

## The relationship of adolescence disruptive behavior with anxiety, residence and sex

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### Abstract

Mental health in childhood is characterized by the achievement of development and emotional milestones, healthy social development, and effective coping skills; such that mentally healthy children have a positive quality of life and can function well at home, in school, and in their communities. The current study aimed to examine the association between the disruptive behavior and anxiety among adolescents in a community sample of Bangladeshi youth. The sample consisted of 100 adolescents aged 12–17 years. Cross sectional survey method was used to describe the data. Our findings lead to a number of conclusions. First Results indicate that adolescent's disruptive behavior has a positive correlation with anxiety ( $r=.274$ ,  $p<0.01$ ). This result may suggest anxiety as a factor for disruptive behavior. Second the examination of analysis of variance (ANOVA) revealed that sex has a significant effect [ $F=2.729$ ,  $df =1, 99$ ,  $p<.05$ ] on disruptive behavior as well. Third, in this study it is shown that adolescents who were female had less disruptive behavior ( $X =15.29$ ,  $SD=6.77$ ) than the male adolescents ( $X= 32.39$ ,  $SD=11.94$ ). Although future research is needed to examine the differences between male and female. A central conclusion of this study is that it is important to consider the sex, residence and other demographic data when assessing the factors associated with disruptive behavior.

**Keywords:** Mental health, adolescence, disruptive behavior, anxiety

### Introduction

Adolescence is the period of rapid growth between childhood and adulthood, including psychological and social development (Atwater 1992).

Throughout the literature, the term adolescence has been difficult to concretely define (Hine, 1999; Santrock, 2001). This may be due to the fact that adolescence requires consideration of multiple factors including age and contextual influences. In addition, adolescence is a cultural and social

phenomenon causing difficulty in defining the beginning and endpoints of this development stage (Santrock, 2001). The literature has suggested that adolescence is a relatively new phenomenon within Western societies and is viewed as a by-product of social pressures specific to culture (Hine, 1999).

Recent literature identifies several factors related to the development of disruptive behaviors. Genetic contributions to childhood aggression appear to be relatively

small (Jacobson, Prescott, & Kendler, 2002) and psychobiological influences are at best inconclusive (Hinshaw & Lee, 2003). Instead, a large emphasis is placed on the multifaceted and transactional causal factors for disruptive behaviors (Coie & Dodge, 1998; Hinshaw & Lee, 2003). The literature concerning underlying factors for disruptive behaviors converges on environmental factors. Most importantly, high levels of parental psychopathology, poverty, poor family functioning, dysfunctional parent-child interactions, and child abuse are thought to play a role in the severity of disruptive behaviors in children (Coie & Dodge, 1998). Associated variables with disruptive behaviors include, but are not limited to, cognitive deficits (Moffit & Lynam, 1994), difficulties in social-cognitive information processing (Crick & Dodge, 1994), and peer rejection (Coie & Dodge, 1998).

Adolescents often experience anxiety during this transitional phase related to social identification and interpersonal issues (Castellanos & Hunter, 1999). Furthermore, severe levels of anxiety have been associated with negative outcomes including peer relationship difficulties, academic issues, and future onset of comorbid disorders including major depressive disorder (Bernstein & Borchardt, 1999).

Low levels of anxiety and fear seldom elicit an avoidance reaction and tend to decrease in intensity with time and explanation (Marks, 1977). Furthermore, anxiety and fear are normative emotional reactions that increase physiological arousal to better equip individuals in preparing for anticipated danger.

### **Rationale of the study**

There is a growing appetite for mental health and wellbeing outcome measures that can inform clinical practice at individual and service levels, including use for local and national benchmarking. Despite a varied

literature on child mental health and wellbeing outcome measures that focus on psychometric properties alone, no reviews exist that appraise the association between the disruptive behavior and anxiety among adolescents including key implementation issues. This paper aimed to present the findings of the first review that evaluates existing broadband measures of correlation in terms of these criteria. Thus the findings of this research will be useful and meaningful in Bangladesh context.

### **Objectives**

The main objective of the present study is to find the relationship of adolescence anxiety with disruptive behavior. Following specific objectives of the study are to investigate

- (1) Variance in adolescence disruptive behavior according to adolescent's residence and
- (2) Variance in adolescence disruptive behavior according to adolescent's sex?

### **Methods and materials**

#### **Sample**

Cross sectional survey method was used for the present study. A total of 100 adolescent students were participating in this research. The sample was equally subdivided into boys (n=50) and girls (n=50). They were selected following convenient sampling method. The respondents were selected equally from different schools of the Dhaka city and rural area and the age range of the children of both the gender group was from 12-17.

#### **Measuring Instruments**

Following instruments were used to collect data of the present study.

1. Demographic and personal information questionnaire.
2. The adapted Bangla version of Beck Anxiety Inventory (BAI),(Uddin, Haque & Shimul,2011)

3. The adapted Bangla version of Beck Disruptive Behavior Scale (BDB), (Uddin, Haque & Shimul, 2011)

### **Demographic and personal information questionnaire**

This instrument was used to collect personal and demographic information such as age, gender, place of residence, socio-economic status.

### **Bangla version of Beck Anxiety Inventory**

The Bangla version of Beck Anxiety Inventory was developed by Uddin, M. K., Haque, A. U., & Shimul, A. M. (2011) to measure the severity of anxiety symptoms. It is a 20-item questionnaire that takes 5-10 minutes to complete. Each of the 20 items (anxiety symptoms) is represented by four statements reflecting increasing levels of anxiety. Using a 4-point scale ranging from 0 (not at all) to 3 (severely; I could barely stand it), participants rate the severity of each of the symptoms by indicating how much they have been bothered by the symptoms during the preceding week, including the test day. Severity scores for each question are summed, deriving a score ranging from 0-63. A minimal overall severity rating ranges from 0 to 7, mild from 8 to 15, moderate from 16 to 25, and severe from 26 to 63. Anxiety reaches a “clinical” level at a score of 16 or greater.

### **Bangla version of Beck Disruptive Behavior Scale**

The Bangla version of Beck Disruptive Behavior Scale was developed by Uddin, M. K., Haque, A. U., & Shimul, A. M. (2011) to measure the severity of disruptive behavior symptoms. It is a 20-item questionnaire that takes 5-10 minutes to complete. Each of the 20 items is represented by four statements reflecting increasing levels of disruptive behavior. Using a 4-point scale ranging from 0 (not at all) to 3 (severely; I could barely stand it),

participants rate the severity of each of the symptoms by indicating how much they have been bothered by the symptoms during the preceding week, including the test day. Severity scores for each question are summed, deriving a score ranging from 0-63. A minimal overall severity rating ranges from 0 to 7, mild from 8 to 15, moderate from 16 to 25, and severe from 26 to 63. Disruptive behavior reaches a “clinical” level at a score of 16 or greater.

### **Procedure**

Standard data collection procedures were followed in this study. At the beginning one hundred adolescent respondents were approached individually. Then the respondents were selected by telling them about the general purpose of the study and then good rapport was established with them. They were also informed that the exploration is purely academic and their responses would be kept confidential. The questionnaire was administered individually. Then the responses were taken by using three questionnaires. Beside this general instruction, each participant was given separate instruction for each of the measure and scales. They were also allowed to ask question freely if they had about any item of the scale. It took 15 minutes on average to complete the response for each participant. They were thanked at the end for their participation.

### **Data Analysis**

After collecting the data Correlation analysis and Analysis of Variance (ANOVA) were administered for data analysis with the help of statistical package for social sciences (SPSS).

### **Results**

Pearson product moment correlation and Analysis of Variance one way ANOVA were used to determine the relationship of anxiety, residence, and sex that influence

adolescent's disruptive behavior. The analysis is presented in table-1 through table-4.

**Table 1: Mean ( $\bar{X}$ ) and Standard Deviation (SD) of Disruptive behavior and Anxiety (N=100).**

Variables	Mean	Standard Deviation (SD)
Disruptive Behavior	23.67	12.88
Anxiety	25.65	8.89

Table 1 shows that mean of Disruptive behavior is 23.67 with Standard Deviation 12.88 and Anxiety 25.65 with Standard Deviation 8.89.

**Table 2: Correlation of Disruptive Behavior with Anxiety.**

Correlation of Disruptive Behavior	Correlation (r)	Level of significant (P value)
Anxiety	.274**	0.01

\*\*Correlation is significant at the 0.01 level (2-tailed).

Table 2 shows correlation indicated that disruptive behavior has significant positive correlation with anxiety [ $r = .274, p < 0.01$ ].

In Table 3, Disruptive behavior of adolescents by residence (Mean of urban=26.75 and Mean of rural = 20.33) is significant at the 0.05 level (2-tailed). Disruptive behavior of adolescents by sex (Mean of boy = 32.39 and Mean of girl = 15.29) is significant, which is significant at the 0.05 level (2-tailed).

As shown in Table 4, ANOVA indicated that in case of sex [ $F=2.729, df = 1, 99, p < .05$ ] there is a significant effect of it on disruptive behavior. In case of residence [ $F=1.219, df = 1, 99, p > .05$ ] it showed that there is no significant effect of residence on disruptive behavior.

Above all the results, it might be seen that anxiety is good predictor of disruptive behavior and there is sex difference as well.

**Table 3: Mean and Standard Deviation (SD) of Disruptive behavior score by Place of residence and Sex (N=100).**

Variables	Level	Mean	Standard Deviation (SD)	df	t	Significant level (2-tailed)
Residence	Urban	26.75	15.59	98	2.557	0.012
	Rural	20.33	7.98	98		
Sex	Boy	32.39	11.94	98	8.852	.000
	Girl	15.29	6.77	98		

**Table 4: Summary of ANOVA of Disruptive behavior by Sex and Residence.**

Sources		df	SS	MS	F	Sig.
Sex	Between Groups	42	16.69	.397	2.729	.000
	Within Groups	57	8.30	.146		
	Total	99	24.99			
Residence	Between Groups	42	11.81	.281	1.219	.241
	Within Groups	57	13.15	.231		
	Total	99	24.96			

**Discussion**

The present study was undertaken to examine the relationship of adolescent's disruptive behavior with anxiety, place of residence and sex. And correlation between disruptive behavior and anxiety were calculated to achieve this end. To assess the effect of place of residence and sex on disruptive behavior the ANOVA was performed.

Adolescence is one of the most significant periods in one's life. This period is vital both for their physical and psychological effects. Disruptive behavior is common and has a negative impact throughout the whole life. Scientific study of adolescent disruptive behavior is important because it has many to do with the quality of life. Anxiety was the important predictor of adolescent disruptive behavior. Result shows that disruptive behavior is positively correlated with anxiety ( $r=.274$ ,  $p<0.01$ ), meaning adolescent who have high anxiety have higher disruptive behavior. (Frick and colleagues, 1999).

Results support that adolescents disruptive behavior has a positive correlation with the anxiety ANOVA indicated that sex has a significant effect [ $F=2.729$ ,  $df =1$ ,  $99$ ,  $p<.05$ ] on disruptive behavior. In case of place of residence there is no significant effect on disruptive behavior was found. In adolescence period there is no significant variances between urban and rural that means place of residence has no significant effect on disruptive behavior in adolescence period. In this study female adolescents had less disruptive behavior ( $X=15.29$ ,  $SD=6.77$ ) than male adolescents ( $X=32.39$ ,  $SD=11.94$ ). Historical story can help to explain why men children are more violent than women. The men who hold power will fight to keep it and men who find themselves without economic resources feel entitled to acquire things by force if they see no other way. Male adolescents get negative more attention from the family than female

adolescents. As explanation it may be said that, In Bangladesh most are the families are male dominated. (Khatun & Rahman, 2012) in most of the case boys or males usually receive the maximum love and affection in terms of negative attention. In this present study researcher tried to identify determinants and correlates of adolescent disruptive behavior within Bangladeshi culture. Aggression or disruptive is a complex problem, which no simple biological approach can diagnose or remedy. Factors such as political instability, population density, and income inequality are associated with massive differences in violence across cultures, and these differences are observed while gender ratios remain constant.

Results of this study revealed that anxiety and sex are predictors of adolescent disruptive behavior. However the study suggests further research using larger samples and the appropriate sampling technique to come up with more reliable findings. Additional research needs to be conducted to determine the gender difference and its causes particularly in Bangladesh where females are suppressed. Lastly there are many other variables (like socio-economic status and genetic influences) which may influence which could not be investigated in the present study.

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