

Research Article**REDUCING AGGRESSIVE BEHAVIOR AMONG UNDERGRADUATE STUDENTS THROUGH PSYCHOEDUCATION****Noor Muhammad^{1*}, Shilpi Rani Saha², Bijon Baroi¹ and Jannatul Ferdous¹**¹*Department of Psychology, Jagannath University, Dhaka,*²*Institute of Education and Research (IER), Jagannath University, Dhaka**Received: 04 October 2020, Accepted: 29 June 2021***ABSTRACT**

Aggression is increasing at an alarming rate among the young generation. It is the propensity of harming or injuring people, property etc. where psychoeducation is thought to effectively play a role in reducing aggressiveness among students. The present study is intended to investigate the effectiveness of psychoeducation in reducing aggressive behavior among undergraduate students in Dhaka city of Bangladesh following pretest-posttest control-group design. Thirty undergraduate male students were purposively selected as participants from Jagannath University, Dhaka, based on some inclusion and exclusion criteria and were assigned into experimental and control groups (15 students in each group) following simple randomization technique. Data were collected from the participants using the adapted Bangla version of the Buss Perry Aggression Questionnaire (BAPQ) before and after receiving psychoeducation. The experimental group received two psychoeducational sessions (once in a week with duration of 3 hours) after pre-assessment but the control group didn't receive any psychoeducation. Four weeks later from the pre-assessment phase, again BPAQ was used to measure aggressive behavior to monitor differences between pre and post assessment scores for both groups. Results of the study indicated that aggressive behavior i.e., physical aggression, verbal aggression, anger, and hostility were significantly decreased ($p < .001$) and 90% of the variance of total remaining scores was due to the effect of the program for the experimental group only and there was no change in the control group. The outcomes of this study provide a direct indication that psychoeducation program can be planned on a large scale and implemented as an initial intervention strategy to lessen aggression among the students of different educational institutions like schools, colleges, universities, and madrasas of Bangladesh.

Keywords: *Psychoeducation, aggressive behavior, undergraduate students***Introduction**

Aggressive behavior may take place in the forms of verbal (e.g., shouting, cursing, name calling etc.), physical (e.g., beating, kicking, stabbing, shooting etc.), or gestural ferocious or destructive acts (Zinatmotlagh *et al.*, 2013; Motevalian *et al.*, 2011). It is directed towards any living being,

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personal property or other objects with an intention of damaging or hurting them (Mahmood and Kakamad 2018). In recent years, aggressive behaviors have increased harshly among school, college, and university students (Kevin *et al.*, 2001) irrespective of their age and class. UNESCO (2017) reported that 246 million students around the world experience physical and verbal aggression due to different biological, environmental, societal, cultural, and psychological factors (Blair 2016).

Poverty (Hill *et al.*, 1994); psychological distress (Villarreal-Gonzalez *et al.*, 2011); lack of empathy (Mestre *et al.*, 2012); social inequality; feelings of deprivation, hopelessness, and anger; negative attitudes towards studies, school, and teaching staff (Estevez *et al.*, 2013); academic pressure, unfavorable relations with peers (Amuda-Kannike Mariam 2018); conflicts in the family (Wienke *et al.*, 2009); negative social relationships (Eccles and Roeser 2011) and communication pattern (Markovic 2015) etc. are considered as some risk factors for aggression. A study carried out with 352 secondary students where school setting, age, perceived parental warmth were found as significant predictors of aggression (Fayso 2019). Another study was conducted over 601 students of Kermanshah University of Medical Sciences, Iran. Almost 15.3% of the participants were aggressive where marital status and smoking were the most influential predictive factors on aggressive behavior (Mirzaei-Alavijeh *et al.*, 2015).

Aggressive behaviors among the students are often connected to consequential criminal offenses, interpersonal problems, poor adjustment, impeding learning etc. (Coie *et al.*, 1995). Different studies have shown that aggression is higher among males as compared to females (Hassan *et al.*, 2015; Akhtar and Kushwaha 2015; Talukdar and Deka 2014; Averil 2012). A study was conducted at Tafila Technical University, Jordan and found high aggressiveness among male students. This study also found that 3rd and 4th year students were more aggressive as compared to the 1st and 2nd year students (Qaisy 2004). The physiological construction of males' bodies and their social exposure lifts them to higher levels of physical aggression (Loeber and Stouthamer-Loeber 1998). On the other hand, females' nature and socializing make them comparatively less aggressive.

A number of programs have been implemented in educational institutions of different countries with the aim of preventing and reducing aggression among the students (Simons-Morton *et al.*, 2005; Baldry and Farrington 2004; Menesini *et al.*, 2003). Psychoeducational program is one of the earliest intervention approaches used in educational institutions (Boyle 2007; Baldry and Farrington 2004; Larson and Lochman 2002). Ando *et al.* (2007) also found psychoeducation as effective for averting aggressive behaviors among Japanese early adolescents. Psychoeducation is the methodical and planned educational information and training on psychological complications and related treatment that is provided to empower sufferers as well as their family members to cope with the ailment, enhance the quality of life (Bauml and Pitschel-Walz 2008), promote mental health and handle negative emotions (Lukens and McFarlane 2004).

Rationale of the Study

Existing research evidence suggests the drastic rise in aggression during the last decades and its negative effects on human interactions and relationships (Zinatmotlagh *et al.*, 2013). It may cause devastating incidents at any time both for the students and others also. Therefore, it is necessary to find out aggression levels and how to reduce the aggressive behavior of students in the context

of Bangladesh. Aggressive behavior could depressingly impact students' personal, social, and educational life (Smith *et al.*, 1998) and if not controlled earlier, it may cause subsequent criminal behaviors in the future too (Jennifer *et al.*, 1990).

In recent years, there has been a remarkable rise in violent and aggressive behaviors among the youths (males) of Bangladesh also. As psychoeducational programs have been found to be effective for coping with aggression and promoting behavioral change among students across the world (Boyle 2007; Baldry and Farrington 2004; Larson and Lochman 2002). It is the demand of the time to design and implement psychoeducation program in Bangladeshi context as an initial approach to reducing aggression among the students. So, the authors of the present study were interested in designing a psychoeducation program to observe its effect on reducing aggressive behavior. The outcomes of the study would likely be helpful for the students, parents, school personnel, therapists, and psychologists to understand the importance of arranging psychoeducational programs in reducing aggression and violence among the students. It will also insert new knowledge into existing literature.

Objectives of the Study

The main objective of the study was to investigate the effect of psychoeducation in reducing aggressive behavior among the undergraduate male students of Jagannath University. The specific objectives were to:

- i) develop psychoeducation materials;
- ii) assess the level of aggressive behavior (i.e., physical aggression, verbal aggression, anger, and hostility) among the undergraduate male students;
- iii) investigate the effect of psychoeducation in reducing a) physical aggression, b) verbal aggression, c) anger, and d) hostility.

Materials and Methods

Participants

Total 30 undergraduate male students were purposively selected as research participants based on some inclusion criteria (i.e., participants who scored high in aggression questionnaire with no known psychological problems) and exclusion criteria (i.e., participants who were not interested to attend the program at the time of data collection and psychoeducation program and had participated in such type of training where learned skills or knowledge were related to psychoeducation program) from Jagannath University, Dhaka, Bangladesh. Participants were assigned into experimental and control groups (15 participants in each group).

Study Design

The present study was carried out by following pretest-posttest control- group design under quasi-experimental design. This study was designed to see the effect of psychoeducation on reducing aggression of undergraduate male students.

Psychoeducation

The psychoeducation material for this study was designed based on the psychoeducational program of Ando *et al.* (2007) within the context of Bangladeshi educational system norms as well as considering students' views, expectations etc. The investigators spent considerable time observing university student's life, identifying key issues, and events of the students. The final

psychoeducation material was prepared by following several steps including materials collection from various sources, evaluation by relevant experts, pilot testing etc. The plan with activities and purpose of the psychoeducation program is given at Table 1.

Table 1. Summary of sessions performed in the present study.

Session	Lesson	Activity	Purpose
Session 1	Lesson 1	Creating the successful self	Promoting the understanding of self and creating a positive self-image and making some effective goals in life.
	Lesson 2	Recognize inner distress	Make the students able to identify and manage their own psychological distress.
	Lesson 3	Developing empathetic skills	Foster empathy toward others.
Session 2	Lesson 4	Developing dysfunctional attitude changing skills	To develop skills for maintaining a positive or functional attitude, and view things from different perspectives.
	Lesson 5	Problem solving skills	Make the students able to deal with their problems without depending on others.
	Lesson 6	Identifying and resolving one's own conflict	Getting insight about how conflicts are created in life and enhancing skills to manage or reduce conflicts.
	Lesson 7	Developing non-violent communication (NVC) skills	Be able to communicate with others without being violent.

Measures

The following measures were administered to collect data.

i) Personal Information Form (PIF).

PIF was used to collect the socio-demographic information of participants like age, gender, socioeconomic status, semester, and department.

ii) Adapted Bangla Version of the Buss-Perry Aggression Questionnaire (BPAQ).

BPAQ (Buss and Perry 1992) consists of 29 self-administered items rated on a 5-point Likert-type scale which is used to assess intensity of aggressive behavior both in full scale and four subscales-Physical Aggression (PA, items 1-9), Verbal Aggression (VA, items 10-14), Anger (An, items 15-21), and Hostility (H, items 22-29). The score for each scale is the sum or the ratings for its items. Two items (7 and 18) are worded in the opposite direction to aggression and are reverse-scored. The total score for aggression is the sum of these subscales scores. Higher scores indicate higher aggressive behavior, yielding a minimum score of 29 points and maximum score of 145.

The internal consistency coefficient for the four dimensions was 0.72, 0.82, 0.83, and 0.77 for verbal aggression, physical aggression, anger, and hostility respectively and it was 0.89 for the total aggression. Test-retest reliability (nine weeks) for the four subscales and total score ranged from 0.72 to 0.80. The BPAQ scale was adapted in Bangla by Muhammad *et al.* (2019). To

ascertain the reliability of the instrument, it was administered to 30 undergraduate students. Analysis of the aggression questionnaire revealed the internal consistency in both full scale (Cronbach's Alpha, $\alpha = 0.81$) and within four dimensions of the scale i.e., verbal aggression, $\alpha = 0.74$, physical aggression $\alpha = 0.77$, anger $\alpha = 0.80$, and hostility $\alpha = 0.83$ which was high. This value indicated that the Bangla version of the aggression questionnaire is reliable to use.

Procedure

Official approval for space, co-operation, and assistance was obtained from the authority of Jagannath University. For taking consent at the pre-assessment phase, each respondent was briefed about the general purpose of the study. The respondents were also assured that all information given by them would be kept confidential and used only for research purposes. Both written and verbal instructions were provided to them for clarification about what to do and how to fill up the whole questionnaire. Questionnaires were administered to 210 undergraduate male students of Jagannath University, Dhaka. Among them, based on inclusion-exclusion criteria, finally 30 students were identified for participation who met the purpose of the study. Then the selected participants were divided into two groups (experimental and control group) by a simple randomization technique.

After that, the participants of the experimental group received training on self-management, problem solving skills, Non-violent Communication (NVC), empathetic skills, managing relationship conflicts, and techniques of altering negative attitudes towards others. The training program was implemented within two sessions (once in a week) involving various single and group activities. The duration of each session was three hours. One of the reasons for conducting the program in two sessions was the reduction of the likelihood of dropout. But the participants of the control group did not receive any training. Aggression questionnaire was administered again to all participants of both groups in the post-assessment phase with an interval of approximately four weeks from the pre-assessment phase. After collecting information, respondents were thanked for their cooperation.

Results and Discussion

In accordance with the objectives of the present study, the obtained data were analyzed using descriptive statistics like mean and standard deviation of pretest and posttest of both groups and inferential statistics such as ANCOVA and Eta coefficient were used with the help of SPSS version 23. The findings are presented in the following.

The Reliability of Difference Scores

To assess the effectiveness of the psychoeducation program, BPAQ was administered to participants before and after intervention. Through a formula of the reliability of difference scores (Kline 1996) was calculated. From the calculation, it was found that the difference score reliability in experimental and control groups were 0.50 and 0.54 (approximately the same) which was low but acceptable.

In order to compare the mean and standard deviation of aggressive behavior along with its four dimensions of two groups both in pre-test and post-test, descriptive statistics were calculated. The Mean and SD in Table 2 shows the difference between the two groups.

Table 2. Mean Difference of aggressive behavior with its four dimensions before and after application of psychoeducation between experimental and control group scores.

Attributes	Group	Pre-test		Post-test	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Physical aggression	Experimental (15)	35	4.02	24.67	2.38
	Control (15)	33.27	2.09	32.93	3.50
Verbal aggression	Experimental (15)	21.67	2.82	15.80	2.54
	Control (15)	23.73	3.34	23.33	2.82
Anger	Experimental (15)	29.53	2.13	23.67	3.37
	Control (15)	30.20	2.63	30.40	2.90
Hostility	Experimental (15)	33	2.48	26.60	3.85
	Control (15)	32.27	2.94	32.47	2.17
Total Aggression	Experimental (15)	119.07	5.30	90.73	8.53
	Control (15)	119.20	3.95	119.07	5.23

Results presented in Table 2 showed that the levels of physical aggression, anger, and hostility were comparatively higher than verbal aggression among the students. The mean scores had reduced in the posttest as compared to the pretest within four dimensions of aggressive behavior as well as total aggression. But in control group where psychoeducation was not applied the mean scores in pre and posttest were approximately same which indicates that psychoeducation played role in reducing aggressive behavior in terms of physical aggression, verbal aggression, anger, and hostility among undergraduate male students by filling-up their knowledge gap and enhancing their social skills. The finding is supported by previous studies also (Boyle 2007; Baldry and Farrington 2004; Larson and Lochman 2002). Moreover, as the newly developed psychoeducation material has a great effect on reducing the aggressive behavior among students, it can be said that this program is valid for reducing aggression.

To compare the effectiveness of psychoeducation on the experimental group compared to the control group, analysis of covariance was applied and the results are shown in Table 3 and 4.

Table 3. Analysis of covariance (ANCOVA) model representing experimental and control groups on posttest score by removing the effect of pretest score on aggressive behavior.

Statistical Indicators	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>p</i>	Partial Eta Squared
Pre-test (covariate)	706.221	1	706.221	27.410	.000	.504
Groups	5958.782	1	5958.782	231.277	.000	.895
Error	695.645	27	25.765			
Total corrected	7422.700	29				

Results reported in Table 3 showed a significant difference in aggressive behavior [$F(1, 27) = 231.28, p < 0.001$] between the experimental and control groups whilst adjusting for pretest scores of aggressive behavior scores. Therefore, the psychoeducation program decreases aggressive behavior in the experimental group as compared to the control group. In other words, 90% of the variance of total remaining scores is due to the effect of the program. The findings of the present study have shown that students after participating in the psychoeducation program had experienced lower levels of aggressive behavior as compared to the students of the control group.

Table 4. Analysis of covariance (ANCOVA) model representing experimental and control groups on posttest score by removing the effect of pretest score for four dimensions.

Aggressive Behavior Dimensions	Statistical Indicators	Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	<i>p</i>	Partial Eta Squared
Physical aggression	Pre-test	15.770	1	15.770	1.816	.189	.063
	Groups	523.081	1	523.081	60.228	.000	.690
	Error	234.497	27	8.685			
	Total corrected	762.800	29				
Verbal aggression	Pre-test	4.480	1	4.480	.613	.440	.022
	Groups	407.668	1	407.668	55.801	.000	.674
	Error	197.254	27	7.306			
	Total corrected	627.367	29				
Anger	Pre-test	12.595	1	12.595	1.286	.267	.045
	Groups	315.235	1	315.235	32.199	.000	.544
	Error	264.339	27	9.790			
	Total corrected	616.967	29				
Hostility	Pre-test	85.653	1	85.653	12.322	.002	.313
	Groups	295.560	1	295.560	42.520	.000	.612
	Error	187.680	27	6.951			
	Total corrected	531.467	29				

Results reported in Table 4 indicates that there was a significant difference in the four dimensions of aggressive behavior (i.e., in physical aggression, [$F(1, 27) = 60.23, p < 0.001$]; in verbal aggression, [$F(1, 27) = 55.80, p < 0.001$]; in anger, [$F(1, 27) = 32.20, p < 0.001$]; in hostility, [$F(1, 27) = 42.52, p < 0.001$]) between the experimental and control groups whilst adjusting for pre-test score of each four dimensions of aggressive behavior scores. Therefore, the psychoeducation program played a role in decreasing aggressive behavior in the experimental

group as compared to the control group. In other words, in the case of four dimensions of aggression- physical aggression, verbal aggression, anger, and hostility 69%, 67%, 54%, and 61% of the variance of total remaining scores respectively are due to the effect of the psychoeducation program. The findings of the present study have shown that students after participating in the psychoeducation program had experienced lower levels of aggression in terms of physical aggression, verbal aggression, anger, and hostility as compared to the control group of undergraduate male students.

Conclusion

The present study had some limitations which could be addressed by future researchers. Firstly, the study was conducted on a small number of participants and they were selected from only one university located in Dhaka city. Secondly, the psychoeducation program was confined only within two sessions. Further research can be planned with large sample covering different educational institutions. Additional related aspects in reducing aggression as well as enhancing interpersonal and social skills among the students can be included in a psychoeducational program to promote mental health among the youths. Follow up assessment is also required to prevent relapse and confirm the long-term effect of psychoeducation as an intervention strategy.

Regardless of all the limitations, by focusing on the findings of the present study and supportive evidence it can be summarized that psychoeducation even if it is short-term, can significantly reduce aggressive behavior among students by filling up the gap or upgrading their knowledge. These types of programs can be introduced and continued not only for the university students but also for the students in various streams or levels all over Bangladesh to prevent aggression and remove negativity among the students. But caution must be taken about misinformation. Besides, if possible, some of these programs can be included in the regular curriculum.

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