Prevalence and Psychosocial Factors of Aggression Among Youth

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ABSTRACT

Background: Youth indulge themselves in various aggressive behaviors leading to significant psychosocial dysfunctions. The present study assesses the prevalence of aggression among youth and to assess the risk factors of aggression among youth. Materials and Methods: Anger Data sheet, Resilience Scale and Buss-Perry Aggression Scale, were administered on 5476 participants using survey design. Data was collected from different communities (college, residential, apartments and workplace) of Bangalore, Jammu, Indore, Kerala, Rajasthan, Sikkim and Delhi. 47% were female and 53% were male. The mean age of the sample was 20.2 years. Comparative analysis was carried out by Pearson correlation coefficient and Chi-square was also carried out. Results: About 17.7% of the youth has high mean aggression score on Buss-Perry Aggression Scale. Males have high mean score on aggression than females. Males experienced more verbal aggression, physical aggression and anger than females. Younger age group (16-19 years) experienced more aggression than older age group (20-26 years). The risk factors of the youth aggressions were identified as physical abuse in childhood, substance abuse such as alcohol and tobacco, negative peer influence, family violence, academic disturbance, psychological problems attention deficit-hyperactivity disorder, suspicious, loneliness, mood disturbance, negative childhood experience and TV and media. Conclusion: The study document, the presence of correlates of risk factors of aggression among youth and implies usages of management strategies to help them to handle aggression.

Key words: Aggression, risk factors, youth

INTRODUCTION

Society has seen an increase in the incidents of aggression/violence among youth. It includes behaviors such as slapping, hitting, rape, recklessness, driving and shooting in school, truancy, road rage and other high-risk behaviors. Nearly 18.6% of females aged 12-17 got into a serious fight at school or work. 14.1% participated in a group-against-group fight and 5.7% attacked another person with an intent to seriously harm him/her.[1] In India, researchers have focused on factors such as perceived popularity among the peer group,[2] romantic relations,[3] the risk factors such as family system, environment, aggressive parents and academic performance,[4] peer aggression, victimization and social relationships,[5] Prevalence and Gender difference.[6] The increasing crime rates and violent activities of youth in India have made the researchers to focus on aggression among youth. There is a need for the proper assessment of youth for aggression and development of prevention and intervention modules for youth in Indian context. The present study aims to understand the factors (prevalence, risk factors and protective factors associated with aggression in six cities of India (Bangalore, Uttar Pradesh, Madhya Pradesh, Rajasthan, Jammu and Kashmir, Kerala and Sikkim).
MATERIALS AND METHODS

The sample consisted of 6500 subjects, from which 1024 incomplete protocols were not considered for analysis. Total of 5476 data’s (2785 males and 2691 females) in the age range of 15-26 years were taken for the study. The subjects with dependence on psychoactive substances or unwillingness to participate were excluded. The data collected (individual administration of protocols) from the communities (college, residential, apartments and workplace) of Bangalore, Jammu, Indore, Kerala, Rajasthan, Sikkim and Delhi using English/Hindi/Kannada version of the questionnaire. Anger data sheet: Developed by the investigator, provides information about the subject socio-demographic variable, situations associated with anger, type of anger style of expression of anger, control over aggressive ideation and protective factors for controlling the aggression and risk factors such as substance abuse, mood disturbance, childhood experience, academic effects, family influence, peer influence, media influence etc., were involved. Clinical anger scale\(^\text{[7]}\) was used to measure the psychological symptoms presumed to have relevance in understanding and treatment of clinical anger. It has 21 items and it has reliability coefficient of 94 (Male and female together). The statements are scored on a four point Likert scale. Higher score correspond to high clinical anger. Buss and Perry Aggression Questionnaire\(^\text{[8]}\) represent the revision of Buss-Durkee Hostility Inventory. It has 29 items and it has been scored on five point scale. Test reliability was 71 for anger and 90 for physical aggression and total scale resilience. It had been developed by org-health.\(^\text{[9]}\) The resilience assessment measures the ability of coping stressful situations. It has eight dimensions, which are self-assurance, personal vision, flexible and adaptable, organized, problem solver, interpersonal competence, socially connected and Active. There are 32 items each item has five point rating from strongly disagree to strongly agree. The permission for the same was taken from the publisher. The present work has Institute Ethic Committee approval.

Data analysis
The nominal and ordinal measures were analyzed using frequency, percentage. Interval and ratio scale measure was analyzed using descriptive statistics. Comparative analysis was carried out by Pearson correlation coefficient. Subgroup analysis, analysis of variance and Chi-square were also used to analyze the data.

RESULTS

A total of 5476 participants, 2785 males and 2691 females protocol were taken for the study. The data was collected from different communities (college, residential, apartments and workplace) of Bangalore, Jammu, Indore, Kerala, Rajasthan, Sikkim and Delhi. 20.2 years was the mean age of the sample. The maximum percentage of the sample was in the age range of 18-20 years, in this 47% of them were females and 53% of them were males and 94.7% were single, 4.3% were married. 74.3% were graduates, 10.2% were postgraduates and 5.2% were Industrial Training Institutes educational background among the sample. Nearly, 17.7% of them experience of anger and 17% of them had physical aggression. The youth in the age group of 16-19 years had frequent experience of aggression in comparison to the age group of 20-26 years. There was a significant difference between males and females in the experience and expression of aggression. Females experienced less aggression in comparison to males. The subjects reported that work pressure (28.3%), alcohol (15.1%), violent activities (14.8%), exposure to family violence/violence in media (9.2%) had been associated with experience/ expression of aggression/road rage. In this survey, 34.8% reported indulgence in fights when they were angry. About 20.4% involved themselves in physical violence, 12.3% also used weapons during expression of aggression. Nearly 13.8% had experienced injuries due to fights. In the family context, 37% of the participants got hurts from their parents physically or emotionally, 14.8% of the parents had hurts each other emotionally or physically, 36.6% reported their parents had used physical means to discipline them.

The mean score on the total of Buss-Perry Aggression Scale is 80.24, standard deviation is 19.59 \(F\) value is 63.71 and \(P\) value 0.00 (significance level 0.001) indicates significant difference among the mean scores of the group. The mean score of Indore (91.67) and Jammu (83.08) showed a high score on the total of Buss-Perry Aggression Scale, which indicates that Jammu and Indore groups have high-level of aggression compared with other regions.

For management of aggression, the following themes emerged includes discussing with others (29%), solving problems individually (24.9%) and exploring the reasons for anger (18.1%); 37.1% perceives managing the anger with proper guidelines; 32.8% perceived explaining positives and negative effects of anger expression by encouraging healthy expression of anger; 23.9% perceives strict implementation of law such rules and regulation was the role of law and order in managing the anger in the society; 47.7% perceived encouraging healthy and positive programs in the media; 22.7% perceives promoting healthy expression of anger and positive role models and 20.7% perceives promoting the information about counseling and its
centers was the role of media in managing anger in the society.

Risk factors associated with aggression
Among them, 7% use substance occasionally in the form of tobacco but none of them met the clinical criteria of dependence.

Comparison of substance abuse and aggression
There was a significant relation in the subjects who consume substance and the level of aggression in them. The Chi-square value was 14.016, $P$ value is 0.001, which is significant at 0.01 levels. The subjects who consumed substance abuse had a high score (21.7) on aggression when compared with the non-substance abuser [Table 1a].

Mood disturbance
Nearly, 49.2% of the group reported experience of frequent mood disturbance. Around 5.2% of them felt most of the time there was a strong relation between aggression and mood disturbance [Table 1b].

The Chi-square value of 16.919 and $P$ value of 0.000, which was significant at 0.001 levels, which indicates there, was a significant relation with mood disturbance and aggression.

Psychological problems
On examination, 5% of the sample always experienced loneliness, 4.9% always experienced lack of concentration. Psychological problems such as sadness of mood, disturbed sleep, irrational fear, anxious, suspicious were experienced rarely or some of the times by the subjects. The Chi-square value was 169.59 and $P$ value was 0.000, which was significant at 0.001 levels, which indicated a significant relation between attention deficit-hyperactivity disorder (ADHD) and aggression [Table 1c].

Frequency and correlation of academic experience and anger expression in college
The correlation analysis indicates that there was a significant positive relationship between aggression and failures in academics, verbal or physical fights in schools or colleges, anger expressed in their educational institutes punishment received from the educational institutes. It showed that failure in academics and anger expression in educational institutions are directly related to level of aggression in the youth [Table 1d].

Peer group violence reported by the subjects
Nearly, 44.2% of the subject’s peer group had frequent mood disturbance. 17.3% of peer group were involved in the physical violence, 13.1% of peer involved in the legal constraints 19.2% peer involved in the gang attacks. 21.5% of subjects were provoked to involve for aggression by the peer group, 20.7% of the subjects had received a threat from other gang and 11.8% of the subjects reported that their friends use weapons in violence. There was a significant positive relationship with peer influence and youth [Table 1e].

Anger management ways by peer group
It indicated that peer violence had a direct influence on youth aggression.

| Table 1a: Comparison of substance abuse and aggression |
|-------------------------------------------------------|
| Aggression scale | Low (%) | Normal (%) | High (%) | Chi-square | $P$ |
| Substance abuse  | No 14.8 | 76.5 | 14.6 | 14.016 | 0.001 |
| | Yes 10.6 | 67.7 | 21.7 |

| Table 1b: Comparison of mood disturbance with aggression |
|--------------------------------------------------------|
| Mood disturbance | Low | Normal | High | Chi-square | $P$ |
| No 16.5 | 67.9 | 15.6 | 16.919 | 0.000 |
| Yes 12.5 | 72.8 | 14.7 |

| Table 1c: Psychological problems (ADHD and aggression) |
|-------------------------------------------------------|
| Aggression | Low | Normal | High | Chi sq | $P$ |
| 0 24.4 | 60.6 | 15 | 169.562 | 0.000 |
| 1 18.5 | 72 | 9.5 |
| 2 11.5 | 72.3 | 16.2 |
| 3 10.3 | 68.3 | 21.4 |
| 4 11.9 | 48.6 | 39.4 |
| 5 0 | 50 | 50.0 |

| Table 1d: Frequency and correlation of academic experience and anger expression in college |
|------------------------------------------------------------------------------------------|
| Academic expression of anger | Situations associated with aggression |
| | No% | Yes% | Correlation value | $P$ value |
| Missed college | 55 | 45 | -0.016 | 0.285 |
| Failure in academics | 71.4 | 28.6 | 0.040(**) | 0.007 |
| verbal or physical fights | 69.7 | 30.3 | 0.116(**) | 0.000 |
| anger expressed | 69.8 | 30.2 | 0.113(**) | 0.000 |
| action against you | 88.9 | 11.1 | 0.106(**) | 0.000 |

* – .05; ** – .001

| Table 1e: Peer group violence reported by the subjects |
|-------------------------------------------------------|
| Peer group | No | Yes | Correlation value with aggression | $P$ value |
| Mood swings in peer group | 55.8 | 44.2 | 0.219(**) | 0.000 |
| Physical violence by peer group | 82.7 | 17.3 |
| Peer group involved in legal constrain | 86.9 | 13.1 |
| Gang attacks on your peer group | 80.8 | 19.2 |
| Provoked by peer group | 78.5 | 21.5 |
| Threaten you by group/ person | 79.3 | 20.7 |
| Weapons used by peer group | 88.2 | 11.8 |
The Chi-square value of gender difference of anger management by peer group is 66.78 and P value was 0.000, which was significant. It indicates there was a significant gender difference in the management of anger in the peer group [Table 2].

**Correlation values of risk factors of aggression with resilience**

Correlation analysis relieves that resilience and risk factors such as substance use, mood disturbance, physical abuse, sexual abuse, Failure in academics, missed college regularly, anger expressed in school or college, childhood experience, ADHD, family influence, peer influence, media influence and psychological problems in participants has a negative relationship [Table 3].

**Aggression model for risk factors of aggression**

The model has proposed based on the risk factors assessed from the current study [Figure 1]. It indicates that there is influence of all these factors for youth aggression. In the current study, all these factors has individual positive relationship to aggression, Substance abuse (0.001), Mood disturbance (0.000), family influence (0.000), peer influence (0.000), psychological problems such ADHD, sadness of mood, loneliness, anxious, irrational fear, suspicious etc., (0.000), academic influence (0.001), childhood experience (0.01), physical and sexual abuse (0.000), TV and media (0.000).

**DISCUSSION AND CONCLUSION**

The present work highlighted the presence of aggression among youth. Its association with reported that work pressure, substance use, violent activities, family disturbance, road rage, mood disturbance, psychological problems and peer relationships. Resilience had a negative relationship with substance use, mood disturbance, physical abuse, sexual abuse, Failure in academics, missed college regularly, anger expressed in school or college, childhood experience, ADHD, Family influence, peer influence, media influence and psychological problems. That Jammu and Indore groups have high-level of aggression compared to other regions. It management has been highlighted in the form of discussing with others, solving problems individually, exploring the reasons for anger; educating themselves about the positives and negative effects of anger expression by encouraging healthy expression of anger; strict implementation of Law such rules and regulation in managing the anger in the society; healthy and positive programs in the media and healthy expression of aggression; sensitization about the availability of counseling and its management. Gender difference exits for management of aggression. It was corroborated by other studies. The presence of abnormal scores of aggression among children in the age range of 14-19 years in the Indian context and students (mean age of 28.7 years). Younger age group had high expression of aggression. Males were more likely to be aggressors or victims than females. Boys were found to be more physically and verbally aggressive than girls, but girls used more indirect aggression at the higher year levels. Higher percentage of women engaged in verbal aggression (95.3% vs. 92.8%), whereas the males engaged in

| Table 2: Anger management ways by peer group |
|--------------------------------------------|
| **Frequency** | **Gender** | **Total %** | **Chi-square** | **P value** |
|----------------|------------|-------------|----------------|------------|
| Expression of anger | Male 10.30 | Female 10.90 | 21.20 | 66.785 | 0.000 |
| Suppress anger | Male 9.30 | Female 9.20 | 18.50 |
| Withdraw from people | Male 9.70 | Female 8.80 | 18.50 |
| Destruction | Male 2.30 | Female 1.40 | 3.70 |
| Talk to someone | Male 14.00 | Female 12.40 | 26.40 |
| Involve in fights | Male 3.40 | Female 1.20 | 4.60 |
| Others | Male 3.60 | Female 3.70 | 7.20 |

| Table 3: Correlation values of risk factors of aggression with resilience |
|-------------------------------------------------|
| **Risk factors associated with aggression** | **Total of resilience** |
| Substance use | −0.066** |
| Mood disturbance | −0.170** |
| Physical abuse | −0.051** |
| Sexual abuse | −0.068** |
| Failure in academics | 0.022* |
| Missed college | −0.041** |
| Anger expressed in college | −0.009 |
| Childhood experience | −0.059** |
| Media | 0.086** |
| ADHD | 0.027 |
| Family influence | −0.033* |
| Peer influence | 0.002 |
| Psychological problems | −0.104** |

ADHD – Attention deficit-hyperactivity disorder; * − .05; ** – .001

![Figure 1: Aggression model for risk factors of aggression](image)
more severe physical aggression (4.6% vs. 2.0%) and produced worse consequences for their female partners’ health (especially slight cuts/slight bruises, broken nose, black eye, broken bone and requiring medical treatment/hospitalization). Women reportedly attacked their partners while under the influence of alcohol (13.0% vs. 6.6%). Physical aggression decreased significantly across the age groups, but health consequences became more severe with age (e.g., broken nose, black eye, broken bone, went from 1% at 16 years to 4.5% at 20 years of age). Risk factors strongly related to later violence were distributed among the five domains of hyperactivity (parent rating), low academic performance, peer delinquency and availability of drugs in the neighborhood predicted violence from ages 10, 14 and 16 years. Youths exposed to multiple risks were notably more likely than others to engage in later violence. A dependent group had high mean scores for state anger, trait anger and expression/experience of anger. They had lower anger control and quality-of-life. Alcohol dependent persons have high expression and experience of anger leading to low quality-of-life. A history of abuse, failing a grade and dealing drugs was also independently associated with violence while having a regular partner was protective. Delinquent peer influences, antisocial personality traits, depression and parents/guardians who used psychological abuse in intimate relationships were consistent risk factors for youth violence and aggression poor academic performance, peer rejection and psychosomatic complaints with high-levels of anger. The present model of risk factor for aggression among youth has also been corroborated by the presence of risk factors available in the review of literature in the form of developmental stages (e.g., maternal substance abuse, community disorganization, residential mobility, exposure to violence, family socio-economic status); executive dysfunction (e.g., difficulty connecting actions and consequences, adapting to new circumstances, processing information to set and realize goals), chronic under arousal and abnormal biochemical activity; psychological factors, such as cognitive delays/disorders (e.g., ADHD), certain personality traits (e.g., conduct disorder), poor coping ability and poor school functioning; parental antisocial practices and attitudes and externalizing behaviors, such as early deviant behaviors, violence, aggression and substance use. It has limitation in the form of survey design, even though the researchers were trained for data collection, Investigators did not have any control on the quality of the data collections. It has implications in the form of screening of risk factors/vulnerabilities for emotional dyscontrol among youth, teachers should pay attention to aggression related behavior (verbal/non-verbal) and help children/youth to handle them in a better way and psychoeducation for the parents; Need for interaction of academic institute, policy makers and parents: Reducing academies distress, ability to handle pressure or frustration or failure; development of intervention module for management of aggression.

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