



AGGRESSION AND SELF-ESTEEM: A CROSS-SECTIONAL STUDY AMONG SCHOOL GOING ADOLESCENTS OF NEW DELHI

Dr Mukesh Kumar	Public Health Specialist, AFMS, New Delhi
Dr Richa Kapoor	Director Professor, Department Of Community Medicine, Vardhman Mahavir Medical College, New Delhi
Dr Arpita Goswami	Reader, Department of Periodontology, IP Dental College, Sahibabad (UP).

ABSTRACT **Background:** There has been increase in incidents of aggression among youth in society. Relationship between aggression and self-esteem among adolescents has received renewed attention in recent past. **Aim:** To determine the prevalence of aggression and levels of self-esteem among school going adolescents of New Delhi. **Methods:** It was a cross sectional study conducted with a questionnaire semi structured in nature, having questions related to socio-demographic profile, BPAQ (Buss and Perry Aggression Questionnaire) and RSE (Rosenberg Self Esteem) Scale. Data was analyzed using appropriate statistical tests. **Results:** A total of 463 students of 10 to 19 years were included in present study. 66.3% of them were males and rest were females. The mean age of study participants was 13.78 ± 2.072 years. About 46.2% study participants scored high for physical aggression; 65.2% of them scored high for verbal Aggression; 48.8% scored high for anger while 57.2% scored high on hostility scale. 44.1% of the participants scored high on Self-esteem. Low scores on Self-esteem were found to be significantly associated with hostility. **Conclusion:** Most of the adolescents have high levels of aggression, Verbal aggression being the major one. Self-esteem levels appeared to be low in majority of adolescents. Low self-esteem may lead to increased hostility. Special attention is needed to look for various contributing factors and appropriate management methods are needed to be explored.

KEYWORDS : Aggression, Self-esteem, Adolescents, School-going, Buss and Perry

INTRODUCTION

There are specific health and developmental needs during the phase of adolescence in one's life. During this phase only one leads towards developing an identity. Knowledge and skills are developed during this phase only which is also a time when one learns to balance emotions and relationships and develop abilities and attributes that will be necessary for enjoying the adolescent years and to assume adult roles [1].

Adolescence is a time when one has many things in mind and a sense of immense energy is felt which is to be utilized or expressed in some way. It is always not necessary that this expression is direct and sometimes it comes out in the form of aggression.

Aggression is the delivery of an aversive stimulus from one person to another, with intent to harm and with an expectation of causing such harm, when the other person is motivated to escape or avoid the stimulus [2]. Various types of aggression are described based upon the form of expression. Aggression may be physical or verbal. It may also be expressed as anger or hostility.

There has been increase in cases of aggression among youth of the society in the recent past [3].

Self-esteem is an important variable which can be related to aggression. Self-esteem can be broadly defined as the "overall evaluation of oneself in either a positive or negative way" [4].

Over the past decade there has been renewed attention towards relationship between aggression and self-esteem observed amongst adolescents and it is currently among topics of debate among many researchers [5]. One side of the argument focused on the 'low self-esteem hypothesis' in which research suggests that the individual who has real-world externalizing problems, he/she will report lower levels of self-esteem. This suggests that aggression and anti-social behavior are an expression for low self-esteem [5-8]. Individuals with low self-esteem may be provided an increased sense of power and independence by aggression, suggested Ostrowsky in his study [9].

Hence, the present study was conducted to determine the prevalence of aggression and levels of self-esteem among school going adolescents and the relation between these to guide further research in the field for prevention, early detection and appropriate management of aggression among the adolescents.

MATERIALS & METHODS

A cross sectional study was conducted from January-December 2016 in a government aided school of Delhi. Among 11 administrative

districts of Delhi, one district was identified by Simple Random Sampling (Lottery Method) for conducting the study. List of all Government and Government aided schools which were Co-Educational, Senior Secondary and having a minimum strength of 1000 student was prepared. Among these schools, one school was selected by simple random sampling method.

The study subjects for this study were students studying in class 6th to 12th from the selected school. All those who fulfilled the inclusion criteria and gave consent for the study were included as study subjects.

Sample Size

The sample size was calculated using prevalence of verbal aggression reported by Debashis Dutt et al [10] in their study conducted under similar conditions in West Bengal during December 2009. Using that prevalence of 56.8%, the sample size for the present study was calculated using the formula $N = 4PQ/L^2$. L was taken to be 5%. The sample size was calculated as 392.

The total number of classes to be studied was seven. So, 65-70 students from each class who satisfied inclusion criteria were selected for the study. All students who consented were included in the study by following the sampling strategy.

Study Tool

A pretested, semi-structured and self-administered questionnaire with components of Socio-demographic Profile, and standard and validated scales for Aggression, and Self-Esteem was used. Bilingual questionnaire, containing both the English and the Hindi versions were used so that it was easily understood by all the students.

Aggression was measured using Buss and Perry aggression Questionnaire (BPAQ) [11] which is the revision of Buss-Durkee Hostility Inventory. It is scored on a five-point scale. Total score on the BPAQ ranges from 29 to 145 and mean score is taken as cut-off. A study participant scoring more than mean score was considered aggressive.

Self-esteem was measured using Rosenberg Self Esteem scale (RSE) [12] which is a ten-item questionnaire measuring global self-worth by considering both positive and negative feelings about self. All items were answered using a 4-point Likert scale with responses ranging from "strongly agree" to "strongly disagree". Total of scores of all 10 items were taken. Mean score was taken as cut-off. Study participants scoring more than mean were considered to have high self-esteem and vice versa.

The study protocol was approved by the Institutional Ethics Committee (IEC) of the hospital where study was conducted.

The purpose of the study was informed in detail to the principal in charge of the selected school and permission to conduct the study was taken. All the students were also briefed about the purpose of the study and written assent was also taken from each student.

The confidentiality of the subjects was maintained always during the study. In case of any student scoring high on aggression he/she was referred to psychiatrist for further evaluation and management as needed.

Data was analyzed using MS Office Excel 2016 and SPSS (IBM SPSS Statistics licensed version 21.0; IBM SPSS, 2012). Bivariate analysis for determining association between aggression, self-esteem, resilience was done using Chi-square test.

Significance of difference in proportions (qualitative variables) was calculated using Pearson's correlation coefficient. p value considered significant at 0.01 level for Pearson's correlation.

RESULTS

The study was conducted among 463 adolescents of a government aided school of central district of Delhi. The response rate was 100%.

Age of participants ranged from 10 years to 18 years with mean age of study participants being 13.78 years (SD = 2.86 years).

When evaluated for aggression over the Buss and Perry Aggression Questionnaire, the mean score on total of BPAQ in the present study came out to be 74.68 with standard deviation of 1.68. Half of the participants (50.1%) were found to have aggression according to the scale. Self-esteem of study participants was evaluated over RSE, on which total score ranges from 10 to 40 and mean score was found to be 22.56 (SD = 4.451) (Table 1/Figure 1). Out of 463 respondents, 204 (44%) participants had high self-esteem whereas 56% had low self-esteem.

Pearson's correlation coefficient was calculated between BPAQ total scores and RSE scores. It was found that BPAQ total scores were significantly and negatively correlated with RSE scores at 0.01 level (p=0.000) (Table 2/Figure 2).

DISCUSSION

Aggression was measured using BPAQ and the mean score on total of BPAQ in the present study came out to be 74.68 with standard deviation of 1.68. A similar mean score of 80.24 with standard deviation of 19.59 was reported by Manoj Kumar Sharma and Palaniappan Marimuthu in their study of 2014 involving youths of different communities [3]. Another study done in 2014 by Ali Alami et al among more than 10000 students of three universities of Ganabad, Iran also reported mean score of 72.45 with standard deviation of 15.49 [13]. Such results indicate towards the similar aggression profile among adolescents across the world.

The prevalence of aggression among school adolescents in present study is 50.5%. This is comparable to those reported by Rashmi Ranjan Puhana et al in their study exploring aggression among students of government and private schools of Odisha with 45.5% of the study participants having high aggression but results from the present study differed from those of study by Manoj Kumar Sharma and Palaniappan Marimuthu conducted among youth of different communities where, only 17.7% of youth was found to be aggressive [14,3]. This difference may be attributed to the large sample size and a wide age group considered by authors in the above-mentioned study.

In the present study, the mean score in Rosenberg Self Esteem (RSE) scale was 22.56 with a standard deviation of 4.451. Similar mean scores were also reported by Fareeda Shaheen and Musaddiq Jahan in a study conducted among senior secondary school students of Aligarh Muslim University, Aligarh where mean score was 19.02 with standard deviation of 4.905 and also by Shobhna Joshi and Rekha Srivastava in a study conducted among rural and urban adolescents of Varanasi reporting mean score of 20.30 with standard deviation of 4.50 [15, 16].

More than half (56%) of the study participants were found to have low levels of self-esteem. Very scanty literature was available on the prevalence of self-esteem among the adolescents based on RSE.

In the present study, it was found that BPAQ total scores were negatively and significantly correlated with RSE scores indicating a negative correlation between aggression and self-esteem (p = 0.000 at 0.01 level). These findings were like those reported by Razieh Kamal and Venkatesh Kumar G in their study done among adolescent students of Bangalore where self-esteem and aggression were negatively and significantly correlated [17].

Limitations of the study included the problem of under-reporting and/or over-reporting associated with the questionnaire being self-administered. Also, since the study was conducted in a single school, the findings may not be generalised to the population at large. The study being a cross sectional study was not expected to find a temporal association and, so it is not possible to comment if the aggression was responsible for low self-esteem seen in the adolescents or vice-versa.

Table 1/figure 1: Aggression And Self-esteem Scores Of The Study Participants

Variable	Mean	Standard deviation
Aggression	74.68	1.68
Self-Esteem	22.56	4.451

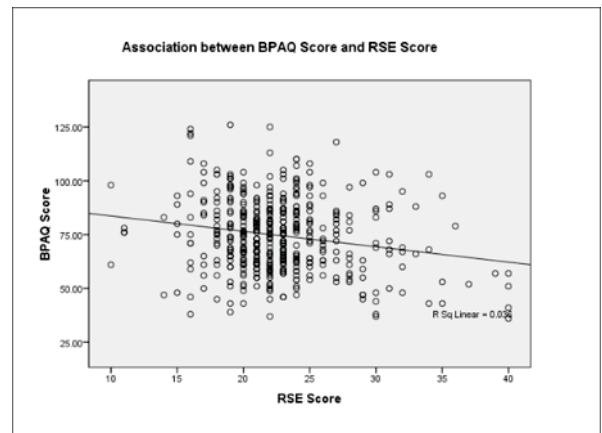


Table 2/figure 2 : Scatter Plot To Depict Association Between Aggression And Self-esteem

CONCLUSION

It was also found that half of the study participants were aggressive and 56% of the study participants had low self-esteem. Aggression was negatively correlated with self-esteem and this association was found to be statistically significant. This finding of high prevalence of aggression and its correlation with low self-esteem carries significance for parents, schools and the society at large. Adolescents with low self-esteem have problems in adjusting to life problems and coping with stressful situations. This can lead to these adolescents growing up with mental health problems and not being able to develop to their full potential. So, communities need be made supportive, providing safer and enabling environment, so that adolescents feel connected with adults and the community and there will be less chances of aggression and violent behaviour.

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