ORIGINAL ARTICLE

PREVALENCE OF EMOTIONAL AND BEHAVIOURAL PROBLEMS AMONG ADOLESCENTS IN PAKISTAN: A CROSS-SECTIONAL STUDY

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ABSTRACT

OBJECTIVE

To determine the prevalence and severity of emotional and behavioural problems among adolescents.

STUDY DESIGN

Cross-sectional study

PLACE AND DURATION OF STUDY

The study was conducted at private sector secondary schools of Karachi, from August 2021- February 2022.

SUBJECTS AND METHODS

The sample comprised 1470 students between the ages of 11 to 17 years from different private sector secondary schools in Karachi. The sample was collected through a convenience sampling technique. Socio-demographic Information Form, Asian Adolescents Depression Scale (AADS) and School Children Problem Scale (SCPS) were used. SPSS 26 was used to analyse the data.

RESULTS

The mean age of study respondents was 13.62 years (SD 1.39). Findings of the present study reveal that emotional and behavioural problems were more common among female adolescents as compared to their male counterparts. Overall, all 20% of study respondents were found to have very severe level of emotional and behavioural problems, and aggression was the most common problem among 14% of adolescents, followed by academic problems in 9.7% of adolescents.

Approximately 20% of the school going adolescents were struggling with emotional and behavioural problems (i.e., anxiousness, aggression, social withdrawal, rejection, somatic problems, & depression), along with academic problems. Further, a statistically significant association was found between gender, emotional and behavioural problems. Mental health experts should focus on prevention and treatment interventions in school settings to reduce the risk of emotional and behavioural problems of Pakistani adolescents so that they could grow socially and emotionally healthy and excel in their academics and contribute to their family and community.

CONCLUSION

Adolescence is a growing age, during this phase individual can experience social and emotional issues. Detecting these issues at early stage could reduce the risk of mental health problems at later stage. Mental health experts should focus on prevention and treatment interventions in school settings to reduce the risk of emotional and behavioral problems of Pakistani adolescents so that they could grow socially and emotionally healthy and excel in their academics and contribute to their family and community.

KEYWORDS

Emotional Problems, Behavioural Problems, Adolescents, Prevalence, Pakistan

INTRODUCTION

Adolescence is a stage of bio-psychosocial transition that occurs during early life. It is a time of physical, social, emotional, and nutritional transition. As a result of their psychological and social needs, they experience several behavioural issues of varied levels of intensity.[1]

Recently, researchers[2] have identified different stages of adolescence: early adolescence (ages 10-13 years), middle adolescence (age 14-17 years), and late adolescence (age range 18-22 years). Based on the features of adolescence, these stages have been categorised according to physical, emotional, and mental health development.

A study from Pakistan[3] shows that adolescents experience several problems as they grow older, and this transitional period between childhood and adulthood is critical. They further explained that the adolescents' weak emotional state leads them towards blaming others for their issues and starts excessive negative thinking. Furthermore, catastrophising thoughts can also increase the risk of depression in adolescents. Evidence shows the prevalence of emotional and behavioural problems among children and adolescents in different countries. The World Health Organisation[4] estimates that 10-20% of adolescents experience emotional and/or behavioural problem. Although, the prevalence rates vary by nation, for example, in India 5.5% (age range 15-17 years),[1] in Kenya 17% (age range 6-18 years),[5] China 17.9% (age range 6-16 years),[6] and in Pakistan 34.4% and 35.8%, they are all higher than the global average (age range 5–11 years).[7]

Due to limited access to health care services, adolescents are facing numerous issues and addressing them is the need of the hour, as this can reduce the risk of mental health problems. Researchers have shown their concerns that if ignored, psychological problems may negatively affect their general quality of life, including poor academic performance, substance misuse, and in severe instances even suicide.[7] A study[8] found that, even though in Pakistan there are strict prohibitions against alcohol use, but in secondary school students, 44.9% of the sample reported lifetime alcohol use, with 22.6% of the sample scores showed significant risk levels. Another study[9] on the prevalence of emotional and behavioural problems among adolescents found that 53.3% reported having difficulties in concentration, emotional and behaviour problems, including getting along with other people.

In their study, researchers[10] explained that one of the important areas for children and adolescents is their relationship with the peers. They explained that, at early years of life, children try to reach to their peer to socialise with them. During this time, they may have conflicting experience with their peers, and as a result their physical and psychological self is threatened. This can have a negative impact on their overall health (i.e., psychological, physical, social and academic problems).

The insufficient psychological healthcare services for children in Pakistan are partly because of inadequate knowledge about the adolescents' social and emotional needs, and developing interventions to help them in overcoming these issues.[11]

Research evidence supports that several factors are involved in social and emotional problems of adolescents. In Pakistan, there is a dearth of studies that identify the prevalence of social and emotional issues. This study aims to investigate the prevalence of social and emotional issues among adolescents attending secondary schools in Karachi, Pakistan. The findings of the present study may help mental health professionals and teachers in designing and implementing school-based prevention interventions and programs to improve their social and emotional health.

SUBJECTS AND METHODS

Sample of present study comprised 1470 students, ages between 11-17 years, recruited from different private sector secondary schools of Karachi after obtaining consent from parents. Only those students who could read and write in Urdu and English were included in this study.

Measures

School Children's Problems Scale (SCPS)

The SCPS is a self-report measure. This scale consists of 88 items, comprising six subscales namely Anxiousness, Academic Problems, Aggression, Social Withdrawal, Feelings of Rejection and Somatic problems. This is a Likert type scale (0-3) and response options are “Never, Sometimes, Often, and Very much.” The total score is calculated by summing up all the subscales. Higher the score on SCPS denotes to higher mental health problems. The Cronbach's alpha for 88 items of SCPS was found to be 0.95 ($p<0.001$). The scale was found to be a reliable (test-retest reliability = 0.79 and split half reliability = 0.89) and valid scale with acceptable psychometric properties.[12]

Asian Adolescent Depression Scale (AADS)

Asian Adolescent Depression Scale (AADS),[13] is a self-report measure which consisted of 20 items. The AADS comprised 4 factors (negative self-evaluation, negative affect, cognitive inefficiency, and lack of motivation) and demonstrated sound psychometric properties. Analysis of internal consistency by Cronbach's alpha α = .86 provided good evidence of AADS reliability, which is especially developed to measure the level of depression among Asian adolescents.[14]

Procedure

This research was carried out considering all ethical guidelines in conducting research with human subjects. Initially, permission was taken from the education department, and then the school authorities, including the principals of each school. Once approved, potential participants were approached for data collection through convenience sampling. Before administering the tools, a written informed consent was taken from the parents/caretaker/guardian of the participants, who were briefed about the purpose and procedure of the study. The students who received parental consent were invited to participate in the study, upon meeting the pre-requisite criteria. They then filled out the Demographic Information Form, Asian Adolescents Depression Scale (AADS) and School Children Problem Scale (SCPS). Data were collected in a group structure in the school setting in the presence of the study investigator. The questionnaires were self-administered and required 25 minutes to complete. At the end, the researcher thanked each participant for their participation in the study.

RESULTS

Sample of present study comprised 1470 students from different private sector secondary schools, situated in different areas of Karachi. Among them, 717 (48.77%) were male and 753 (51.22%) were female. The mean age of participants was 13.62 years (SD 1.39) with a slightly higher mean age of males (M=13.77, SD= 1.35) as compared to females (M=13.47, SD=1.43). (Table 1).

Table 1
Mean Age distribution of Participants (N=1470)

Variable	Male N=717		Female N=753		Total N=1470	
	M	SD	M	SD	M	SD
Age	13.77	1.35	13.47	1.43	13.62	1.39

The early adolescent group (11-14 years) was in majority (57.35%). Majority of participants were studying in grade 8 (31%) followed by Grade 7 (27%), Grade 9 (21%) and Grade 10 (21%). Majority of participants were living in a nuclear family system (66.51%). Most of the parents of the study participants had education up to either matriculation 41.02%) or intermediate level (48.55%), respectively. A greater number (57.39%) of study participants reported having lower socioeconomic status (Table 2).

Table 2

Socio-economic* status profile of study respondents (N=1470)

Variables	Male N = 717		Female N = 753	
	F	%	*F*	%
Age				
11-14 years	411	57.32	432	57.37
15-17 years	306	42.68	321	42.63
Grade				
class 7	202	28.17	192	25.50
class 8	209	29.15	240	31.87
class 9	159	22.18	154	20.45
class 10	147	20.50	167	22.18
Family Type				
Nuclear	471	65.69	507	67.33
Joint	246	34.31	246	32.67
Father's Education				
Matric- Inter	274	38.21	330	43.82
Graduation	270	37.66	253	33.60
Master	139	19.39	146	19.39
Others	34	4.74	24	3.19
Mother's Education				
Matric- Inter	343	47.84	371	49.27
Graduation	218	30.40	226	30.01
Master	115	16.04	125	16.60
Others	41	5.72	31	4.12
Social Economic Status				
Middle Class	314	43.79	312	41.43
Lower Class	403	56.21	441	58.57

Table 3

Prevalence of behavioural and emotional problems in the study population

Problem & Severity	N	Prevalence %	95% CI
Anxiousness			
Mild	254	17.3	
Moderate	966	65.7	12.98 - 13.73
Severe	168	11.4	
Very Severe	82	05.6	
Academic problem			
Mild	224	15.2	
Moderate	883	60.1	8.07 - 8.57
Severe	221	15.0	
Very Severe	142	09.7	
Aggression			
Mild	141	09.6	
Moderate	754	51.3	43.46 - 45.05
Severe	369	25.1	
Very Severe	206	14.0	
Social Withdrawal			
Mild	624	42.4	
Moderate	630	42.9	9.52 - 10.06
Severe	173	11.8	
Very Severe	43	02.9	
Feelings of being Rejected			
Mild	324	22.0	
Moderate	876	59.6	6.62 - 7.03
Severe	156	10.6	
Very Severe	114	07.8	
Somatic problems			
Mild	156	10.6	
Moderate	1036	70.5	3.33 - 3.68
Severe	174	11.8	
Very Severe	104	07.1	
Depression			
Normal	41	02.8	
Mild	629	42.8	
Moderate	553	37.6	4.19 - 4.44
Severe	231	15.7	
Very Severe	16	01.1	
Total Problem			
Normal	301	20.5	
Mild	294	20.0	
Moderate	288	19.6	2.91 – 3.06
Severe	294	20.0	
Very Severe	293	20.0	

Severity of social and emotional problems have been categorised into five (5) levels, these include; normal, mild, moderate, severe, and very severe. Out of 1470 participants, 20.0% (02.91- 03.06%; 95% CI) reported having very severe emotional and behavioural problems. Among the different categories of emotional and behavioural problems, 14% reported having very severe Aggression, 9.7%, reported academic problems, 7.8% with feelings of being Rejected, 7.1% had somatic problems, 5.6% reported having anxiousness, 2.9% reported social withdrawal, and 1.1% reported having depression (Table 3).

Table 4

Distribution of gender on emotional and behavioural problems (N=1470)

Variables	Gender Male *f (%)*	Gender Female *f '(%)*	x 2 value	p-value
Anxiousness				
Mild	139(19.4%)	115(15.3%)	33.673	.000
Moderate	497(69.3%)	469(62.3%)		
Severe	57(7.9%)	111(14.7)		
Very Severe	24(3.3%)	58(7.7%)		
Academic problem				
Mild	100(13.9%)	124(16.5%)	2.878	.411
Moderate	445(62.1%)	438(58.2%)		
Severe	103(14.4%)	118(15.7%)		
Very Severe	69(9.6%)	73(9.7%)		
Aggression				
Mild	62(8.6%)	79(10.5%)	8.884	0.031
Moderate	347(48.4%)	407(54.1%)		
Severe	197(27.5%)	172(22.8%)		
Very Severe	111(15.5%)	95(12.6%)		
Social Withdrawal				
Mild	342(47.7%)	282(37.5%)	33.622	.000
Moderate	302(42.1%)	328(43.6%)		
Severe	65(9.1%)	108(14.3%)		
Very Severe	8(1.1%)	35(4.6%)		
Feelings of being Rejected				
Mild	176(24.5%)	148(19.7%)	19.923	.000
Moderate	439(61.2%)	437(58%)		
Severe	65(9.1%)	91(12.1%)		
Very Severe	37(5.2%)	77(10.2%)		
Somatic problems				
Mild	82(11.4%)	74(9.8%)	25.375	.000
Moderate	536(74.8%)	500(66.4%)		
Severe	67(9.3%)	107(14.2%)		
Very Severe	32(4.5%)	72(9.6%)		
Depression				
Normal	26(3.6%)	15(2%)	26.774	.000
Mild	324(45.2%)	305(40.5%)		
Moderate	279(38.9%)	274(36.4%)		
Severe	86(12%)	145(19.3%)		
Very Severe	2(0.3%)	14(1.9%)		
Total problem				
Normal	155(21.7%)	146(19.4%)	24.481	.000
Mild	162(22.6%)	132(17.6%)		
Moderate	150(21%)	138(18.4%)		
Severe	143(20%)	151(20.1%)		
Very Severe	107(15%)	186(24.8%)		

Regarding the severity of emotional and behavioural problems by gender, the overall emotional and behavioural problems were more common among females (24.8%) as compared to male participants (15%) with a statistically significant correlation ($p < 0.05$). Females were found to have 1-5% more emotional and behavioural problems as compared to their male counterparts in all sub-categories with statistically significant association ($p < 0.05$), However, males (15.5%) were found to have greater level of aggression as compared to female (12.6%). Further, females (9.7%) were comparatively scored on very severe category on academic problems, which is relatively higher than compared to males (9.6%) counterparts, but no statistically significant association was found ($p > 0.05$). (Table 4).

DISCUSSION

This study's findings reveal that 20.0% of adolescents had emotional and behavioural issues that at severe range (02.91-03.06 %; 95% CI), these are consistent with the findings by WHO on prevalence of emotional and behavioural issues,[4] however, this prevalence is greater than the earlier studies reported from Kenya (17%)[5] and China (17.9%).[6] The prevalence of emotional and behavioural issues found in this study is lower than the prevalence rates in another research study by researchers[7] in Pakistan (34.4% and 35.8%). The variation in the age range of research participants accounts for the lower prevalence estimates for emotional and behavioural issues in this study, as compared to other previous Pakistani studies. As most adolescents outgrow these issues as they get older, this also adds credibility to previous research that claims that these problems decline with age.[15,16]

When compared to the children of the same age in low and middle-income countries, the prevalence estimates show that mental health issues are more prevalent in Pakistani adolescents by a ratio of roughly 1:3. Particularly, these teenagers' scores on anxiety, depression, social withdrawal, somatic complaints, social issues, and overall problems were about twice than the other cultures.[15,16,5] Aggression and academic issues are more prevalent than other emotional and behavioural issues, which may be explained by teenagers being subjected to rigid compliance with social and cultural standards and verbal and/or physical abuse in their homes, schools, or the community.

A few of these risk factors might include chronic or infectious disease[17] and malnutrition,[18] a lack of parent-child interaction and ineffective parental supervision and control,[19] and poverty.[20,21] Other researchers also found that adolescents who are exposed to persistently high level of risk factors may have a chance of higher than average level of emotional and behavioural issues, which usually continue if the risk is not removed.[5]

In this study, females reported greater levels of psychological and behavioural issues than males, including anxiety, academic difficulties, social withdrawal, feelings of rejection, somatic issues, and depression. It appears that girls are more likely than boys to have these psycho-social problems, which is a continuing trend. Other studies from Pakistan, China, Kenya, India and Nepal found girls reported more issues (40% vs 20%) than boys did[7,6,5,1,22] and, supporting the general trend of gender differences in social and emotional problems. The disparity in gender roles and expectation between boys and girls is one of the plausible explanations for these findings. For instance, boys are typically assumed to be strong, resilient, confident, and independent in Pakistani society, whilst girls are assumed to be quiet, weak, and display nurturing behaviours.

Given the high prevalence of aggression issues and their potential significance as indicators of emotional issues, special consideration must be given to this issue. It is crucial that mental health professionals use the proper preventative measures to lessen social and emotional issues. Future empirical research on emotional and behavioural issues should also investigate the risk factors that may be present. Hence, an insight into pliable risk factors of emotional and behavioural problems in Pakistani adolescents would be available, and this insight shall serve as a crucial foundation for preventing and controlling the prevalence of emotional and behavioural issues.

There are some limitations to the current study, and these include: sampling technique (i.e., convenience) used in this study may hamper in generalisability of findings. Further, the study sample was drawn from only a few private sector secondary schools in Karachi, Sindh, so generalising findings by recruiting sample only from one city. Thus, future research may address these weaknesses by adding more samples from other provinces and adding the qualitative portion to that comprehensive information about the participants may be identified for future prevention and treatment interventions. Despite these drawbacks, the study sheds light on social and emotional problems faced by school-aged adolescents in this setting.

CONCLUSION

The findings revealed that about three-tenth of the school-age adolescents showed behavioural and emotional issues. There is a strong correlation between gender and emotional and behavioural problems. The results add to our understanding of the emotional and behavioural problems of adolescents, and may help us explain concerns regarding gender and academic context. In the current context, evidence-based prevention and treatment interventions are necessary to address the social and emotional problems of adolescents, and these interventions should be developmentally appropriate, and contextually relevant to address the diverse issues using different prevention approaches (i.e., universal, selective & indicated) to address each group's specific needs, nature, level and severity of problems.

IMPLICATIONS AND FUTURE RESEARCH

It is important to note that supporting adolescent adaptability in the school setting could be accomplished by early identification of emotional and behavioural problems, and then integration of Social and Emotional Learning (SEL) programs as part of regular school curriculum. This would be helpful in building resilience, promotion of mental health, and prevention of social and emotional problems at an early stage. These prevention interventions programs may help school administration, mental health experts, including school counsellors and other mental health experts in designing and implementing school based mental health services to improve adolescents' academic performance, mental well-being and quality of life. Additional research should be done to shed light

on more specific details. This study has few implications, and future research should focus on adding more variables related to intrapersonal, interpersonal and transitional domains to better understand the risk and protective factors for social and emotional problems. Further, future research should also focus on the parenting patterns and characteristics which have a significant contribution in shaping the personality of a child and developing appropriate interventions to strengthen the parenting skills for the positive personality development and growth of children and adolescents.

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