullet" treatment for all youngsters who refuse school, therapeutic strategies are assigned individually and prescriptively to enhance effectiveness. With respect to School Refusal Assessment Scale-C (revised) test-retest reliability, all item scores were correlated significantly over a 7-to 14-day period (mean $=.71$; range $=.58-.92$ ). With respect to School Refusal Assessment Scale-P (revised) test-retest reliability, all but two item scores were correlated significantly over a 7- to 14- day period (excluding two items: mean $=.70$; range $=.51-.90$ ). With respect to School Refusal Assessment Scale (revised) inter-rater reliability, 16 questions were correlated significantly (mean $=.63$; range $=.35-$ .79).For purpose of concurrent validity, School Refusal Assessment Scale (revised) functional condition scores were correlated with School Refusal Assessment Scale functional condition scores from the original scale. For example, School Refusal Assessment Scale (revised) scores from functional condition 1 correlated significantly with School

Refusal Assessment Scale (original) scores from functional condition 1 (.61). Similarly calculated correlations for functional conditions 2 (.71), 3 (.77), and 4 (.61) were also reported. All correlations are significant at $p<.01$. These data provide preliminary support for the psychometric strength of the revised version of the SRAS (School Refusal Assessment Scale).

The School Refusal Assessment Scale is a versatile measure that can be used for many different types of clients with problematic absenteeism. The primary benefit of the School Refusal Assessment Scale is that it provides clinicians and educators with a straightforward and useful clinical picture of a child's school refusal behavior. The School Refusal Assessment Scale gives a thumbnail sketch of the primary maintaining factors that influence a particular case. The School Refusal Assessment Scale is thus a sound vehicle for classifying, assessing, and assigning treatment for youngsters with primary school refusal behavior.

## Children's Depression Inventory (Maria Kovacs, 1985):

Children's Depression Inventory developed by Kovacs (1985) is a 27 item self-report inventory. It is a symptom-oriented scale for children aged 8-15 years. Scores on each item range from 0 to $2 ; 0$
indicating absence of a symptom and 2 indicating severity of a symptom. It is a downward extension of the Beck's Depression inventory. It questions on how the child has been for the past two weeks. The child has to select from a group of three statements, which is most applicable to him.

For example:
i I am sad once in a while
i I am sad many times
i I am sad all the time

It has high internal consistency of .94 for normal population and .80 for psychiatric population. Test-retest coefficients range from .38 to .84 in various studies. A cut off score of 18 is used to distinguish between a clinically depressed and non-depressed individual.

## State-Trait Anxiety Inventory For Children: (Spielberger

 et.al,1973)The State Trait Anxiety Inventory for Children was developed initially as a research tool to study anxiety in elementary school children by (Spielberger, Edwards, Lushene, Montuori and Platzek;
1973). This scale is developed to measure anxiety for children between 9-12 years. It may also be used with younger children, 8 years and below if their comprehension is adequate. It is also applicable for use with 13 -year old children. The test has separate self report scales of 20- items each that measure two distinct anxiety concepts i.e. state Anxiety (A - state) and Trait Anxiety (A - Trait). While the A - state items consist of statements that ask how the subjects feel at a "particular moment in time", the A - Trait consists of statements with a requirement to respond by indicating how they generally feel. Elevations on the A - state scales are expected in children exposed to stressful situations. Children, who score high on A - Trait, are expected to experience A - State elevations more frequently and with greater anxiety.

The test is suitable for individual or group situations; however, it is used as an individual test in this study. The described procedure in the manual was altered to suit the special needs of the study sample. The instructions of the scales were read out aloud for the child and so also were all the items. The answers were recorded on a separate sheet by the examiner her self.

The items are scored 1,2 or 3 depending on the amount indicated by the choice. All 20 items on the State Trait Anxiety Inventory for Children - A - state are phrased as "I feel ..." followed by 3 choices for e.g., Very calm, calm or not calm which are respectively scored as 1,2 and 3 . The scores on each item are added to obtain a total score indicative of the level of state - anxiety.

On State Trait Anxiety Inventory for Children - A- Trait scale, the child is required to respond to each item by indicating the frequency of occurrence of a particular behavior. For e.g. item 6 on the scale states "I worry too much". The options for each item provided are: hardly ever, sometimes or often, and are scored as 1,2 and 3 respectively.

The State Trait Anxiety Inventory for Children shows a test retest reliability of .65 and .71 of A - Trait scale for boys and girls respectively. While it has a reliability of .31 and .47 respectively, on A - state scale for males and females, its internal consistency and reliability scores for A - state scale was .82 for males and .87 for females. For the A - Trait scale, the alpha co - efficents were .78 for males and .81 for females.

Concurrent validity of the State Trait Anxiety Inventory for Children - A - Trait scale was obtained by correlating it with the Children's Manifest Anxiety scale and the General Anxiety Scale for children. Correlations of .75 and .63 were obtained, respectively. Construct validity was also calculated for the A - state scale and was found to be fairly high. For the present study, the scores were considered to fall in the average range if they were between $45 \%$ and $55 \%$ of the possible range of scores, which is 20-60.

## The Revised Child Behavior Checklist for parents CBCL (Shenoy,

1996):

Shenoy (1996) modified the Child Behavior Checklist for parents (Achenbach and Edelbrock, 1983) as she found the author recommended cut offs to be unsatisfactory. Item analysis of the original checklist was done and items that were reported less than $10 \%$ of the time were deleted. The principal component method of factor analysis was used to obtain cut off scores for the short scale. There are a total of 48 items; 10 externalizing items, 12 internalizing items, 4 learning items and 22 miscellaneous items. The items are scored on a 3 point scale of 0,1 , and 2 where 0 indicates absence of a problem, 1indicates that the problem is sometimes or somewhat true and 2
indicates that it is often or almost always true of the child. Cut off scores are as follows:

Cut off scores for various scales of Revised Child Behavior Check List.

| Scale | Cut - off score |
| :--- | :---: |
| Externalizing | $7+$ |
| Internalizing | $6+$ |
| Learning | $3+$ |
| Miscellaneous | $11+$ |
| Total (overall behavioral problems) | $24+$ |

Sample items include "impulsive", "fears animals", "disobedient at home" and "nightmares". Reliability: The test -retest reliability correlations reported by the authors, for outpatient's scores over a 6 month period were in the 0.60 s for behavior problem. Validity: Construct validity was computed and a correlation of 0.91 with Connor's Questionnaire and 0.92 with Quay Peterson Revised Problem Checklist was found.

Reliability Coefficients were established for the following instruments:

| Instruments | Cronbach Alpha co efficient |
| :--- | :---: |
| SRAS (Parent ) | 0.88 |
| SRAS (Child) | 0.89 |
| CDI | 0.75 |
| STAIC (State) | 0.83 |
| STAIC (Trait) | 0.75 |
| CBCL | 0.75 |

## NIMHANS Index of Specific Learning Disability (Kapur, John,

## Rozario and Oommen, 1992):

Initially the battery (Level - II) consisted of the Bender Gestalt Test, the Minnesota Perceptual - Diagnostic Test, tests of reading, spelling, writing, and arithmetic. The 1992 revision by Kapur et al. consisted, in addition, of attention, memory and visual - motor skills (Development Test of Visual - motor integration). This battery is used with children over 5 years of age. In this study, the study group children were assessed on the language and arithmetic tests only. Reading ability of a child is assessed by checking the child's ability to read aloud, as well as comprehend what was read. The child is exposed to class appropriate passages which are to be read aloud depending on which class the child is currently studying in. Five questions from the
passage read are asked at the end of reading to check the comprehension. Errors made are noted down in terms of frequency of errors the child makes such as reading word by word, ignorance of punctuation, guessing of words, difficulty in using phonetic cues etc as well as the no. of wrong answers given for the questions asked. Reading is considered adequate for that class where the child makes no errors or very minimal errors for the passage read and is also able to answer at least 3 of the 5 questions asked. If the reading is significantly erroneous for a given passage then the child is made to read the passage of the lower class. For e.g.: If a child studying in the $7^{\text {th }}$ std reads word by word, shows difficulty in using phonetic cues more than 5 times and guesses at words with occasional omission or reversals of words the he/she is made to read the $6^{\text {th }}$ std passage. The reading test is continued till the child is able to read adequately for a particular class. Thus if the above child is reading adequately at the $3^{\text {rd }}$ STD level his reading ability is taken to be at the $3^{\text {rd }}$ std. Spelling ability is assessed by checking for spelling mistakes in the words given by dictation from the 15 words and 5 words lists. Spelling is considered adequate for a particular class if 9 from the 15 word list and 3 from the 5 word list are correct. For those with more spelling errors, the test as in reading is
continued to lower classes till the child is able to perform adequately for a certain class.

The writing tasks of copying, dictation and spontaneous writing (making single sentences involving target and writing a short essay) are given to the child with appropriate instructions and recorded in the record form. Errors are noted down in term of adequacy of formation of alphabets and words, spacing errors, ignorance of punctuation, jumbling, reversals or transposition of alphabets, omissions, or additions, adequacy in the generation of ideas, organization of the same as well as grammatical errors. For arithmetic, class appropriate tasks are given for the child to write and work out. Arithmetic ability is considered as adequate for that class where the child is able to answer $75 \%$ of the problems presented for that particular class.

Scoring: As learning disability is operationally defined as an ability-achievement discrepancy of 2 years, when the test result showed two years difference between the child's current level of performance and the class in which he/she is currently studying, it is considered as a learning difficulty.

## Binet Kamath Test of General Mental ability - (Kamath, 1973)

This test of intelligence is an Indian adaptation of the Stanford Binet Scale of Intelligence for Children. The test is meant for 3 years to 22 year olds .It has verbal and performance items. Basal age is wherein the child passes all the items in that age. Terminal age is wherein the child fails all the items in that age and mental age is the total number of items passed by the child. Children with an IQ of 80 and above were included in the study sample. The test has a reliability coefficient of 0.72 and validity of 63 .

## Data Collection procedure

The period of data collection extended from March 2005 to 2007. The research proposal was approved by the investigators advisory committee prior to the pilot and major study .The study was carried out in two institutes -Institute for Children and Hospital for Children and Stanley Medical College and hospital. Approval from these two institutions was obtained to conduct the research. The study subjects who met the inclusion criteria and were willing to participate in the study were included. A sample of 160 children was selected for the study. The purpose of the study was explained to the parents and oral consent was obtained from them. Assurance was given that the
anonymity of each individual would be maintained. Each subject was assessed separately in Tamil or English by the researcher.

## Data analysis:

Data was analyzed using SPSS Statistical Packages for Social Sciences version 11. Descriptive (frequencies, percentages, means and standard deviations) and inferential statistics were used to analyze the data. The inferential statistics included' Chi-square, t - test, ANOVA and multiple regression analysis. Chi-square was used to estimate mean rank of school refusal factors. t - Test and ANOVA (Analysis of Variance) were used to determine the difference in the mean scores of socio demographic, clinical and psychological variables with respect to school refusal factors. Multiple regression analysis was carried out to find out the effects of socio demographic, clinical and psychological variables on school refusal factors.

## Pilot Study

The Pilot study was conducted on 10 children presenting with school refusal, attending the Institute of Child health and Hospital for children, Egmore. Based on the pilot study, the tools were refined, and reliability of the instruments was established.

## CHAPTER V

## RESULTS AND ANALYSIS

A sample of 160 children presenting with school refusal were assessed with regard to socio-demographic, clinical and psychological variables. The findings are presented as follows:

1. Distribution of socio-demographic variables.
2. Distribution of clinical and psychological variables.
3. Analysis of socio -demographic, clinical and psychological variables with respect to school refusal factors.
4. Multiple regression analyses with school refusal factors as dependent variables and socio -demographic, clinical and psychological variables as independent variables.

Table - 1

## Distribution of Socio- demographic Variables of Children with

School Refusal

| Socio demographic variables | Frequency | Percentage |
| :---: | :---: | :---: |
| Age Group |  |  |
| 5-8 | 38 | 23.75 |
| 9-12 | 83 | 51.88 |
| 13-15 | 39 | 24.38 |
| Sex |  |  |
| Male | 98 | 61.25 |
| Female | 62 | 38.75 |
| Mother Tongue |  |  |
| Tamil | 116 | 72.50 |
| Telugu | 18 | 11.25 |
| Hindi | 9 | 5.63 |
| Malayalam | 15 | 9.38 |
| Others | 2 | 1.25 |
| Religion |  |  |
| Hindu | 110 | 68.75 |
| Christian | 31 | 19.38 |
| Muslim | 19 | 11.88 |


| Type Of. Family |  |  |
| :---: | :---: | :---: |
| Nuclear | 57 | 35.63 |
| Joint | 103 | 64.38 |
| Parent's (Father/Mother) |  |  |
| Dead | 4 | 2.50 |
| Alive | 148 | 92.50 |
| Divorced | 8 | 5.00 |
| Birth Order |  |  |
| 1 | 90 | 56.25 |
| 2 | 47 | 29.38 |
| 3 | 23 | 14.3 |
| Father's Age |  |  |
| 30-40 | 66 | 42.31 |
| 41-50 | 85 | 54.49 |
| 51 \& Above | 5 | 3.21 |
| NA | 4 | - |
| Mother's Age |  |  |
| 20-30 | 6 | 3.75 |
| 31-40 | 97 | 60.63 |
| 41-50 | 57 | 35.63 |
| Father's Education |  |  |
| Illiterate | 8 | 5.13 |
| Primary | 8 | 5.13 |
| High School | 21 | 13.46 |


| Higher secondary | 42 | 26.92 |
| :---: | :---: | :---: |
| Graduate | 77 | 49.36 |
| NA | 4 | - |
| Mother's Education |  |  |
| Illiterate | 8 | 5.00 |
| Primary | 19 | 11.88 |
| High School | 27 | 16.88 |
| Higher secondary | 55 | 34.38 |
| Graduate | 51 | 31.88 |
| Father's Occupation |  |  |
| Unskilled | 60 | 16.67 |
| Skilled | 26 | 38.46 |
| Professional | 70 | 44.87 |
| NA | 4 | - |
| Mother's Occupation |  |  |
| House wife | 116 | 72.50 |
| Unskilled | 6 | 3.75 |
| Skilled | 18 | 11.25 |
| Professional | 20 | 12.50 |
| Parent's Monthly Income |  |  |
| $<6000$ | 29 | 18.13 |
| 6000-10000 | 48 | 30.00 |
| $>10000$ | 83 | 51.88 |

## Description of the sample

## Table 1 Distribution of Socio- Demographic Variables

Nearly half the sample was aged 9-12 years with predominantly boys (62\%). Majority were Tamil speaking from Hindu, joint families and about $50 \%$ of the children were first born. $50-60 \%$ of the mothers and fathers were in the $30-40$ and $41-50$ age group respectively. 4 fathers had expired and 8 were single parent families. $50 \%$ of the fathers and $30 \%$ of the mothers were graduates/post graduates. $70 \%$ of the mothers were housewives, $13 \%$ were professionals including doctors, engineers, lawyers, accountants and clerical staff. $40 \%$ of the fathers were professionals e.g., doctors, engineers, lawyers, accountants and clerical staff. Unskilled laborers included daily wages laborers; skilled laborers included electricians, mechanics and plumbers. Socio-economic status ranged from lower to middle income group.

Table - 2
Distribution of Clinical Variables of Children with School Refusal

| Course of school refusal |  |  |
| :---: | :---: | :---: |
| Precipitating Factors |  |  |
| Scholastic | 8 | 5.00 |
| Somatic | 32 | 20.00 |
| Behavioral | 13 | 8.13 |
| Multiple | 107 | 63.13 |
| Laboratory Investigation |  |  |
| Yes | 66 | 41.25 |
| No | 94 | 59.75 |
| Treatment( medication) |  |  |
| Yes | 23 | 14.38 |
| No | 137 | 85.63 |
| Frequency of school refusal |  |  |
| Intermittent | 69 | 43.13 |
| Frequent | 67 | 41.88 |
| Continuous | 24 | 15.00 |
| Developmental History |  |  |
| Development at birth |  |  |
| Full term | 149 | 93.13 |
| Pre term | 11 | 6.88 |


| Delivery Complications |  |  |
| :---: | :---: | :---: |
| Yes | 49 | 30.63 |
| No | 111 | 69.38 |
| Antenatal Complications |  |  |
| Yes | 36 | 22.50 |
| No | 124 | 77.50 |
| Neonatal Complications |  |  |
| Yes | 33 | 20.63 |
| No | 127 | 79.38 |
| Birth Weight |  |  |
| Normal | 91 | 56.88 |
| Low | 69 | 43.13 |
| Birth Defect |  |  |
| Yes | 27 | 16.88 |
| No | 133 | 83.13 |
| Feeding Problem |  |  |
| Yes | 71 | 44.38 |
| No | 89 | 55.63 |
| Sleeping Problem |  |  |
| Yes | 86 | 53.75 |
| No | 74 | 46.25 |


| Physical Illness |  |  |
| :---: | :---: | :---: |
| Yes | 33 | 20.63 |
| No | 127 | 79.38 |
| Motor Milestones |  |  |
| Normal | 141 | 88.13 |
| Delayed | 19 | 11.88 |
| Speech |  |  |
| Normal | 113 | 70.63 |
| Delayed | 47 | 29.38 |
| Bladder function |  |  |
| Normal | 116 | 72.50 |
| Delayed | 44 | 27.50 |
| Temperamental History |  |  |
| Stubborn |  |  |
| Yes | 97 | 60.63 |
| No | 63 | 39.38 |
| Adjustment Problems |  |  |
| Yes | 91 | 56.88 |
| No | 63 | 43.13 |
| Temper Tantrums |  |  |
| Yes | 72 | 45.00 |
| No | 88 | 55.00 |


| Aggressive |  |  |
| :---: | :---: | :---: |
| Yes | 24 | 15.00 |
| No | 136 | 85.00 |
| Attention Problems |  |  |
| Yes | 102 | 63.75 |
| No | 58 | 36.25 |
| Shy |  |  |
| Yes | 59 | 36.88 |
| No | 101 | 63.13 |
| Extremely Sensitive |  |  |
| Yes | 96 | 60.00 |
| No | 64 | 40.00 |
| Able to take no for Answer |  |  |
| Yes | 58 | 36.25 |
| No | 102 | 63.75 |
| Social, Friendly |  |  |
| Yes | 119 | 74.38 |
| No | 41 | 25.63 |
| Moody |  |  |
| Yes | 98 | 61.25 |
| No | 62 | 38.75 |


| Educational History |  |  |
| :---: | :---: | :---: |
| Class |  |  |
| $\begin{aligned} & 1-3 \\ & 4-7 \\ & 8-10 \end{aligned}$ | $42$ <br> 80 $38$ | $\begin{aligned} & 26.25 \\ & 50.00 \\ & 23.75 \end{aligned}$ |
| Syllabus |  |  |
| State <br> Matriculation <br> CBSE | $\begin{array}{r} 37 \\ 102 \\ 21 \end{array}$ | $\begin{aligned} & 23.13 \\ & 63.75 \\ & 13.13 \end{aligned}$ |
| Change of School |  |  |
| $\begin{aligned} & \text { Yes } \\ & \text { No } \end{aligned}$ | $\begin{aligned} & 74 \\ & 86 \end{aligned}$ | $46.25$ <br> 53.75 |
| Scholastic Performance |  |  |
| Good <br> Average <br> Below Average | $\begin{array}{r} 23 \\ 101 \\ 36 \end{array}$ | $\begin{aligned} & 14.38 \\ & 63.13 \\ & 22.50 \end{aligned}$ |
| Teacher's Complaints |  |  |
| Yes <br> No | $\begin{array}{r} 42 \\ 118 \end{array}$ | $\begin{aligned} & 26.25 \\ & 73.75 \end{aligned}$ |
| Total No. of days missed/year |  |  |
| $\begin{array}{r} 7-14 \\ 15-30 \\ 31-60 \end{array}$ | $\begin{aligned} & 41 \\ & 97 \\ & 22 \end{aligned}$ | $\begin{aligned} & 25.63 \\ & 60.63 \\ & 13.75 \end{aligned}$ |


| Examination anxiety |  |  |
| :---: | :---: | :---: |
| Yes | 71 | 44.38 |
| No | 89 | 55.63 |
| Health |  |  |
| Health Status |  |  |
| Good | 21 | 13.13 |
| Average | 104 | 65.00 |
| Below Average | 35 | 21.88 |
| Menstruation |  |  |
| Yes | 28 | 50.00 |
| No | 34 | 50.00 |
| Not Applicable | 98 |  |
| Menstrual Problems |  |  |
| Yes | 18 | 32.14 |
| No | 38 | 67.86 |
| Not Applicable | 98 |  |
| Family Functioning |  |  |
| Indulgent |  |  |
| Yes | 77 | 48.13 |
| No | 83 | 51.88 |
| Inconsistent |  |  |
| Yes | 73 | 45.63 |
| No | 87 | 54.38 |


| Over Protective |  |  |
| :---: | :---: | :---: |
| Yes | 78 | 48.75 |
| No | 82 | 51.25 |
| Sibling Rivalry |  |  |
| Yes | 80 | 50.00 |
| No | 80 | 50.00 |
| Life Events |  |  |
| Recent death of family members |  |  |
| Yes | 26 | 16.25 |
| No | 134 | 83.75 |
| Death of friends |  |  |
| Yes | 9 | 5.63 |
| No | 151 | 94.38 |
| Financial Problems |  |  |
| Yes | 36 | 22.50 |
| No | 124 | 77.50 |
| Health problems of family members |  |  |
| Yes | 52 | 32.50 |
| No | 108 | 67.50 |
| Family history of psychiatric problems |  |  |
| Yes | 83 | 51.88 |
| No | 77 | 48.13 |
| Alcohol abuse |  |  |
| Yes | 33 | 20.63 |
| No | 127 | 79.38 |

## Table - 2

## Distribution of Clinical Variables of children with school refusal

## Course of School Refusal

Precipitating factors or presenting complaints at the time of inclusion were classified as following; $8(5 \%)$ had scholastic problems $32(20 \%)$ had somatic complaints, 13 (8\%) had behavioral problems and 107 (66\%) had a combination of these problems; 66 (41\%) children underwent laboratory investigations, 23 (14\%) were on medication for anxiety or depression, 69 (43\%) were intermittently not attending school, 67 (41\%) were frequent school refusers and 24 (15\%) did not attend school continuously.

## Developmental History

11 (6\%) children were born preterm, 69 (43\%) had low birth weight - below 2.5 kg , 49 mothers (30\%) had delivery complications e.g. forceps delivery; Antenatal and neonatal complications were present in $36(22 \%)$ and $33(20 \%)$ mothers respectively; $27(16 \%)$ had birth defects 71 (44\%) had feeding problems, 86 (53\%) had sleep problems and 33 (20\%) had physical illness. Motor milestones were
delayed in 19 (11\%), speech delay in 47 (29\%) and bladder function was delayed in 44 (27\%) children.

## Temperamental History

97 ( $60 \%$ ) were stubborn, 63 ( $43 \%$ ) could not adjust to new situations, 72 (45\%) had temper tantrums, 24 (15\%) were aggressive, 102 (63\%) had attention problems, 59 (36\%) were shy, 96 (60\%) were extremely sensitive, 102 (63\%) were unable to take no for an answer, 119 (74\%) were described to be friendly and 98 (61\%) moody by the parents.

## Educational History

$80(50 \%)$ children belonged to $4-7^{\text {th }}$ STD. Majority of the children 102 (63\%) came from Matric, rest 37 (23\%) from State Board and 28 (13\%) from CBSE. 74 (46\%) had a recent change of school. Scholastic performance was based on the average marks obtained in all subjects at the time of inclusion. The children whose average marks were $70 \%$ to $90 \%$ was considered to be good (14\%), 101 ( $63 \%$ ) children were average performers with $50-70 \%$ aggregate. The children with below average performance (36) constituted $22 \%$ scored $30-50 \% ; 42$ children (26\%) had complaints from teachers at school
regarding scholastic and behavioral problems. 71 (44\%) had reported increased anxiety levels prior to examination.

## Health status:

Health status, as indicated by parents showed that majority, 104 (65\%) had average health. Among girls 18 (32\%) had menstrual problems.

## Family functioning

As reported by parents, 77 (48\%) tended to be indulgent, 73 (45\%) were inconsistent in disciplining the children and $78(48 \%)$ were overprotective in handling these children; 80 (50\%) children had sibling rivalry.

## Life events

26 (16\%) had lost a family member, 7 (5\%) had lost a friend due to illness, 36 ( $22 \%$ ) had significant financial problems at home, 52 (32\%) had health problems in family members, 83 (51\%) had family history of psychiatric illness and 33 (20\%) had fathers who abused alcohol.

Table 3
Distribution of Psychological variables in children with school refusal

| Depression(CDI-Children's Depression Inventory) |  |  |
| :---: | :---: | :---: |
| No Depression Depression | $\begin{array}{r} 40 \\ 120 \end{array}$ | $\begin{aligned} & 25.00 \\ & 75.00 \end{aligned}$ |
| State Anxiety (STAIC-State Trait Anxiety Inventory for Children) |  |  |
| Low anxiety High anxiety | $\begin{aligned} & 83 \\ & 77 \end{aligned}$ | $\begin{aligned} & 51.88 \\ & 48.13 \end{aligned}$ |
| Trait Anxiety (STAIC- State Trait Anxiety Inventory for Children) |  |  |
| Low anxiety High anxiety | $\begin{aligned} & 85 \\ & 75 \end{aligned}$ | $\begin{aligned} & 53.13 \\ & 46.88 \end{aligned}$ |
| Intellectual Functioning (Binet Kamath Test of Intelligence) |  |  |
| Border Line (80-89) Average (90-110) | $\begin{array}{r} 19 \\ 141 \end{array}$ | $\begin{aligned} & 11.88 \\ & 88.13 \end{aligned}$ |
| Learning Difficulty (NIMHANS Index of Specific Learning Difficulty) |  |  |
| Reading <br> Writing <br> Spelling <br> Arithmetic | $\begin{aligned} & 21 \\ & 52 \\ & 36 \\ & 51 \end{aligned}$ | $\begin{aligned} & 13.13 \\ & 32.50 \\ & 22.50 \\ & 33.13 \end{aligned}$ |



## Distribution of psychological variables in children with school refusal (Table - 3)

Depression - Children who scored above the cutoff of 18 on Children's Depression Inventory were included in the depressed group. $120(75 \%)$ children with school refusal belonged to the depressed group.

Anxiety - High state anxiety was seen in 77 (48\%) children, 75 (46\%) children had high trait anxiety as seen on STAIC.

## Learning difficulty

On BKT (Binet Kamath Test of Intelligence) 141 (88\%) were of average intellectual functioning. On NIMHANS Index of specific learning difficulty 21 (13\%) had reading difficulty, 51 (32\%) had writing difficulty, 36 (22\%) had spelling difficulty and 51 (33\%) had arithmetic difficulty.

## Behavioral problems

On CBCL 80 (50\%) had externalizing problems 90 (56\%) had internalizing problems, 87 (54\%) had learning problems, 66 (41\%) had miscellaneous problems and 105 (65\%) had overall significant behavioral problems.

## Table 4

## School Refusal Factors

Friedman Test for Significant Difference between School Refusal
Factors:

| School refusal Factors | Mean Rank | Chi <br> square | P Value |
| :--- | :---: | :---: | :---: |
| ANA (Avoidance of <br> Negative affectivity) | 2.83 |  |  |
| ESE (Escape from social <br> evaluative situations) | 1.98 | 38.154 | $.000^{* *}$ |
| AGB (Attention seeking <br> Behavior) | 2.54 |  |  |
| PTR (Pursuit of Positive <br> Tangible reinforcement) | 2.65 |  |  |

## School Refusal Factors (Table 4):

Kearney and colleagues developed a functional model that stipulates that youth generally refuse school for the following reasons 1) to avoid school related stimuli that provoke a sense of general negative affectivity (ANA), 2) to escape from aversive social or evaluative situations at school (ESE), 3) to pursue attention from
significant others (AGB), 4) to pursue tangible reinforcement out side the school setting (PTR). There was a significant difference between the school refusal factors. The Avoidance of stimuli that provoke a general sense of negative affectivity (2.83) was most used followed by Positive tangible reinforcement (2.65), Attention seeking behavior (2.54) and Escape from aversive social and evaluative situations (1.98).

Hypothesis 1 'Children with school refusal have associated psycho social problems ' is partially accepted.

## Table 5

School Refusal Factors and Socio- Demographic variables in children with School Refusal

## $t$ test for significant difference between male and female with respect to school refusal factors <br> Socio Demographic Variables

| Sex |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male ( $\mathrm{n}=98$ ) |  | Female ( $\mathrm{n}=62$ ) |  |  | $t$ value | $P$ value |  |
| School refusal factors | Mean | SD | Mean |  | SD |  |  |  |
| ANA | 2.93 | 0.96 | 4.07 |  | 1.05 | 7.10 | 0.000** |  |
| ESE | 2.48 | 0.69 | 3.18 |  | 1.16 | 4.77 | 0.000** |  |
| AGB | 3.32 | 1.20 | 3.09 |  | 0.85 | 1.30 | 0.196 |  |
| PTR | 3.62 | 1.32 | 2.71 |  | 1.10 | 4.56 | 0.000** |  |
| * Significant at .05 level, ** Significant at .01 level |  |  |  |  |  |  |  |  |
| ANOVA for significant difference between age groups with respect to school refusal factors |  |  |  |  |  |  |  |  |
| Age Group |  |  |  |  |  |  |  |  |
|  | $5-8(\mathrm{n}=38)$ |  | 9-12 ( $\mathrm{n}=83$ ) |  | 13-15 ( $\mathrm{n}=39$ ) |  | $F$ value |  |
| School refusal factors | Mean | SD | Mean | SD | Mean | SD |  | $P$ value |
| ANA | 3.12 | 1.17 | 3.34 | 1.07 | 3.66 | 1.22 | 2.247 | 0.109 |
| ESE | 2.56 | 0.89 | 2.75 | 0.95 | 2.95 | 1.03 | $1.598$ | 0.205 |
| AGB | 3.39 | 1.11 | 3.11 | 1.02 | 3.33 | 1.16 | 1.100 | 0.335 |
| PTR | 3.53 | 1.38 | 3.16 | 1.24 | 3.24 | 1.39 | 1.096 | 0.336 |


| t test for significant difference between type of family with respect to school refusal factors |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of family |  |  |  |  |  |  |  |
| Nuclear ( $\mathrm{n}=57$ ) |  |  |  |  |  |  |  |
| School refusal factors | Mean | SD | Mean | SD | t value | P value |  |
| ANA | 3.32 | 1.04 | 3.40 | 1.19 | 0.41 | 0.680 |  |
| ESE | 2.73 | 0.97 | 2.76 | 0.95 | 0.23 | 0.817 |  |
| AGB | 3.35 | 1.08 | 3.16 | 1.07 | 1.08 | 0.284 |  |
| PTR | 3.30 | 1.37 | 3.25 | 1.28 | 0.22 | 0.823 |  |


| ANOVA for significant difference between different birth order with respect to school refusal factors |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}(\mathrm{n}=90)$ |  | $\mathbf{2}(\mathrm{n}=47)$ | $\mathbf{3}(\mathrm{n}=23)$ |  |  |  |  |  |
|  | Mean | SD | Mean | SD | Mean | SD | F value | P value |
| School refusal factors | Merder |  |  |  |  |  |  |  |
| ANA | 3.48 | 1.14 | 3.04 | 0.98 | 3.61 | 1.35 | 2.940 | 0.055 |
| ESE | 2.87 | 0.95 | 2.59 | 0.92 | 2.60 | 1.02 | 1.727 | 0.181 |
| AGB | 3.29 | 1.04 | 3.43 | 1.06 | 2.57 | 1.06 | 5.477 | $0.005^{*}$ |
| PTR | 3.35 | 1.29 | 3.49 | 1.42 | 2.50 | 0.88 | 4.961 | $0.008^{*}$ |

## ANOVA for significant difference between parent's monthly income with respect to school refusal factors

| Parent's Monthly Income |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $<\mathbf{6 0 0 0}(\mathrm{n}=29)$ | $\mathbf{6 0 0 0} \mathbf{- 1 0 0 0 0}(\mathrm{n}=48)$ | $>\mathbf{1 0 0 0 0}(\mathrm{n}=83)$ |  |  |  |  |  |  |
| School refusal factors | Mean | SD | Mean | SD | Mean | SD | F value | P value |  |
| ANA | 2.89 | 0.96 | 3.28 | 1.08 | 3.59 | 1.18 | 4.481 | $0.012^{*}$ |  |
| ESE | 2.14 | 0.67 | 2.58 | 0.77 | 3.06 | 1.02 | 12.442 | $0.000^{* *}$ |  |
| AGB | 2.62 | 0.93 | 3.08 | 1.00 | 3.53 | 1.08 | 8.936 | $0.000^{* *}$ |  |
| PTR | 2.52 | 1.00 | 3.04 | 1.23 | 3.66 | 1.32 | 10.262 | $0.000^{* *}$ |  |

ANOVA for significant difference between father's age with respect to school refusal factors

| Father's Age |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{3 0 - 4 0}(\mathrm{n}=66)$ |  | $\mathbf{4 1 - 5 0}(\mathrm{n}=85)$ |  | $>\mathbf{5 0}(\mathrm{n}=5)$ |  |  |  |  |
| School refusal factors | Mean | SD | Mean | SD | Mean | SD | F value | P value |  |
| ANA | 3.35 | 1.09 | 3.38 | 1.15 | 4.12 | 1.55 | 1.075 | 0.343 |  |
| ESE | 2.62 | 0.84 | 2.83 | 1.06 | 3.22 | 0.75 | 1.507 | 0.224 |  |
| AGB | 3.14 | 1.01 | 3.29 | 1.15 | 2.92 | 0.72 | 0.565 | 0.569 |  |
| PTR | 3.12 | 1.28 | 3.31 | 1.33 | 3.58 | 1.24 | 0.553 | 0.575 |  |

ANOVA for significant difference between mother's age with respect to school refusal factors

| Mother's Age |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 - 3 0}(\mathbf{n}=\mathbf{6})$ |  | $\mathbf{3 1 - 4 0}(\mathbf{n}=\mathbf{9 7})$ |  | $\mathbf{4 1 - 5 0}(\mathbf{n}=\mathbf{5 7})$ |  |  |  |
| School refusal factors | Mean | SD | Mean | SD | Mean | SD | F value | P value |
| ANA | 2.48 | 1.19 | 3.31 | 1.04 | 3.56 | 1.26 | 2.795 | 0.064 |
| ESE | 1.67 | 0.52 | 2.77 | 0.88 | 2.83 | 1.06 | 4.238 | $0.016^{*}$ |
| AGB | 2.97 | 1.15 | 3.32 | 1.06 | 3.10 | 1.10 | 0.941 | $0.039^{*}$ |
| PTR | 3.08 | 1.44 | 3.34 | 1.28 | 3.16 | 1.37 | 0.371 | 0.690 |

ANOVA for significant difference between father's education with respect to school refusal factors

| Father's Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Illiterate <br> $1(\mathrm{n}=8)$ |  | Primary <br> $2(\mathrm{n}=8)$ |  | High school <br> $3(\mathrm{n}=21)$ |  | Hecondary <br> $(\mathrm{n}=42)$ | Graduate/ Post <br> Graduate $(\mathrm{n}=57)$ |  |  |  |  |  |  |
| School <br> refusal <br> factors | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | F <br> value | P value |  |  |
| ANA | 2.15 | 0.80 | 2.59 | 1.04 | 3.44 | 0.97 | 3.53 | 1.09 | 3.51 | 1.16 | 4.075 | $0.003^{* *}$ |  |  |
| ESE | 1.75 | 0.65 | 2.13 | 0.78 | 2.31 | 0.78 | 3.06 | 0.90 | 2.88 | 0.98 | 6.167 | $0.000^{* *}$ |  |  |
| AGB | 2.01 | 0.88 | 2.76 | 1.10 | 3.07 | 0.92 | 3.20 | 1.08 | 3.44 | 1.06 | 4.019 | $0.004^{* *}$ |  |  |
| PTR | 2.06 | 0.78 | 2.75 | 0.86 | 2.89 | 1.32 | 3.37 | 1.21 | 3.44 | 1.35 | 2.997 | $0.020^{*}$ |  |  |

## ANOVA for significant difference between mother's education with respect to school refusal factors

Mother's Education

|  | Illiterate ( $\mathrm{n}=8$ ) |  | Primary ( $\mathrm{n}=19$ ) |  | $\begin{gathered} \text { High School } \\ (\mathrm{n}=27) \\ \hline \end{gathered}$ |  | $\underset{\substack{\text { Higher Secondary } \\(\mathrm{n}=55)}}{ }$ |  | Graduates/ Post graduates ( $\mathrm{n}=51$ ) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| School refusal factors | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | $\begin{gathered} F \\ \text { value } \end{gathered}$ | P value |
| ANA | 2.61 | 1.01 | 3.25 | 1.07 | 3.18 | 1.05 | 3.52 | 1.09 | 3.47 | 1.25 | 1.468 | 0.214 |
| ESE | 1.96 | 1.07 | 2.59 | 1.00 | 2.44 | 0.69 | 2.89 | 0.86 | 2.94 | 1.06 | 3.157 | 0.015* |
| AGB | 2.46 | 0.90 | 3.15 | 0.96 | 2.80 | 0.91 | 3.38 | 1.07 | 3.45 | 1.15 | 3.023 | 0.019* |
| PTR | 2.55 | 1.16 | 2.79 | 1.10 | 3.01 | 1.26 | 3.57 | 1.29 | 3.36 | 1.38 | 2.357 | 0.054* |

ANOVA for significant difference between father's occupation with respect to school refusal factors

## Father's Occupation

|  | Unskilled (n=26) |  | Skilled(n=60) |  | Professionals (n=70) |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| School refusal factors | Mean | SD | Mean | SD | Mean | SD | F value | P Value |
| ANA | 2.48 | 0.65 | 3.55 | 1.12 | 3.59 | 1.14 | 11.471 | $0.000^{* *}$ |
| ESE | 2.06 | 0.73 | 2.75 | 0.94 | 3.02 | 0.95 | 10.487 | $0.000^{* *}$ |
| AGB | 2.40 | 0.97 | 3.19 | 0.90 | 3.54 | 1.11 | 12.036 | $0.000^{* *}$ |
| PTR | 2.67 | 1.11 | 3.12 | 1.20 | 3.55 | 1.38 | 4.927 | $0.008^{* *}$ |

## ANOVA for significant difference between mother's occupation with respect to school refusal factors

| Mother's occupation |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Housewife$1(\mathrm{n}=116)$ |  | Unskilled$2(\mathrm{n}=6)$ |  | $\begin{gathered} \text { Skilled } \\ 3(\mathrm{n}=18) \end{gathered}$ |  | $\begin{gathered} \text { Professionals } \\ 4(\mathrm{n}=20) \end{gathered}$ |  |  |  |
| School refusal factors | Mean | SD | Mean | SD | Mean | SD | Mean | SD | F value | $P$ value |
| ANA | 3.33 | 1.10 | 3.02 | 1.26 | 3.46 | 1.10 | 3.64 | 1.39 | 0.600 | 0.583 |
| ESE | 2.63 | 0.92 | 3.18 | 0.76 | 2.68 | 0.89 | 3.41 | 1.02 | 4.498 | 0.004 ** |
| AGB | 3.18 | 1.08 | 3.63 | 1.06 | 3.25 | 1.09 | 3.40 | 1.11 | 0.539 | 0.655 |
| PTR | 3.25 | 1.32 | 3.57 | 1.09 | 3.07 | 1.36 | 3.43 | 1.36 | 0.339 | 0.796 |

## School refusal factors and socio- demographic variables (Table - 5)

Based on Kearney's theoretical framework, analysis of school refusal factors and socio demographic variables yielded the following results.

- Gender differences indicated that school refusal was negatively reinforced in girls (ANA -Avoidance of stimuli that provoke a general sense of negative affectivity). However in boys it was positively reinforced behavior especially on Positive tangible reinforcement dimension (PTR).
- Second born children tended to exhibit school refusal behavior which was positively reinforced on both Attention seeking behavior (AGB) and Positive tangible reinforcement (PTR).
- Socio economic status indicated that the high income group scored significantly higher on all four school refusal dimensions.
- Children of older mothers and those who were professionals scored significantly higher on Escape from aversive and evaluative situations dimension (ESE) indicating fear of social evaluation.
- Children with more educated fathers and those who were professionals exhibited significant scores on all four school refusal dimensions.
- Children with more educated mothers reflected significant scores on Escape from aversive social and evaluative situations (ESE), Attention seeking behavior (AGB) and Positive tangible reinforcement (PTR) dimensions.
- Age of the child, type of family (joint/nuclear) and father's age did not seem to influence school refusal dimensions.

Hypothesis 2’ Socio- demographic variables influence school refusal factors' is partially accepted.

# School Refusal Factors and Clinical variables in children with school refusal (Tables 6-11) 

## Table 6

| ANOVA for significant difference between frequency of school |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| refusal with respect to school refusal factors |  |  |  |  |  |  |  |  |
| Frequency of School Refusal |  |  |  |  |  |  |  |  |
|  | Intermittent <br> $(\mathrm{n}=69)$ | Frequent <br> $(\mathrm{n}=67)$ |  | Continuous <br> $(\mathrm{n}=24)$ |  |  |  |  |
|  | 3.36 | 1.16 | 3.37 | 1.16 | 3.41 | 1.08 | 0.018 | 0.981 |
|  | 2.68 | 0.99 | 2.89 | 0.88 | 2.57 | 1.05 | 1.329 | 0.267 |
|  | 3.24 | 1.12 | 3.26 | 1.06 | 3.12 | 1.05 | 0.148 | 0.862 |
|  | 3.23 | 1.43 | 3.35 | 1.22 | 3.14 | 1.23 | 0.287 | 0.750 |

Table - 7


## Table-7a

| School <br> refusal <br> factors | Source | D.F | Sum of <br> Squares | Mean <br> Squares | F <br> Ratio | F <br> Prob. |
| :--- | :--- | ---: | ---: | ---: | ---: | :--- |
| ANA | Between Groups | 3 | 3.7857 | 1.2619 |  |  |
|  | Within Groups |  |  |  |  |  |
| Total | 156 | 202.3943 | 1.2974 | 0.9726 | 0.4073 |  |
| ESE | Between Groups | 3 | 159 | 206.1799 |  |  |
|  | Within Groups | 156 | 133.8723 | 3.8959 |  |  |
|  | Total | 159 | 145.5600 |  | 4.5399 | $0.0044^{* *}$ |
| AGB | Between Groups | 3 | 18.7855 | 6.2618 |  |  |
|  | Within Groups | 156 | 166.2865 | 1.0659 | 5.8745 | $0.000^{* *}$ |
|  | Total | 159 | 185.0719 |  |  |  |
| PTR | Between Groups | 3 | 35.2070 | 11.7357 |  |  |
|  | Within Groups | 156 | 238.2874 | 1.5275 | 7.6830 | $0.000^{* *}$ |
|  | Total | 159 | 273.4944 |  |  |  |

Table - 8

| ANOVA for significant difference between condition of health with respect to school refusal factors |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Condition of health |  |  |  |  |  |  |  |
|  | Good$(\mathrm{n}=21)$ |  | Average$(\mathrm{n}=104)$ |  | Poor$(\mathrm{n}=35)$ |  |  |  |
| School refusal factors | Mean | SD | Mean | SD | Mean | SD | $F$ value | $\begin{aligned} & P \\ & \text { value } \end{aligned}$ |
| ANA | 3.41 | 1.25 | 3.29 | 1.11 | 3.57 | 1.16 | 0.781 | 0.059 |
| ESE | 2.56 | 1.05 | 2.74 | 0.85 | 2.88 | 1.18 | 0.763 | 0.467 |
| AGB | 2.82 | 0.91 | 3.27 | 1.10 | 3.36 | 1.08 | 1.871 | 0.157 |
| PTR | 2.89 | 1.18 | 3.42 | 1.31 | 3.03 | 1.35 | 2.23 | 0.110 |

Table-9

ANOVA for significant difference between scholastic performance with respect to school refusal factors

|  | Scholastic Performance |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Good <br> $(\mathrm{n}=23)$ |  | Average <br> $(\mathrm{n}=101)$ |  | Below Average <br> $(\mathrm{n}=36)$ |  |  |  |
| School <br> refusal <br> factors | Mean | SD | Mean | SD | Mean | SD | F <br> value | P value |
| ANA | 3.69 | 1.14 | 3.36 | 1.15 | 3.19 | 1.08 | 1.36 | 0.25 |
| ESE | 2.97 | 1.22 | 2.79 | 0.96 | 2.50 | 0.71 | 1.94 | 0.14 |
| AGB | 3.74 | 1.09 | 3.15 | 1.05 | 3.11 | 1.08 | 3.09 | 0.06 |
| PTR | 3.37 | 1.54 | 3.17 | 1.29 | 3.46 | 1.22 | 0.71 | 0.49 |

Table - 10

| t test for significant difference between exam anxiety with respect <br> to school refusal factors |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :--- |
|  | Exam Anxiety |  |  |  |  |  |
|  | Yes <br> $(\mathrm{n}=71)$ |  | No <br> $(\mathrm{n}=89)$ |  |  |  |
| School <br> refusal <br> factors | Mean | SD | Mean | SD | t <br> value | P value |
| ANA | 3.69 | 1.09 | 3.12 | 1.12 | 3.23 | $0.001^{* *}$ |
| ESE | 3.08 | 1.00 | 2.49 | 0.84 | 4.07 | $0.000^{* * *}$ |
| AGB | 3.31 | 1.01 | 3.16 | 1.13 | 0.89 | 0.377 |
| PTR | 3.19 | 1.35 | 3.33 | 1.28 | 0.66 | 0.510 |

Table-11

|  | School refusal factors |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ANA |  |  | ESE |  |  | AGB |  |  | PTR |  |  |
| Family functioning |  |  |  |  |  |  |  |  |  |  |  |  |
| Indulgent | Mean | SD | t value | Mean | SD | t value | Mean | SD | t value | Mean | SD | $t$ value |
| Yes ( $\mathrm{n}=77$ ) | 3.40 | 1.13 | 0.30 | 2.83 | 0.95 | 1.03 | 3.49 | 1.04 | 3.06 | 3.60 | 1.34 | 3.22 |
| No ( $\mathrm{n}=83$ ) | 3.34 | 1.15 | (0.765) | 2.67 | 0.96 | (0.303) | 2.98 | 1.06 | (0.003**) | 2.95 | 1.21 | (0.002**) |
| Inconsistent |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes ( $\mathrm{n}=73$ ) | 3.39 | 1.21 | $0.23$ | 2.85 | 1.05 | $1.20$ | 3.43 | 1.16 | $2.17$ | 3.65 | 1.38 | 3.54 |
| No ( $\mathrm{n}=87$ ) | 3.35 | 1.08 | (0.820) | 2.67 | 0.87 | (0.230) | 3.06 | 0.98 | (0.032*) | 2.94 | 1.17 | (0.001**) |
| Overprotective |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes ( $\mathrm{n}=78$ ) | 3.39 | 1.10 | 0.21 | 2.88 | 1.02 | 1.08 | 3.39 | 1.16 | 1.85 | 3.27 | 1.40 | 0.02 |
| No ( $\mathrm{n}=82$ ) | 3.35 | 1.18 |  | 2.63 | 0.88 |  | 3.08 | 0.98 | (0.067) | 3.26 | 1.24 | (0.982) |
| Note: The vale with in brackets indicates p value |  |  |  |  |  |  |  |  |  |  |  |  |

School Refusal Factors and Clinical Variables (Tables 6-11)
Analysis of school refusal factors and clinical variables revealed the following findings;

- Frequency of school refusal did not seem to influence school refusal factors (Table - 6).
- A combination of multiple precipitating factors e.g. scholastic, somatic and behavioral related to significant scores on Escape from aversive social \& evaluative situations, Attention seeking behavior and Positive tangible reinforcement dimensions (Table- 7).
- Health status of the child and scholastic performance did not seem to influence school refusal factors (Tables -8 and 9 ).
- Children with examination anxiety exhibited negatively reinforced school refusal behavior (Table - 10).
- Children of parents who were indulgent and inconsistent in disciplining their children exhibited positively reinforced school refusal behavior on both Attention seeking behavior and Positive tangible reinforcement (Table - 11).

Hypothesis 3 'Clinical variables influence school refusal factors' is partially accepted.

School Refusal Factors and Psychological Variables in children
with school refusal (Tables 12- 23)

Table-12

| t test for significant difference between children with and without <br> depression with respect to school refusal factors$\|$No Depression  Depression    <br> School <br> refusal <br> factors Mean SD Mean SD  <br> t      <br> value      |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| P value |  |  |  |  |  |  |
| ANA | 3.09 | 1.09 | 3.46 | 1.14 | 1.82 | 0.071 |
| ESE | 2.41 | 0.86 | 2.86 | 0.96 | 2.64 | $0.009^{* *}$ |
| AGB | 2.98 | 1.14 | 3.31 | 1.05 | 1.68 | 0.095 |
| PTR | 3.16 | 1.36 | 3.30 | 1.30 | 0.61 | 0.544 |

Table - 13

| t test for significant difference between children with high and low <br> state anxiety with respect to school refusal factors |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | State Anxiety |  |  |  |  |  |
|  | Low |  | High |  |  |  |
| School refusal <br> factors | Mean | SD | Mean | SD | t value | P value |
| ANA | 3.14 | 0.99 | 3.61 | 1.24 | 2.67 | $0.008^{* *}$ |
| ESE | 2.83 | 0.87 | 2.66 | 1.04 | 1.10 | 0.273 |
| AGB | 3.59 | 1.06 | 2.84 | 0.97 | 4.67 | $0.000^{* *}$ |
| PTR | 3.77 | 1.30 | 2.73 | 1.10 | 5.43 | $0.000^{* *}$ |

Table - 14

| t test for significant difference between children with high and low trait anxiety with respect to school refusal factors |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Trait Anxiety |  |  |  |  |  |
|  | Low |  | High |  |  |  |
| School refusal factors | Mean | SD | Mean | SD | t value | P value |
| ANA | 2.79 | 0.94 | 4.02 | 0.99 | 8.10 | 0.000** |
| ESE | 2.51 | 0.75 | 3.02 | 1.09 | 3.52 | 0.001** |
| AGB | 3.23 | 1.25 | 3.23 | 0.86 | 0.04 | 0.965 |
| PTR | 3.66 | 1.29 | 2.82 | 1.20 | 4.22 | 0.000** |

Table - 15

| t test for significant difference between children with reading <br> difficulty with respect to school refusal factors |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Reading Difficulty |  |  |  |  |  |  |
|  | Yes |  |  | No |  |  |
|  |  |  |  |  |  |  |  |
|  | Mean | SD | Mean | SD | t value | P value |
|  | 2.78 | 0.89 | 3.46 | 1.15 | 2.59 | $0.011^{*}$ |
|  | 2.45 | 0.62 | 2.79 | 0.99 | 1.54 | 0.127 |
|  | 3.56 | 1.05 | 3.18 | 1.08 | 2.13 | $0.035^{*}$ |
|  | 3.83 | 1.33 | 3.18 | 1.29 | 3.09 | $0.002^{* *}$ |

Table - 16

| t test for significant difference between children with writing difficulty with respect to school refusal factors |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Writing Difficulty |  |  |  |  |  |
|  | Yes |  | No |  | $\begin{gathered} \mathrm{t} \\ \text { value } \end{gathered}$ | P value |
| School refusal factors | Mean | SD | Mean | SD |  |  |
| ANA | 2.98 | 1.00 | 3.56 | 1.16 | 3.09 | 0.002*** |
| ESE | 2.55 | 0.76 | 2.85 | 1.03 | 1.85 | 0.066 |
| AGB | 3.22 | 1.19 | 3.24 | 1.03 | 0.11 | 0.910 |
| PTR | 3.54 | 1.31 | 3.13 | 1.30 | 1.87 | 0.063 |

Table-17

| t test for significant difference between children with spelling <br> difficulty with respect to school refusal factors |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :--- |
| Spelling Difficulty |  |  |  |  |  |  |
|  | Yes |  | No |  |  |  |
|  | Mean | SD | Mean | SD | t value | P value |
|  | 2.87 | 0.90 | 3.52 | 1.16 | 3.09 | $0.002^{* * *}$ |
|  | 2.39 | 0.55 | 2.85 | 1.03 | 2.58 | $0.011^{* *}$ |
|  | 3.19 | 1.13 | 3.24 | 1.07 | 0.26 | 0.799 |
|  | 3.59 | 1.27 | 3.17 | 1.31 | 1.71 | 0.089 |

Table - 18

| School refusal factors | Arithmetic Difficulty |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes |  | No |  | t value | P value |
|  | Mean | SD | Mean | SD |  |  |
| ANA | 3.10 | 1.09 | 3.50 | 1.15 | 2.11 | 0.036* |
| ESE | 2.65 | 0.81 | 2.80 | 1.02 | 0.89 | 0.037 |
| AGB | 3.37 | 1.20 | 3.16 | 1.01 | 1.13 | 0.261 |
| PTR | 3.64 | 1.41 | 3.08 | 1.22 | 2.55 | 0.012* |

Table - 19

| t test for significant difference between children with overall behavioral problems with respect to school refusal factors |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | CBCL - Overall Behavioral Problems |  |  |  |  |  |
|  | Absent |  | Present |  | t value | P value |
| School refusal factors | Mean | SD | Mean | SD |  |  |
| ANA | 3.42 | 1.17 | 3.34 | 1.13 | 0.38 | 0.707 |
| ESE | 2.53 | 0.84 | 2.86 | 1.00 | 2.12 | 0.036* |
| AGB | 2.84 | 0.88 | 3.43 | 1.12 | 3.41 | 0.001** |
| PTR | 2.89 | 1.09 | 3.46 | 1.38 | 2.66 | 0.001** |

Table - 20

| $t$ test for significant difference between children with |
| :--- |
| externalizing symptoms with respect to school refusal factors |


|  | Externalizing |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Absent |  | Present |  |  |  |
| School <br> refusal <br> factors | Mean | SD | Mean | SD | t value | P value |
| ANA | 3.91 | 1.00 | 2.83 | 1.01 | 6.79 | $0.000^{* *}$ |
| ESE | 2.95 | 1.06 | 2.55 | 0.80 | 2.68 | $0.008^{* *}$ |
| AGB | 2.91 | 0.81 | 3.55 | 1.22 | 3.96 | $0.000^{* *}$ |
| PTR | 2.54 | 0.97 | 3.99 | 1.21 | 8.32 | $0.000^{* *}$ |

Table - 21

| t test for significant difference between children with <br> internalizing symptoms with respect to school refusal factors |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Internalizing |  |  |  |  |  |  |  |  |  |  |
|  | Absent |  |  |  |  |  |  |  | Present |  |
|  | Mean | SD | Mean | SD | t value | P value |  |  |  |  |
|  | 2.89 | 1.10 | 3.74 | 1.03 | 5.03 | $0.000^{* *}$ |  |  |  |  |
|  | 2.55 | 0.80 | 2.91 | 1.04 | 2.42 | $0.017^{*}$ |  |  |  |  |
|  | 3.50 | 1.23 | 3.02 | 0.90 | 2.83 | $0.005^{* *}$ |  |  |  |  |
|  | 4.00 | 1.18 | 2.70 | 1.12 | 7.15 | $0.000^{* *}$ |  |  |  |  |

Table - 22

| t test for significant difference between children with learning <br> problems with respect to school refusal factors |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
|  | Absent |  |  |  |  |  |  | Present |  |  |
| School <br> refusal <br> factors | Mean | SD | Mean | SD | t value | P value |  |  |  |  |
| ANA | 3.48 | 1.15 | 3.28 | 1.13 | 1.12 | 0.264 |  |  |  |  |
| ESE | 2.65 | 0.95 | 2.83 | 0.96 | 1.17 | 0.243 |  |  |  |  |
| AGB | 3.01 | 0.97 | 3.42 | 1.14 | 2.43 | $0.016^{*}$ |  |  |  |  |
| PTR | 2.92 | 1.17 | 3.56 | 1.36 | 3.18 | $0.002^{* *}$ |  |  |  |  |

Table - 23

| t test for significant difference between children with <br> miscellaneous with respect to school refusal factors |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Miscellaneous |  |  |  |  |  |  |  |  |  |  |  |
|  | Absent |  |  |  |  |  |  |  | Present |  |  |
|  | Mean | SD | Mean | SD | t value | P value |  |  |  |  |  |
|  | 3.61 | 1.10 | 3.03 | 1.11 | 3.28 | $0.001^{* *}$ |  |  |  |  |  |
|  | 2.81 | 0.97 | 2.66 | 0.94 | 1.02 | 0.307 |  |  |  |  |  |
|  | 2.86 | 0.87 | 3.76 | 1.13 | 5.70 | $0.000^{* *}$ |  |  |  |  |  |
|  | 2.83 | 1.06 | 3.90 | 1.39 | 5.53 | $0.000^{* *}$ |  |  |  |  |  |

## School refusal factors and Psychological Variables (Table 12- 23)

With regard to analysis of school refusal factors and psychological variables, the key findings were as follows;

- Children with depression scored significantly higher on Escape from aversive social and evaluative situations dimension-ESE (Table-12).
- Children with high state anxiety had significantly higher score on ANA dimension and lower score on AGB and PTR, indicating negatively reinforced school refusal behavior (Table-13).
- High trait anxiety related to negatively reinforced school refusal behavior is more pronounced as seen by significantly higher scores on both ANA and ESE and lower scores on PTR (Table - 14).
- Children with learning difficulty (reading, writing, spelling and arithmetic) scored significantly lower on ANA indicating low levels of anxiety (Table $15-18$ ).
- Children with learning difficulty (spelling, arithmetic) scored significantly lower on ESE.
- Children with learning difficulty (reading and arithmetic) scored significantly higher on AGB and PTR dimensions respectively.
- Overall, learning difficulty seems to be positively reinforced rather than negatively reinforced behavior.
- With regard to behavioral problems
- Externalizing symptoms were related to positively reinforced behavior (Table - 20).
- Internalizing symptoms were related to negatively reinforced behavior (Table - 21).
- Learning, miscellaneous and overall behavioral problems were related to positively reinforced school refusal behavior (Tables 19, 22, 23).

Hypothesis 4 'Psychological variables influence school refusal factors' is partially accepted.

## Multiple Regression Analyses

Table - 24
Multiple Regression with psychological variables as predictor variables and Avoidance of stimuli that provoke a general sense of negative affectivity-ANA as Dependent Variable

1. Dependent variable - ANA
2. Independent Variables - Depression, State and Trait anxiety, Behavioral problems and Learning difficulty
3. Method-Stepwise method
4. Step number - 4
5. Multiple R value $=.678$
6. R Square value $=.460$
7. $\quad \mathrm{F}$ value $=33.07$
8. $\quad \mathrm{P}$ value $=.000^{* *}$

Variables entered in the stepwise regression

| Variables | Unstandardized <br> coefficient (B) | SE of <br> B | t value | P value |
| :--- | :---: | :---: | :---: | :---: |
| Depression | 0.030 | 0.010 | 2.88 | $0.004^{* *}$ |
| Trait Anxiety | 0.072 | 0.015 | 4.85 | $0.000^{* *}$ |
| Internalizing <br> Symptoms | 0.073 | 0.014 | 4.97 | $0.000^{* *}$ |
| Miscellaneous <br> problems | 0.027 | 0.011 | 2.39 | $0.017^{*}$ |
| Constant | 0.127 | 0.472 | 0.270 | 0.787 |

Table - 25

Multiple Regression with psychological variables as predictor variables and Escape from aversive social and evaluative situations

## -ESE as Dependent Variable

1. Dependent variable - ESE
2. Independent Variables - Depression, State and Trait anxiety, Behavioral problems and Learning difficulty
3. Method - Stepwise method
4. Step number - 3
5. Multiple R value $=.570$
6. $\quad$ R Square value $=.326$
7. F value $=25.15$
8. $\quad \mathrm{P}$ value $=.000^{* *}$

Variables entered in the stepwise regression

| Variables | Unstandardized <br> coefficient (B) | SE of B | t value | P value |
| :--- | :---: | :---: | :---: | :---: |
| Depression | 0.047 | 0.009 | 4.87 | $0.000^{* *}$ |
| Internalizing <br> Symptoms | 0.065 | 0.012 | 5.06 | $0.000^{* *}$ |
| Learning Problems | 0.088 | 0.033 | 2.63 | $0.009^{* *}$ |
| Constant | 0.930 | 0.237 | 3.92 | $0.000^{* *}$ |

## Table - 26

## Multiple Regression with psychological variables as predictor

 variables and Attention seeking behavior AGB as Dependent
## Variable

1. Dependent variable - AGB
2. Independent Variables - Depression, State and Trait anxiety, Behavioral problems and Learning difficulty
3. Method - Stepwise method
4. Step number - 2
5. Multiple R value $=.507$
6. $\quad$ R Square value $=.257$
7. $\quad \mathrm{F}$ value $=27.27$
8. $\quad$ P value $=.000^{* *}$

Variables entered in the stepwise regression

| Variables | Unstandardized <br> coefficient (B) | SE of B | t value | P value |
| :--- | :---: | :---: | :---: | :---: |
| Internalizing <br> Symptoms | 0.029 | 0.014 | 2.07 | $0.039^{*}$ |
| Miscellaneous | 0.085 | 0.012 | 6.77 | $0.000^{* *}$ |
| Constant | 2.56 | 0.19 | 13.07 | $0.000^{* *}$ |

Table-27

Multiple Regression with psychological variable as predictor variable and Positive tangible reinforcement PTR as Dependent

## Variable

1. Dependent variable - PTR
2. Independent Variables - Depression, State and Trait anxiety, Behavioral problems and Learning difficulty
3. Method - Stepwise method
4. Step number - 4
5. Multiple R value $=.693$
6. $\quad$ R Square value $=.481$
7. F value $=36.00$
8. $\quad \mathrm{P}$ value $=.000^{* *}$

Variables entered in the stepwise regression

| Variables | Unstandardized <br> coefficient (B) | SE of B | t value | P value |
| :--- | :---: | :---: | :---: | :---: |
| State Anxiety | 0.033 | 0.013 | 2.55 | $0.011^{*}$ |
| Externalizing <br> symptoms | 0.096 | 0.024 | 4.00 | $0.000^{* *}$ |
| Internalizing <br> Symptoms | 0.060 | 0.018 | 3.22 | $0.001^{* *}$ |
| Miscellaneous | 0.039 | 0.016 | 2.40 | $0.017^{*}$ |
| Constant | 3.68 | 0.501 | 7.34 | $0.000^{* *}$ |

# Multiple Regression analyses with school refusal factors as dependent variables and psychological variables as independent variables (Tables 24-27) 

Multiple regression analyses of school refusal factors as dependent variables and psychological variables as independent variables indicated the following -

- $46 \%$ variance in ANA could be explained by depression, trait anxiety, and internalizing symptoms.
- $32 \%$ of variance in ESE could be explained by depression, internalizing symptoms and learning problems.
- $25 \%$ of variance in AGB could be explained by miscellaneous problems on CBCL.
- $48 \%$ of variance in PTR could be explained by externalizing symptoms and miscellaneous problems on CBCL.


## Table - 28

Multiple Regression with demographic and clinical variables as predictor variables and Avoidance of stimuli that provoke a general sense of negative affectivity -ANA as Dependent Variable

1. Dependent variable - ANA
2. Independent Variables - Sex, Parental Income, Parental education, Parental occupation, Precipitating factors, Examination anxiety, Scholastic performance and Family functioning.
3. Method - Stepwise method
4. Step number - 2
5. $\quad$ Multiple R value $=.568$
6. R Square value $=.323$
7. F value $=36.59$
8. $\quad \mathrm{P}$ value $=.000^{* *}$

Variables entered in the stepwise regression

| Variables | Unstandardized <br> coefficient (B) | SE of B | t value | P value |
| :--- | :---: | :---: | :---: | :---: |
| Sex | 1.137 | 0.155 | 7.33 | $0.000^{* *}$ |
| Father's <br> Occupation | 0.388 | 0.103 | 3.76 | $0.000^{* *}$ |
| Constant | 0.533 | 0.393 | 1.35 | 0.177 |

Table - 29

Multiple Regression with demographic and clinical variables as predictor variables and Escape from aversive social and evaluative situations as Dependent Variable

1. Dependent variable - ESE
2. Independent Variables - Sex, Parental Income, Parental education, Parental occupation, Precipitating factors, Examination anxiety, Scholastic performance and Family functioning.
3. Method - Stepwise method
4. Step number - 5
5. $\quad$ Multiple R value $=.578$
6. R Square value $=.334$
7. F value $=15.05$
8. $\quad \mathrm{P}$ value $=.000^{* *}$

Variables entered in the stepwise regression

| Variables | Unstandardized <br> coefficient (B) | SE of B | t value | P value |
| :--- | :---: | :---: | :---: | :---: |
| Sex | 0.604 | 0.135 | 4.45 | $0.000^{* *}$ |
| Parental Income | 0.280 | 0.101 | 2.75 | $0.006^{* *}$ |
| Mother's Occupation | 0.137 | 0.063 | 2.18 | $0.030^{*}$ |
| Exam Anxiety | 0.417 | 0.132 | 3.16 | $0.001^{* *}$ |
| Precipitating Factors | 0.105 | 0.052 | 2.02 | $0.045^{*}$ |
| Constant | 1.26 | 0.39 | 3.19 | $0.001^{* *}$ |

Table - 30
Multiple Regression with demographic and clinical variables as predictor variables and Attention seeking behavior as Dependent

## Variable

1. Dependent variable - AGB
2. Independent Variables - Sex, Parental Income, Parental education, Parental occupation, Precipitating factors, Examination anxiety, Scholastic performance and Family functioning.
3. Method - Stepwise method
4. Step number - 3
5. Multiple R value $=.450$
6. $\quad$ R Square value $=.202$
7. F value $=12.89$
8. $\quad$ P value $=.000^{* *}$

Variables entered in the stepwise regression

| Variables | Unstandardized <br> coefficient (B) | SE of <br> B | t value | P value |
| :--- | :---: | :---: | :---: | :---: |
| Father's Occupation | 0.395 | 0.112 | 3.49 | $0.000^{* *}$ |
| Indulgent Parents | 0.343 | 0.162 | 2.12 | $0.035^{*}$ |
| Precipitating Factors | 0.161 | 0.057 | 2.79 | $0.005^{* *}$ |
| Constant | 1.80 | 5.17 | 3.48 | $0.000^{* *}$ |

Table - 31

Multiple Regression with demographic and clinical variables as predictor variables and Positive tangible reinforcement as

## Dependent Variable

1. Dependent variable - PTR
2. Independent Variables - Sex, Parental Income, Parental education, Parental occupation, Precipitating factors, Examination anxiety, Scholastic performance and Family functioning.
3. Method-Stepwise method
4. Step number - 4
5. Multiple $\mathrm{R}=.557$
6. $\quad$ R Square $=.310$
7. $\quad \mathrm{F}$ value $=16.98$
8. $\quad \mathrm{P}$ value $=.000^{* *}$

Variables entered in the stepwise regression

| Variables | Unstandardized <br> coefficient (B) | SE of <br> B | t value | P value |
| :--- | :---: | :---: | :---: | :---: |
| Sex | 0.918 | 0.182 | 5.04 | $0.000^{* *}$ |
| Parental Income | 0.412 | 0.132 | 3.10 | $0.002^{*}$ |
| Over Indulgent Parents | 0.593 | 0.180 | 3.28 | $0.001^{* *}$ |
| Precipitating Factors | 0.141 | 0.071 | 1.98 | $0.048^{*}$ |
| Constant | 3.88 | 0.543 | 7.14 | $0.000^{* *}$ |

## Multiple regression analyses with school refusal factors as

## dependent variables demographic/clinical variables as predictor

variables (Tables - 28-31)

Certain demographic and clinical variables which emerged to be significant were chosen in the multiple regression analysis. The summary of the findings are presented below -

- The most significant predictors of Avoidance of stimuli that provoke a general sense of negative affectivity were sex of the child and father's occupation.
- Escape from aversive social and evaluative situations was mostly influenced by sex of the child, parental income, mother's occupation, examination anxiety and precipitating factors.
- Attention seeking behavior's most significant predictor variables were father's occupation, indulgent parents and presence of precipitating factors.
- Sex of the child, parental income, overindulgent parents and presence of precipitating factors were most powerful predictors of Positive tangible reinforcement.


## CHAPTER VI DISCUSSION

The current investigation was a cross sectional study of 160 children presenting with school refusal at Institute of Child Health and Hospital for Children, Egmore, Chennai. The relevance and significance of this study cannot be emphasized more. The globalization has lead to an increase in emotional/behavioral problems in children. Globe trotting fathers, multitasking mothers, information overload from booming television channels/expanding internet, changing social cultural milieu, coupled with mundane textbooks, uninspiring teaching methods, over emphasis on marks/grades are clear risk factors for these children. The present study is certainly a wake up call for educational authorities, policy makers, teachers and parents to make combined and sustained effort towards transforming the educational system into ecstasy and not agony. Revamping the educational system with child friendly text books, innovative teaching methods, defocusing from examinations, positive parenting strategies, placement of school counselors could be a step in this direction. There have been very few Indian studies on school refusal which emphasizes
the need for the current study. The study findings are discussed in this chapter.

## The first objective of the study was to assess the psychosocial profile of children with school refusal.

Socio -demographic variables -An overview of the socio demographic variables of the sample indicated that there were predominantly boys from 9-12 year age group, first born, mostly from joint families, majority of the mothers being house wives, with school to college education in parents, from low to middle income groups. Most studies done in other countries suggest that school refusal tends to be equally common in boys and girls (Granell de Aldaz, Vivas, gelfard and Feldman, 1984; Kennedy, 1965).

The presence of more boys in this sample could be attributed to the impetus given to education of the male child rather than the girl child, indicative of culture as an influencing factor. This study finding is consistent with the study done by Prabhuswamy et al (2007) which reported more males, $8-16$ years, from middle to high income group; however they were mostly last born from nuclear families with primary to secondary level education in parents.

School refusal can occur throughout the entire range of school years, but it appears there are major peaks at certain ages and certain transition points in the child's life especially while joining school or while changing from primary to secondary school level. Current findings coincide with Ollendick and Mayer's conclusion that it occurs between 10-11 years of age. For most cases of school refusal the socio economic status of the family is considerably mixed (Baker \& Wills, 1978; Last \& Staruss, 1990) as seen in the present study.

## Clinical variables

## Course of school refusal

In the present study, course of school refusal indicated that it was intermittent in nature, most children presenting with a combination of scholastic, behavioral problems predominantly with somatic complaints who underwent laboratory investigations; $14 \%$ were on medication for anxiety and depression. Stickney and Milternberger's (1998) survey indicates that almost half presented with somatic complaints in the absence of medical condition, an important finding from the view point of early identification and treatment. Prabhuswamy's (2007) study also reported acute school refusal and the
presence of somatoform/stress related disorders in $1 / 3^{\text {rd }}$ of the study sample.

Developmental History The following factors emerged as importantlow birth weight, delivery complications, delayed speech and the presence of physical illness. Establishing well baby clinics for high risk infants, providing early environmental stimulation and behaviorally based programs for parents may be helpful in handling behavioral/emotional problems in these children. However longitudinal studies may be needed to establish cause-effect relationship.

Temperamental History suggests majority have a difficult temperament, described as being 'stubborn', 'inability to adapt',' attention problems', being 'sensitive' and 'shy' and 'moody'. Temperamental difficulty in children may be an early warning sign of vulnerability for school refusal and other emotional disorders. Prabhuswamy's (2007) study also indicates that nearly $69 \%$ of the sample exhibited a difficult temperament.

Educational History revealed that most children belonged to VI standard from matriculation schools, average scholastic performers with significant levels of examination anxiety. Prabhuswamy's (2007) study also indicated that $50 \%$ exhibited average scholastic performance
and significant levels of exam phobia. The shift from primary to secondary school i.e. VI standard, calls for preparatory sessions, emotional cushioning, better stress coping strategies and improving learning styles for vulnerable students in transition. Unimaginative text books of schools focus on rote memory and mindless mass production of marks in exams needs to be culled out and replaced by knowledge based, hands- on experiential learning to make learning more meaningful in today's context.

Although the overall health status of the children was average, few girls exhibited menstrual problems. In this context, the government's decision of providing booths with sanitary napkins in schools seems to be a welcome change in improving school attendance among girls.

With regard to family functioning there seems to be inconsistent, indulgent and overprotective parenting. In this study it was apparent that many children had a difficult temperament. Moreover either of the parents tended to give in to their children's demands easily or resorted to punitive measures. They also tended to be extremely worried and anxious with regard to their children's well being. Similarly parental overindulgence, overprotection and other
contextual psychosocial factors was found in $87 \%$ of the sample in Prabhuswamy's study (2007) which is high compared to western literature. Bernstein et al (1999) reported low cohesion, disengagement and low adaptability rigidity on FACES (Family Adaptability and Cohesion Evaluation Scale II). Adolescents in extreme families reported significantly higher scores on 2 or three depression instruments and somatic symptoms. Family therapy to improve cohesion and adaptability and treatments focused on improving depression and somatic symptoms may improve family functioning and decrease the severity and course of school refusal. Obondo et al (1990) found that family characteristics significantly associated with school refusal were neuroticism in parents, unstable family relationship occasioned by marital discord, parental expectations of high academic performance by the children/adolescents and to some extent poverty. Common management approaches used were family therapy, counseling and pharmacotherapy.

With regard to life events, nearly $20 \%$ had significant financial problems and alcohol problems in the father and nearly $50 \%$ had family history of psychiatric illness in a first degree relative. Similarly, family history of affective spectrum disorders was found to be the
highest in Prabhuswamy's study. Martin et al (1990), Atkinson et al (1989), Last and Staruss (1990) have reported high rates of anxiety disorders, school refusal and school related fears in families of children with school refusal.

## Psychological variables

## School refusal factors

Among the four school refusal factors, avoidance of stimuli that provoke a general sense of negative affectivity (ANA) was found to be the highest rank followed by pursuit of positive tangible reinforcement (PTR), attention getting behavior (AGB) and escape from social/evaluative situations (ESE). Majority of these children exhibited school refusal due to ANA probably because they belonged to a younger age group and also had co-morbid anxiety and depression as seen on CDI and STAIC. Kearney (2002) found a combination of negative reinforcement functions (avoidance of negative affectivity and escape from social situations) in the factor analysis. The two groups are often different with youth in the negative affectivity group typically younger than the social evaluation group (Kearney, 2001). The School Refusal Assessment Scale is meant to be a part of comprehensive assessment approach to identify primary function of school refusal
behavior. Following the compilation of multiple sources of data, a clinician may make a reasonable determination of function (Kearney, 2001; Kearney and Albano 2000). Kearney (1997, 2001) found that youth diagnosed with separation anxiety disorder are more representative of the attention seeking group. Positive tangible reinforcement appears to be a distinct function and youth belonging to this condition tend to be older and display more chronic forms of school refusal behavior (Kearney, 2001).

## Depression and anxiety

Nearly $75 \%$ of the children scored significantly on Children's Depression Inventory (CDI) and half the sample (48\%) had high state and trait anxiety as seen on State Trait Anxiety Inventory for Children (STAIC). Prabhuswamy's study also reported similar findings wherein $50 \%$ had a diagnosis of major depressive disorder and $48 \%$ of the children had anxiety disorder. The prevalence of depression and anxiety in children with school refusal has been illuminated in other studies as well.

Several diagnostic studies have examined the co morbidity of anxiety and depression in clinic samples of school-refusing children. It is quite possible that in the current study, children with school refusal also exhibit depressive symptoms, multiple somatic symptoms, and have fear of social evaluation. Children with high state and trait anxiety also have high levels of examination anxiety, social anxiety and internalizing symptoms increasing their vulnerability for school refusal. Bernstein et al (1991) compared four groups of school refusers: an anxiety disorder-only group (separation anxiety disorder and/or overanxious disorder, $\mathrm{n}=27$ ), a depressive disorder-only group (major depressive disorder or dysthymia, $\mathrm{n}=27$ ) an anxiety and depressive disorder group (co-morbid for anxiety and depression, $n=24$ ), and a no-anxiety disorder or depressive disorder group (an absence of anxiety and depressive disorders, $\mathrm{n}=18$ ). The last group comprised mainly children with disruptive behavior disorders. Results showed that the group with co-morbid anxiety and depression scored the highest on rating scales of anxiety and depression, with the no-anxiety or depression group scoring the lowest. In general, the anxiety-only and depression-only groups scored similarly with scores that were intermediate between the other two groups. The findings suggest that
the co morbidity of anxiety and depressive disorders is associated with more severe symptoms.

Borchardt et al, (1994) compared age- and gender- matched groups of inpatient $(\mathrm{n}=28)$ and out patient school refusers $(\mathrm{n}=28)$. While the inpatient and outpatient groups did not differ significantly on prevalence of anxiety disorders ( $75 \%$ and $85 \%$ respectively), they differed significantly on rate of major depression ( $86 \%$ and $46 \%$ respectively), inpatients were also more likely to have severe symptoms.

In an investigation of anxious/depressed adolescent school refusers $\quad(\mathrm{n}=44)$, Bernstein et al , (1997) reported that these teenagers frequently report moderate or severe somatic complaints. The most common somatic complaints were of the autonomic and gastrointestinal type. Although this study did not involve comparison groups, findings are consistent with the picture of substantial symptoms in anxious/depressed school-refusing youth.

## Learning difficulty

In the present study nearly 10 to $20 \%$ had reading and spelling difficulty, 30 to $40 \%$ had writing and arithmetic difficulty as assessed
on NIMHANS Index of Specific Learning Difficulty. It is probable that children with learning difficulty have difficulty in coping with academics, hence exhibit poor scholastic performance and resultant school refusal. Studies related to learning difficulty indicate that Naylor et al (1994) found that $70 \%$ of children with school refusal have learning disabilities and $44 \%$ have language impairments compared with matched controls. Hence they concluded that academic and communication frustration in adolescents reduces ability to meet academic and social demands in the school environment may play a role in the etiology of school refusal. McShane et al (2001) mentioned that learning disability was found in $5 \%$ of the children with school refusal. Specific learning disability was found in $15 \%$ of the subjects in Prabhuswamy's study (2007).

## Behavioral Problems

$65 \%$ of the children in the study exhibited significant overall behavioral problems and 50 to $60 \%$ presented with externalizing, internalizing and learning problems as seen on Revised Child Behavior Check list (CBCL). The presence of behavioral problems especially externalizing and internalizing symptoms in children with school refusal have been high lighted in other studies. Other studies reported
internalizing symptoms such as general and social anxiety (Last and Staruss, 1990), fears of school related stimuli (Ollendick, 1983) depression and suicidal ideation (Bernstein and Garfinkel, 1986) and somatic complaints (Last, 1990). Externalizing symptoms such as non compliance, tantrums, verbal/physical aggression, running away from home or school (Cooper, 1986, Kearney; 1995) are also typical in children with school refusal. However externalizing disorders were found in only $15 \%$ of the subjects in Prabhuswamy's study indicating the absence of significant antisocial behavior and conduct disorder.

The second objective of the study was to analyze socio demographic variables with respect to School Refusal factors

## School refusal factors and socio demographic variables-

 Supportive evidence for gender differences among children with school refusal have been found in earlier studies. In the current study, girls tend to exhibit negatively reinforced school refusal behavior and boys tend to exhibit positively reinforced school refusal behavior. In a study by Kuramoto (1995) items relating to neurosis showed little difference between sexes; however antisocial scores were higher in boys similar in tendency to junior high school students. Bools et al (1990) found that in children with school refusal generalized neuroticdisorders were found mostly in girls and 'truancy' and conduct disorder were found mainly in boys. Last et al (1987) found more children with separation anxiety disorder were female, pre pubertal and from families with low socioeconomic backgrounds.

Although the current study indicates that second born children exhibited positively reinforced school refusal behaviour, birth order has not been implicated in other studies. In a study by Kuramoto (1995), those in the school nonattendance group did not significantly differ from school attendance group in demographic characteristics such as number of children and birth order.

In the present study higher socioeconomic status, higher parental education and working mothers increases the vulnerability for school refusal in children. Possibly these parents exhibited greater levels of anxiety, spent less quality time with children coupled with greater expectations regarding their education and faulty parenting strategies may be contributory factors. Treatment strategies may include parent training in contingency management, emphasizing verbal/physical attention for appropriate school attendance, down playing excessive reassurance-seeking, increasing problem solving ability among family
members, increased incentives for school attendance and penalties for nonattendance (Kearney \& Albano 2004).

The studies quoted below indicate the relationship between parental education/occupation/socioeconomic status and school refusal which reiterates the current study findings. Kuramoto (1995) found significant differences between school attendance group and nonattendance group in terms of mother's education and father's occupation. The clinic based studies on school refusal found children were from materially good homes where the emotional climate was more likely to be intense than lacking (Kahn et al, 1996). Parents tended to be rather ineffectual and over anxious, although there is a veneer of authority which the family colluded to protect (Eisenberg, 1958) and there were no obvious differences to the normal parental patterns of managing domestic affairs, leisure and work (Berg, Butler \& Fairbairn, 1981).

# The third objective of the study was to analyze clinical variables with respect to school refusal factors. 

## School Refusal Factors and Clinical Variables:

Combination of precipitating factors especially somatic complaints showed elevated scores on escape from social/evaluative situations (ESE), attention getting behavior (AGB) and pursuit of positive tangible reinforcement (PTR) factors in the present study. Bernstein et al (1997) reported that teenagers frequently reported moderate or severe somatic complaints. The most common somatic complaints were of the autonomic and gastrointestinal type. There was significant correlation between percentage of days absent from school and severity of somatic symptoms. Knowledge that somatic complaints are commonly an expression of underlying anxiety and depression may facilitate referral for treatment and help avoid unnecessary medical work ups ,repeated investigation and squealae from school refusal.

In the present study children who had examination anxiety exhibited negatively reinforced school refusal behavior. They tend to avoid negative reinforcers at school including tests, exams, oral recitals, games and 'punitive' teachers. Providing helpline exclusively for children facing exam related stressors, study skills training, deep
breathing and other relaxation exercises may help in alleviating emotional burden in these children.

In the current study children whose parents were indulgent and inconsistent in their discipline engaged in positively reinforced school refusal behavior. A combination of parental anxiety, faulty parenting strategies and temperamental difficulty seems to be contributing to school refusal. Research evidence for pathological family functioning has been elicited in other studies as well. Kearney and Silverman (1995) identified family subtypes -enmeshed family, conflictive family, isolated family, detached family, healthy family, on family environment scale. Healthy family profiles were found only in $39 \%$ of the sample as defined by scores of 60 or more on the FES cohesion or experiences subscales with either score than the conflict score. (Silverman, 1995) The suggestion of a causal link with separation anxiety arises because of the common presence of marked over protection of the child, especially by mother, for instance by offering assistance with dressing (Berg \& McGuire, 1971) which limits the youngsters strivings for independence (Weiner, 1970). The mother also tends to have a strongly ambivalent and insecure relationship with her child (Davidson, 1961) who shows itself within the mother as a pattern
of avoiding distress and having poor consistency in discipline and control (Kahn \& Nursten, 1962).

Frequency of school refusal did not seem to influence the school refusal factors in the present study. Probably the arbitrary demarcation of frequency of school refusal as frequent, intermittent, continuous and lack of corroboration of school attendance needs to be replaced by more objective and reliable measures of school attendance. Frequency and type of school refusal did not significantly affect the out come of school refusal in Prabhuswamy's study (2007). However Okuyama et al (1999) found that duration from absence to the first evaluation, patients character, and 'non presence of volition for school attendance' and 'frequency of school attendance' influenced the prolongation of school refusal.

The fourth objective of the study was to analyze psychological variables with respect to school refusal factors.

## School Refusal factors and Psychological Variables:

The present study indicated that children with significant depressive symptoms on Children's Depression Inventory scored higher on escape from social/evaluative situations (ESE) dimension.

It's possible that children who have poor social skills, unable to make friends easily and reduced peer group interaction also have co morbid depressive symptoms. The strong relationship between depression and negatively reinforced school refusal behaviour has been established in Kearney \& Silverman's study (1993). Children with negatively reinforced School Refusal behavior especially fear of social evaluation reported more depression, low self esteem and greater social anxiety than children with positively reinforced school refusal behavior.

This study highlights the presence of negatively reinforced school refusal behavior in children with high state and trait anxiety as seen on STAIC. Children with high levels of anxiety probably also have examination anxiety and internalizing symptoms, exhibiting negatively reinforced school refusal behavior. The relationship between state and trait anxiety and negatively reinforced school refusal behavior has been well established by previous research. Correlations of child self report and parent/teacher checklist indicated that symptoms of anxiety, depression, low self esteem and internalizing behavior problems, were associated with negatively reinforced School Refusal behavior (Kearney, 1993). Kearney and Albano (2004) indicated that anxiety related diagnoses were more associated with
negatively reinforced School Refusal behavior; separation anxiety disorder was associated more with attention seeking behavior, oppositional defiant disorder and conduct disorder were associated more with pursuit of tangible reinforcement outside of school.

The connection between learning difficulty and school refusal clearly indicates positively reinforced behavior in the present study. Children with learning difficulty probably have difficulty in coping with the school curriculum and prefer to stay outside school pursuing positive tangible reinforcement or engage in attention getting behavior. A study by McShane et al (2001) indicated that academic difficulties and a diagnosis of social phobia were predictive of poorer outcomes (three years after treatment). Prior (1998) found that children with academic difficulties were not able to do work easily and had related behavior problems at the prospect of social embarrassment. The findings of the current study calls for urgent measures from the government, school authorities, educational institutions, NGO's and parents for early identification, assessment, remediation and inclusion of children with learning difficulty so that they can be well integrated into mainstream education.

This study's finding that externalizing symptoms are related to positively reinforced behavior and internalizing symptoms are related to negatively reinforced behaviour seems to be strongly supported by earlier research. Other studies report similar findings. Children with negatively reinforced School Refusal behavior were diagnosed with internalizing disorders such as major depression and overanxious disorder in $60 \%$ of cases .Parents who rated their children with negatively reinforced SR behavior indicated that the children also met criteria for internalizing disorders in $58 \%$ of cases and these diagnoses accounted for $77 \%$ of the total given (Kearney, 1993). Externalizing behavior problems rated by parents on CBCL were significantly associated with positively reinforced SR behavior. Also parents who had rated their children with positively reinforced $S R$ behavior indicated that the children also met criteria for Attention Deficit Disorder, Oppositional or Conduct disorder in $72.7 \%$ of case and these diagnoses accounted for $46.2 \%$ of the total given (Kearney et al, 1993).

# The fifth objective of the study was to identify the most significant variables contributing to school refusal factors. 

A combination of socio demographic, clinical and psychological variables contributed to school refusal factors.

## Negatively reinforced school refusal behavior (ANA and ESE)

Multiple regression analyses revealed that girls predominantly with parents who were professionals, from higher income groups, exhibiting examination anxiety with contributory multiple precipitating factors combined with significant levels of depression, trait anxiety and internalizing symptoms were most likely to exhibit negatively reinforced school refusal behavior. How ever Prabhuswamy's study did not find the influence of sex of the subject or somatic symptoms probably since it was an outcome study. Consistent with these study findings, presence of specific learning difficulty, duration and type of school refusal and scholastic performance did not influence school refusal in his study.

These findings reiterate the much needed emphasis on the education of the 'girl child' and revision of the current system of evaluating children's progress solely through examination system but
identifying each child's potential and strengths in extracurricular activities to enhance school attendance; it also clearly addresses the urgent need for provision of school mental health programs for early identification, assessment, referral and treatment if necessary of children with mental health concerns and concurrently providing supportive measures to parents of these children in alleviating the family's burden through multidisciplinary team of school counselors, psychiatrists, social workers, clinical psychologists and nurses.

## Positively reinforced school refusal behavior (AGB and PTR)

Boys from high income groups with fathers who were professionals, over indulgent parents, multiple precipitating factors presenting with significant externalizing symptoms and miscellaneous problems seem to be more vulnerable for positively reinforced school refusal behavior. The study high lights the need for parent education program especially on behavioral techniques to deal with the behavioral problems in vulnerable children and early identification and treatment of precipitating factors especially somatic complaints. School refusal causes significant distress to the child and family. The study highlights the need for early recognition and appropriate
intervention of children with school refusal as it has implications on the child's psychological and social functioning.

The study supported the conceptual framework based on Kearney's model of school refusal behavior. By identifying the various dimensions of school refusal behavior, treatment progress may be designed. Kearney et al (2006) provide the following suggestions for school based health professionals.

## Youth anxious in the morning about school or separation from parents

Youth with school refusal behavior who are anxious about school or separation from parents will often resist about school or separation from parents in the morning before classes begin. Such behavior is often manifested by temper's tantrums, crying, refusal to move, running away from the school building, and withdrawn behavior. Here, a school health professional may be called upon to address a high - intensity situation. If the situation is new, a key rule of thumb is to allow a child to remain where he or she is without permitting regression. If a child has successfully entered the school library, it would be preferable for him or her to retreat to the lobby. In addition, having parents leave the school setting during this process is
often helpful. Keeping a child where he or she is, does not reward "successful" avoidance or escape behavior and serves as an exposurebased practice so that anxiety declines during the course of the day.

## Youth who are anxious about school or parental separation are

likely to seek excessive amounts of reassurance from school-based health professionals and other officials as well. In these cases, a good rule of thumb is to answer a child's question once and then ignore subsequent repetitions.

Youth who are highly anxious about school may also be on medication for their condition. In these cases, school - based health professionals are encouraged to identify the type and dosage level of the medication, consult with the child's physician and parents, about the likely efficacy and side effects of the medication. If a child is attempting to be sent home, then keeping the child in school is generally the best option. Sending a child home will reinforce avoidant behavior and increase the likelihood of misbehavior in the future. Instead, school-based health professionals are encouraged to ease physical symptoms of anxiety, intermittently encourage return to class, reward successful attempts to resume classroom attendance, and
consult with parents and other school officials as necessary to develop a long term plan for such behavior.

As mentioned earlier, youth with school refusal behavior often display severe somatic complaints, especially headaches, stomachaches, and other problems that are not easily measured.

If a child has a true medical condition, such as peptic ulcer, then standard procedures, to accommodate such a child can be followed. If no obvious medical condition is evident, then designing a set schedule of classroom attendance that gradually increases in intensity each week maybe helpful. During this process, procedures to reduce physical symptoms of anxiety should be pursued. In addition, classroom attendance despite the presence of physical symptoms of anxiety should be actively rewarded in some way.

## CHAPTER VII

## SUMMARY AND CONCLUSIONS

This chapter is divided into five sections: Summary of the study, conclusions of the study, limitations of the study, recommendations for further research and implications of the study.

## Summary of the Study

The purpose of the study was to assess psychosocial profile of the children with school refusal. A cross sectional descriptive design was used for the study. Conceptual frame work of the study was based on Kearney's functional model of school refusal behaviour. All instruments used for data collection were standardized. Convenient sampling techniques were used to select 160 children for the purpose of the study at the ICH and HC, Chennai.

Descriptive statistics (frequency percentage, mean and standard deviations) and inferential statistics (independent $t$ test, multiple regression and Analysis of variance) were used to analyze the data.

The conclusions are given below:

* Socio demographic variables of the sample indicated that there were predominantly males, from joint families, from low to middle income groups.
* Clinical variables indicated that there were multiple precipitating factors, temperamental difficulty and pathological family functioning.
* Psychological variables indicated that there were significant levels of anxiety, depression, learning difficulty and behavioral problems.
* Analysis of socio demographic variables with respect to school refusal factors, indicated that sex of the child, parental education, occupation and socio economic status were significant variables influencing school refusal factors.
* Among clinical variables, presence of multiple precipitating factors, examination anxiety and pathological family functioning influenced the school refusal factors.
* With regard to psychological variables, children with depression and anxiety scored significantly higher on negatively reinforced
school refusal behavior dimension. Children with learning difficulty, externalizing symptoms and behavioral problems scored significantly higher on positively reinforced school refusal behavior dimension.
* Multiple regression analysis revealed that sex of the child, parental occupation, presence of examination anxiety, precipitating factors, pathological family functioning, significant levels of depression, anxiety and behavioral problems emerged to be the significant predictor variables with regard to school refusal factors.
* The study clearly establishes the heterogeneity of the sample and the need for identifying school refusal factors in the context of demographic, clinical and psychological variables. The study findings emphasize the urgent need to evolve multimodal treatment strategies based on the functional model of assessment through a multidisciplinary team. In addressing this population, it is imperative to provide.


## Systemic solutions viz

- Change in government's educational policy to enhance the form, structure, content, syllabus and method of teaching and learning processes at schools.
- Integrating children with learning difficulty in mainstream education, providing resource rooms and intervention for children with learning difficulty.
- Providing school mental health programs, sensitizing teachers and parents on children's emotional/behavioral issues, training them to identify these problems and appointing school counselors as part of primary and secondary prevention programs at all schools.


## Molecular Solutions viz

- Positive parenting programs and family counseling to help parents handle behavioral and emotional problems in children.
- Specialized child and adolescent clinics addressing mental health problems in children and adolescents especially vulnerable for school refusal.
- Developing treatment strategies to treat school refusal, relevant to the Indian setting specifically based on Kearney's functional model of assessment of school refusal.


## Limitations of the Study

1. Sample size was restricted and could have been a much larger sample.
2. There was no control group for comparative research to evaluate the utility of School Refusal Assessment Scale.
3. The prescriptive treatment of children with varying profiles of school refusal behavior could not be carried out due to paucity of time.
4. The teacher version of School Refusal Assessment Scale and standardized instrument to assess family functioning, diagnostic assessment could not be utilized in this study.
5. School attendance could not be always corroborated through school report.

## Recommendations for further research

1. The empirical testing of additional maintaining variables of school refusal behavior should be continued.
2. Controlled research is necessary to fully evaluate the utility of School Refusal Assessment Scale.
3. The teacher version of School Refusal Assessment Scale and assessment of family functioning may be used in future research.
4. Fine tuning items, examining more diverse sample of youth, evaluating the link between identified function and successful prescriptive treatment may be useful.
5. Developmental and clinical variables such as temperamental history, family history of psychiatric illness and life events in children with school refusal may be included in further research.

## Implications of the study

From the study findings it is apparent that Kearney's model of school refusal behavior has implications in terms of devising specific treatment strategies for children with school refusal based on assessment. The following intervention programs maybe helpful based
on the school refusal factors, improving family functioning and providing school based intervention.

## Behaviorally Based Therapy

Kearney and Silverman (1993) devised the School Refusal Assessment Scale to measure strength of functional conditions for a case of school refusal behavior. Kearney and Albano (2000) developed prescription treatment strategies for each function that are assigned and tailored individually to a particular client.

* For youth who refuse school to avoid stimuli that provoke negative affectivity, prescriptive child based treatment involves psycho education about anxiety and anxiety avoidance, hierarchy development, somatic control strategies (e.g.), relaxation, deep breathing and gradual re exposure to school settling.
* For youth who refuse school to escape aversive social and evaluation situations, prescriptive child based treatment includes psycho education, anxiety avoidance hierarchy development, modeling and role play, cognitive restructuring and gradual exposure to the school settling.
* For youth who refuse school for attention, prescriptive parent based treatment include contingency management, establishment of routines, modification of parents commands and in some cases forced school attendance.
* For youth who refuse school for tangible reinforcement outside of school, prescriptive family based treatment includes contingency, contracting, communication skills training, peer refusal skills training and in some cases, escorting the child to school and classes.


## Family Therapy

The role of the family has been highlighted by many authors. It has been recognized that improvement in the family's function may be central to achieving any clinical progress and that such improvement may be an important factor in the anxiety of overall outcome (Valles and Oddy, 1984). Therapy should focus upon family issues and particularly the enmeshed over involved strikings of the youngster. It can proceed only when the sense of need and dependency within the parent has been understood and addressed. A therapeutic focus upon these themes often releases the young person from the emotional grip
of the parent, and so allows them to pursue their own developmental needs (Place et al, 1986).

## School -based Intervention:

Schooling and educational process in general have changed in recent years. Reducing the number of children who are out of education, developing support systems, refuges or withdrawal units for vulnerable children within mainstream school settlings, catering to children with other needs have been emphasized upon. These changes in provision and expectation have altered the education landscape and with it the environment within school (Place et al, 1986).

* Health professionals have proposed various school-based programs to help reduce absenteeism due to illness.
* A common one involves school based asthma management: contacting parents, educating family members and engaging inhome visits.
* Others have developed school based clinics:- access to a full time nurse, greater school nurse to student ratio and greater school nurse support.
* Other health based programs have been designed to reduce spread of communicable disease with in schools.
* General wellness programs may also help increase school attendance.
* Still other health based programs have been designed to address stressful circumstances and mental health needs (e.g.), support group for youth with problems attending school, programs to ease anxiety, depression, substance abuse, stressful life events. Other programs may include safety for homosexuality, teenage pregnancy, bullying and general psychological problems.

As Carroll (1997) pointed out 'absenteeism' is not just about the absentee but also has to do with the home, school and neighborhood in which the home and school are situated and in sociological terms, society as well. Addressing youths with school refusal behavior can be a delicate and frustrating experience for school based health professionals. Assessment and treatment process involves school health professionals and a multi disciplinary team that involves parents, guidance, counselors, school psychologists, principals and specialized teachers. In cases where a child's school refusal behaviour is excessive in severity or frequency or in cases of where there is
family dysfunction or depression, referral to a clinical psychologist who is familiar with the cognitive behavioral treatment of this population, is recommended. Consultations with school health professionals are common and often essential components of successful treatment and such professionals need to be active participants in addressing these youth (Kearney and Bensaheb, 2006).

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## APPENDIX - A

## PART - I <br> SOCIO DEMOGRAPIC DETAILS

## (SOCIO DEMOGRAPHIC VARIABLES)

Date of Evaluation:

1. Name
2. Age
3. Sex
4. Date of Birth
5. Address \& Phone No
6. Mother Tongue . . Tamil / Telugu / Hindi /

Malayalam/ Others
7. Religion
. . Hindu / Christian / Muslim /
Others
8. Number of Children .. 123 or More
9. What is the position in the family? (Birth order) . . First Middle Last
10. Type of family
. . (a). Joint
(b). Nuclear
11. Are the parents
.. (a). Alive
(b). Married
(c). Separated
12. Age of the parent

| $\cdots$ | Mother | Father |
| :---: | :---: | :---: |
|  | $(20-30)$ | $(20-30)$ |
|  | $(30-40)$ | $(30-40)$ |
|  | $(40-50)$ | $(40-50)$ |

13. Total Family Income . . (Rs. / month)
14. Education. .

Mother
(a). Illiterate
(b). Primary
(c). Secondary
(d). Higher Secondary
(e). College
15. Occupation ..
(d). Professional

Father
(a). Illiterate
(b). Primary
(c). Secondary
(d). Higher Secondary
(e). College

Mother
(a). House Wife
(b). Unskilled
(c). Skilled

Father
(a). Unskilled
(b). Skilled
(c). Professional

## (CLINICAL VARIABLES)

## COURSE OF ILLNESS

16. Course .. Acute/chronic
17. Precipitating factors

Somatic/Scholastic/Behavioral/Multiple
18. Frequency

Intermittent/Frequent/Continuous
19. Laboratory Investigations done .. Yes / No
20. Is he/she on Medication? .. Yes / No

## DEVELOPMENTAL HISTORY:

21. Was the child born full term? .. Yes / No
22. Were there any complications during delivery? .. Yes / No
23. Any antenatal complications? .. Yes / No
24. Neonatal Complications? .. Yes / No
25. Birth weight .. Low/Normal
26. Does he have a birth defect? .. Yes / No
27. Any feeding problems? .. Yes / No
28. Was there recurrent sleeping problems? .. Yes / No
29. Any recurrent physical illness? .. Yes / No
30. When did he start to walk? . . Normal / Delayed
31. Did he/she start to speak
in sentences at the usual time? . . Yes / No
32. Was he/she delayed in controlling bladder / bowel functions? . . Yes / No

## TEMPERAMENTAL HISTORY:-

33. Was he very stubborn \& demanding? .. Yes / No
34. Can he/she adjust and adapt to a situation ? . Yes / No
35. Did he/she have excessive tantrums? . . Yes / No
36. Was he/ she repeatedly destructive and aggressive? .. Yes / No
37. Was he/she able to pay attention to tasks? . . Yes/ No
38. Was he/she unusually shy, anxious? .. Yes / No
39. Was he/she extremely sensitive? .. Yes / No
40. Can he/she easily accept 'no' as a response from others? . . Yes / No
41. Was he/she social/friendly/
talking a lot? .. Yes / No
42. Was he/she very moody, whose feelings changed easily? .. Yes / No

## EDUCATIONAL HISTORY

43. Which class is he/she studying?
44. Name of the school
45. School Syllabus .. State/ CBSE/ Matric/ others
46. Has he/she changed schools recently? .. Yes / No
47. How is his/her general school performance? .. Good/ Average/

Below average
48. Did the teachers complain about him/her? .. Yes / No
49. How many days / months has he missed school? .. 7-14 days/ 15-30
days / 31-60 days/ more than 60 days
50. Does he/she feel anxious prior to exams? . . Yes / No

## PHYSICAL HEALTH

51. How is his/her health usually? .. Good / Average / Poor

## GIRLS:

52. Has she started to menstruate? . . Yes / No
53. Has she had problems with
menstruation like painful
menses resulting in
school absence? .. Yes / No

## FAMILY FUNCTIONING

54. Is there anyone at home who has been indulgent(giving in to demands) /
with him/her? (Over indulgent) . . Yes / No
55. Is there a lot of
disagreement at home
over how to discipline him/her? . . Yes / No
(Inconsistent)
56. Is there an adult in the
family who is overly
concerned / worried about
his/her health, safety and
welfare? (Overprotective) .. Yes / No
57. Is there very much anger /
quarreling usually between
siblings that creates
repeated adult intervention
in the family?(sibling rivalry) . . Yes / No

## LIFE EVENTS

58. Has there been recent death of a friend? .. Yes / No
59. Has there been recent death of a parent / grand parent? . . Yes / No
60. Any significant financial problems? .. Yes / No
61. Has there been medical / health problems of family members? .. Yes / No
62. Psychiatric / Mental health related problems in a first degree relative? . . Yes / No
63. History of Alcohol abuse in the father and resultant family discord? . . Yes / No

## PART -II A

## SCHOOL REFUSAL ASSESSMENT SCALE - REVISED (P)

(Kearney and Silverman, 1995)

Children sometimes have different reasons for not going to school. Some children feel badly at school, some have trouble with other people, some just want to be with their family, and others like to do things more fun out side of school. This form asks questions about why your children don't want to go to school. For each question, pick one number that describes you best for the last few days. After you answer one question, go on to the next. Don't skip any questions. There is no right or wrong answers. Just pick the number that best fits the way you feel about going to school. Circle the number.

Here is an example of how this form works. Try it. Circle the number that describes you best.

Example:
How often do you like to go shopping?

| Never | Seldom | Some <br> times | Half <br> the time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

Begin to answer the questions
Please circle the answer that best fits the following questions:

1) How often does your child have bad feelings about going to school because he / she is afraid of something related to school (for example, tests, school bus, teacher, )?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

2) How often does your child stay away from school because it is hard for him / her to speak with the other kids at school?
Never
0

| Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 |

How often does your child feel he / she would rather be with you or your spouse than go to school?

Never

0
4) When your child is not in school during the week (Monday to Friday), how often does he / she leave the house and do something fun?

Never

0

Never

0
1

| Seldom | Some <br> times | Half <br> the <br> time |
| :---: | :---: | :---: |
| 1 | 2 |  |

Usually
Almost
Alway
5
Always

6
6) How often does your child stay away from school because he / she feels embarrassed in front of other people at school?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

7) How often does your child think about you or your spouse or family when in school?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

8) When your child is not in school during the week (Monday to Friday), how often does he / she talk to or see other people (other than his / her family)?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

9) How often does your child feel worse at school (for example, scared, nervous, or sad) compared to how he / she feels at home with friends?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

10) How often does your child stay away from school because he / she does not have many friends there?

Never

0
11) How much would your child rather be with his / her family than go to school?
Never
0

| Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 |

12) When your child is not in school during the week (Monday to Friday), how much does he / she enjoy doing different things (for examples, being with friends, going places)?

| Never | Seldom | Some <br> times | Half <br> the | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

13) How often does your child have bad feelings about school (for example, scared, nervous, or sad) when he / she thinks about school on Saturday and Sunday?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

14) How often does your child stay away from places in school (e.g., places where certain groups of people are) where he / she would have to talk to some one?

Never

0
15) How much would your child rather be taught by you or your spouse at home than by his / her teacher at school?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

16) How often does your child refuse to go to school because he / she wants to have fun out side of school?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

17) If your child had less bad feelings (for example, scared, nervous, and sad) about school, would it be easier for him / her to go to school?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

18) If it were easier for your child to make new friends, would it be easier for him / her to go to school?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

19) Would it be easier for your child to go to school if you or your spouse went with him / her?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

20) Would it be easier for your child to go to school if he / she could do more things he / she likes to do after school hours (for example, being with friends)?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

21) How much more does your child have bad feelings about school (for example, scared, nervous, or sad) compared to other kids his / her age?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

22) How often does your child stay away from people in school compared to other kids his / her age?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

23) Would your child like to be home with you or your spouse more than other kids his / her age would?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

24) Would your child rather be doing fun things out side of school more than most kids his, her / age?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

Do not write below this line

| ANA | ESE | AGB | PTR |
| :---: | :---: | :---: | :---: |
| 1. | 2. | 3. | 4. |
| 5. | 6. | 7. | 8. |
| 9. | 10. | 11. | 12. |
| 13. | 14. | 15. | 16. |
|  | 18. | 19. | 20. |
| 21. | 22. | 23. | 24. |

Total Score = $\qquad$
$\qquad$
Mean Score $=$ $\qquad$
$\qquad$
Relative
ranking $+=$ $\qquad$
$\qquad$

## PART - II B

## SCHOOL REFUSAL ASSESSMENT SCALE - REVISED (C)

(Kearney and Silverman, 1995)

Children sometimes have different reasons for not going to school. Some children feel badly at school, some have trouble with other people, some just want to be with their family, and others like to do things more fun out side of school. This form asks questions about why you don't want to go to school. For each question, pick one number that describes you best for the last few days. After you answer one question, go on to the next. Don't skip any questions. There is no right or wrong answers. Just pick the number that best fits the way you feel about going to school. Circle the number.

Here is an example of how this form works. Try it. Circle the number that describes you best.

## Example:

How often do you like to go shopping?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

Begin to answer the questions

Please circle the answer that best fits the following questions:

1) How often do you have bad feelings about going to school because you are afraid of something related to school (for example, tests, school bus, and teacher)?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

2) How often do you stay away from school because it is hard to speak with the other kids at school?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

3) How often do you feel you would rather be with your parents than go to school?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

4) When you are not in school during the week (Monday to Friday), how often do you leave the house and do something fun?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

5) How often do you stay away from school because you will feel sad or depressed if you go?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

6) How often do you stay away from school because you feel embarrassed in front of other people at school?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

7) How often do you think about your parents or family when in school?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

8) When you are not in school during the week (Monday to Friday), how often do you talk to or see other people (other than your family)?

| Never | Seldom | Some <br> times | Half <br> the | Usually | Almost <br> Always | Always |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

9) How often do you feel worse at school (for example, scared, nervous, or sad) compared to how you feel at home with friends?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

10) How often do you stay away from school because you do not have many friends there?

| Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 |

How much would you rather be with your family than go to school?

| Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 |

12) When you are not in school during the week (Monday to Friday), how much do you enjoy doing different things (for example, being with friends, going places)?

Never
13) How often do you have bad feelings about school (for example, scared, nervous, or sad) when you think about school on Saturday and Sunday?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

14) How often do you stay away from places in school (e.g., places where certain groups of people are) where you would have to talk to some one?

| Never | Seldom | Some <br> times | Half <br> the | Usually | Almost <br> Always | Always |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

15) How much would you rather be taught by your parents at home than by your teacher at school?

Never

0
16) How often do you refuse to go to school because you want to have fun out side of school?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

17) If you had less bad feelings (for example, scared, nervous, and sad) about school, would it be easier for you to go to school?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

18) If it were easier for you to make new friends, would it be easier for you to go to school?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

19) Would it be easier for you to go to school if your parents went with you?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

20) Would it be easier for you to go to school if you could do more things you like to do after school hours (for example, being with friends)?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

21) How much more do you have bad feelings about school (for example, scared, nervous, or sad) compared to other kids your age?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

22) How often do you stay away from people in school compared to other kids your age?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

23) Would you like to be home with your parents more than other kids your age would?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

24) Would you rather be doing fun things out side of school more than most kids your age?

| Never | Seldom | Some <br> times | Half <br> the <br> time | Usually | Almost <br> Always | Always |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |

Do not write below this line

| ANA | ESE | AGB | PTR |
| :---: | :---: | :---: | :---: |
| 1. | 2. | 3. | 4. |
| 5. | 6. | 7. | 8. |
| 9. | 10. | 11. | 12. |
| 13. | 14. | 15. | 16. |
|  | 18. | 19. | 20. |
| 21. | 22. | 23. | 24. |

Total Score $=$ $\qquad$
$\qquad$
Mean Score $=$ $\qquad$
$\qquad$
Relative
ranking +=

## PART- II C

## CHILDREN'S DEPRESSION INVENTORY

## Maria Kovacs, Ph.D. (1985)

## DIRECTIONS

Kids some times have different feelings and ideas. This form lists the feelings and ideas in groups. From each group of three sentences pick one sentence that describes you best for the past two weeks. After you pick a sentence from the first group, go on to the next group. There is no right answer or wrong answer. Just pick the sentence that best describes the way you have been feeling recently. Put a mark like this (x) next to your answer; put the mark in the box next to the sentence that you pick.

Here is an example of how this form works. Try it. Put a mark next to the sentence that describes you best.

## Example:

( ) I read books all the time.
( ) I read books once in a while.
( ) I never read books.

Remember: Pick out the sentences that describe you best in the PAST TWO WEEKS.

1. ( ) I am sad once in a while
( ) I am sad many times
( ) I am sad all the time
2. ( ) Nothing will ever work out for me
( ) I am not sure if things will work out for me
( ) Things will work out for me O.K.
3. ( ) I do most things O.K
( ) I do many things wrong
( ) I do everything wrong
4. ( ) I have fun in many things
( ) I have fun in some things
( ) Nothing is fun at all
5. ( ) I am bad all the time
( ) I am bad many times
( ) I am bad once in a while
6. ( ) I think about bad things happening to me once in a while
( ) I worry that bad things will happen to me
( ) I am sure that terrible things will happen to me
7. ( ) I hate my self
( ) I do not like my self
( ) I like my self
8. ( ) All bad things are my fault
( ) Many bad things are my fault
( ) Bad things are not usually my fault
9. ( ) I do not think about killing my self
( ) I think about killing my self but I would not do it.
( ) I want to kill my self
10. ( ) I feel like crying every day
( ) I feel like crying many days
( ) I feel like crying once in a while
11. ( ) Things bother me all the time
( ) Things bother me many times
( ) Things bother me once in a while
12. ( ) I like being with people
( ) I do not like being with people many times
( ) I do not want to be with people at all
13. ( ) I cannot make up my mind about things
( ) It is hard to make up my mind about things
( ) I can make up my mind
14. ( ) I look O.K
( ) There are some bad things about my looks
( ) I look ugly
15. ( ) I have to push my self all the time to do my school work
( ) I have to push my self many times to do my school work
( ) Doing school work is not a big problem
16. ( ) I have trouble sleeping every night
( ) I have trouble sleeping many nights
( ) I sleep pretty well
17. ( ) I am tried once in a while
( ) I am tried many days
( ) I am tried all the time
18. ( ) Most days I do not feel like eating
( ) Many days I do not feel like eating
( ) I eat pretty well
19. ( ) I do not worry about aches and pains
( ) I worry about aches and pains many times
( ) I worry about aches and pains all the time
20. ( ) I do not feel alone
( ) I feel alone many times
( ) I feel alone all the time
21. ( ) I never have fun at school
( ) I have fun at school once in a while
( ) I have fun at school many times
22. ( ) I have plenty of friends
( ) I have some friends but I wish I had more
( ) I do not have any friends
23. ( ) My school work is all right
( ) My school work is not as good as before
( ) I do very badly in subjects I used to be good in
24. ( ) I can never be as good as other kids
( ) I can be as good as other kids if I want to
( ) I am just as good as other kids
25. ( ) Nobody really loves me
( ) I am not sure if anybody loves me
( ) I am sure that somebody loves me
26. ( ) I usually do what I am told
( ) I do not do what I am told most times
( ) I never do what I am told
27. ( ) I get along with people
( ) I get in to fights many times
( ) I get in to fights all the time

## PART - II D

## HOW I FEEL QUESTIONNAIRE

## (Spielberger, Edwards, Montuori and Lushene, 1973)

## STAIC FORM -1

## DIRECTIONS:

A number of statements which boys and girls use to describe themselves are given below. Read each statement carefully and decide how you feel "right now". Then put X in front of the word or phrase, which best describes how you feel. There is no right or wrong answers. Do not spend too much time on any one statement. Remember, find the word or phrase which best describes how you feel right now," at this very moment".

1. I feel . . . . . . very calm . . . . . . calm . . . . . . not calm
2. I feel . . . . . . very upset . . . . . . upset . . . . . not upset
3. I feel . . . . . . very pleasant . . . . pleasant . . . not pleasant
4. I feel . . . . . . very nervous . . . . nervous . . . not nervous
5. I feel . . . . . . very jittery . . . . . . jittery . . . . . not jittery
6. I feel . . . . . . very rested . . . . . . rested . . . . . not rested
7. I feel . . . . . . very scared . . . . . scared . . . . not sacred
8. I feel . . . . . . very relaxed . . . . . relaxed . . . . not relaxed
9. I feel . . . . . . very worried . . . . worried . . . not worried
10. I feel . . . . . . very satisfied . . . . satisfied . . . not satisfied
11. I feel . . . . . . very frightened . . . frightened . .not frightened
12. I feel . . . . . . very happy . . . . . . happy . . . . . not happy
13. I feel very sure $\qquad$
$\qquad$
14. I feel . . . . . . very good . . . . . . good . . . . . . not good
15. I feel . . . . . . very troubled . . . troubled . . .. not troubled
16. I feel . . . . . . very bothered . . . bothered . . . not bothered
17. I feel . . . . . . very nice . . . . . . . nice . . . . . . not nice
18. I feel . . . . . . very terrified . . . terrified . . . . not terrified
19. I feel . . . . . . very mixed - up . . . mixed - up . . . . . . not mixed - up
20. I feel . . . . . . very cheerful . . . . . . cheerful . . . . . . . not cheerful

## HOW I FEEL QUESTIONNAIRE

## STAIC FORM -2

## DIRECTIONS:

A number of statements which boys and girls use to describe themselves are given below. Read each statement and decide if it is "hardly ever" or "some times" or "often" true for you. Then for each statement, put an ' X ' in front of the word that seems to describe you best. There is no right or wrong answers. Do not spend too much time on any one statement. Remember choose the word, which seems to describe how you usually feel.

1. I worry about making mistakes:
hardly ever sometimes often
2. I feel like crying: hardly ever sometimes often
3. I feel unhappy:
hardly ever sometimes often
4. I have trouble making up my mind:
hardly ever sometimes often
5. It is difficult for me to face my problems:
hardly ever sometimes often
6. I worry too much:
hardly ever sometimes often
7. I get upset at home: hardly ever sometimes often
8. I am shy:
hardly ever sometimes often
9. I feel troubled:
hardly ever sometimes often
10. Unimportant thoughts run through my mind and bother me:
hardly ever sometimes often
11. I worry about school:
hardly ever sometimes often
12. I have trouble deciding what to do:
hardly ever sometimes often
13. I notice my heart beats fast:
hardly ever sometimes often
14. I am secretly afraid:
hardly ever
sometimes
often
15. I worry about my parents:
hardly ever sometimes often
16. My hands get sweaty:
hardly ever sometimes often
17. I worry about things that may happen: hardly ever sometimes often
18. It is hard for me to fall asleep at night:
hardly ever sometimes often
19. I get a funny feeling in my stomach: hardly ever sometimes often
20. I worry about what others think of me:
hardly ever sometimes often

## PART- II E

## REVISED CHILD BEHAVIOR CHECKLIST FOR PARENTS

(Shenoy, 1996)

Below is a list of items that describe children. For each item that describes your child, now or within the past 6 months, please circle 2 if the item is very true or often true of your child. Circle 1 if the item is sometimes or some what true of your child. If the item is not true of your child, circle 0 . Please answer all the items as well as you can, even if some do not seem to apply to your child.
$0=$ Not true (as far as you know)
$1=$ Somewhat or sometimes true
$2=$ Very true or often true

| 1. | Acts too young | 0 | 1 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| 2. | Argues a lot | 0 | 1 | 2 |
| 3. | Brags / Boasts | 0 | 1 | 2 |
| 4. | Cannot concentrate | 0 | 1 | 2 |
| 5. | Restless | 0 | 1 | 2 |
| 6. | Cries a lot | 0 | 1 | 2 |
| 7. | Cruel to animals | 0 | 1 | 2 |
| 8. | Cruel to others | 0 | 1 | 2 |
| 9. | Day dreams | 0 | 1 | 2 |
| 10. | Demands attention | 0 | 1 | 2 |


| 11. | Destroys own things | 0 | 1 | 2 |
| :---: | :---: | :---: | :---: | :---: |
| 12. | Destroys others things | 0 | 1 | 2 |
| 13. | Disobeys at home | 0 | 1 | 2 |
| 14. | Disobeys at school | 0 | 1 | 2 |
| 15. | Doesn't eat well | 0 | 1 | 2 |
| 16. | Fear animals | 0 | 1 | 2 |
| 17. | Accident - prone | 0 | 1 | 2 |
| 18. | Fights | 0 | 1 | 2 |
| 19. | Impulsive | 0 | 1 | 2 |
| 20. | Likes to be alone | 0 | 1 | 2 |
| 21. | Lying / cheating | 0 | 1 | 2 |
| 22. | Nervous | 0 | 1 | 2 |
| 23. | Nightmares | 0 | 1 | 2 |
| 24. | Anxious | 0 | 1 | 2 |
| 25. | Physically attacks people | 0 | 1 | 2 |
| 26. | Picks nose | 0 | 1 | 2 |
| 27. | Poor school work | 0 | 1 | 2 |
| 28. | Clumsy | 0 | 1 | 2 |
| 29. | Prefers older children | 0 | 1 | 2 |
| 30. | Refuses to talk | 0 | 1 | 2 |


| 31. | Screams | 0 | 1 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| 32. | Self conscious | 0 | 1 | 2 |
| 33. | Shows off | 0 | 1 | 2 |
| 34. | Shy / timid | 0 | 1 | 2 |
| 35. | Stubborn | 0 | 1 | 2 |
| 36. | Moody | 0 | 1 | 2 |
| 37. | Sulks | 0 | 1 | 2 |
| 38. | Talks too much | 0 | 1 | 2 |
| 39. | Teases others | 0 | 1 | 2 |
| 40. | Temper tantrums | 0 | 1 | 2 |
| 41. | Threatens people | 0 | 1 | 2 |
| 42. | Slow moving / under active | 0 | 1 | 2 |
| 43. | Sad | 0 | 1 | 2 |
| 44. | Unusually loud | 0 | 1 | 2 |
| 45. | Wets bed | 0 | 1 | 2 |
| 46. | Whining | 0 | 1 | 2 |
| 47. | Withdrawn | 0 | 1 | 2 |
| 48. | Worrying | 0 | 1 | 2 |

## PART II F

## NIMHANS Index of Specific learning Difficulty Level - II

(Kapur, John, Rozario and Oommen, 1992)
a) Reading of passages in English classes from I to VIII std level
b) Spelling of English words of I - V std level (words based on passages read \& Schonell's 15 words list)
c) Reading comprehension of English passages of I - VIII std levels
d) Copying of English passages I - VIII std levels
e) Arithmetic subtest (simple digit addition, simple digit subtraction, simple digit multiplication, simple digit division, graded addition, graded subtraction, graded multiplication, graded division, addition of fractions, subtraction of fractions, multiplication of fractions, division of fractions)

Other tests of the battery routinely used are Developmental Test of Visual Motor Integration (DTV MI), Benton Visual Retention Test (BVRT, Benton, 1953), writing expression and auditory memory tests.

## PART -II G <br> BINET KAMATH TEST FOR GENERAL MENTAL ABILITY

TESTS FOR YEAR III

1. Pointing to parts of the Body
2. Naming Familiar objects
3. Repeating two digits
4. Enumeration of objects in a picture
5. Repeating six to seven Syllables
6. Comparison of lines

## TESTS FOR YEAR IV

1. Repeating three digits
2. Discrimination of forms
3. Comprehension first degree
4. Repeating twelve to thirteen syllables
5. Counting four pice
6. Copying a square

## TESTS FOR YEAR V

1. Aesthetic comparison
2. Definitions in terms of use
3. Three commissions
4. Distinguishing right and left
5. Naming four coins
6. Counting thirteen pice

## TESTS FOR YEAR VI

1. Repeating four digits
2. Comprehension second degree
3. Divided card
4. Giving number of fingers
5. Description of pictures
6. Missing features

## TESTS FOR YEAR VII

1. Repeating sixteen to eighteen syllables
2. Copying a diamond
3. Repeating three digits reversed
4. Naming days of week
5. Counting backward twenty to one
6. Giving difference from memory

TESTS FOR YEAR VIII

1. Finding value of coins
2. Repeating five digits
3. Comprehension, third degree
4. Definitions superior to use
5. Naming six coins
6. Reading and report

## TESTS FOR YEAR IX

1. Repeating four digits reversed
2. Making change
3. Giving similarities
4. Using three words in a sentence
5. Reading and report
6. Free association

## TESTS FOR YEAR X

1. Arranging five weights
2. Repeating twenty to twenty - two syllables
3. Naming the months
4. Drawing designs from memory
5. Finding rhymes
6. Reading and report

## TESTS FOR YEAR XII

1. Detecting absurdities
2. Construction puzzle
3. Defining abstract words
4. Repeating five digits reversed
5. Interpretation of fables
6. Interpretation of pictures

## TESTS FOR YEAR XIV

1. Induction test: Finding a rule
2. Dissected sentences
3. Arithmetical reasoning
4. Problems of enclosed boxes
5. Giving similarities
6. Giving full formula

## TESTS FOR YEAR XVI

1. Interpretation of fables
2. Reversing hands of clock
3. Giving differences between Patil and Kulkarni
4. Repeating six digits reversed

## 5. Problem questions

6. Repeating seven digits

## TESTS FOR YEAR XIX

1. Using a code
2. Ingenuity test
3. Differences between abstract terms
4. Binet's paper - cutting test
5. Repeating thirty syllables
6. Reversing triangle in imagination

## APPENDIX－B

## APPENDIX B

ப卉की 9












உங்கள் விமைபிி்் சரி，தவறு என்பது தேவையில்மை．உங்கள் குழ்்மை பள்ளிக்கு


உணா்றுகளை கூறியது？
（உ．ம்）பரீட்ம்ச，பள்எிியி்் ஊர்த，ஆசிடியப்

| 8ம்லை 6 | எธ்யோதாவது |  | ஏறக்குறறய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்றறற கூறைய | －ஏறக்குா | வயாதூம் | எบ்கோதృセேก |
| 4 |  |  | 6 |


எத்தயய ழுயைற தவிா்்தீதுக்கிறது？

| இல்யை | எบ்ढோதாவதை |  | ஞறக்கூறைய |
| :---: | :---: | :---: | :---: |
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| இல்6060 | எบ்யோநாவைத | சிலநேரைம் | ஏறக்குறறய |
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வீ亡்டL விட்டு வைளியே டெண்று மியைாயாடுகிறது？

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 செல்வதை தவிர்க்கறது？

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| 4 |  |  | 6 |




| இช்மை๐ | எบ்போதாவஞை |  | ஏறக்குறைய |
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 цழககிறது？

| இல்மை எ | ளப்கபாதாவது | சிமநேரம் | ஏறக்குロறய |
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| 0 | 1 | 2 | 3 |
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எத்தயை ழுணற கவயைய்யடுகிறது？

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| சற்®றற குøறய | 1 ஞறக்குயை | 8ாమுவ் | எப்லயாカு｜ைை |
| 4 | 5 |  | 6 |

 தஷி்க்கறதா？

| இல்மை | எน்டோதாவதை | சிலరநநறy | ஏறக்குறறய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
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| இல்ணை๐ | எบ்போதாவது | சிமைநநரை⿺𠃊 | ஏறக்கூறய |
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|  | －$\ddagger$ ¢க்குயைற | போகும் | எบ்கேபாலுகெ |
| 4 | 5 |  | 6 |


 எசல்லுதல் ．

| இல்ணை எ | எบ்ใோதாவதை | சி๐ைநைฺ் | ஏறக்கு6றu |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்8றை கூறைய | 1 ஏறக்க毋ை | 8umgூi | สบ்ญบாதுமே |
| 4 | 5 |  | 6 |

 บயน்படுகிறதா？

| இச்கைை | எบ்யur历ாவதை | சிலாந！ம் | ஏறக்கூலறu |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்றறற கூmu | － | ชயாதும் | எบ்8urgு｜ே |
| 4 |  |  | 6 |



| 8ல்ணை எ | எப்யோதாவது | சிலநோம் | ஏறக்கூறயய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்8றற கூறைய | －ஏறக்கு60 | யோதும் | สบ்வோதுமை |
| 4 |  |  | 6 |


ஷிும்பகறதாா？

| 8606006 | எบ்சuாதாவதை | சி60¢நறைம் | ஏறக்குறறய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்றேற கூmை | －$\ddagger$ ¢க்குை | போதும் | 6บ்（3urgு｜® |
| 4 | 5 |  | 6 |

 தவிா்க்கறதா？

| இல்மைை | எบ゙யோதாவது |  | ஏறக்குறறய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
|  | －ワறக்கூ毋 | Buாதூம் | எบ்யோதுகை |
| 4 |  |  | 6 |

 கசம்லுறாா？

| 8ம்லை 6 | எบ்டோதாவது | விбாநூம் | ஏறக்கூ毋றய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்றறற கூறux | －ஏறக்கு冂1 |  | 6บ்（8umbு｜8ே |
| 4 |  |  | 6 |

 แஎ்ாிிக்க எெல்ஞுமா？

| 8ம்யை | எบ்யோதாவது | சிலநேேுய் | ஞறக்குறை |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்கறロ குாறய | －ஏறக்க60 | வோதும் | ๓บ்வோது｜6ை |
| 4 |  |  | 6 |


குழந்ணத விரும்பகறதா?

| 8ல்யை | எบ்லோதாவைு | சிலைநநரீய | ஏறக்காறை |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்றறற © 6 ¢ | - நறக்கு6 | ¢urgும் | எบ்டோதுமே |
| 4 |  |  | 6 |




| இல்ツை | எบ்யиாதாவது | சிமநேரும் |  |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்றறற கூறய | - நறக்கை | வோனும் | สบ்6บ!து\|ேை |
|  |  |  | 6 |

 பற்றிய வேறு்ப உணா்்்சியை வவளிய்படுத்துக்றது?

| அல்மைை எ | எบ்(பபாதாவது | சில8நநரம் | ஏறக்குறை |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்(19@ கூறu | - $\quad$ ¢றக்கு6 | பบாమுமீ | எบ்கோது®ே |
| 4 |  |  | 6 |


பழகுவதல்ம்மை?

| இல்யை 1 | எบ்யோதாவது | ชி๒8ந!! | ஏறக்கூறய |
| :---: | :---: | :---: | :---: |
| 0 | 1. | 2 | 3 |
| சற்றறற கூறu | - ஏறக்குறை | வோதூம் | எவ்(8urgj\|cロ |
| 4 | 5 |  | 6 |


ஷேநம்பக்றதா?

| 8ல்மை எ | எบீயோதாவது | விலறேரர் | ஏறக்கணறய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
|  | 1 ஏறக்கு | வேோதும் | எบ்யோது\|ேே |
| 4. |  |  | 6 |


உற்சாகயாக இயுக்க்றதா?

| இல்மை | எบ்யோதாவவத | சிமகோவ் | ஏறக்குறைய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்கறற | ஏறக்கு60 | யாதூவ் | ตบ்லோதுமே |

4.5








 அளிக்கவும்．
 உணா்வுகணை காறியு்ாளாய்？


| 8 8ல்லை | ๙பீ6иாதாவது | ชிலஜநநற！ | 6றக்கண0றய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| 于ற்றற குறைய | －ஏற்குாை |  | எน்கumbூ⿺𠃊 |
| 4 | 5 |  | 6 |


எத்தணைா ゅுறை தவிற்த்தக்க்கிறாய்？

| Sல்மை எ | எவ்கurதாவதை |  | ஏறக்குறறMu |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்றேற கூறu | －$\ddagger$ ¢ | வோதும் | எบ்ல்யா｜ு｜セே |
| 4 |  |  | 6 |


விரும்புகறாய்？

| இல்மை ம | எप்கோதாவது | சிலநோா冂் | ஏறக்க毋ைறய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்றேற கூறைu | －ஏறக்கு冂1 | யோது！் | எவ்லபாதுமை |
| 4 |  |  | 6 |

 சசன்ாறு வியளாயாடுகிறாய்？

| இல்மை எ | எบ்6บ！தாவேு | ชி๐ாேேரை | ஏறக்குめறறய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சறறறற கூறைய | －நறக்கூ60 | யோதூா | бவப்போதுமே |
| 4 |  |  | 6 |

5．பா்ாிிக்கு எசம்வதால் கவமை அல்லது மணா அழித்தம் ஏற்படும் என்று காறி பள்ளிக்க டெல்வதை தவிா்க்துுக்கிறாuய！？

| 8லำை 6 |  | சிமைநநாம் | ஏறக்கு60றய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்றறற குறை | －ஏறக்கூைை | வபாதும் | எu்8บாது｜6ை |
| 4 | 5 |  | 6 |

 தலிிா்த்துக்க்கிறாய்？

| இல்லைை | எய்யோதாவதை | சிலநோம் | ஞறக்குறைய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்றறற ¢ | －$\ddagger$（ | வurதும் | எบ்வuாதுமே |
| 4 |  |  | 6 |


நநேேேத்துக் மகாா்்டிகுக்காறாய்？

| இல்லை ต | எப்யோதாவது |  | ஏறக்குறைய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
|  | －ஏறக்கு | （Burbjin | எบ்கூாதுமே |
| 4 | 5 |  | 6 |



| இல்மை ள | ளப்（8umgாவது | சிலロ！நரம！ | ஏறக்கூற¢ |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்8றற குறறய | －$\ddagger$ ¢ | （1urதூம் |  |
| 4 |  |  | 6 |



| 8ல்60 | எบ்யோதாவது | சிலロறฺฺฺ | ஏறக்கூறறய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்8றற குறைய | － | யோதுவ் | สบ்போனுமே |
| 4 |  |  | 6 |



| 886000 | எบ்லோநூவது | சிலூநேரம் | ஏறக்கு¢றறய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| 于ற்றறற | ஞறக்குை | வோதும் | எவ்8பாதுகை |



| இல்மைை எ | எบ்சuாதாவது | சிலாநநரும் | ஏறக்கூைறu |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
|  | －ஏறக்குめ | வோதும் |  |
| 4 |  |  | 6 |




| 8லำ00 $ศ$ | எüயurgrவது | சிம¢ேேை⿺் | ๓றக்குறைய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்றறற கூmu | －ஏறக்கு01 | பuாது் | எบ்கบாது｜8ெ |
| 4 |  |  | 6 |



| இல்மை | எบ்கurதாவது | சிமைநேரம் | ஞறக்கூறய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
|  | －ஏறக்கு60 | போதும் | எบ்போதுமே |
| 4 |  |  | 6 |



| இட்மைை எ | สบ்கபாதாவது | சிலநேோட் | ஏறக்குறைய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்றロற கூறロー | －ஏறக்குற1 | வurதூi் | எவ்வோதுமே |
| 4 |  |  | 6 |

 ஷிடும்பிகாாயா？

| アல்மை | สப்๕゙แதாவத | சிடைதோமீ | ஏறக்குறறய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சறீறறற ¢ | －ஏறக்கு60 | （8பாதூா் | สบ̊¢umgృ¢ை |
| 4 |  |  | 6 |



| 8ல்யை எ ை | எบ்லோதாவகை | சிலாநரம் | ஏறக்கூறைய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற் 6 ¢ க | －நறக்கு6ை | வோதும் | ๙ப்ชแாலு｜\％ |
| 4 | 5 |  | 6 |



| 8ம்600 | எบ்கோதாவதை |  | ஞறக்குறறu |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்லறற கூறu | － | （8urதும் | எบ்8பாது｜8ே |
| 4 | 5 |  | 6 |

18．நீ எளிதாக புகய நண்ாப்களூடன் பழக்ஜால்，விதட்பத்தூடண் பள்ளிிக்க ๑சம்லூவாயா？

| இ8ல்லை | எப்போதாவது | சிலல！நாவ் | ஏறக்குறைய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்றறற குவறu | I ஏறக்குறை | போதும் | எน்கumbுமே |
| 4 | 5 |  | 6 |



| 8®060 | எவ்ชนாதாவூு | சிலநந！ரும் | ஏறக்குறை |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்றை கூறய | －ஏறக்கூ | யпநூவ் | எவ்கuாbுセே |
| 4 |  |  | 6 |




| இல்லை | எบ்கோதாவது | சிமுநநரம் | ஏறக்குறைய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்றேற குめைய | －$ற$ ¢்கூ | ¢ோூுவ் | สบ்セோதூセே |
| 4 |  |  | 6 |

 உணைர்ச்சியியை மவஎிப்படுத்துகிறாய்？

| இல்மை | எப்｜ோனூாவது | சிமロநோ！ | ஏறக்குறைறய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்றறற குறைய | －$\quad$－ | யோதுற் | எப்கேபூுமேே |
| 4 | 5 |  | 6 |



| இல்60ை | எบ்லோrதாவது |  | ஏறக்குறையu |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்றறற கூறறய | 1 戶றக்கு60 | யோதூவ் | எบ்லோதுறை |
| 4 |  |  | 6 |





| 8ல்மை | எบ்லபாதாவது | ชி๐ロநநฺฺ் | ஏறக்கூணறய |
| :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 |
| சற்கறற குறைய | －ஏறக்கு0 | வேrgூம் | எบ்கบrநுமே |
| 4 |  |  | 6 |

## பசூநி 8

## बதழந்ணததகள் மன அழத்தத்மைப்பற்றிய குிப்பகள்

குழந்ம்தகளுக்கு சில நேேங்களிி் வித்தியாசமான உணார்வுகளும், எண்ணணா்களளும் தோன்றும். கடந்த இரு வாயங்களில், உங்களை விவாி்க் கீ ழ்க்கண்ாட 3 வரியளில் ஏதேனும் ஒரு வரிळய
 தேர்ந்தெடுக்கஷும். நீங்கள் தேர்ந்லதடுக்கும் வாக்கியத்த்ன் எதிரில் இக்குறியீ்டட நிரப்பவும் . கீழ்கண்ட உ.தாநணத்தீன் ஏதேனுப் ஒரு அயடப்பி் நேேப்பவும்.
(உதாரணாம்)
( ) நான் எப்போதும் புத்தக1் படித்துக் நகாண்ாிடுப்பேன்.
() நான் எப்பuாநதாவது புத்தக்் பழுப்பேன்
() நான் ஒரு போதும் புத்தகட் படிக்க பா்டேே்
(1) () நான் எப்போதாவது கவணைப் படுவேன்
( ) நான் அழிக்கடி கவவணைப் படுவேன்
( ) நான் எப்போதும் கவணைப் படுகேன்
(2) () எணக்கு எதுவும் கை கூவுஷதல்மை.
( ) எனக்கு ஹைகூடும் என்று உறுதி இல்லை.
( ) எணக்கு ஈக்ூடும் என்பதில் உ றுதயயாக இருக்கிறேன்.
(3) ( ) நான் எல்லாவற்மறயு|்் சாியயாக டெய்வேன்
( ) நான் நிறறய தவறுகள் ிசய்வேன்
( ) நான் எல்லாவற்யைபு|்் துவாக \&சய்வேன்
(4) () நான் எல்லா விஷியங்களிஷு|ம் சந்தோஷி்் அகைக்றேன்
() நாா்் சில விஷஷயங்களளி்் சந்தோஷம் அயைகூறேன்
( ) நநான் எதிலூு் சந்தோஷி்் அயைவதில்யை.
(5) () நான் எப்பொழுதுடே டகட்டவன(ள)ாக இருப்பேன்
( ) நாான் அடிக்கடி கெடடவனன(ளT) ாக இடுப்பேன்
() நான் எப்பொழுதாவது டகட்டவன (ள) ாக இருப்பேன்.
(6) () எப்போதாவது ிகட்டது நடக்கும் என்று நிமைய்பேன்
( ) எனக்க இகட்டது நடக்கும் என்று கவயைப்படுவேன்
( ) எбக்க ககட்டது நடக்குดமன்று உறழதuாக நம்புகிறேன்
(7) () நான் எண்ணை மஹறுக்கீறேன்
( ) என்ணை எனங்கு பிடிக்காது
( ) என்ணை எனக்கு பிிிக்கும்
(8) () எல்மா கெட்ட விஷயங்களும் என் ததவு
() பல ககட் விஷயuங்கள் என் தவயறு
() டகட்L விஷியங்கள் என் தவறஹ்ல
(9) ( ) எனக்கு தற்ககாணை எண்ணணம் இம்ஸை
( ) எனக்கு தற்கொமை செய்ய எண்ணாமுண்டு ஆனால் கெய்ய மாட்டேன்
( ) நான் தம்கொ6000 செய்து ககாள்வேன்
(10) () ாாா் தினடும் அழுஹேன்
( ) நான் அடிக்குட அழுவேன்
( ) நான் எப்ดபாழுதாவது அழுவேன்
(11) () எனக்கக எல்லோடுடனுப் இருக்க விருப் $ப \dot{~}$
() அநேகமாக Uாருடனும் இருப்பதை நான் வியும்புவதில்லை
() எனக்கு யாருடனுப் இருக்க விருப்பமி்்யை.
(12) () எண்ணை எம்லா ஷிஷயாங்களும் கஷ்டபப்படுத்தும்
( ) என்னை ப6 விஷயயங்கள் கஷ்டப்படுத்தும்
( ) என்னை சில வ1ஷஷயங்்கள் கஷ்டப்படுத்தும்

( ) எбக்கு முடிவఎ(bக்க கன்டிLDாக இநுக்கிDது.
() நான் சுலபபாா எல்லா விஷயயங்களிலும் டுடிடெடு்்பேன்.
(14) () நான் நன்றாக இருக்கறேன்
( ) என் தோற்றத்தில் சில குறைகள் உண்டு
() நான் அசிங்கமாக இருக்கறேன்
(15) () எбக்கு வீடடுப்பாடம் டசய்வதற்க கங்டLDாக இருக்க்றது.
( ) எணக்கு வீட்டுப்பாடம் ிசய்வதற்கு பலடுறை கங்டபாக இருக்க்றது.

(16) ( ) ஒவ்வோரு இாவினுப் நான் தூங்க கங்டபபடுகக்றேன்
() பல இரவுகளில் நான் தூங்க கஷ்டப்படுகிறேன்.
( ) நான் நன்றாக தூங்குகிறேன்
(17) () எணக்கு சில ச1Duル்் சோi்வாக இருக்கிறது.
( ) எбக்கு பலநாட்கள் சோர்காக இருக்கிறது
( ) நான் எப்போதுயே சோர்ஷாக இருப்பேன்
(18) () ஒவ்மோரு நநாளும் எனக்கு சாப்பிட விருபுபபம்ல்லை.
() பம நாட்களில் எனக்கூ சாப்பிட ஷிடுப்பமிம்மை
() நான் நன்றாக சாப்பிடுவேன்.
(19) () வலிணயப் பற்றி நான் கவணைப்பL Lாாட்டேன்
( ) வலிணயப் பற்றி நான் பமடுமற கவலைப்படுவேன்
( ) வலிணயபப் பற்றி நான் எப்ดபாழுதும் கவலலப்படுவேே்
(20) ( ) நான் தனிணையாக இல்டைை
( ) பமழுறை நான் தனியைமயாக இருக்க்றோ்
( ) நான் எப்பபாழுதுமே தனியையாாக இருக்கிறேன்
(21) () பள்ளியயில் நாண் சந்தோஷமாக இல்மை0
( ) சில ஜோம் பள்ளியில் சந்தோஷமமாக இருக்கிறேன்
( ) நான் பள்ளியபில் எப்ดபாழுதுமே சந்தோஷமாா இருக்கீறேன்
(22) () எனக்கு நணறய நண்ாபர்கள் உள்ளனனா
( ) எனக்கு சில நநண்பா்கள் உள்ளானா், ஆனாா் மேலும் இருக்க வியுப்பட்
( ) எணக்கு நண்பர்களே கீடையாது.
(23) ( ) நான் பள்ளிபாட்் நன்றாக படிப்பேன்
( ) நான் பள்ளி பாடங்ககில் முன்புபோல் சரியாாக படிப்பதில்லை
() முன்பு நன்றாக படித்த பாடர்ககளில் இட்டபாழுது வோசமாக படிக்க்றேன்
(24) () நான் மற்ற குழந்க்தகணைபப்போல நன்றாக இருக்க டுடியாாது
( ) நான் Lற்ற குழந்மததகளைப் போம நன்றாக இருக்க டுடியும்
( ) நான் மற்ற குழந்யைகணளப் போல நб்றறாக இருக்கிறேன்
(25) () என்ணை பாருமே விடுநுப்புவதில்ணை

( ) என்ணை uாறோ ஒருவர் ஷிருமுபுகிறார்கள்
(26) () நான் என்னிட்் சோல்வணைத செய்வேன்
( ) நான் பலழுணை என்னிடi் ஆசால்வதை ிசய்யடே மாட்டேன்
( ) நான் என்னிட்் சசாம்வகத செய்யவே டாட்டேன்
(27) () நாா் எல்லோாுடனுவ் ஒத்து போவேன்
( ) நாஜ்் பஸழுணை சண்டைபோடுடேஎ்
() நான் எப்டபாழுதும் சண்ாை போட்டுக்கொண்டிருப்பேன்

> ப(ூ) की ஈ

என் உணார்வுகள் - 1
 வாக்கியங்ககளை கவனடாக படித்து தற்போதுள்ள உங்கள் மனநலலைய தேந்மெகுக்கவும். பிறகு தோ்ந்நெடுத்த வாக்கயயங்கணை X என்று குறிப்பிட்டு எழுதவும். சாி, தவறு என்று உங்கள் வியையில் தேவையில்லை. ஒதே வாக்கியத்தில் நீண்ட நேரம் சசலலிிட வேண்டாம். தற்போது து்கள் மன ந்லல
எவ்வாறு உள்ளது எண்பபறை விவாிக்கவும்.
தற்சமயம் உங்களை வர்ணிக்கும் வாக்கியத்முத தேர்ததடுக்க வேண்டுட்

1. நான் பிக அயைமதியாக இருக்கூறோ்

அயைமதயாக இவுக்கிறேன்
அமைதியபாக இல்ணை
2. நான் றொட்ப குழப்பட் அயுடந்துள்ளேன்

நான் குழப்பட் அயைட்துள்ளேன்
நான் குழப்பட் அடைவத்ல்யை
3. நநான் பிக மகிழ்ச்சியாாக இருக்கூறேன்

நான் ம்கிழ்ச்சியாக இருக்க்றேன்
நான் மகிழ்ச்சியாக இல்மை
4. எணக்கு மிக தளா்்்சியாக இருக்க்றத!

எぁக்கு தளர்ச்சியபாக இருக்கிறது
எஜக்கு தளா்க்சியாக இல்யைல
5. எனக்கு பிக பதட்LDாக இருக்கிறத

எனக்கு பதட்Lıாாக இருக்கிறத
எணக்கு பதட்டமாக இல்லை
6. நான் மிக ๒ய்வாக இருக்கூறேன்

நான் ஒu்வாக தருக்கூறேன்
நான் ๒ய்வாக இல்ணை
7. எөぁக்கு மிகவும்பபயமாக இருக்கிறது

எøக்கு பயLDாக இருக்கீறது
எனக்கு பயபாாக இல்லை
8. நான் மிக நம்ட்தீயாக இருக்கீறேன்

நநான் நம்்மதீயாக இருக்கிறேன்
நான் ந்ம்பதியாக இல்்ळை
9. நான் மிக வருத்த1Dாக இருக்க்றேன்

நான்் வருத்தமாாக இருக்கிறேன்
நான் வயருத்தமாக இல்லை
10. நான் மிக திருப்தியாாக இருக்க்றேன்

நான் தீடுப்தியாக இுுக்கிறேன்
நான் தீருப்தியாக இல்மை
11. நான்் மிகவும் அஞ்சுடேன்

நான் அஞ்சுேேன்
நான் அஞ்சமாடடேன்
12. நநான் மிகவும் சந்தோஷிமாக இருக்க்றேன்

நான் சந்தோஷடாக இருக்கிறேன்
நநான் சந்தோஷமாக தல்லை
13. நாான் மிக உறுதியாா இருக்கிறேன்

நான் உறுசியாக இருக்கூறேன்
நான் உறுீியாக இல்மை
14. நாஜ் மிக நன்றாக இருக்க்றேன்

நான் நன்றறாக இடுக்கிறேன்
நான் நன்றாக இல்லை
15. நான் மிக வயுத்தமாக இருக்கிறேன்

நான் வருத்த|மாக இருக்கீறே்
நான் வருத்தமாக இலல்லை
16. எனக்கு மிக சலனणाDாக இருக்கிறது

எøக்கு சலனமாா இருக்கீறது
எனக்கு சல円புாக இல்முை
17. நான் பிக நமレமாக இலுக்கீறேன்

நநான் நமபாக இருக்கிறேன்
நான் நமுமாக \$ல்ணை
18. நான் அளாக்க் அதிகமாக பயப்படுடேேன்

நான் அதீகபாக பயப்படுவேன்
நான் அஷிகமாா பயப்படபாாட்டேன்
19. நான் மிக குழப்பiமாக இருக்க்றேன்

நான் குழப்பபாக இருக்கிறேன்
நாா்் குழப்பமாா இல்லை
20. நநான் மிக உற்சாகபாக இநுக்க்றேன்

நான் உற்சாகபாா இருக்க்றேன்
நான் உற்சாகLDாக இல்ணல

## ப()की 2

எண் உஎ0ாற்வுகள் - 2


 வாக்கயத்தன் மத்தியி்் X என்று குறிய்மிட்டு தங்களூக்க பயாகும்தும் வாக்கயத்ணத

 வா்்்்தகணை எடுத்து எழுதவும்.

1. நான் தவறணள் டசய்ய பயப்படுவேன்
இல்மை சிலசமயம் எப்பொழுதும்
2. எணக்கு அழனும் போல் இருக்கிறது
இல்ணை சிலசுமயம் எப்பபாழுதும்
3. நான் கவஹமலயாக இருக்கீறேன்
இல்மை சிலசமயம் எப்பபாழுதுப்
4. நான் முழிவவட்பதில் கவ்ிLப்படுவேன்
இல்மை சிலசமயட் எப்டபாழுதும்
5. எனக்கு பிஏச்சணைகணை சமாளிக்க கஷ்டLDாக இருக்கிறது.
இல்மை சிலசமயயம் எப்டபாழுதும்
6. நான்் மிகவும் வநுத்தப்படுவேன்
இல்ணை சிலசமய1் எப்டபாழுது்்
7. நான் வீடடடல் கவமையாக இருக்கீறேன்.
இல்ணை சிமசமயப் எப்ดபாழுதும்
8. எனக்க கூச்சமாக இருக்கும்
இல்ணை சிமசமயம் எப்பொழுது்்
9. நான் கவமையルா இருக்க்றேன்.
இல்மை சிலசமயம் எப்பொழுதும்
10. தேவையில்மாத எண்ணாங்கள் என் மனळை பாதகக்கும்
இல்ம00 சிலசமயம் எப்ดபாழுதும்
11. பள்ளியயப் பற்றி நான் வருத்தப்படுவேன்
இல்மை சிலசடமயம் எப்ดนாழுதும்
12. நான் என்ணை டசய்ப போகீறேன் என்று தெரியவிம்மை

| இல்ணை |  | எப்ดபாழுதும் |
| :---: | :---: | :---: |

13. என் இதuப் படபடடவண அடிக்கும்

இல்லல திலசுDய!் எப்பபாழுதும்
14. நநா் பயப்படுவேன்
இல்ணை சிமசமயம் எப்பொழுது்
15. என் டபற்றோா்களைப் பற்றி வருந்து|ேேன்

| இல்லைை | சிலசமய\|i | எப்ดபாழுதும் |
| :---: | :---: | :---: |

16. என் கைகள் வேர்த்து விடும்

இல்ணை சிலசடயபம் எப்ดபாழுதுட்
17. என்ள நடக்குேோ என்று பயLロாக இருக்கிறது
இல்மை சிலசமயப் எப்ดபாழுதும்
18. இரவில் தூக்கம் வருவதற்கு கஷ்டிாாக இருக்கிறது
இல்லை சிலசமயபம் எப்ดோழுதும்
19. எøக்கு வயிற்றுக் கோளாறு இருக்க்றது
இல்ணல சிலசமயபம் எப்பபாழுதும்
20. பற்றவா்கள் என்யைனாப்பற்றி என்ன நிணைப்பார்கள் என்று எбக்கு வருத்த1Dாக இருக்கிறது

| இல்மை | விலீசமயபம் | எப்பொழுதுட் |
| :---: | :---: | :---: |

##  <br> பகதकி

 கழந்மத இவ்வாறு நடந்து டகாள்கிறான் என்றால்（2）வட்டமிடவும்．எப்லபாழதாவது நடந்து
 எல்ソா ஙாக்கியஙங்களுக்கும் விணை அளிக்க வேண்ாும்ம்．

| 0 | － | எவ்மபாழுதுவ் இவ்ம்லை |
| :---: | :---: | :---: |
| 1 | － | எப்போதானது |
| 2 | － | எப்லபாழூுவ் |


| 1. | சிறு பிய்ாைை｜த்தய1் | 0 | 1 | 2 |
| :---: | :---: | :---: | :---: | :---: |
| 2. | விவாதம் டசய்வத | 0 | 1 | 2 |
| 3. | தற்யபரு60） | 0 | 1 | 2 |
| 4. | கவன1் செனு｜த்துவதீல்6060 | O | 1 | 2 |
| 5. |  | $\bigcirc$ | 1 | 2 |
| 6. | மிகவு｜் அiழுவது | 0 | 1 | 2 |
| 7. | பிராாணிககணள சித்தீரகணை சசய்வது | 0 | 1 | 2 |
| 8. |  | 0 | 1 | 2 |
| 9. | வேழக்கூக பார்ப்பத！ | 0 | 1 | 2 |
| 10. | தன்டேロ் கவையம் ஈா்ப்பது | 0 | 1 | 2 |
| 11. | தб் ดนாருட்க60ா அழித்த60 | 0 | 1 | 2 |
| 12. |  | 0 | 1 | 2 |
| 13. |  | 0 | 1 | 2 |
| 14. |  | 0 | 1 | 2 |
| 15. |  | 0 | 1 | 2 |
| 16. |  | 0 | 1 | 2 |
| 17. |  | 0 | 1 | 2 |
| 18. |  | O | 1 | 2 |
| 19. | Cuாசிக்காவல் செயல்பநத6் | 0 | 1 | 2 |
| 20. | தனியாக இருக்க விருப்புவது | 0 | 1 | 2 |
| 21. | டுாய் எசால்வத1／ஏ1ロாற்றுவத | O | 1 | 2 |
| 22. | பயப்படுத60 | 0 | 1 | 2 |
| 23. | ூணட் கனை4 | 0 | 1 | 2 |
| 24. | பதட்ப்் | 0 | 1 | 2 |


|  |  | 0 | 1 | 2 |
| :---: | :---: | :---: | :---: | :---: |
| 26. | மூக்கை நநநாண்டுவது | 0 | 1 | 2 |
| 27. |  | $\bigcirc$ | 1 | 2 |
| 28. |  | 0 | 1 | 2 |
| 29. | ூufிய குழந்மைதகளுLன் பழகுவது | $\bigcirc$ | 1 | 2 |
| 30. | Lேசு®தில்ணை | 0 | 1 | 2 |
| 31. | கத்துவது | 0 | 1 | 2 |
| 32. |  | 0 | 1 | 2 |
| 33. | தற்பபருயை | 0 | 1 | 2 |
| 34. | Cூூச்சம் | 0 | 1 | 2 |
| 35. | 1ிி¢வாதம் | - | 1 | 2 |
| 36. | சோகம் | o | 1 | 2 |
| 37. | ழுகவ் சுளிப்பது | - | 1 | 2 |
| 38. | அதுக1Dாக பேசுவது | $\bigcirc$ | 1 | 2 |
| 39. | மற்றவi்கணள கீணLட் டசய்வது | 0 | 1 | 2 |
| 40. | அLi் பlịப்பது | 0 | 1 | 2 |
| 41. |  | 0 | 1 | 2 |
| 42. | ிமதுவாக \&ெயல்படுதல் | 0 | 1 | 2 |
| 43. | குவயை0 | 0 | 1 | 2 |
| 44. | அசாதாரண تூவ்ச்சலிடுவது | 0 | 1 | 2 |
| 45. | படுக்கைu910் சிறிரீர் கழித்தல் | 0 | 1 | 2 |
| 46. | குறை கூறுவத1 | 0 | 1 | 2 |
| 47. |  | - | 1 | 2 |
| 48. | வருத்தப் படுவது | 0 | 1 | 2 |

## APPENDIX C

## Informed Consent Form

We ................ hereby consent to be included as volunteers in the study entitled "School refusal factors and its psycho social concomitants" conducted by Sangeetha Madhu, under the guidance of Dr. Thara .R.

We have been informed to our satisfaction about the nature and purpose of the study and have understood the general principles as mentioned previously; we are informed that we can drop out of the study at any stage.

Signature of participant

## Date

Signature of parent

Date

## APPENDIX - D


#### Abstract

School refusal behavior may be generally defined as childmotivated refusal to attend school or difficulties remaining in class rooms for an entire day. Kearney and Silverman (1995) proposed a compound functional analytic model of school refusal behavior. The present study is based on their conceptual framework.


#### Abstract

Aim To assess the psycho social profile of School refusal behavior based on a functional/theory/driven model of assessment and study the factors associated with School refusal behavior.


## Research Design

A cross sectional ex post facto design was used for the study.

## Sample Selection

A purposive sample of 160 children was screened for school refusal behavior based on Kearney and Silverman's operational definition, at The Institute of Child Health and Hospital for Children, Egmore and Stanley Medical College and Hospital (Chennai). Children of either sex, $5-15$ yrs old, with full scale IQ of $<80$ were included.

## Method of Data Collection

Children who fulfilled the criteria for school refusal as the primary problem were assessed on the following scales: School Refusal Assessment Scale (SRAS - Child version, Kearney and Silverman, 1995), Children's Depression Inventory (CDI - Maria Kovacs, 1985), State Trait Anxiety Inventory for Children (STAIC, Spielberger, 1973) and NIMHANS Index of Specific Learning Disability (Kapur et al 1991) and Binet Kamath Test of General Mental Ability (Kamath, 1973). The parents were administered an Interview Schedule, School Refusal Assessment Scale (SRAS - Parent version, Kearney and Silverman, 1995), and Revised Child Behavior Check List (CBCL, Shenoy, 1996).

## Data analysis:

Data was analyzed using SPSS version 11 Statistical package. Descriptive (percentages, mean and Std deviations) and inferential statistics (t-test, ANOVA, chi square, and multiple regression analysis) were used to analyze the data.

## RESULTS AND DISCUSSION

Results indicated that children with school refusal exhibited significant levels of anxiety, depression, learning difficulty and behavioral problems. Sex of the child, socio economic status, parental education, occupation, and presence of precipitating factors, examination anxiety, and pathological family functioning and depression, anxiety, internalizing/externalizing symptoms were significant predictors of school refusal factors. The study highlights the utility of the functional assessment model, the heterogeneity of the sample and the need for assigning treatment strategies for children with school refusal behavior to enhance effectiveness. Problematic school non attendance is likely to be one of the most pressing social problems. Resources to provide systemic (eg. alternative schools) and molecular (specialized clinics) solutions are thus considered imperative.


