PSYCHOPATHOLOGY AND ANXIETY PERCEPTION AMONGST PARENTS OF CHILDREN WITH SCHOOL REFUSAL

Avinash De Sousa

INTRODUCTION

In keeping with society's expectation concerning education and school attendance, most children attend school on a regular and voluntary basis. For some children there is difficulty in attending school plagued with emotional distress, especially anxiety and depression. Terms such as school phobia or separation anxiety may be used interchangeably but the term school refusal is preferable due to its descriptive and comprehensive nature[1-6].

School refusal is noted in around 3-5% of most school going children across a varied age distribution and with no particular sexual dichotomy[7-9]. Various forms of anxiety have been implicated as a causative factor in school refusal by the child. These may range from separation anxiety to simple fears and phobias and at time panic and social phobia[10-12]. School refusal may be seen due to the presence of conduct disorder or oppositional defiant disorder on one hand and may be linked to aggressive peer groups, poor school climate, poor teaching and parent illiteracy with poverty on the other[13-18].

Problems in family functioning have been highlighted as a contributing factor to school refusal in various studies[19-20]. Parental emotional problems and instability have also been implicated[21]. Harsh rearing practices, avoidant and anxiety promoting behavior along with parental over protectiveness are the other factors put forward by some authors[22]. It has been noted families of children with school refusal are often rigid where no emotional freedom exists[23]. There have been few systematic studies on family functioning and parental psychopathology in children with school refusal[24-26]. These families are often ones where the family structure is ill defined and the parents often have incomplete personality development[27]. Parents of children with school refusal have been found to be high on neuroticism and also report substantial marital discord in their lives[28]. Parents of children with school refusal have been diagnosed as cases of simple or social phobia and panic disorder with agoraphobia to greater extent than the normal population[29].

Correspondence:

Dr. Avinash De Sousa, M.D., D.P.M., M.B.A., M.S., D.P.C., D.S.M., Consultant Child & Adolescent Psychiatrist Mumbai. Carmel, 18 St Francis Avenue, Willingdon Colony, Santacruz – West Mumbai – 400054, State – Maharashtra, India. E- mail – avinashdes999@yahoo.co.uk

The present study looks at psychopathology in parents of children with school refusal examining mothers and fathers separately. It also highlights the differences between parents in perceiving the anxiety of their children. The clinical setting for the study was one in keeping with routine clinical practice in India.

SUBJECTS AND METHODS

The subjects for the study were children with school refusal and their parents that presented to a private psychiatric clinic in Mumbai, India. All children belonged to the age group 8-12 years and were studying in a non boarding full day school.

All the children in the study experienced considerable emotional distress in attending school due to various forms of anxiety on clinical assessment. All children had missed at least 10 days of school in the last month prior to presentation. This was the clinical criteria to select children with school refusal as it is not a DSM-IV / ICD diagnosis as yet. The cause of school refusal was not selected.

The children were not diagnosed as having any other psychiatric disorder and were not under psychiatric treatment in the past. This was ruled out on the basis of a clinical interview and history taking. This was important to the study as many children with conduct disorder or oppositional defiant disorder may exhibit school refusal as well. Such children were not selected for the study. Also in such cases the school refusal is more of truancy than actual school refusal related to anxiety or depressive causes.

All children had normal intelligence and no form of learning disability existed. This was ruled out by current and past academic performances and scrutiny of their notebooks and last exam papers for tell-tale signs of learning disability in their writing. None of the children had any major physical illness on routine medical examination.

The parents of child were selected on the basis that they were both staying with child and spent at least 3-4 hours with the child on a daily basis. The parents did not suffer from any psychiatric disorder and were not on any psychiatric treatment ever. The age group of the parents was between 30-50 years. All children and parents had a nuclear family constellation. Psychiatric disorder in the parents was assessed by clinical assess-

ment and history taking with no formal assessment procedure being used. We selected such a stringent sample as we did not wish to have many confounding factors affecting the rate of school refusal in the children. We accept that a selection bias could be present but we felt this was necessary in the demonstration of psychopathology and anxiety perception in an otherwise normal group of parents. This may be a limitation of our study. There was no specific reason for the age criteria of parents except to maintain uniformity. It was also noted and mandatory that the child was in the same school and place of residence for the last 5 years.

52 sets of parents and children were screened and 43 met the inclusion criteria for the study. Of these 38 agreed to participate in the study and written informed valid consent was taken for the same after explaining to the parents, the nature and purpose of the study. Socio-demographic data and data with regard to variables for the study were collected using a semi-structured interview from both parents and children.

The study population was from diverse schools across Mumbai and included parents from all strata socio-economically. Hence they were a diverse group demographically and represented the population of the area.

INSTRUMENTS USED

The parents were administered the following tests –

(1) *The Symptom Checklist – 90 (SCL-90)* – a comprehensive instrument used to assess general psychopathology and consists of 90 items as a self report scale which has been widely used in both normal and distressed populations. The items are divided into 9 sub scales that include various forms of psychopathology. The scales have a likert type scale of distress from 0 to 4. Scores are defined as General Symptom Index (GSI) with higher scores representing more psychopathology. Scores on each scale range from 0 to 0.99 (normal) while scores > 1 indicate psychopathology[30].

(2) *Spence Children Anxiety Scale (Parent Report) (SCAS-P)* – this is a self report questionnaire with 39 items. It assesses various forms of anxiety in the child in 6 sub scales and a total score. The total score ranges from 0-114. It has been used in a variety of clinical settings with reliability and validity being established across diverse populations[31-34]. This scale was chosen primarily as it gives a better description of the type of anxiety, a subjective experiences rather than a symptomatic approach. Parent and child versions were chosen for comparison as well as dual informants as in child psychology and psychiatry, it is well known that disagreements in perception between parents and children occur[35].

The children were administered the following scale –

Spence Children's Anxiety Scale (SCAS) – this is a self report questionnaire made up of 39 items with a similar scoring pattern as in the parent report form.

Both parents and children were administered the tests on the same day. The Spence Scales had not been validated in India and hence no references for the same available.

STATISTICAL ANALYSIS

The data was analyzed using the student t test with two tailed p values being obtained and $p<0.05$ being regarded as significant. The entire analysis was done by a qualified bio-statistician.

RESULTS

No major differences were noted in the socio-demographic data of both parents. Mean ages of the fathers was 43.6 years and mothers was 39.4 years. Majority of both parents were graduates and above (> 80%). 92% of the fathers were employed while 42% of mothers were housewives in keeping with Indian cultural standards. Mean age of the children was 9.4 years.

On assessing the scores on the SCL-90 scale (table 1), it was found that mothers showed significantly greater scores on phobic anxiety ($p = 0.0380$), somatization ($p = 0.0134$) and depression ($p = 0.0059$). Both parents had higher scores towards psychopathology on the anxiety, obsessive compulsive and general symptomatic index scales. A high degree of interpersonal sensitivity and obsessiveness was noted in both groups depicting a lot about personality patterns of the parents.

On assessing the proportion of the scores on SCL-90 (table 2), greater number of mothers gave abnormal scores on the somatization ($p = 0.0001$), depression ($p = 0.008$) and phobic anxiety (0.0135) subscales. This was in keeping with the findings seen in table 1. Equal number of both parents had high scores on the general symptomatic index. A high degree of psychopathology was noted in the area of interpersonal sensitivity and general anxiety was noted in both mothers and fathers.

On comparing how the parents perceived their child's anxiety, fathers perceived social phobia ($p = 0.0160$) and obsessive compulsive behavior ($p = 0.0369$) to a greater extent than their children who perceived separation anxiety in a larger manner ($p = 0.0056$) in table 3. Comparing the mothers and children, we found mothers perceived panic and agoraphobia significantly more ($p = 0.0001$) in table 4 while on all other scales there was no difference noted . Entire groups of fathers, mothers and children were compared to each other and individual children were not compared to what their parents perceived.

Table 1

Psychopathology in the Parents based on SCL-90 scores

SCL-90 scales	Mothers (n = 38)	Fathers (n = 38)	t value	p value
	Mean ± SD			
Somatization	1.03 ± 0.62	0.72 ± 0.42	2.5327	*0.0134**
Obsessive Compulsive	1.32 ± 0.63	1.46 ± 0.78	0.8607	0.3922
Interpersonal Sensitivity	1.23 ± 0.59	1.16 ± 0.74	0.4559	0.6498
Depression	1.13 ± 0.66	0.78 ± 0.38	2.8380	*0.0059**
Anxiety	1.96 ± 0.67	1.83 ± 0.71	0.8443	0.4012
Anger Hostility	0.43 ± 0.22	0.51 ± 0.36	1.1689	0.2492
Phobic Anxiety	1.15 ± 0.69	0.86 ± 0.49	2.1124	*0.0380**
Paranoia	0.57 ± 0.38	0.59 ± 0.36	0.2355	0.8144
Psychoticism	0.54 ± 0.31	0.63 ± 0.44	1.0308	0.3060
General Symptomatic Index (GSI)	1.16 ± 0.68	1.09 ± 0.64	0.4621	0.6454

* Significant ($p < 0.005$) Paired t test used in the statistical analysis

Table 2

Ratio of the Scores of Parents on the SCL-90 scales

Scale		Mothers (n = 38)	Fathers (n = 38)	X^2(df = 1)	p value
Somatization	Normal	20	34	12.539	*0.0001**
	Psychopath	18	04		
Obs. Comp.	Normal	24	19	7.143	*0.007**
	Psychopath	14	19		
Interpersonal	Normal	26	25	0.0312	0.8624
	Psychopath	12	13		
Depression	Normal	18	26	6.854	*0.008**
	Psychopath	20	12		
Anxiety	Normal	17	18	0.0234	0.8875
	Psychopath	21	20		
Anger Hostility	Normal	34	35	0.091	0.7641
	Psychopath	04	03		
Phobic anxiety	Normal	18	23	2.231	*0.0135**
	Psychopath	20	15		
Paranoia	Normal	36	37	0.098	0.7646
	Psychopath	02	01		
Psychoticism	Normal	37	35	0.812	0.3682
	Psychopath	01	03		
GSI	Normal	25	24	0.0312	0.8624
	Psychopath	13	14		

* Significant ($p < 0.005$) Chi square test used in the statistical analysis.

Table 3

Children Versus Fathers Scores on Spence Children Anxiety Scale

SCAS Scales	Children N=38	Fathers N=38	t value	p value
	Mean ± SD			
Panic Agoraphobia	13.8 ± 6.2	14.3 ± 4.2	0.4116	0.6818
Separation Anxiety	13.6 ± 7.7	9.6 ± 3.9	2.8568	*0.0056**
Physical Injury Fears	7.8 ± 3.8	9.3 ± 4.3	1.6113	0.1141
Social Phobia	9.6 ± 4.2	12.4 ± 5.6	2.4658	*0.0160**
Obsessive Compulsive	5.6 ± 3.1	7.4 ± 4.2	2.1256	*0.0369**
Generalized Anxiety/ Over-anxiety	11.7 ± 6.8	13.4 ± 6.8	1.0897	0.2794
Total Score	66.3 ± 19.2	69.4 ± 21.6	0.6612	0.5105

* Significant.

Table 4

Children Versus Mothers Scores on Spence Children Anxiety Scale

SCAS Scales	Children N=38	Mothers N = 38	t value	p value
	Mean ± SD			
Panic Agoraphobia	13.8 ± 6.2	19.6 ± 5.1	4.4536	*0.0001**
Separation Anxiety	13.6 ± 7.7	13.2 ± 4.7	0.2733	0.7854
Physical Injury Fears	7.8 ± 3.8	7.2 ± 4.1	0.6616	0.5103
Social Phobia	9.6 ± 4.2	10.2 ± 5.8	0.5165	0.6070
Obsessive Compulsive	5.6 ± 3.1	6.3 ± 5.8	0.6561	0.5138
Generalized Anxiety/ Over-anxiety	11.7 ± 6.8	12.6 ± 7.1	0.5643	0.5742
Total Score	66.3 ± 19.2	74.2 ± 23.3	1.8130	0.1111

** Significant.*

DISCUSSION

School refusal is commonest between children of the age 6-12 years[10]. Our sample represented that age group. Most of the parents in our study were graduates and relatively well educated. This could probably mean that this group of parents had higher expectations from their children and this pressure may at times contribute to school refusal.

Anxiety from mothers is often passed on to the child and he may be brought up in an environment that is anxious with fears being inculcated in him. The child may thus have a propensity towards school refusal[26]. Mothers with unexpressed anxiety and depression are likely to express somatic symptoms. This may serve as a model for the children to express somatic symptoms and exhibit school refusal[36-38]. A depressed mother may voice thoughts about suicide in front of the child and cause separation anxiety. She may also show neglect for the child. This may in turn cause the child to reciprocate in the form of school refusal[25]. These factors are in keeping with the psychopathology noted in mothers of children with school refusal in our study.

Fathers in the study showed higher perception of social phobia and obsessive compulsive anxiety. We hypothesize that this may be in keeping with their own anxious and obsessive temperaments which they try and project onto their children[20]. We could also say that fathers probably misinterpreted the anxieties of their children. Mothers perceived panic and agoraphobia to

a greater extent. This panic in mothers exhibits their temperament which begets further anxiety in the children. Lack of differences between scores on mothers and children on all other scales indicates that mothers understood their children better and also perceived their child's anxiety in the right manner. Using parental psychopathology and anxiety perception in family based interventions for school refusal is important for a complete solution to the problem[39].

LIMITATIONS

A number of limitations exist with respect to the present study. First would be the small sample size of the study. It is not possible to generalize these findings to larger groups. This was a clinic referred sample and not a community based sample. We have been rigid in our inclusion and exclusion criteria and thus had a group of parents devoid of non anxiety co-morbid psychiatric pathology as well any major psychiatric disorder. The converse is true in a majority of cases with school refusal. The lack of structured clinical interviews in the assessment and ruling out of psychiatric disorders is another caveat. As mentioned earlier a selection bias and lack of validated scales may be another constraint.

CONCLUSIONS

Parental psychopathology may be an important factor in school refusal as shown in our study. Many a times the parents may project their psychopathology onto their children which may lead to various psychiatric problems in the child. Parents often think for their children without realizing what is in their child's mind. The differences in anxiety perception between children and their parents is an indication of the same. It is not surprising that school refusal causes much distress to the child, parents and school personnel alike. It is not understood whether nature or nurture causes school refusal, or whether parental psychopathology has genetic effect to it. Studies do not confirm whether exposure to this psychopathology in the growing stages of the child leads to school refusal. The heterogeneity of school refusal and variable family dynamics involved, warrant further research and larger studies across diverse cultures and in both home and school settings. It is important for all those involved with school refusal to realize that it is a vexing problem where the treatment has to involve both the child and his parents.

REFERENCES

1. Burke AE, Silverman WK. The prescriptive treatment of school refusal. Clin Psychol Rev 1987 ; 7 : 353-62.
2. King NJ, Ollendick TH, Tonge BJ. School refusal – assessment and treatment. Boston : Allyn & Bacon, 1995.
3. Kearney WA, Roblek TL. Parent training in the treatment of school refusal behavior. In Scaeffer CE, Briesmeister JM, editors. Handbook of Parent Training – Parents as Co-therapists for Children's Behvaioral Problems. 2nd Edition, New York : Wiley, 1996.
4. King NJ, Bernstein GA. School refusal in children and adolescents – a review of the past 10 years. J Am Acad Child Adolesc Psychiatry 2001 ; 40: 197-205.
5. Fermont WP. School refusal in children and adolescents. Am Fam Physician 2003 ; 68: 1555-60.
6. Egger HL, Costello AJ, Angold A. School refusal and psychiatric disorders – a community study. J Am Acad Child Adolesc Psychiatry 2003 ; 42: 797-807.
7. Baker H, Willis U. School Phobia – classification and treatment. Br J Psychiatry 1978; 132: 429-39.
8. Kearney WA, Silverman WK. The evolution and reconciliation of taxonomic strategies for school refusal behaviors. Clin Psychol Sci Pract 1997; 3: 339-54.
9. Heyne D, King NJ, Tonge BJ, Cooper H. School refusal – epidemiology and management. Pediatr Drugs 2001; 3: 719-32.
10. Last CG, Strauss CC. School refusal in anxiety disordered children and adolescents. J Am Acad Child Adolesc Psychiatry 1990; 31: 21-8.
11. Bools C, Foster J, Brown I, Berg I. The identification of psychiatric disorders in children that fail to attend school – a cluster analysis of a non clinical population. Psychol Med 1990; 20: 171-8.
12. Berg I, Butler A, Franklin J, Hayes H, Lucas C, Sims R. DSM-IIIR disorders, social factors and management of school attendance problems in the normal population. J Child Psychol Psychiatry 1993; 34: 1187-203.
13. Essau CA, Sakano Y, Ishikawa S, Sasagawa S. Anxiety symptoms in Japanese and German children. Behav Res Ther 2004; 42: 601-12.
14. Farmer TW, Estell DB, Leung MC, Trott H, Bishop J, Cairns BD. Individual characteristics, early adolescent peer affiliations and school dropout : An examination of aggressive and popular group types. J School Psychol 2003; 41: 217-32.
15. Kearney CA, Albano AM. The functional profiles of school refusal behavior : Diagnostic aspects. Behav Modif 2004; 28: 147-61.
16. Orfield G. Droputs in America : Confronting the graduation rate crisis. Cambridge, MA : Harvard Education Press, 2004.
17. Reid K. The causes, views and traits of school absenteeism and truancy. Res Education 2005; 74: 59-82.
18. Brookmeyer KA, Fanti KA, Heinrich GC. Schools, parents and youth violence : A multilevel ecological analysis. J Clin Child Adolesc Psychol 2006; 35: 504-14.
19. Waldron S, Shrier DK, Stone B, Tobin S. School phobia and other childhood neuroses. Am J Psychiatry 1975; 132 : 802-8.
20. Hersov L. School refusal. In Child and Adolescent Psychiatry – modern approaches. 2nd edition, Oxford: Blackwell Publications, 2005.
21. Costello AJ, Angold A. Epidemiology of childhood anxiety disorders. In Essau C, editors. Anxiety Disorders in

children and adolescents. New York: Guilford Press, 1995.

22. Barrett PM. Evaluation of cognitive behavioral treatments in childhood anxiety disorders. J Clin Child Psychol 1998; 27: 459-68.

23. Olson DH, McCubbin HI, Barnes H, Larsen A, Muxen M, Wilson M. Families – what makes them work. Beverly Hills CA: 1983.

24. Bernstein GA, Garfinkel BD, Borchardt CM. Comparitive studies of pharmacotherapy for school refusal. J Am Acad Child Adolesc Psychiatry 1990; 29 : 773-81.

25. Bernstein GA, Borchardt CM. School refusal – family constellation and family functioning. J Anx Disord 1996; 10 : 1-19.

26. Bernstein GA, Warren SL, Massie ED, Thuras PD. Family dimensions in anxious depressed school refusers. J Anx Disord 1999; 13 : 513-28.

27. Steinhauer PD, Santa-Barbara J, Skinner H. The process model of family functioning. Can J Psychiatry 1984; 29 : 77-88.

28. Obondo A, Dhadpale M. Family study of Kenyan children with school refusal. East Afr Med J 1990; 67: 100-8.

29. Martin C, Cabrol S, Bouvard MP, Lepine JP, Mouren-Simeoni MC. Anxiety and depressive disorders in fathers and mothers of anxious school refusing children. J Am Acad Child Adolesc Psychiatry 1999; 38: 916-22.

30. Derogatis LR, Lipman RS, Covi L. Dimensions of out patient psychopathology – comparison between clinical and empirical assessment. J Consult Clin Psychol 1970; 34 : 2-9.

31. Essau CA, Muris P, Ederer EM. Reliability and validity of the Spence Children's Anxiety scale and the screen for Child Anxiety Related Emotional Disorders in German children. J Behav Ther Exp Psychiatry 2004; 33: 1-18.

32. Spence SH. Structure of anxiety symptoms among children – a confirmatory factor analytical study. J Abn Psychol1997; 106: 280-97.

33. Spence SH. A measure of anxiety symptoms among children. Behav Res Ther 1998; 36: 545-66.

34. Spence SH, Rapee R, McDonald C, Ingram M. The structure of anxiety symptoms amongst preschoolers. Behav Res Ther 2001; 39: 1293-316.

35. Hanna GL, Fischer DJ, Fluent TE. Separation anxiety disorder and school refusal in children and adolescents. Pediatr Rev 2006; 27: 56-63.

36. Mullick MS. Somatoform Disorders in children and adolescents. Bangladesh Medical Research Council Bulletin 2002; 28: 112-22.

37. Muris P, Meesters C. Children's somatization symptoms – correlation with trait anxiety, anxiety sensitivity and learning experiences. Psychol Rep 2004; 94: 1269-75.

38. Craig TK, Bailas I, Hodson S, Cox AD. Intergenerational transmission of somatization behavior – observations of joint attention and bids for attention. Psychol Med 2004; 34: 199-209.

39. Lagana MT. Protective factors for inner city adolescents at risk for school dropout : Family factors and social support. Children and Schools 2004; 26: 211-20.