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# Automatic Thoughts and Aggression among Adolescents

Swathi Mary Suresh<sup>1</sup>, Ms. Shruthi Rose<sup>2</sup>  
Kristu Jayanti College (Autonomous), Bangalore

**Abstract:** *The purpose of the present study is to assess the role of automatic thoughts on adolescents aggression. The study also assesses whether there are significant difference in gender with respect to aggression. A sample of 100 young adults (50 males, 50 females) aged between 15-22 years participated in the study. The Buss-Perry Aggression Questionnaire (BPAQ) by Drs. Arnold Buss and Robert Perry and the Automatic Thought Questionnaire 30 (ATQ 30) by Steven D. Hollon and Phillip C. Kendall were used to measure the variables in the study. The data were statistically analyzed using the independent sample t-test and Pearson's correlation coefficient. According to the results, aggression and automatic thinking are significantly positively correlated. Aggression in males and females does not significantly differ based on gender.*

**Keywords:** *Automatic thoughts, Aggression, Adolescents*

## I. INTRODUCTION

According to the American Psychological Association (APA), automatic thoughts are unconscious, immediate behaviours. A person's mood and behaviour are impacted by automatic thoughts. One of the main goals of cognitive therapy is to assist patients in being aware of the presence and effects of negative automatic thoughts as well as in testing the veracity of those thoughts.

Beck, who recognized the significance of the connection between thoughts and feelings, came up with the term "automatic thoughts" to refer to the thoughts that come to people's minds without any conscious effort. Although people aren't always aware of these thoughts, he found that they can be taught to recognize them and report them. He discovered that people who were disturbed had pessimistic, frequently unrealistic thoughts, and that long-lasting, constructive change could be achieved by identifying and questioning these views.

According to the APA, aggression is a behaviour intended to cause bodily or psychological harm to other people. It differs from anger in that anger is focused on defeating the target, though not always by injury or destruction.

According to the topics they focus on, theories about the reasons behind violence differ. According to many experts, including Freud, McDougall, and Lorenz, people are born with impulses and urges to be aggressive (Freedman et al., 1989, p. 194). According to Bandura (1973), children pick up aggressive behaviour through watching and imitating others. Children learn to be non-aggressive by imitating non-aggressive role models, which is also true.

According to some (Coie et al., 1993; Miller, 1994), aggression results from the interaction of personal (such as social and emotional difficulties, low self-esteem, peer rejection, academic failure) and environmental (such as poverty, a lack of parental supervision, a lack of social support, and family conflicts) characteristics. This latter point of view is now commonly shared.

The study's aim is to determine the association between automatic thoughts and aggressive behavior in adolescents.

A study on Cognitive Schemas and Aggressive Behavior in Adolescents: The Mediating Role of Social Information Processing (Calvete and Orue, 2010). The Mediating Role of Social Information Processing. This study examines whether social information processing (SIP) mediates the relationship between cognitive schemas of justification for violence, grandiosity, and abuse, and reactive and proactive violent behaviour. Measures of cognitive schemas, SIP, and reactive-proactive aggression were completed by a sample of 1371 teenagers (638 girls and 580 boys) for this reason. The findings indicated that while the abuse schema is more relevant for reactive aggression, the justification of violence and narcissism cognitive schemas are more relevant for proactive aggression. The relationship between cognitive schemas and reactive hostility was strongly mediated by SIP. Each cognitive model was shown to be linked to a certain SIP component, with narcissism being linked to the experience of rage and justification of violence and abuse being linked to interpretation. Additionally, the decision to respond aggressively was inversely related to the abuse schema. Last but not least, it was found that, despite the fact that boys scored higher in proactive aggression due in part to their higher scores in the justification of violence and narcissistic schemas, the basic model of routes between schemas, SIP, and aggression was very comparable for boys and girls.

A study conducted on The mediating role of anger in the relationship between automatic thoughts and physical aggression in adolescents (Yavuzer, Zeynep and Karataş, 2013). The study's goal was to investigate how anger mediates the connection between automatic cognitive patterns and physical aggressiveness in adolescents. 224 teenagers in the ninth grade from three separate high schools in central Burdur participated in the study during the 2011–2012 academic year. During counselling sessions, participants filled out the Automatic Thoughts Scale and the Aggression Questionnaire in their classrooms. Simple and multivariate linear regression analysis were used to analyse the data. The adolescents' instinctive thinking, physical aggression, and anger all showed favourable associations. According to regression analysis, automatic thoughts effectively predicted the level of physical aggression ( $b = 0.233$ ,  $P < 0.001$ ) and anger ( $b = 0.325$ ,  $P < 0.001$ ). Analysis of the mediating role of anger showed that anger fully mediated the relationship between automatic thoughts and physical aggression (Sobel  $z = 5.646$ ,  $P < 0.001$ ). Therefore it was determined that the relationship between automatic thoughts and physical aggression was fully mediated by anger. It is crucial to teach teenagers anger management techniques in order to stop physical aggressiveness. The development of an awareness of dysfunctional and automatically inciting ideas and how to correct them should be included in such training programmes. Since Burdur-based adolescents made up the study group, only groups with comparable characteristics can benefit from extrapolating the results.

Another study conducted on The Relationship between Aggressive Behaviour and Negative Automatic thoughts in University Students ; The Mediator Role of Hopelessness Level by (Lerzan and Tuğdem, 2019). 'Negative Automatic Thoughts Scale', 'Buss-Perry Aggression Questionnaire', and 'Beck Hopelessness Scale' were used in this study on university students. 112 individuals in all took part in the study. As a result of unanswered questions on the scales, the scores of 19 individuals were subtracted. The sample's participants had an average age of 19.9. Students pursuing undergraduate and associate degrees made up the participants. According to 28% of respondents, they are continually considering the need for change. According to 29% of the respondents, "Sometimes I feel like a bomb waiting to go off." As a result, this study came to the conclusion that violence and unfavorable automatic thoughts are related.

Another recent study which was conducted on The Profiles of Perfectionistic Automatic Thoughts and Aggression (María P., Flores, and Vicent, 2022). The research of perfectionistic automatic thoughts (PAT) has grown in recent years due to its maladaptive nature and correlation with many psychological diseases. As far as we are aware, no prior studies have looked at the connection between PAT and the four aspects of violent behaviour (hostility, rage, verbal aggression, and physical aggressiveness). This study had a double goal.

The first aim was to identify distinct profiles of PAT in a sample of 3060 Ecuadorian undergraduates ( $M_{age} = 22.7$ ,  $SD = 2.46$ ). Based on the four components of aggressive behaviour, the second goal of this study was to ascertain whether or not there are statistically significant differences between these profiles. The Perfectionism Cognitions Inventory (PCI) and the Aggression Questionnaire (AQ) were also used.

Latent Class Analysis was used to identify five profiles (No-Perfectionistic Automatic Thoughts, Low Perfectionistic Automatic Thoughts, High Perfectionistic Demands, Moderate Perfectionistic Automatic Thoughts, and High Perfectionistic Automatic Thoughts) with dimensions of perfectionistic automatic ideas have varied intensities. (i.e., the four components that make up AQ: Physical Aggression, Verbal Aggression, Anger, and Hostility), the moderate and high perfectionistic automatic thought profiles received the highest mean scores, whereas the No-perfectionistic automatic thought and Low perfectionistic automatic thought profiles received the lowest mean scores. These findings shed new light on PAT's occurrence in the Ecuadorian context. Additionally, given the favourable association between PAT and aggressive behaviour, they recommend more research on the subject.

## II. METHOD

### A. Objectives of the study

- 1) To study the relationship between automatic thought and aggression among adolescents
- 2) To study the gender difference on Automatic thoughts and aggression among adolescents

### B. Hypotheses

Ho1: There is no significant relationship between Automatic thoughts and aggression among adolescents

Ho2: There is no significant gender difference on Automatic thoughts and aggression among adolescents

### C. Research Design

Quantitative Research design is used in this study

#### *D. Variables*

Independent Variable: Automatic thoughts

Dependent Variable: Aggression

Demographic variables: Gender

#### *E. Sample Distribution*

In the present study, purposive sampling method was used to collect data from 100 participants including 50 males and 50 females aged 15-22 years.

The study consisted of students, undergraduates, postgraduates and working individuals. The response was collected from the participants using the Google form which was a one-time response. The consent of the participant was taken before filling the Google form to participate in the current study.

#### *F. Inclusion Criteria*

- 1) Young adults of age 15- 22 years is included in the study
- 2) The Gender studied on is specific to male and female
- 3) The study didn't focus on any particular state.

#### *G. Exclusion Criteria*

People diagnosed with clinically significant psychological disorders

#### *H. Research Ethics Followed*

- 1) Informed consent of participant taken
- 2) Anonymity of the participant maintained
- 3) Confidentiality maintained

#### *I. Tools for the study*

- 1) The Automatic Thought Questionnaire 30 (ATQ 30) Steven D. Hollon and Phillip C. Kendall (1980)
- 2) The Buss-Perry Aggression Questionnaire (BPAQ) Dr. Robert Perry.

#### *J. Description of the tool*

- 1) *The Automatic Thought Questionnaire 30 (ATQ 30) Steven D. Hollon and Phillip C. Kendall (1980)*

The scale consists of 30-item instrument that measures the frequency of automatic negative statements about the self. ATQ taps 4 aspects of these automatic thoughts: personal maladjustment and desire for change (PMDC), negative self-concepts and negative expectations (NSNE), low self-esteem (LSE), and Helplessness. The scale reliability has an excellent internal consistency with an alpha coefficient of .97. Participants indicate how much they agree or disagree with each of the 30 items using 5 point scales that range from 1 Not at all to 5 Totally.

- 2) *The Buss-Perry Aggression Questionnaire (BPAQ) Dr. Arnold Buss and Dr. Robert Perry(1992)*

The Buss-Perry Aggression Questionnaire (BP-AQ) is a 29-item, four-factor instrument that measures physical aggression, verbal aggression, anger, and hostility. The scale reliability has an internal consistency coefficient of 0.85. Participants indicate how much they agree or disagree with each of the 29 items using 5 point scales that range from 1 Extremely uncharacteristic to 5 Extremely characteristic.

#### *K. Statistical Analysis*

The results were analyzed using descriptive and inferential statistics. IBM SPSS- 2.5 was used for data analysis. Among descriptive statistics, mean and standard deviation were used; among the inferential statistics inferential statistics independent sample t-test and Pearson's correlation method was used to test the hypothesis.



### III. RESULT AND DISCUSSION

1) Ho1: There is no significant relationship between Automatic thoughts and aggression among adolescents.

Table 1

Mean, SD and R value of Automatic thoughts and Aggression

Variable	Mean	SD	r
Automatic thoughts	77.56	27.21	0.54*
Aggression	78.67	16.33	

N= 100, \*p<0.05 level (2-tailed)

Table 1 shows that the mean score for Automatic thoughts is 77.56 and Aggression is 78.67. In terms of standard deviation, the score for loneliness is 8.700 and Aggression is 16.331. It means that the spread of scores away from mean is apparently more for Aggression, suggesting that there is more variation for Aggression among young adults. To see whether there is a significant relationship between the two variables, the scores were subjected to Pearson’s correlation co-efficient. The results yielded a strong positive correlation (r=.548) for Automatic thoughts and Aggression which is significant at 0.05 level, indicating that the null hypothesis is rejected. This indicated that there is a significant relationship between Automatic thoughts and Aggression among young adults.

On the contrary to the above results, the study conducted by Lerzan and Tuğdem, 2019 reported that students pursuing undergraduate and associate degrees showed that violence and unfavorable automatic thoughts are related.

2) Ho2: There is no significant gender difference on Automatic thoughts and aggression among adolescents

Table 2

Significance of difference between gender and aggression among adolescents

Variable	Male		Female		t	Sig.
	M	SD	M	SD		
Aggression	79.58	15.185	77.76	17.510	0.555	0.580 <sup>NS</sup>

NS Not Significant

Table 2 shows that the mean score for Aggression is 79.58 for males and 77.76 for females, with corresponding standard deviation of 15.185 and 17.520 respectively. The calculated “t” value for Aggression between Male and Female is 0.555, which is less than 1.96 and Significant Value is 0.580 which is more than 0.05. Hence, the hypothesis stated “There is no significant difference between gender and aggression among adolescents” accepted.

On the contrary to above results, the study conducted by conducted by Yavuzer, Karatas, Civilidag and Gundogdu, 2014) found that the effect of gender on aggression scores were meaningful. According to there findings , male adolescents’ aggression scores were higher compared to female adolescents’ aggression scores.

The following conclusions are drawn based on the research questions raised.

- 1) There is a significant relationship between Automatic thoughts and Aggression among young adults.
- 2) There is no significant relationship between gender and aggression among adolescents.

### IV. IMPLICATIONS

The results implicated that Automatic thoughts was related to Aggression among young adults. The insignificant difference in levels of automatic thoughts and aggression will also aid in the understanding that men and women experience aggression-triggering automatic thoughts. This emphasizes the equivalent importance of mental health issues in both the genders. Thus, individuals of both genders must be given equally appropriate care for treatment of their mental health issues regarding effect on automatic thoughts on aggression.

## V. SUGGESTIONS FOR FUTURE RESEARCH

A few suggestions for research in the future include in gathering a large sample as it will increase validity of data and help in arriving at better conclusions. The study can be expanded to other age groups including children, adolescents and older people. The study can be conducted manually to reach out to those who do not have a social media account. Other demographic variable such as socioeconomic status, occupation can enhance the effectiveness of this study.

## VI. ACKNOWLEDGMENTS

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Conflict of Interest: The author declared no conflict of interests.

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