

Original Article

A Community Study of Association between Parenting Dimensions and Externalizing Behaviors

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ABSTRACT

Background: Association between parenting dimensions and externalizing behaviors in children was examined. **Method:** Data on children from the middle class families of Patiala (N=240) were collected from schools and families. Parents completed questionnaires on parenting dimensions and externalizing behaviors of children. **Results:** Analysis of variance of externalizing behaviors indicated significant mean differences for gender and age on aggression and conduct disorders. Analysis of variance for parenting variables indicated significant differences for age and gender on indulgence, punitive, physical coercion, and verbal hostility parenting dimensions. Correlations between non reasoning, verbal hostility, physical coercion, autonomy and indulgence parenting dimensions and externalizing behaviors were significantly positive whereas regulation and connection parenting dimensions showed a significant negative correlation with externalizing behaviors. Multiple regression analysis of parenting dimensions to each externalizing behaviors showed that autonomy, non reasoning and indulgence parenting dimensions predicted externalizing behaviors. **Conclusions:** Parenting significantly influences externalizing behaviors in children

KEY WORDS: Parenting; Externalizing behavior; Aggression; Conduct disorder; Oppositional defiant disorder.

INTRODUCTION

In the western psychological literature the association between parental child rearing practices and externalizing behaviors has a long tradition of enquiry.¹ Although the issue of causal links between these variables remains unresolved, the role of parenting practices in maintaining disruptive behaviors are well established. Parenting variables such as warmth, close regulation, strict enforcement of family rules with clear emphasis on consequences of behaviors, and democratic recognition of child's viewpoint have been consistently associated with low levels of behavioral problems, particularly delinquency, externalizing behavior and affiliations with deviant peers.²⁻⁴ The Coercion theory suggests that the pattern of harsh aversive hostile interchanges between parents and children leads to development and intensification of antisocial behavior.^{5,6} Dishion, et al conclusively demonstrated "parents' effects" from experimental interventions studies designed to reduce parent-child coercive interchanges.⁷ It was observed that parenting skills training markedly reduced children's risk for disruptive behavior problems.⁷ Although not always directly associated with less aggression, parental reasoning oriented

control has been linked to adaptive social behaviors and cognitions.⁸ Coercive parenting – verbal hostility, punitiveness and physical coercion are linked to distorted cognitive representational processes, deficits in emotional functioning and overt aggression in peer group.⁹

Sex differences in aggression are apparent in early childhood with boys exhibiting more aggressive behaviors than girls. However these differences become markedly distinct in adolescence with male predominance evident across different forms of aggression, both physical as well as verbal in samples spanning community, epidemiological and clinic referred ascertainment procedure.¹⁰ Similar differences are noted in rates of disruptive behaviour disorders.¹¹

In India, a methodologically robust community based epidemiological study of child psychopathology reported the prevalence of psychiatric disorders at 13.4%.¹² The most common disorders identified were enuresis, attention deficit hyperactivity disorder, learning disorders, conduct behavioral disorders and emotional disorders. In a clinic based study on 80 children conducted in Chandigarh, Malhotra et al reported that children with externalizing disorders had significantly higher scores on factors of “low intelligence with behavior problems” and conduct disorder.¹³ Two-Thirds of these children were diagnosed with disorder of activity and inattention, hyperkinetic conduct disorder and conduct disorder confined to the family context. Significant association was found between measures of parental style, psychosocial stress, family adversity and externalizing disorders. In a study from Bangalore, Reddy et al identified six clusters of psychiatric disorders in a sample of 701 clinic referred children.¹⁴ Two of these clusters were conduct disorders and hyperactivity. The cluster of hyperactive children consisted primarily of boys from joint families. Children belonging to the cluster of conduct disorders were also predominantly boys. Temperamentally they were insensitive, difficult to manage, physically and verbally aggressive, highly active and had low emotionality. Discordant intrafamilial relationships, familial over-involvement and inadequate parental control was significantly associated with conduct disorders.

In urban India, the contemporaneous model of childrearing is the dialectical synthesis of material independence and psychological interdependence. Parents are increasingly encouraging autonomy and agentic/individualistic orientations in the children, since these contribute to greater self-reliance, self-sufficiency and adaptiveness in the globalized technological environments.¹⁵ Though the traditional authoritarian style of complete unquestioned obedience is no longer emphasized, a preference for control is seen in childrearing and individuation is not encouraged. The emergent connectedness, autonomy and control orientation in the parenting practices of the urban educated are quite akin to Baumrind’s authoritative parenting style. In nucleated urbanized families parents are becoming less authoritarian, more permissive, child centered and responsive to the children.¹⁶ Indulgence has taken new forms as parents are increasingly investing their time, energy and money in children’s, educational and occupational options. At the same time parenting is changing from “indulgent to demanding” with singular emphasis on achievement and success. The excessive parental demands coupled with societal pressure, ruthless competition and endless emphasis on scholastic achievement, information overload and over-scheduling has pushed children over the edge. Consequently, gnawing frustration, confusion, chaos, hopelessness and desperation has been observed in children and adolescents. Feeling overwhelmingly choked, trapped and

distressed, many children manifest psychosomatic or psychiatric disorders and some even commit suicide.¹⁷

The objective of the present research is to investigate the relationship between parenting behaviors and externalizing behaviors in context to gender and age. It is hypothesized that a negative association would be seen between connection, regulation, and autonomy parenting dimension and externalizing behaviors whereas a positive association would be seen between indulgence, physical coercion, verbal hostility and punitive parenting dimensions and externalizing behaviors. It was hypothesized that boys would exhibit more aggression, oppositional defiant and conduct disorder than girls and that older children (12-14 years) would exhibit more aggression, oppositional defiant and conduct disorders than younger children (6-8 years). Differences on parenting dimensions were assumed for gender and age in context of childrearing in the Indian culture.¹⁵

METHODS

The sample comprised of 240 children (120 boys and 120 girls from two age groups 6-8 years and 12-14 years, respectively) from middle class nuclear families belonging to Patiala. The family income of the subjects ranged between Rupees 150000-550000 per annum. All fathers had graduate or professional degrees, and 180 mothers had graduate degrees while 60 mothers had 10-14 years of education.

Parenting is conceptualized as generalized patterns of behaviors that describe molar parent child interactions over wide range of situations and are presumed to create a pervasive interactional climate in the parent-child micro-system. The Parenting Styles and Dimensions Questionnaire consists of 32 items, split into 7 parenting dimensions: connection, autonomy, regulation, verbal hostility, physical coercion, non reasoning/punitive and indulgence.^{18,19} “Connection” is high degree of warmth, nurturance, sensitivity and acceptance by parents. “Autonomy” is high degree of psychological freedom and democratic participative interactions between parents and children. “Regulation” is behavioral control that places consistent limits on child’s behavior through inductive reasoning about rules and establishing consequences for misbehavior. “Physical coercion” is use of physical punishment/force (e.g. spanking, slapping) to control or discipline the child. “Verbal hostility” is use of abusive hostile manner to control, discipline or intimidate the child. “Non reasoning punitiveness” is meting out punishment without justifications or plausible reasoning. “Indulgence” is pampering, yielding to the demands of the child, lax discipline, and tolerance for under controlled behaviors. Parents rated themselves on 5-point Likert type scale anchored by 1 (never) and 5 (always). The authoritative parenting style consisted of three stylistic dimensions: connection–warmth/involvement (5items); regulation-induction/reasoning (5 items); and autonomy granting-democratic participation (5 items). The authoritarian pattern consisted of three stylistic dimensions: verbal hostility (4 items); physical coercion (4 items); and non-reasoning (4 items). The permissive pattern consisted of indulgence dimension (5 items). The Cronbach’s alpha for authoritative, authoritarian and permissive parenting styles are .86, .82 and .64, respectively. The PSDQ has been validated cross-culturally.^{18,19}

Child Behavior Checklist consists of 118 items that are rated by parents on a 3-point scale (not true, sometime true, and very true).^{1,20} The scoring was done with the scoring protocol of the manual for the ASEBA school-age forms and profiles for child behavior checklist for ages 6-18 years. Oppositional defiant disorder (ODD) and conduct

disorder were evaluated on the DSM oriented scales and Aggression was evaluated on an empirically based scale. The DSM-oriented scales comprise of problems that psychologists and psychiatrists from 16 cultures rated as consistent with the DSM-IV diagnostic categories. The Cronbach's alpha for the DSM oriented scales for ODD and conduct problems is .86 and .92, respectively and for empirical based aggression scale is .90. The test-retest reliability of ODD, conduct problems and aggression scales is .85, .93 and .90 respectively. The construct validity - reported as correlations of DSM-oriented scales (ODD and Conduct problems) with DSM-IV Hudziak's checklist 14 for ODD & conduct disorder is .60 and .61 respectively.²¹ The parent rated/reported Child Behavior Checklist permit comparisons of problems reported for children from diverse cultures as small effect sizes for culture variations were found for externalizing behaviors.²²

The preliminary information about the children was obtained from the schools after apprising authorities of the purpose of the research. Once the criterion requirements were met, parents were contacted for appointments. The researcher along with student volunteers met the subjects in their respective homes. After establishing rapport, parents were informed that the objective of the study and assured that their responses would be treated confidentially. Initially; the Child Behavior Checklist was rated by parents, who were asked to respond to PSDQ only if their children had high scores on externalizing behaviors dimension. The process of identifying families and subsequently collecting information continued for 16 months, until 80 children each, were selected for aggressive, conduct and oppositional defiant behaviors respectively. The SPSS (version 8.0) (Statistical Package for Social Sciences) software was used for statistical analysis.

RESULTS

Boys had higher scores on aggression (16.2±4.0), conduct disorder (14.3±5.2) and ODD (11.0±5.1) in comparison to girls (aggression 14.5±2.9; conduct disorder 9.9±4.3; and ODD 9.7±4.2). Similarly, older children (12-14 years: aggression 16.0±3.6; conduct disorder 13.7±5.4, ODD 10.6±5.0) had higher scores on these 3 dimensions in comparison to younger children (6-8 years: aggression 14.5±3.1; conduct disorder 10.4±3.1; ODD 10.5±4.2). Analysis of variance was computed to assess differences in externalizing behaviors on gender and age. The analysis of variance for externalizing behaviors were found to be significant ($F(2, 237)=23.65; p<.01$). 2*2 analysis of variance computed to examine age and gender differences in each externalizing behavior showed that the main effect of gender ($F(1, 76)=4.30; p<0.05$) and age ($F(1, 76)=3.98; p<.05$) were significant for aggression. Similarly, for conduct disorder, the main effects of gender ($F(1, 76)=18.4; p<.01$) and age ($F(1, 76)=10.36; p<.01$) were significant. However the interaction of age and gender was not significant for any externalizing behavior dimension.

Scores on parenting dimensions in subgroups based on age, gender and externalizing behaviors are shown in Table 1. 2*2 ANOVA was computed to assess differences on parenting dimensions as function of gender and age for each externalizing behavior. In case of aggressive behaviors, for punitive parenting main effects of gender ($F(1, 76)=11.73; p< 0.01$) and age ($F(1, 76)=4.38, p <0.05$) were significant. For indulgent parenting main effects of gender ($F(1, 76)=9.67, p<0.01$) and age ($F(1, 76)=8.23, p<.01$) were significant. For physical coercion the main effects of gender ($F(1, 76)=16.3, p<.01$) and age ($F(1, 76)=25.2, p<.001$) were significant. For autonomy ($F(1,$

76)=22.43, $p<.001$) and verbal hostility ($F(1, 76)=34.36$, $p<.001$) only the main effect of age was significant.

In case of conduct disorder, for verbally hostile main effects of gender ($F(1, 76)=5.47$, $p<.05$) and age ($F(1, 76)=11.1$, $p<.05$) were significant. For physically coercive parenting main effects of gender ($F(1, 76)=30.22$, $p<.001$) and age ($F(1, 76)=5.38$, $p<.05$) were significant. For punitive parenting main effects of gender ($F(1, 76)=7.26$, $p<.01$) and age ($F(1, 76)=6.39$, $p<.05$) were significant. For indulgence only the main effect of gender ($F(1, 76)=4.03$, $p<.05$) was significant while for autonomy only the main effect for age ($F(1, 76)=29.35$, $p<.001$) was significant.

Table 1: Comparison of parenting dimension scores in subgroups based on age, gender

Parenting dimensions	Boys (Mean±SD)	Girls (Mean±SD)	Age 7-9 (Mean±SD)	Age 12-14 (Mean±SD)
Aggression (N=80)				
Punitive	3.37±.94	2.58±1.12	2.71±.91	3.22±1.23
Indulgence	3.23±1.26	2.51±.85	2.54±1.19	3.20 ±.97
Autonomy	3.15±1.21	3.23±1.15	2.63±1.14	3.75±.92
Regulation	3.08±.80	3.10±1.10	2.91±.95	3.20±.94
Connection	3.04±1.02	3.23±1.23	3.21±1.31	3.06±.91
Verbal hostility	3.21±1.16	2.86±1.18	2.39±.96	3.62±1.02
Physical coercion	3.45±1.03	2.65±.98	2.55±1.04	3.50±.87
Conduct disorder (N=80)				
Punitive	3.02±1.0	2.41±1.08	2.43±1.0	3.00±1.04
Indulgence	3.43±.98	3.03±.81	3.12±.86	3.34±.97
Autonomy	3.00±1.23	2.81±1.03	2.35±1.16	3.54±.75
Regulation	3.05±1.10	2.89±.99	2.78±1.12	3.16±.93
Connection	3.25±1.10	3.01±.99	2.95±1.04	3.42±.93
Verbal hostility	3.00±1.24	2.47±.98	2.35±1.10	3.14±1.06
Physical coercion	3.00±1.14	1.86±.69	2.19±.99	2.66±1.16
Oppositional defiant disorder (N=80)				
Punitive	2.90±1.10	3.0±.96	3.14±.85	2.8±1.07
Indulgence	3.70±1.26	3.10±.88	3.45±1.24	3.36±1.00
Autonomy	3.47±1.17	3.02±1.28	3.04±1.38	3.45±1.06
Regulation	2.89±1.00	3.59±.78	3.06±1.05	3.31±.80
Connection	2.90±1.13	3.08±1.14	2.79±1.30	3.20±.91
Verbal hostility	2.58±1.04	2.51±1.07	2.60±.94	2.50±1.16
Physical coercion	2.7±1.06	2.62±1.27	2.40±1.10	2.92±1.19

In case of ODD, for physically coercive parenting interaction of age and gender was significant ($F(1, 76)=16.93$, $p<.01$). For indulgence main effects of gender ($F(1, 76)=5.57$, $p<.05$) was significant while for regulation main effects of age ($F(1, 76)=9.33$, $p<.01$) was significant.

Table 2: Correlations of parenting dimensions and externalizing behaviors by gender and age (N=240)

Parenting dimensions	Aggression		Conduct disorder		ODD	
	Boys	Girls	Boys	Girls	Boys	Girls
Punitive	.77**	.76**	.82**	.63**	.63**	.81**
Indulgence	.86**	.56**	.80**	.55**	.91**	.51**
Physical Coercion	.70**	.50**	.66**	.56**	.66**	.62**
Autonomy	.86**	.65**	.80**	.50**	.76**	.61**
Verbal Hostility	.69**	.52**	.61**	.68**	.67**	.80**
Regulation	-.51**	-.69**	-.69**	-.73**	-.60**	-.59**
Connection	-.69**	-.88**	-.88**	-.85**	-.45**	-.77**
Age (years)	6-8	12-14	6-8	12-14	6-8	12-14
Indulgence	.81**	.74**	.79**	.67**	.73**	.79**
Connection	-.72**	-.86**	-.80**	-.92**	-.68**	-.54**
Regulation	-.51**	-.72**	-.73**	-.72**	-.56**	-.69**
Autonomy	.83**	.71**	.67**	.67**	.60**	.79**
Physical coercion	.58**	.71**	.55**	.64**	.70**	.70**
Punitive	.81**	.71**	.64**	.81**	.64**	.79**
Verbal Hostility	.54**	.71**	-.57**	.69**	.56**	.84**

p<.01**, p<.05* (two tailed)

The Pearson's product moment correlations between parenting dimensions and externalizing behaviors for gender and age were significant (Table 2). Positive correlations were found to exist between verbal hostility, indulgence, physical coercion, punitiveness, autonomy and externalizing behavior (r 's ranged from +.51 to +.91) whereas negative correlations were found for connection and regulation dimensions and externalizing behavior (r 's ranged from -.45 to -.88).

Three sets of multiple regression analyses were performed to explore which parenting dimension contributed uniquely to each externalizing behavior namely, aggression, conduct disorders and oppositional defiant disorder (Table 3).

The F statistic was significant for aggression ($F(7, 72)=49.05, p<.001$), conduct disorder ($F(7, 72)=58.66, p<.001$) and oppositional defiant disorder ($F(7, 72)=37.64, p<.001$). For aggression, the multiple correlation coefficient R was .909, R Square was .827, and the adjusted R square was .810. This showed that the common variance between predictor variables and the criterion variable was 81%. The beta coefficients for punitive, autonomy, indulgence and regulation parenting dimensions were significant. For oppositional defiant disorder, the common variance between predictor variables and the criterion variable was 83.6%. The beta coefficients for punitive, indulgence, autonomy, verbal hostility and physical coercion dimensions were significant. For Conduct disorder, the common variance between predictor variables and the criterion variable was 76.5. The beta coefficients for punitive, indulgence, physical coercion and connection were significant.

Table 3: Multiple regression analysis of externalizing behaviors on parenting dimensions (N=240)

Dependent Variable	Adjusted R Square	F	Standardized Beta	Predictors	t
Aggression	.810	49.05***	.201	Punitiveness	2.60*
			.249	Indulgence	3.27**
			.128	Physical coercion	1.82
			.184	Autonomy	2.23*
			.054	Verbal Hostility	.764
			-.189	Regulation	-2.85*
			-.159	Connection	-1.91
Oppositional Defiant Disorder	.836	58.66***	.266	Punitiveness	4.23***
			.255	Indulgence	3.76***
			.237	Physical coercion	3.84***
			.178	Autonomy	2.95**
			.180	Verbal hostility	2.63*
			.007	Regulation	.116
			-.094	Connection	-1.52
Conduct Disorder	.765	37.64***	.217	Punitiveness	2.73**
			.183	Indulgence	2.08*
			.186	Physical coercion	2.72**
			.118	Autonomy	1.54
			.114	Verbal hostility	1.48
			.018	Regulation	.193
			-.304	connection	-3.08**

p<0.001***, p<.01**, p<.05* (two tailed)

DISCUSSION

In keeping with cross-cultural researches our results indicate significant gender differences on aggression and conduct disorder.²³ The differential genetic, hormonal¹⁰ and psychobiological influences²⁴ coupled with gender specific socialization²⁵ funnel boys into externalizing manifestations more than girls. The gender discrepancy was less in preadolescence. This could be due to greater expression of the genetically determined potential for delinquent behavior with increasing age or due to salience of peer influences in pre-adolescence.²⁶ Our findings circumstantially support the proposition that ODD could serve as a developmental precursor to conduct disorder⁴ as significant age and gender differences were found for conduct disorders whereas this was not seen for oppositional defiant children.

In congruence with the childrearing ethno theories our research findings revealed significant differences on parenting dimensions for age as well as gender for externalizing behaviors in children.^{15,25} The results indicate that parents are more punitive/nonreasoning, verbally hostile, physically coercive as well as autonomy granting and indulgent toward children in the ages 12-14 years than in ages 6-8 years. In a similar vein significantly higher means of parenting punitiveness or non reasoning, physical coercion, verbal hostility and indulgence were found for boys than girls for aggressive, ODD and conduct disordered children. With exception of autonomy granting and indulgent parenting dimension, the above mentioned results mirror the findings in Western literature.^{27,28} Indulgence of boys has been and continues to be the hallmark of parenting practices in India.²⁹ Despite indulgence our findings suggest that parental disciplinary practices are rather punitive. In preadolescence stress on socialization, training and demand for socially appropriate behaviors is actively initiated with emphasis

on submissiveness, unquestioned obedience, compliance and conformity.¹⁶ Perhaps this is the ethnocentric rationale for manifestations of more disruptive behaviors in preadolescents than younger children. Recent research indicates that while belief in indulgence of children still persists, gender disparities have attenuated, at least in the educated middle class. This subtle change in parenting is reflected in our findings of consistency in parental regulation and affection towards children irrespective of gender. But higher autonomy granting in preadolescent boys than preadolescent girls validates the above mentioned predictive associations between externalizing behaviors and preadolescent boys.

Most theoretical frameworks including coercion model,⁶ affective motivational models,³⁰ social cognitive information processing models,¹⁰ and transactional models³¹ explain dyadic processes regarding how children acquire externalizing behaviors. Our results are consistent with western researches and indicate that a stressor model may be at work.³² Power assertive control through punitiveness/ non reasoning, verbal hostility and physical coercion is emotionally and physiologically arousing for children. Such exposure lowers threshold for emotional regulation, induces frustration, activates stress hormones and promotes angry cognitions and negative affect that may be translated into deviant activities, aggression and defiance. Furthermore, induction of negative emotions may increase child's distress, misattributions of hostile intent and deficits and distortions in social information processing.³³ Our multiple regression results support the theoretical models, in that punitive, physical coercive and verbally hostile parenting significantly predicted externalizing behaviors in children. These propositions highlight the cognitive affective processes in children in response to authoritarian parenting as it continues to be a dominant parenting style in India.^{15,16}

Also, in consonance with Western findings, our results indicate predictive positive associations between indulgence parenting dimension and externalizing behaviors. Steinberg and Darling observed that indulgence parenting fails to provide guidance to children to effectively regulate their own behavior.^{28,34} As expected, this association was more pronounced in boys in the present study. The patriarchal, hierarchical kinship social structure deeply rooted in our religious cultural traditions normatively prefers sons to daughters as is evidenced in the inequitable gender ratio of Punjab.

Contrary to our hypothesis, autonomy granting was positively associated with aggression, conduct and oppositional defiant disorders. These results are in contrast to research in North America, where autonomy granting is associated with greater psychosocial adjustment in children and adolescents.³⁵ In nucleated families of the urban India the democratic parent child interactions is an emergent parenting practice which presumably is misperceived as ineffectual or lax parenting. Interestingly the abuse and misuse of psychological/behavioral autonomy granting is evidently more in preadolescent boys than girls despite parents being equally autonomy granting of boys and girls in preadolescence. Cognitive developmental immaturity of boys, peer pressure, physiological/biochemical upheaval and permissive parental attitudes towards boys may be leading to more reckless, defiant, deviant and aggressive behaviors in boys.^{26,36}

In support of our hypothesis, associations between connection and regulation dimensions and externalizing behavior were found to negative. The regression coefficients showed that lower levels of parental regulation predicted aggression and lowers levels of connection predicted conduct disorder in children. These findings validate prominent theories of parent child relationships.^{28,35} Responsivity and sensitivity to children's needs, and close monitoring with inductive reasoning emphasizing

consequences of behaviors have been noted to be associated with low levels of behavioral problems particularly delinquency and externalizing behaviors and to predict psychosocial adjustment in children.^{3,37} The overall results suggests that absence of parental affection, involvement and regulation, and excess of autonomy granting and indulgence are as significant as the presence of hostile and punitive parenting in determining the cumulative effect of parenting dimensions on externalizing behavior in children. In congruence with the childrearing ethno theories,²⁵ our research findings revealed differential parenting by age and gender. The results indicate that parents are more punitive /nonreasoning, verbally hostile, physically coercive as well as autonomy granting and indulgent toward children in the age 12-14 yrs than 6-8 years. Similarly parents were more punitive, verbally hostile, physically coercive and indulgent towards boys than girls. Indulgence of boys has been and continues to be the hallmark of parenting practices in India. Despite overwhelming indulgence as evidenced in our findings, the disciplinary practices are rather punitive. Childhood in India is conceptualized as golden period characterized by protection, indulgence and nurturance, though differentially more favorable for boys than girls. However, preadolescence is a period of strain and stresses for socialization, in which training and demand for socially appropriate behaviors is actively initiated with emphasis on submissiveness, unquestioned obedience, compliance and conformity.^{15,38} While the belief in indulgence of children still persists, gender disparities have attenuated, at least in the educated middle class as reflected in our findings of consistency in parental regulation and affection towards children irrespective of gender.³ Finally while highlighting the traditional authoritarian parenting practices our findings not only reflected the emerging paradigms of psychological model of interdependence quite akin to Baumrind's authoritative style of parenting in the urbanized nucleated families but also augmented our understanding of the effect of differential parenting on externalizing behaviors in boys and girls.^{36,39}

Conclusions from the present study are limited by the possibility of parental response bias due to the exclusive reliance on them for measures of parenting as well as children's externalizing behaviors. Generalizability of the study is limited by restriction of the sample to the urban, educated middle class residents of Patiala. The cross-sectional nature of the study is inadequate to capture the dynamic nature of child psychopathology. Finally, correlational designs such as ones reported here, cannot be the basis for definitive comments on causation.

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