A PSYCHOSOCIAL PERSPECTIVE TO GENDER AND AGE DIFFERENCES IN CHILD AND ADOLESCENT PSYCHOPATHOLOGY

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Abstract

Background There is a general lack of awareness regarding mental health needs of children and adolescents and research on the psychosocial correlates of child and adolescent psychopathology is limited.

Aim To study age and gender differences in child and adolescent psychopathology from the psychosocial perspective.

Method The community sample comprised (n=689) children and adolescents in the ages of 9-11 years and 15-17 years from the middle class families of Patiala and Chandigarh. Child Behavior Checklist and Childhood Psychopathology Measurement Schedule were used to evaluate behavioral problems.

Results Analysis of variance showed significant main effect on age and gender for depression, anxiety, social withdrawal, aggression, conduct disorder with exception of oppositional defiant disorder. However the interaction effect of age and gender was significant for depression only.

Conclusion The results were discussed within the framework of psychosocial paradigm of psychopathology with emphasis on interventions for promoting psychological wellbeing of children and adolescents.

Keywords:Child, Adolescent, Psychopathology, Gender, Age, Psychosocial variables

Introduction

Child and adolescent psychopathology may be defined as "Adaptation failure". It may involve deviation from age appropriate norms, exaggeration or diminishment of normal development expressions, interference in normal developmental progress and failure to achieve optimal level of psychological competence and social functioning. The epidemiological studies of child and adolescent psychopathology in India reports the prevalence of emotional and behavioral disorders at13.4%,12%,6.33%,10%-20%,12.8%& 20.2% respectively[1,2,3,4,5,6]. In context of the dismal epidemiological data pertaining to child and adolescent psychological morbidity it is necessary to explore the psychosocial correlates of child and adolescent psychopathology for developing effective interventions and preventive programs. Psychopathology, be it internalizing or externalizing deserve critical attention , particularly in context of children and adolescents because it may portend life course persistent pattern of psychopathology, with deleterious consequences for the developing child , families and the society at large.

As conceptualized in medicine/psychiatry, behavioral and psychological disorders cannot be conceptualized as static diagnostic labels or syndrome that is believed to exist "within the child", but rather must be seen as dynamic maladaptive responses to social environmental stressors. Childhood behavioral and emotional disorders are not "something that lies within the child "but in part, is a reaction to dysfunctional parenting, families and communities." This does not imply that the presumed biological and genetic component be negated; rather weight is given to understand the impact of psychosocial factors in expression of the disorders. Elucidating the above psychological perspective, this study seeks to explain the psychopathology in children and adolescents in the "cultural context". This contextual understanding places a special emphasis on environment of the child and adolescent, that is family, community and nation5

In the rapidly changing social and technological environment , nuclearization of family structures, rising capitalism and materialism, academic pressures and ruthless competition has burdened young minds with innumerable social pressures, parental expectations and educational goals which in turn has precipitated psychological stress, negative emotional states, suicidal ideation and psychiatric morbidity in children and adolescents [7,8,9]

Externalized disorder constitute aggression, conduct disorder and oppositional defiant disorder, which are characterized by consistent expression of overt deviant behaviors. In a study of social psychological correlates of psychiatric disorders in children reported positive associations between power assertive control , negative temperamental traits and conduct disorders predominantly in boys in the age 4- 14 years than girls.[3] On a sample of 701 clinic referred Indian children, found positive associations between parental over involvement , inadequate parental control and discordant interfamilial relationships and conduct disorders predominantly in boys than girls (later age of

onset).[10] Insofar gender differences are concerned the average aggressiveness ratings are higher for boys in childhood and adolescence for different forms of aggression , both physical and verbal However evidence also points that girls are more likely to use 'relational aggression', such as, alienation, ostracism, character defamation and gossip.[11]The rates of gender differences in oppositional defiant disorder between boys and girls appear similar in early childhood, but by the late preschool and early elementary years, male predominance is distinct.[12] On the other hand, as do boys, girls also display increase in oppositional and defiant behaviors in adolescence[13] The reviews of conduct disorders indicate a decisive preponderance of males over females[14] The plausible rationales are socialization patterns and psychobiological processes[12] but we seek to explore culture specific -gender typed socialization to find why most forms of aggressive and antisocial behaviors are so much more prevalent in boys than girls.

Depression and anxiety is most common psychiatric disorder in children and adolescents found preponderance of depression, emotional problems in girls than boys in the age 10-14 years in clinic referred samples.[5,3,10] Using DSM IV diagnostic criteria,[15] diagnosed depression in 26% of children in the age below 12. Stress in the family and school were found to be significantly associated with depressive disorders. In a study of school going adolescents reported 11.2% prevalence of depression among primary care pediatrics setting in India,[16] with preponderance of girls over boys. However; found a mild over representation of boys over girls in depressive disorders in adolescents in the ages 14-17 years.[17] childhood depression as recurrent, familial and disabling disorder with significant comorbidity with anxiety and externalizing disorders.[18,] in a study reported moderate to severe depression (27%) in girls than boys (21%) urban adolescents in south India. [19] Among clinical samples of depressed children [20] reported mean onset of major depression at about 14 years for both boys and girls. Nolen-Hoeksma explains gender differences to psychobiological hormonal mechanisms and gender specific socialization.

Across the globe, the prevalence rates for childhood anxiety vary from 6% to 20%, with general preponderance of girls over boys were found symptoms of generalized anxiety disorder in clinic referred children and adolescents; however differences as function of age and gender were non-significant. [21,22] In India, the clinic referred and community samples of children in the age 4-14 years found that girls showed more anxiety than boys [10,3] found strong association between overindulgence and over expectations by parents and emotional disorders predominantly in girls than boys in the ages 7-10 years while did not find significant associations between parental warmth and control and anxiety in children.[3] Since there is insufficient data on the demographic composition of generalized anxiety disorders in children and adolescents and the available data are limited by referral and methodological constraints.

With regard to socially withdrawn behavior research is rather sparse in India. Using self-reports and peer rated nominations of school aged children in India, it was found that high socially withdrawn behaviors in girls than boys in childhood. In western cultures, parents view passive and reticent behaviors negatively and children who display such behaviors are considered as socially immature, fearful, and lacking in confidence and dependent. In collectivistic cultures however, children are encouraged to be dependent, cautious, self-restrained dependent and behaviorally inhibited for such behaviors are considered indices of accomplishment, maturity and mastery. Arguably, cultural milieu differentially effects the perceptions of withdrawn behaviors in children and therefore interpretations must be made cautiously.

Objectives

The objectives of the research is to study age and gender differences in children and adolescents' aggression, conduct disorder, oppositional defiant disorder, anxiety, depression and social withdrawal in Indian sociocultural milieu from a psychosocial perspective.

Methodology

Sample

The data of behavioral disorders of the children of the age 9-11 years and 15-17 years were obtained from the public schools of Patiala and Chandigarh. The school counselors provided the needed information regarding children and adolescents with psychological and behavioral problems. The parents and teachers were followed up for CBCL and CPMS reports of children and adolescents. The sample consist of 689 children and their parents from the middle social class of Patiala and Chandigarh city .It comprises of 337 boys and 352 girls in the age range of 9-11 year(4^{th},5^{th}, 6^{th},) and 15-17 years (10^{th} , 11^{th}, 12^{th} Classes. The sub-grouping of the psychological disorders (age and gender wise) in the sample is as follows:

- Depression (n=104): Boys (age 9-11) =26, girls (age 9-11) =26, boys (age 15- 17) =26 and girls (age 15-17) =26.
- Anxiety (n=113): Boys(age 9-11)=26 , girls(age 9-11) =31, boys(age 15-17)=26 and girls (age15-17)=30
- Social Withdrawal (n=114): Boys(age 9-11)=26, girls(age 9-11) =31, boys(age 15-17)=27 and girls (age 15-17)=30

- Aggression (n=128): Boys(age 9-11)=36, girls(age 9-11) =31, boys (age 15-17)=30 and girls (age 15-17)=31
- Conduct disorder (n=124): Boys(age 9-11)=31 , girls(age 9-11) =31 , boys(age 15-17)=31 and girls(age 15-17)=31
- Oppositional defiant disorder (n=106): Boys (age 9-11) =26, girls (age 9-11) =28, boys (age 15-17) =26 and girls (age 15-17) =26.

It is hypothesized that depression, anxiety and social withdrawal disorders would be more in girls than boys in children and adolescents. Aggression, conduct and ODD would be more in boys than girls in children and adolescents. Aggression, conduct disorder, ODD, depression, anxiety and social withdrawal would be more in adolescents than children.

Psychological tools

Child Behavior Checklist (Achenbach & Rescorla, 2001 was used.[23] It consist of 118 items to be rated by parents on a 3 point scale (not true, sometime true, very true) for age of 6-18 years. The DSMoriented scales comprise of problems that psychologists and psychiatrists from 16 cultures rated as consistent with the DSM-IV diagnostic categories. The Cranach's alpha reliability for the DSM oriented scales for ODD and conduct problems is .86 and .92 respectively. Aggression and Social Withdrawal in children were measured on parent rated empirically based syndrome scales. The Cronbach's alpha reliability for aggression and withdrawn/anxious is .94 and .80 respectively. The test-retest reliabilities of withdrawn and aggressive behaviors are. 89 and .90 respectively.

Childhood Psychopathology Measurement

Table 1

Means and SD's of Child and Adolescent Psychopathology

Child psychopathology Ages 9-11 years	Boys Means	SD's	Girls Means	SD's
Depression	7.96	2.0	8.57	2.5
Anxiety	5.96	1.6	8.67	2.1
Social withdrawal	6.84	2.8	10.2	3.4
Aggression	14.8	4.72	11.5	2.29
Conduct disorders	11.9	1.0	8.12	2.40
Oppositional defiant disorder	9.2	1.0	5.4	.92

Adolescent Psychopathology Ages 15-17 years	Boys Means	SD's	Girls Means	SD's
Depression	9.73	2.6	15.61	3.4
Anxiety	7.69	2.42	10.9	1.4
Social Withdrawal	9.41	2.2	13.0	2.1
Aggression	18.0	5.3	14.29	3.1
Conduct disorders	17.5	5.2	10.9	3.5
Oppositional defiant disorder	9.3	.92	6.1	1.3

Schedule is an Indian adaptation of CBCL (18) it is semi-structured diagnostic interview schedule yielding a list of 75 symptoms pertaining to eight factors. Anxiety and depression in the children were evaluated with CPMS (Malhotra, 1988)[24] each question was directed to either mother/father or both regarding the child's behavior to be rated on 2 point scale (zero=not present, one=present).The score of 9> indicated presence of psychopathology. The reliability and the validity of the scale is .88 and .98 respectively. Using this cut off score; the sensitivity for psychopathology is 82% and specificity is 87%.

Table 2

Fractions for 2 X 2 Analysis of Variance on Child and Adolescent Psychopathology

Psychopathology	Main Effects		Interaction Effects
Depression	Age Gender	67.36** 36.68**	24.10*
Anxiety	Age Gender	28.97** 64.51**	.445
Social Withdrawal	Age Gender	27.97** 45.49**	.018
Aggression	Age Gender	17.01** 23.44**	.130
Conduct disorders	Age Gender	31.72** 49.34**	3.41
Oppositional Defiant disorder	Age Gender	3.76 28.2**	3.07
p<.01**, p<.05*			

Results

The means and standard deviations of children and adolescents are tabulated in Table 1. 2 * 2 analysis of variance was computed to assess main effects of age, main effects of gender differences as well as interaction effects on child and adolescent psychopathology (Table 2). For depression main effects of gender F (1,100) =36.68; p<.01 and age F (1,100) =67.36; p<.01 were found to be significant. The interaction of age and gender F (1,100) =24.1; p<.05 was also found to be significant. For anxiety main effects of gender F (1,109) = 64.51; p<.01 and age F (1,109) =28.76; p<.01 were found to be significant. For social withdrawal main effects of gender F (1,110) = 45.49; p<.01 and age F (1,110) =27.97; p<.01 were found to be significant. For aggression main effects of gender F (1,124) =23.44; p<.01 and age F (1,124) = 17.0; p<.01 were found to be significant. For conduct problems main effects of gender F (1,120) =49.34; p<.01 and age F (1,120) =31.72; p<.01 were found to be significant. For oppositional defiant problems main effect of gender F (1,102) =28.2; p<.01 was found to be significant. However the main effect of age was not significant.

Discussion

The results are discussed in keeping with the developmental psychopathologist's viewpoint that “psychosocial contextual events” constitute significant macro-paradigm in effecting adaptive or maladaptive patterns of psychological and behavioral development in the children and adolescents

Gender Differences in Child and adolescent Psychopathology

The significant gender differences for child and adolescent disorders indicate higher levels of depression, anxiety, social withdrawal in girls than boys and higher levels of aggression, conduct disorders and oppositional defiant disorders in boys than girls. These findings are consistent with researches on gender differences in child and adolescent psychopathology.[10,8] The results indicate gender specificity in psychopathology in boys and

girls in childhood and adolescence. The preponderance of boys in externalizing behaviors and girls in internalizing behaviors cannot be singularly attributed to biological or genetic causes. Arguably it is the interaction of biological factors and gender differential socialization which explains the findings. Research indicates predictive associations between parental neglect, coercion, physical punishments, emotional abuse and internalized disorders in children and adolescent[5,25] Explaining the above , Beck's cognitive model posits that abuse, coercion , rejection precipitates loss of self-worth ,negative evaluations of self , negative interpersonal schemes which in turn heightens internalizing symptomatology, whereas behavioral model attribute anxiety , depression and social withdrawal to ensuing inability to elicit positive feedback or a reaction to low rates of positive reinforcement from parents.

Among boys, certain degree of misbehaviors and experimentations are considered normal developmental process. The new onset of oppositional behaviors and independence seeking in adolescence may be due to process off individuation. However caution needs to exercised when apparently minor misdemeanors become antisocial with harmful consequences to self and others .With regard to linkages between parenting socialization patterns and externalizing psychopathologies,[26] found that parents were more punitive, physically coercive and verbal hostile , autonomy granting, permissive and indulgent towards boys than girls. Both social control models and social learning model explains the effect of parental hostility and punitive parenting on escalation of defiant, impulsive and conduct disordered behavior in children through impairment in internalization of controls and modeling or observational learning. In the patriarchal societies like India, the traditional male role modeling socializes boys to be aggressive and “macho”. It may be concluded that in the process of masculinization, the Indian society conspires to make boys violent, defiant, and aggressive and then live to regret it.

Permissive parenting fails to provide guidelines to children for behavioral self-regulation and therefore children exhibit impairments in maturity, impulse control, social responsibility and stronger propensities towards, sensation seeking activities, defiant, aggressive and delinquent behaviors. Given the fact that parents are permissive and lax in regulating activities of boys, the likelihood of boy's affiliation with deviant peers and antisocial activities is more in boys than girls [26]

The finding of lower levels of aggression in girls in comparison to boys is not surprising. In the Indian context, girls experience more social pressures to refrain from aggressive behavior and awareness of this disapproval starts at a young age .Given this strong disapproval of female aggression, girls learn to suppress their rage and anger making them more susceptible to internalizing symptoms or psychological aggression . Depression rooted in rage is a potent manifestation which may be dangerous to self or others. Hence it is inferred that girl's earlier psychobiological development and gender typed socialization patterns funnel girls into internalizing, rather than externalizing manifestations.

In Indian culture, parents regulate and monitor the activities of girls more than boys. The enforcement of rules and regulations and behavioral restrictions and supervision are stringent for girls than boys. Since the demand for socially appropriate behaviors with emphasis on submissiveness, obedience, compliance and conformity is more girls than boys, and in a study found preponderance of socially withdrawn behaviors in girls than boys. In our society girls are encouraged to be quiet, self-restrained, shy, timid, because reticent girls are perceived as veritable models of social decorum. In India, girls are encouraged to be sensitive, dependent, and cautious, self-restrained and behaviorally inhibited for these behaviors are highly appreciated in the Indian families. This is in contrast to western culture where shyness and withdrawn behaviors are associated with social maladjustment. [27] Children and adolescents are expected to be emotionally controlled, behaviorally more inhibited, shy, and timid and restrained for such behaviors are indices of maturity and social decorum. Perhaps the ethno cultural milieu explains more anxiety and withdrawn behavior in girls than boys in childhood as well as adolescence.

With regard to depression, girl's outnumbered then boys in childhood as well as adolescence.[28] argued that both socialization experiences and hormonal mechanisms interact to create a depressogenic diathesis for girls. The gender intensification through differential socialization experiences increase proclivities, limbic system hyper activation and heightened emotional responsiveness, sensitivity to interpersonal stressful life events, low focus in instrumentality, and low self-efficacy which puts the girls at heightened risk for depression and anxiety disorder.[27,29]

Interestingly, the significant interaction effects of age and gender for depression reveal that girls are no more likely than boys to experience depression in adolescence. This indicates that adolescent boys do experience negative affect or depressive symptomatology. However the traditional “male role modeling” , prohibition of expression of emotions (fears, emotional stress, anxiety) and socially accepted tolerance for expressions of anger, aggression and hostility in boys exacerbate aggressive and antisocial behaviors. In support of the findings[30]reported that emotionally disturbed adolescent boys exhibited adjustment problems. It is plausible that externalized psychopathology is

rooted in depression and anxiety. It's time we investigate internalized psychopathologies in boys and help them to effectively manage their pent up emotions, fears and anxieties. It's time we allow boys to cry and express their grief and pain!

Age differences in childhood and adolescence psychopathology

The findings indicated significantly higher levels of anxiety , depression , social withdrawal , aggression and conduct disorders in the age 14-16 years than age 7-9 years for both boys and girls. The changes in the hormonal levels (e.g. adrenal and gonadal hormones) have shown associations with emotional and behavioral problems in adolescence.[31] In case of adolescent's boys, the short-lived affective symptomatology in the age 14 years onwards is possibly associated to "adrenarche".[32] reported that the increase of testosterone in boys at puberty has been found to have a resilient and protective effect against depression and anxiety, although it tends to increase aggressiveness and risk taking behaviors. Testosterone has been implicated in the "great increase in aggression" in pubescent boys. The onset of adolescence for boys in India is characterized by greater freedom and privileges with fewer controls and restrictions.[26]found that parental punitiveness, verbally hostility, physically coercion, autonomy granting and indulgence in adolescence significantly influenced externalizing disorder. Patterson's coercion model explains how aversive parent child interactions ultimately intensify antisocial behavior patterns in adolescents. A male preponderance in aggressive/ defiant behaviors and conduct disorders in adolescence has been reported in literature [33,10] Peers are potent socialization agents in adolescence and play a crucial role in the ontogenesis of disruptive behaviors in adolescence. The impact of peer influence in adolescent boys is so potent that even for children without a history of conduct disorders , association/socialization with deviant peers or peer rejection directly influences on the propensity for deviant and antisocial behaviors .

Supporting previous researches results revealed significantly higher means for depression, anxiety and social withdrawal in adolescent girls than boys. [8,19] Adolescence is indeed a period of "storm and stress" more for adolescent girls than adolescent boys in India. For girls onset of puberty/ adolescence is implies high parental control, behavioral restrictions, monitored social interactions and limited accessibility to information pertaining to adolescent physical and mental health. More than the hormonal upheavals and physical changes in adolescence it's the traditional/prohibitive/ gender specific socialization practices that exacerbates internalizing propensities in adolescent girls in India. The developmental model posits that hormonal changes at puberty activates a diathesis that , subject to socialization by parents and gender role intensification conspires to generate a female preponderance in both anxiety and depression in adolescence . Moreover the heightened depressive propensities in girls than boys are due to differences in self-esteem, perspective taking ability, empathy, rumination, attribution style and learned helplessness [20]

Contrary to expectations, girls in adolescence exhibited more aggression and conduct disorder than in childhood. Surprisingly our findings of aggression and conduct disorders in the adolescent girls support the western researches[13] Findings suggest linkages between pubertal increase in estrogen in girls and precipice increase in defiance, violence and aggression[31] of note is the evidence of aggression and defiance in girls could presumably be a reaction to gender differential parenting practices, which exists covertly in the middle class families. It may have something to do with assertion of freedom, or imitation of boy's behaviors or strategies to gain attention of parents who may not be otherwise attentive to girls for preferential attention towards sons continues to persist even in the 21st century in the Indian culture. The democratization and altered power hierarchies in the nuclear family structure could contribute to increasing defiance or belligerent self-assertion in adolescent girls. It is thereby inferred that girls no longer internalize their emotional pain and express or act out their anger, resentment and hostility through defiance, argumentation, non-compliance and stubbornness. The externalized psychopathology in girls may be due to the influence of media, western culture or maladaptive peer interactions alternately it is argued that much aggression in girls has been overlooked because it is predominantly 'relational aggression', such as, alienation, ostracism, character defamation and gossip. Nonetheless we need to investigate and understand the cause of externalized disorders in girls. It time we pay attention to externalizing behaviors in girls for more research attention had been focused on deviance in boys.

Conclusions

The sample represents the dominant urban middle class population of Patiala and Chandigarh city. The results do not pertain to other social classes. The community data is based on parent reported and, teacher reported child and adolescent psychopathology .Therefore bias and subjectivity and variance cannot be ruled out. However use of standardized questionnaires ensures reliability and validity of the research. This study has predominantly found internalizing disorders in girls and externalizing disorders in boys. However there is evidence of defiant behaviors in adolescent girls and depression in adolescent boys as well. Both internalized and externalized psychopathology is exacerbated in adolescents in comparison to

children. This analysis is based on the assumption that psychosocial factors play a significant role in phenotypic manifestation of psychopathological disorders. This study examines the contributory role of psychosocial variables in psychopathology of children and adolescents. In promotion of psychosocial wellbeing of children and adolescents it is imperative to generate awareness of mental health needs of children and adolescents at primary, secondary and tertiary health care levels. A better understanding of psychosocial etiologic of psychopathological problems is essential for development of parent/ school based interventions, community intervention programs and training of mental health specialists for management of child and adolescent psychopathology.

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