



A Co-Relational Study to Assess Relationship between Anger, Self-Injury and Hostility among Adolescents

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ABSTRACT

Adolescents are the young people age group between 10-19 years. In today's world anger has become a very common and serious issue in adolescent's life. They have become more prone to self-injury and hostility because of their anger issues and unexpressed feelings. So it becomes important to put focus on this area and help the adolescents in dealing with their feelings of anger, self-injury, and hostility. To assess anger, self-injury, and hostility and their relationship with each other among adolescents. A quantitative approach and co-relational design were adopted; the sample comprised 330 adolescents selected using total enumerative sampling from selected schools of dist. Sirmour (H.P.). Data was collected using the Modified Clinical Anger Scale, Ottawa Self Injury Inventory, and State Hostility Scale. The results of the study showed that 10% had moderate and 9% has severe anger scores, regarding the hostility 86% had moderate and 3% had a severe level of hostility and only 3% of the adolescents were involved in self injury. There was a positive correlation found between anger and self-injury scores of the adolescents at a $p < 0.001$ level of significance. The present study showed that adolescents had anger and hostility issues, but the intensity of the self-injury is less compared to their anger and hostility scores. Anger is positively correlated with self-injury and hostility, so there is a need to plan for interventional strategies to manage anger, self-injury, and hostility.

Key Words: Anger, Self-injury, Hostility, Adolescents.

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INTRODUCTION

The World Health Organization (WHO) defines adolescents as people who are in the age group between 10-19 years.¹ During adolescence the individual expands the knowledge, skills, along with capability to learn how to handle emotions and relationships [2]. Adolescence is a period where the child has to undergo different changes and faces a lot of problems in almost every aspect of his/her life [3]. According to Bernard Gold anger can be defined as "an emotional and subjective experience. It is separate and distinct from the physical reactions that might result from it [4]. There are undeniable proofs that show that the children and adolescents who are more in touch with an aggressive environment ultimately will reflect more aggression in their behavior. The aggressive environment can include aggression on television, video games, and observing the aggressive behavior of others [5]. There are lot many theories related to the development of children/ adolescents some of which are the psychosexual theory of development, Psychosocial theory of development, Morality, and cognitive theory of development. The Frustration-Aggression Theory states that aggression is the result of some kind of frustration. In the Social Learning Theory given by Bandura in 1965, it has been stated that aggressive behavior can be cultivated by reinforcement, imitation, or modeling. Different studies down the line also observed children recalling the aggressive behavior for eight months or more [6].

NEED FOR THE STUDY

A descriptive study estimated the prevalence of physical aggression falls between the range of 17.7% overall to 66.5%. Boys were more physically aggressive than girls and the girls were more aggressive verbally [7]. The mean score of aggression was high than that of females. In males' verbal aggression, physical aggression was experienced more than in females. The age group of 16-19 years experienced more aggression than the age group of 20-26 years [8]. A research conducted by the Institute for Health Metrics and Evaluation (IHME), 2013 showed that self-harm is the topmost reason for deaths among adolescents (15-24 years) in India causing around 60,000 deaths annually. The findings of the study also revealed that the incidence of self-harm has increased due to stress and changes in lifestyle [9]. The result

of a meta-analysis of all the community-based studies on self-harm among adolescents from the year 1990 to 2015 included data from 41 countries and 172 datasets reporting self-harm in 597,548 participants. The prevalence of self-injury got increased in 2015 whereas the overall lifetime prevalence was found to be 16.9%. Girls were more prone to harm themselves as compared to boys. The mean age of doing self-harm was found to be 13 years, and 47% of the participants reported only 1 or 2 episodes of self-harm, about the method of doing self-harm, cutting was found to be the prevalent method with 45% of responses. The most common reason that the adolescents gave for self-harm was relief from negative thoughts or feelings [10]. After an extensive search for a review of literature it was found that limited studies were conducted in relation to anger, self-harm, and hostility. Most of the studies showed that anger is more prevalent in the adolescent population. It is important to know more about anger in adolescents and its relationship with self-injury and hostility.

Statement of the problem: A co-relational study to assess the relationship between anger, self-injury and hostility among adolescents of selected schools of Distt. Sirmour, Himachal Pradesh.

OBJECTIVES OF THE STUDY

1. To assess the anger, self-injury and hostility among adolescents.
2. To find the association between anger and hostility with socio-demographic variables of adolescents.
3. To find the relationship between anger, self-injury and hostility.

MATERIAL AND METHODS

A Quantitative research approach was adopted for the conduction of this study. A Correlational research design was used for the present study. This design is selected because the researcher is interested in finding out the relationship between anger, self-injury, and hostility among adolescents. The research setting for this study was selected private & Government schools, Distt. Sirmour, Himachal Pradesh, India. The sample comprised adolescent boys and girls between the age group of 12-18 years studying in various Private and Government schools of Distt. Sirmour, Himachal Pradesh, India. The Total Enumerative Sampling Technique was used for the selection of adolescents. The schools were selected by the Convenient Sampling Technique and then the students fulfilling the inclusion criteria were selected from each class from the respective schools. The calculated sample size was 323 and the samples included in the study were 330 adolescent boys and girls between the age group of 12-18 years studying in various Private and Government schools of Distt. Sirmour, Himachal Pradesh, India. Data was collected using Socio-demographic data sheet developed by the researcher, Modified Clinical Anger Scale¹¹ was used to assess anger, Ottawa Self-Injury Inventory [12] to assess self-injury and hostility was assessed using State Hostility Scale [13].

RESULT AND INTERPRETATION

Section A: Frequency and percentage distribution of adolescents based on the social-demographic characteristics

The results of the study showed that the adolescents based on their socio-demographic variables regarding gender that almost there was an equal number of adolescents participated in the study and the number of females was slightly more 171 (51.8%) and boys were 159 (48.2%). With respect to age majority of the adolescents belonged to the age group 12-14 years 189 (57.3%) and the rest were 15-18 years old 141 (42.7%). The majority of the adolescents were studying in high schools 170 (51.5%); 89 (27%) were in senior secondary and 71 (21.5%) were in middle school. With respect to the residential area, most of them were from rural areas 215 (65.2 %) and 115 (34.8%) belonged to urban areas. About the education level of adolescent's fathers, 99 (30%) had education level graduation and above following 90 (27.3%), 66 (20%), 61 (18.5%), and 14 (4.2%) had senior secondary, secondary, primary and no formal education respectively. In the mother's education maximum of 98 (29.7%) had secondary education, 86 (26.1%), 66 (20%), 59 (17.9%), 21 (6.3%) had graduation and above, senior secondary, primary, and no formal education respectively. Based on the occupation of fathers 115 (47%) fathers were farmers, 80 (24.2%) had a government job, 48 (14.6%) were self-employed, 43 (13%) had a private job and 4 (1.2%) had no job. In the mother's occupation, 248 (75.2%) were homemakers 37 (11.2%) were in a government job, 35 (10.6%) had a private job and 10 (3%) of the mothers were self-employed. Most of the adolescents (40.3%) belonged to the annual income of <1 lakh rupees, 115 (34.9%) and 82 (24.8%) belonged to the 5-10 lakh rupees and 2.5- 5 lakh rupees income group respectively. 160 (48.5%) of the adolescents were living in a joint family, 139 (42.1%) were from nuclear families and 31 (9.4%) were from extended families. The majority of the adolescents 308 (93.3%) had biological parents and 22

(6.7%) had guardians as parenting status. Both parents were alive for 312 (94.6%), single for 15 (4.5%) and separated for 3 (0.9%). 126 (38.2%) adolescents had 2 siblings, 123 (37.3%) had 1, 65 (19.7%) has 3 or more and 16 (4.8%) had no siblings. 132 (40%) were 1st in birth order, 112 (34%) were 2nd, 47 (14.2%) were last and 39 (11.8%) were 3rd in birth order. The majority of the adolescents 315 (95.5%) had no medical issues whereas 15 (4.5%) had medical issues. The number of adolescents who had never done injury on purpose was 319 (96.7%) and 11 (3.3%) had one injury on purpose. Out of 3.3%, 8 (2.4%) had injured themselves 1-3 times and 4 (36.3%) had injured themselves 4-6 times. The method used to do self-injury was cutting 6 (1.8%) following hitting on a wall or table 4 (36.3%) and others (scratching) 1(9.1%).

Section B: Anger, Hostility and Self Injury among adolescents

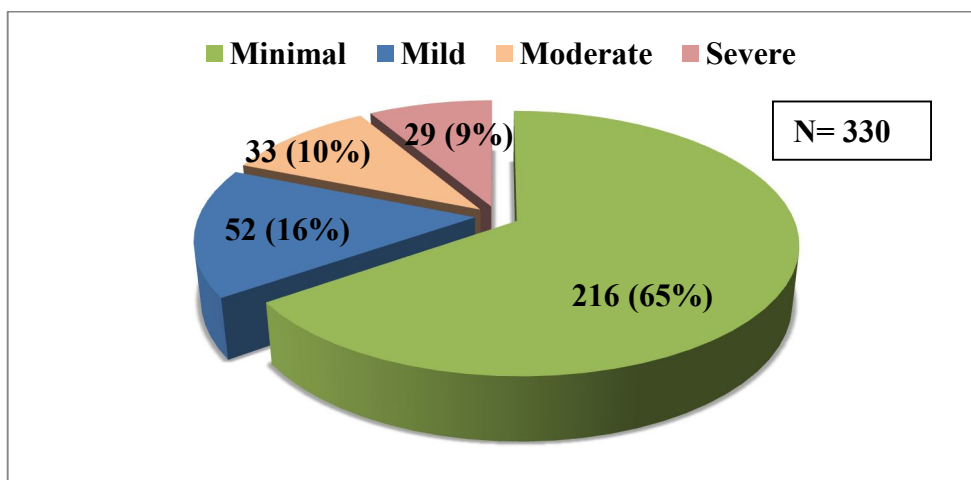


Fig. 1: Pie chart depicting frequency and percentage distribution of adolescents based on the scores of modified clinical anger scale

Fig.1 depicts the frequency and percentage distribution of scores of anger among adolescents. The finding revealed that majority 216 (65%) have minimal anger, 52 (16%) have mild anger, 33 (10%) with moderate level of anger and only 29 (9%) of the adolescents have severe anger.

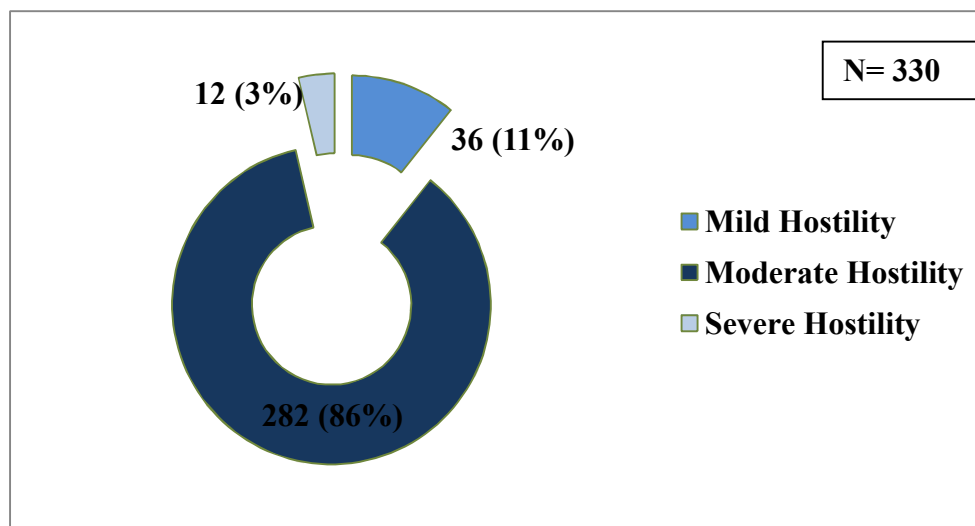


Fig. 2: Pie chart representing frequency and percentage distribution of adolescents based on the scores of state hostility scale

Fig.2 shows the frequency and percentage distribution of scores of hostility among adolescents. The finding revealed that majority 282 (86%) have moderate hostility, 36 (11%) have mild hostility and only 12 (9%) of the adolescents have severe hostility.

Table: 1 Mean, SD, Range & Mean % of the anger & hostility scale scores of adolescents.

S. No.	Variables	Mean ± SD	Range		Mean %
			Max.	Min.	
1.	Anger	11.54 ± 9.70	45	0	19.23
2.	Hostility	80.68 ± 2.45	170	35	46.1

Table 1 shows the Mean, SD, Range & Mean % of the anger & hostility scale scores of adolescents. In the present study the Mean ± SD of scores of anger was 11.54 ± 9.70 and for the hostility 80.68 ± 2.45. It was found the adolescents have higher scores in both Anger and Hostility scales.

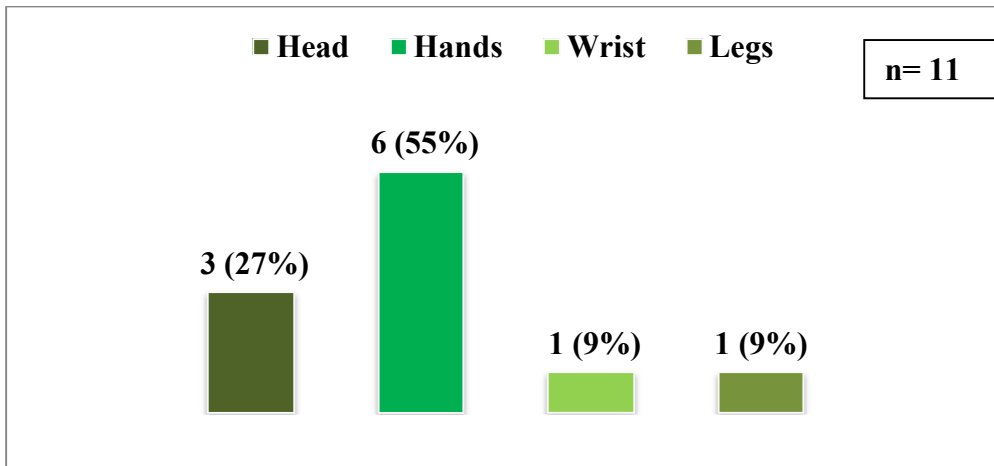


Fig. 3: Bar diagram showing frequency and percentage distribution of adolescents based on most common area of body injured.

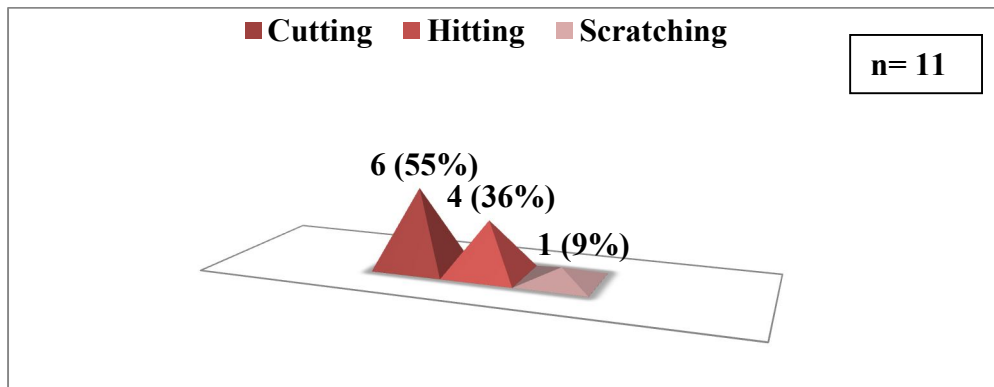


Fig. 4: Cone diagram shows frequency and percentage distribution of adolescents based on most common method used for self injury.

Figure 3 & 4 shows the frequency and percentage distribution of adolescents based on the scores of Ottawa self injury inventory, the results showed that in the majority of the adolescents i.e. 319 (97%) self-injury was absent and it was present only in 11 (3%) adolescents. The common self injury involved were cutting (55%), by hitting (36 %) and Scratching (9%)

Section C: Association between scores of anger, and hostility with selected socio-demographic variables of adolescents

The association between modified clinical anger scale with selected socio-demographic variables of adolescents showed the significant association was found only with self-injury on purpose ($\chi^2= 13.91$; $p < 0.01$) and no. of times self-injury done at the ($\chi^2= 25.21$; $p < 0.01$), other socio-demographic variables were found not significant. Regarding the Association between State Hostility Scale with selected socio-demographic variables of adolescents, only mother's education was significantly associated with the State Hostility Scale at the ($\chi^2= 0.317$; $p < 0.01$). Other socio-demographic variables were found not significant.

Section D: Correlation between the anger, self injury and hostility scores of adolescents

Table 2: Correlation between the anger, self injury and hostility scores of adolescents.

Variables		Self- Injury scores	Hostility Score
Anger Score	r	1.00	0.317
	p-Value	0.001**	0.05

**** Highly significant**

Table 2 shows the relationship between the anger, self injury and hostility scores of adolescents. It was found that significant positive correlation between anger and self injury ($r= 1.00$; $p<0.001$); there is no correlation with anger and hostility ($r= 0.317$; $p 0.001$)

DISCUSSION

Description of socio-demographic characteristics of adolescents from selected schools

In the present study an almost equal number of adolescents participated; males 159 (48.2%) and females 171 (51.8%). In a study the sample comprised of total 50 adolescents; 8 males and 42 females [14]. The age group was 12-14 years; 189 (57.3%) and 15-18 years; 141 (42.7%); in another study, the age group taken was from 14- 16 years.¹⁵ Middle, high, and senior secondary students were taken and the frequency was 71 (21.5%), 170 (51.5%), and 89 (27%) respectively, in another study similar classes i.e. classes 8th-12th were taken for the study.¹⁶ In the study 115 (35.8%) adolescents were from the urban area and 215 (65.2%) were from the rural area. In another study done to assess the aggression level of adolescents, 60 adolescents were taken from both urban and rural secondary school students and the results of the study revealed that the rural secondary school students (mean-52.10) had more aggression than urban secondary school students (mean-47.89), which was found to be significant at $p<0.05$. [15]

Anger, self-injury and hostility among adolescents from selected schools

The result of the study showed that 65% had minimal, 16% had mild, 10% had moderate and 9% had severe anger scores. A similar study done on adolescents showed that 86% had an average level of anger, 8% had a moderately high level of anger and 6% had moderately low level of anger [14]. The results of the study showed a significant difference in aggression levels among male and female adolescents. In a similar study done on adolescents, aggression showed a significant difference in aggression levels, the male adolescents were found to be more aggressive than females [17]. The results of the study showed that only 3% of the adolescents were involved in self-injury and results of a similar study showed that 15% of the adolescents were engaged in self-harm behavior [18]. A similar study done to assess the self-injury behavior among adolescents revealed that approximately 30% of youths reported at least one NSSI behavior [19]. The findings of the study revealed that 6 (55%) of the adolescents involved in self-injury used cutting as the most common method of injuring self-whereas in another study it was found out that NSSI was present in the last year in 46.5% of the adolescents which involved self-biting, craving/cutting skin, hitting self on purpose and burning the skin most frequently. Out of the total sample, 28% had moderate/severe forms of NSSI [20]. In the study majority of the adolescents were in a moderate level of hostility 282 (86%), 36 (11%) were in mild level, and 12 (3%) in a severe level of hostility.

Association between anger and hostility with selected socio-demographic variables of adolescents

The results of the study found that the association was found only with self-injury on purpose ($\chi^2= 13.91$; $p <0.01$) and no. of times self-injury was done at the ($\chi^2= 25.21$; $p <0.01$), other socio-demographic variables were not associated with the anger scale. The results also revealed that the education of the mother is associated significantly ($\chi^2= 32.53$; $p <0.001$) with the hostility scores of adolescents and in one study it was shown that the surfacing of problems like attachment avoidance and self-relation to both parents is possibly related to anger intensity both internal and external [21].

Correlation between anger, self-injury and hostility of adolescents from selected schools

The results of the present study showed a positive correlation between anger and self-injury ($r= 1.00$; $p<0.001$); and no correlation between anger and hostility ($r= 0.317$; $p>0.05$); an increase in anger score causes an increase in self-injury and hostility level. In a similar study, it was shown that hostility and physical aggression had a positive correlation with suicide plans. Hostility was positively related to suicide attempts, while trait anger was in reverse association with suicide attempts [22]. In another research study it was proved that 'minor NSSI' and 'moderate/severe NSSI' were significantly associated with hostility, indirect and verbal aggression [23]. It was found that 33 (10%) had moderate and 29 (9%) had severe anger scores; 282 (86%) had moderate, 12 (3%) had a severe level of hostility and 11 (3%) the adolescents were involved in self-injury. Hence the researcher developed a pamphlet on anger

management and it was distributed among the adolescents who had high anger, self-injury, and hostility scores.

CONCLUSION

The study entitled “A study to assess the correlation between anger, self-injury and hostility” was carried out among adolescents of age group 12- 18 years and who was studying in class 8th- 12th. The results of the present study showed that in adolescent behaviors anger, self-injury and hostility are present. But the intensity of the self-injury is less compared to their anger and hostility. Anger is positively correlated with self-injury, so there is a need to explore the area more so that interventions can be made to assess and manage anger, self-injury and hostility. The results of the study showed less severity of anger and self-injury in adolescents but they have a moderate level of hostility.

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