

# Correlates of Aggression among University Students of Tripura

Das B and Das P\*

Clinical Psychologist, Amity University, India

**\*Corresponding author:** Papri Das, Doctorate Scholar of Psychology, Clinical Psychologist, Assistant Professor of Psychology, Amity University, Kolkata, West Bengal, India, Tel: 8013711818; Email: pdaspsy71@gmail.com

**Received Date:** February 24, 2023; **Published Date:** April 10, 2023

## Abstract

Today's society is under the strain of various forms of aggressive behavior that disturbs peace and harmony. Therefore, the researcher studied how Emotional Intelligence, Cognitive Flexibility, Metacognition and attachment style are related to Aggression. The sample size consisted of 100 young adults of Tripura. The data were collected through Google Form containing "Consent Form", "Information schedule", "General Health Questionnaire-12", "Emotional Intelligence Scale", "Cognitive Flexibility Scale", "Metacognition Questionnaire- 30", "Attachment Style Questionnaire" and "Aggression Questionnaire". Data was analyzed by using "t- test", and "Pearson Product Moment Correlation". The result showed a significant difference between male and female in aggression. Correlation analysis showed that Emotional Intelligence, Cognitive Flexibility, Metacognition, Attachment style are significantly correlated with Aggression. The knowledge from the current research can be helpful in understanding how the said variables are related with aggression, and tailoring specific approaches in anger management programs.

**Keywords:** Aggression; Young Adults; Emotional Intelligence; Tripura

## Introduction

To live in peace and harmony, there is a need to overcome from the barriers like violence, hostility, intolerance, abuses etc. One of the reasons of barriers to peace and harmony is Aggression. Therefore, there is a need to explore aggression and other factors associated with aggression. Underdeveloped state like Tripura is currently lacking in mental health literacy, thus, not only mental health conditions but also researches in the field of psychology are remaining ignored. The present study was conducted with the aim to understand aggression and how it is associated with Emotional Intelligence, Cognitive Flexibility, Dysfunctional Metacognition and Attachment Styles among young adults of Tripura; so that aggression can be prevented and skills of peace and harmony can be improve among young adults by tailoring strategies to improve emotional intelligence, cognitive flexibility, metacognition and attachment with

others.

Aggression refers to those acts one adapts to cause harm in another individual who is motivated to avoid such harm [1]. Aggression is one of the primary reasons of increasing violence, hatred, hostility, crime etc resulting in decreased peace and harmony in our society.

When the literature is reviewed, it is apparent that there is a significant negative relation between emotional intelligence and aggression [2-6]. Many researchers studied aggression in relation to executive functioning. From those studies it was found that along with cognitive flexibility or task shifting or mental shifting, other executive functions related to cognitive flexibility such as working memory, inhibition etc. are negatively relation with aggression [7-9]. Literatures have showed a significant positive relation between (dysfunctional) metacognition and aggression [10-

12]. Aggression also has significant negative association with secure attachment [13,14] fearful, preoccupied [15,16] and dismissing [17] attachment were found to have positive association with aggression.

Therefore, it can be understood that these correlates play a vital role in Aggression and several modes of intervention can be undertaken to improve these correlates which in turn can manage aggression maintaining the peace and harmony in the society.

## Methods and Materials

### Context and Procedure

The current research followed a Descriptive research design to explore the relationship between the non-manipulated variables. The research was conducted in Tripura, India as there lays a research gap to understand the variables related to aggression among young adults of Tripura. Participants were selected on the basis of judgmental sampling, based on specific research criteria. Data collection from the participants was done following the ICMR guidelines

of scientific research of maintaining beneficence, non-maleficence and justice. The data collection was done online through Google forms. The Google form included debriefing of the study, Informed Consent form, Personal Information Schedule and the other measurement tools. Following that, scoring of the data collected was done as per the manual.

### Participants

Young adults, age ranging from 18 to 25 years were selected for the current research. The total number of sample was N= 100, among which 50 were males and other 50 were females; other participants were screened out following the eligibility criteria. Participants who were from the middle socio-economic, urban/suburban backgrounds of Tripura, currently academically active, fluent in English language, having average academic performance, and scoring below the cut off in GHQ-12 were contacted further for their participation in the research. Participants with psychiatric illness, major health issues, and proneness to substance abuse and problem behaviors were excluded from the research.

Socio-Demographic factors		Percentages
Sex	Male	50%
	Female	50%
Socio-Economic Class	Upper Middle	52%
	Lower Middle	48%
Area of Living	Urban	32%
	Sub-Urban	68%
Educational Qualification	12th passed	41%
	Graduate or Above	59%

**Table 1:** Percentage of socio-demographic factors for N= 100 participants are shown above table.

From the above table it can be seen that out of the 100 participants, 50% were male and 50% were female, among them, 52% belonged to the upper middle socio-economic class, 48% belonged to lower middle socio-economic class, 32% hailed from urban areas and 68% hailed from sub-urban areas, and 41% were 12th pass and 59% were graduate or above.

### Measurements

General Health Questionnaire (GHQ-12) developed by Goldberg P, et al. [18]. The 12 items version of the General Health Questionnaire was used as a screening tool to measure psychological distress in normal population.

Emotional Intelligence Scale developed by Singh AK, et al. [19]. The 31 items Emotional Intelligence scale was used

to measure the understanding emotion, understanding motivation, empathy and handling relations among the young adults. The scale shows fair test-retest reliability of 0.86 alpha coefficients and concurrent validity of 0.86. Cognitive Flexibility Scale developed by Martin MM, et al. [20]. This tool was used to measure cognitive flexibility of the young adults. The scale has a good test-retest reliability coefficient of 0.83.

Metacognition Questionnaire- 30 developed by Hatton S, et al. [21]. This 30 items scale has been used to measure the (lack of) cognitive confidence, positive beliefs about worry, cognitive self-consciousness, negative beliefs about uncontrollability of thoughts and danger, and beliefs about the need to control thoughts. The five subscales shows a test-retest reliability ranging from 0.75 to 0.93.

Attachment Styles Questionnaire developed by Oudenhoven JP, et al. [22]. This tool consists of 22 items in total, which has been used to measure the four types of Attachment styles namely, Secure, Fearful, Preoccupied and Dismissing. The internal consistency of the scale is 0.80, and alpha coefficients for the four types of attachment styles are 0.74, 0.70, 0.69 and 0.71.

The Aggression Questionnaire developed by Buss AH, et al. [23]. This 29 items scale was used to measure the four different aspects of Aggression i.e; physical aggression, verbal aggression, anger and hostility among the young adults. Test-retest reliability for verbal aggression ranges from 0.72 and 0.85 for physical aggression.

### Data Analysis

Skewness, Kurtosis and Shapiro-Wilk, Levene's Test of homogeneity, Mean and Standard Deviation were computed.

### Results

Inferential Statistics: Independent sample t-test was conducted to find out whether there were any significant differences present between male and female young adults with regards to all the variables namely emotional intelligence, cognitive flexibility, dysfunctional metacognition, attachment style and aggression.

Variables	Male		Female		Sig. (2 tailed)
	Mean	SD	Mean	SD	
Emotional Intelligence	21.72	3.252	22.62	3.404	0.18
Cognitive Flexibility	53.82	4.641	54.4	4.472	0.526
Dysfunctional metacognition	48.96	7.088	48.6	6.35	0.813
Secure Attachment	27.64	3.635	28.02	4.264	0.633
Fearful Attachment	10.28	2.491	10.5	2.652	0.67
Preoccupied Attachment	16.66	4.298	16.26	3.922	0.628
Dismissing Attachment	11.5	2.541	11.78	2.944	0.612
Physical Aggression	25.42	5.055	18.3	3.644	.000**
Verbal Aggression	15.26	3.55	13.38	2.769	.004**
Anger	18.36	4.637	16.86	3.423	0.069
Hostility	21.94	4.058	20.12	3.821	.023*
Aggression	80.98	16.479	68.66	12.103	.000**

**Table 2:** Showing the p-values representing significance of difference between male young adults (n=50) and female young adults (n=50) on all the variables:

\*\*Significant at the 0.01 level (2-tailed).

\*Significant at the 0.05 level (2-tailed).

From the above table it could be found that mean of male young adults was found to be 80.98 and for female it was 68.66 with p value .000 which is found to be significant at 0.01 level for aggression. From the domain wise analysis, it was found that mean for male young adults in Physical Aggression was 25.42 and mean for female young adults was found to be 18.3. The p value from the t-test was found .000 which is significant at the 0.01 level of significance. In Verbal Aggression, mean value for male young adults was 15.26

which is higher than the mean score 13.38 for female young adults. The p value obtained from the t-test in this domain was .004 which is significant at 0.01 level of significance. In the domain Hostility mean score for male young adults was found to be 21.94 and for female it was 20.12 with p value .023 which is found to be significant at the 0.05 level of significance. These findings indicate that males have higher aggression, physical and verbal aggression and hostility than females.

### Correlation Statistics

	Physical Aggression	Verbal Aggression	Anger	Hostility	Aggression
Emotional Intelligence	-.398**	-.433**	-.412**	-.358**	-.436**
Cognitive Flexibility	-.329**	-.428**	-.424**	-.374**	-.417**
Dysfunctional metacognition	.240*	.298**	.312**	.374**	.328**
Secure Attachment	-.228*	-.335**	-.268**	-.237*	-.285**
Fearful Attachment	.220*	.348**	.309**	.405**	.339**
Preoccupied Attachment	.286**	.328**	.377**	.382**	.370**
Dismissing Attachment	0.111	.235*	0.151	.332**	.215*

**Table 3:** Showing correlation of emotional intelligence, cognitive flexibility, dysfunctional metacognition and types of attachment style with different domains of aggression.

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

\*Correlation is significant at the 0.05 level (2-tailed).

From the above table, it can be seen that the value of Pearson's  $r$  between Emotional Intelligence and Aggression was  $-.436$ , which is significant at 0.01 level of significance. This indicates that when Emotional Intelligence increases Aggression decreases.

The value of Pearson's  $r$  between Cognitive Flexibility and Aggression was found to be  $-.417$ , which was significant at 0.01 level of significance. From the analysis of relation between Cognitive Flexibility and different domains of Aggression, it was found that there is significant negative correlation present between Cognitive flexibility and different domains of Aggression, indicating higher cognitive flexibility will lead to lower aggression.

The above table showed that the value of Pearson's  $r$  between Dysfunctional metacognition and Aggression was found to be  $.328$  and it was significant at 0.01 level of significance. The correlation indicates a significant positive relation between Dysfunctional metacognition and Aggression. Domain wise analysis revealed that Dysfunctional metacognition had a significant positive and moderate correlation with Aggression, Anger and Hostility.

The value of Pearson's  $r$  between Secure Attachment and Verbal aggression was found to be  $-.335$ , which was significant at 0.01 level of significance. It indicates a significant negative and moderate correlation between Secure Attachment and Verbal aggression. For the correlation of Fearful Attachment and Preoccupied Attachment with Aggression, the value of Pearson's  $r$  was found to be  $.339$  and  $.370$  respectively, which were significant at 0.01 level of significance. Fearful Attachment and Preoccupied Attachment showed significant positive and moderate correlation with Aggression. The value of Pearson's  $r$  between Dismissing Attachment and Hostility was found to be  $.332$ , which was significant at 0.01 level of

significance, which means that dismissing attachment had significant positive and moderate correlation with hostility. From domain wise analysis, it was found that secure attachment secure attachment had a significant negative but low correlation with physical, anger, hostility and aggression. For fearful and preoccupied attachment, it was found that they had a significant positive and moderate correlation with verbal aggression, anger, and hostility, but they had a positive and low correlation with physical aggression.

Raw data were generated at Tripura, India. Derived data supporting the findings of this study are available from the corresponding author (P.D) on request.

### Discussion

In the present study, it has been found that gender had significantly influenced expression of anger, and its different types. In this current study it is seen that aggression, physical and verbal aggression, and hostility of male young adults found to be significantly higher than female counterparts. The current findings can be supported by various previous researches on this aspect [24-27]. As the male young adults of Tripura had higher physical aggression, verbal aggression and hostility than females, and did not differ in Anger; it can be inferred that the males and females differ in channelizing and expressing their emotion i.e., Anger [28] found that male have significantly higher verbal and physical aggression than female. However Wani MA, et al. [27] found that male scores significantly higher in all four domains of aggression including anger which was not found significantly different in the present study. Interestingly Sadiq R, et al. [29] found that married men scored higher in physical aggression and married women score higher in verbal aggression, which stressed on the difference of expression of Anger in males and females. From the present study it can be also commented

that though males and females have the same level of anger, but the expression of anger is not same which can be inferred from the societal expectation towards women to remain timid and non-aggressive as much as possible. Ecologically speaking males are mostly associated with competitive and risk taking behavior than the female counterparts because of aggression influencing their masculinity [30].

Aggression had been found to be significantly and moderately related with emotional intelligence, cognitive flexibility, dysfunctional metacognition, fearful and preoccupied attachment styles. The findings of Aggression emotional intelligence says that higher the emotional intelligence of an individual, lower the aggression of that individual Bibi A, et al. [2], Gijwani D, et al. [3], Johnston AW [4], Mambra AJ [5], Masoumeh H, et al. [6] found that emotional intelligence is significantly associated with aggression and higher an individual with E.I scored low in the Aggression. Another finding by Castillo R, et al. [30] pointed out that individual receiving emotional training scored lower in anger and hostility compared to their pre-test condition as individuals with higher emotional intelligence can better understand their feelings of their own as well as others, and can handle relational issues in a better way than the individuals with low E.I. People with high emotional intelligence can express their emotions appropriately and can express their anger appropriately.

Granvald V, et al. [9] also found that cognitive flexibility and aggression are significantly and negatively associated with each other which are consistent with the present findings. An individual with higher cognitive flexibility can interpret a situation with different perspectives. They are flexible in how to behave in a particular situation. They acknowledge alternative ways to behave in a particular situation and behave appropriately according to the need of the situation. High level of cognitive flexibility helps in dealing with anger in better ways and generally do not lead to aggressive expression of anger.

Dysfunctional metacognition is positively associated with aggression, hostility and anger. Similar findings were found by Pourmaveddat K, et al. [11], Garcia SE, et al. [12] which helped us to infer that negative beliefs about uncontrollability and danger, need to control thoughts of an individual often lead to excessive worry and frustration which leads to anger, and metacognition has been found to be associated with anger [10] resulting in aggression and hostility which is the inappropriate expression of anger.

Overall different attachment styles had been found to be moderately associated with aggression, or singularly with verbal aggression and hostility. Boodlworth JE [13], Meesters C [14] found that attachment styles had significant

relationship with aggression Talebi BZ, et al. [31] also found a significant negative relation between secured attachment and aggression which is quite similar with the present findings which says that secured attachment had a moderate and negative relationship with verbal aggression. A person with secure attachment generally develops healthy relationship and healthy ways to deal with problem situation. On the other hand, Fearful attachment and preoccupied attachment were positively related with aggression, verbal aggression, hostility and anger which reflects that anxiety and desire related to close relationships influences internal framework of relationship and coping with problem situations. Fear of being rejected or abandonment often gives rise to aggression in an individual [32]. Dismissing attachment has a moderate and positive relationship with hostility, which reflects that attachment avoidance and anxiety give rise to un-adaptive ways of expressing aggression leading to hostility [33-36].

Therefore, we can now understand how aggression is related to emotions, cognitions and attachment styles among the young adults of Tripura.

## Conclusion

Aggression refers to the behavior in response to anger that is often accompanied by violence. In today's society aggression has been increasing especially among young adults. This reflects a high need to understand different factors associated with aggression to restore the peace and harmony of the society. Moreover, very few research studies had been conducted to understand about aggression in young adults of Tripura. Knowledge about different factors associated with aggression can be helpful in prevention of aggressive behavior. The current study can imply in understanding how emotional intelligence, cognitive flexibility, dysfunctional metacognition and attachment style are associated with aggression. Knowledge about the association of said variables with aggression can provide us the path towards intervention of aggression through using specific strategies that will develop emotional intelligence, cognitive flexibility, dysfunctional metacognition and promoting secure attachment. This study would also help to develop new interventional module incorporating attachment styles, emotion and cognition for anger management.

## Limitation

This study was based on Tripura but not all the participants from all the districts of Tripura could be included, as well as the sample size was not ample to generalize the findings to the population of young adults from other areas. Moreover, as it was a cross-sectional study pattern of aggression over a longer period of time could not be understood.

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