

AGGRESSION LEVEL AMONG MALE AND FEMALE STUDENTS PURSUING PROFESSIONAL AND NON-PROFESSIONAL COURSES

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Abstract

The current research looks at the aggression rate between the students pursuing professional and non-professional courses and their gender variations. A sample population of 100 students (50 males and 50 females) aged between 15 and 18 years was taken in different departments of Desh Bhagat University, Mandi Gobindgarh, Punjab. The Aggression Questionnaire by Buss and Perry (1992) was used to determine different dimensions of aggression, which included anger, hostility, verbal aggression, and physical aggression. The findings indicated that the level of physical and verbal aggressive behavior and aggregate aggression among the students in non-professional courses was significantly higher than that among the students in professional courses. There were, however, no noticeable disparities in the dimensions of anger and hostility. Moreover, the results showed no statistically significant gender differences in any of the dimensions of aggression, implying that both male and female students do not have different levels of aggressive behavior in the modern academic settings. The paper has identified the influence of academic structure, career clarity, and environmental stressors on aggression. The highlighted results show that specific interventions that include emotional regulation and stress management need to be implemented, especially in non-professional participants of courses, to ensure a more favorable behavioral outcome.

Keywords: Aggression, Gender, Students, Dimensions of Anger, dimension of Anger

Introduction

Aggression in children and adolescents has been the focus of extensive research due to its implications for social, emotional, and behavioral development. Contrary to common perceptions that aggressive behaviors emerge primarily during adolescence, studies indicate that such behaviors often begin in early childhood. Research by Tremblay (2019) highlights that physical aggression typically appears between ages 1 and 3, with toddlers expressing frustration or difficulty in communication through hitting, biting or kicking. While most children naturally outgrow these behaviors as they develop language skills, emotional regulation, and social understanding, some continue to display high levels of aggression into later childhood. Factors such as harsh or inconsistent parenting, stressful family environments, and early behavioral issues can exacerbate the persistence of aggressive tendencies. Similarly, in the context of adolescence, research by Jung and Ahn (2023) identifies parenting behaviors and self-control as significant determinants of aggression among middle school students. Their study, grounded in Ajzen's Theory of Planned Behavior, underscores the role of environmental and personal factors in shaping aggressive intentions and behaviors. Understanding the developmental trajectory of aggression is critical for promoting healthy social and emotional outcomes in children and adolescents. Early aggression can have lasting effects on interpersonal relationships, academic performance, and overall well-being. Tremblay (2019) emphasizes that

interventions during early childhood are particularly effective, as they can help children acquire essential self-control and social skills before maladaptive behaviors become entrenched. Additionally, the study by Jung and Ahn (2023) highlights the importance of fostering positive parenting practices and self-control in adolescents to mitigate aggression, suggesting that targeted interventions at both family and school levels can play a crucial role in reducing behavioral problems. By addressing aggression early and understanding its key determinants, society can prevent long-term issues and promote healthier emotional development among youth.

Need and significance of the study

Academic and social pressure may cause aggression; education influences the personality, behavior, and emotional stability of students. Professional courses are characterized by a high level of stress and competition and non-professional Courses have various difficulties, like career insecurity. It is also possible that aggression is different in boys and girls because of biological, psychological, and social factors. This study is significant because it helps to comprehend the disparities in aggression based on gender and type of courses and to study how academic settings can change behaviors. The results will assist teachers and schools to come up with measures to curb aggression, promote emotional stability, and establish a favorable learning atmosphere.

Objective

- To assess and compare the overall level of aggression

among students pursuing professional and non-professional courses.

- To examine and compare the levels of different aspects of aggression—anger, hostility, verbal aggression, and physical aggression—between professional and non-professional course students.
- To assess and compare the overall level of aggression between male and female students.
- To examine and compare the levels of different aspects of aggression—anger, hostility, verbal aggression, and physical aggression—between male and female students.

Hypothesis

The present investigation examined the differences between professional and non-professional courses students on different aspects of aggression (Anger, hostility, verbal and physical aggression). The following hypotheses have been formulated:

1. There is no difference between professional and non-professional courses students on overall aggression as well as on different aspects of aggression (Anger, hostility, verbal and physical aggression).
2. There is no difference between male and female students on overall aggression as well as on different aspects of aggression (Anger, hostility, verbal and physical aggression).

Literature Review

Aggression is typically described as the action aimed at causing harms to other people either through physical, verbal, or psychological means and can be described as a multidimensional phenomenon that brings in physical aggression, verbal aggression, anger, and hostility. Aggression among students depends on a number of psychological, social, and academic factors. It has been demonstrated that competition, workload, and peer pressure are stressors that students are exposed to in the academic environment, particularly at the university level, and this might be contributing to the number of students becoming aggressive (Alami et al., 2015). There exist considerable amounts of literature that mention strong gender differences in aggression. It has always been studied that male students are more inclined to display direct or overt aggressiveness, which is represented by physical and verbal aggression, and female students are more inclined to display indirect or relational aggressiveness, which is represented by social exclusion and emotional hostility. According to Romero et al. (2024), such differences are conditioned by the differences in empathy and personality traits, with males having higher scores on overt aggression. On the same note, Dey et al. (2025) also noted that male students are much more aggressive than their female counterparts, especially in competitive situations. Yet, other studies postulate that females can show the same or even greater incidence of emotional aggression, e.g., anger and internalized hostility, which means that gender differences are rather a matter of type than a matter of magnitude of

aggression. Aggression differentiation has also been found to exist among students who are taking professional and non-professional courses in the context of academic streams. Professional courses like engineering, medicine, and law are normally defined by the high academic pressure, regularized system of evaluations, and high competition. These are the reasons that make stress levels high, which can also result in aggressiveness. In a study, Khan and Yadav (2017) established a high degree of variation in aggression among the students taking professional and non-professional (academic) courses, which implies that aggressive behavior is influenced by factors such as the nature of the course. Moreover, it has been observed that stressful academic conditions lead to an increased rate of aggression, especially in male students who tend to display their stress in overt forms of aggression (Alami et al., 2015). Conversely, non-professional programs like arts and humanities can be said to be less structured and competitive. Consequently, the students belonging to such streams are less likely to show physical aggression. Nevertheless, emotional and relational forms of aggression might still exist, in particular with female students. There is still no direct comparative research between professional and non-professional courses, but indirect evidence indicates that structured and competitive environments are more likely to raise the level of aggression, whereas more flexible environments are less likely to cause overt aggression but not emotional aggression (Dey et al., 2025). Aggression among students in the two academic streams has a number of contributors. Individual aspects, including personality characteristics, impulsivity, and poor empathy, were identified to promote aggressive behavior (Romero et al., 2024). Environmental influences, such as academic stress, peer influence, and institutional climate, are also very critical. Moreover, social forces like gender requirements and culture dictate the manner in which aggression is manifested where masculinity is commonly linked to overt aggression and femininity to relational aggression. It has also been found that contextual factors like urban background versus rural background might also affect the level of aggression among students (Chauhan, 2023). To sum it up, the existing literature shows that the issue of aggression among students is affected by both gender and academic setting. Male pupils tend to be more overtly aggressive, whereas female pupils are more covertly or relationally aggressive. Competitive and stressful professional courses are linked with aggressiveness, especially among men. Nonetheless, the emotional aggression of female students in professional and non-professional courses is still high. Although these are found, further direct comparative and culturally specific studies are required, especially in the Indian environment, so as to have a clearer picture of the association between academic streams and aggression. Buss and Perry (1992) conceptualized aggression as a multidimensional construct consisting of four components: Physical Aggression, Verbal Aggression, Anger (emotional),

and Hostility (cognitive). They developed a 29-item Aggression Questionnaire to assess these dimensions, demonstrating strong reliability and validity. Their findings also highlighted gender differences, with males scoring higher on physical aggression. The scale has since become a widely used and influential tool in psychological research, contributing significantly to the study of aggression, personality traits, and behavioral outcomes across diverse populations.

Methodology

Sample

The present study included a total of 100 students selected from different departments of Desh Bhagat University. The sample comprised 50 male students (25 from professional courses and 25 from non-professional courses) and 50 female students (25 from professional courses and 25 from non-professional courses). Professional courses included BAMS, MBA, and Engineering while non-professional courses, primarily from the Arts, Social Sciences, and Commerce departments. The age range of the participants was between 15 and 18 years.

Instrument

To measure aggression level among male and female students studying professional and non-professional courses, the Aggression Questionnaire was used developed by Buss and Perry (1992). This questionnaire contains 29 items and measures aggression across four dimensions:

- Anger
- Hostility
- Physical Aggression
- Verbal Aggression

Each item is rated on a five-point Likert scale, ranging from 1 (extremely uncharacteristic of me) to 5 (extremely characteristic of me). The scale has a good internal consistency, as The Cronbach's alpha for the Aggression Questionnaire as a whole is 0.89, indicating good internal consistency (Buss & Perry, 1992). In the present study, the scale's reliability was found to be 0.718.

Procedure

Before administering the questionnaire, the researchers obtained permission from the relevant authorities of the respective college. After approval, 100 students (from both professional and non-professional courses) were contacted individually across different university departments. The purpose of the study was explained to the participants, and they were assured that their responses would remain confidential and used solely for research purposes.

Results and Discussion

The current study investigates differences in aggression levels between students enrolled in professional and non-professional courses, aiming to understand how academic paths influence aggressive behaviors and emotional states. Using a T-test for independent samples, the researchers compares mean score across four dimensions of aggression—anger, hostility, verbal aggression, and physical aggression—the findings reveal significant differences in all areas. Students in professional courses exhibiting different aggression profiles compared to their non-professional counterparts, suggesting that the academic environment may impact aggressive tendencies.

Table 1: Mean and Standard Deviations on Aggression Questionnaire for Professional and Non Professional Courses Students

<i>Diminution</i>	<i>Professional</i>	<i>Students Non-Professional</i>	<i>t</i>
Physical Agg.			
Mean	23.22	25.24	4.153**
SD	2.873	1.890	
Verbal Agg.			
Mean	24.66	26.18	3.867**
SD	2.086	1.837	
Anger			
Mean	22.28	22.60	.486
SD	3.071	3.505	
Hostility			
Mean	22.62	23.26	1.335
SD	2.457	2.337	
Total Aggression			
Mean	92.78	97.26	3.353**
SD	7.280	6.088	

* $p < .05$, ** $p < .01$

The study examined aggression differences between students in professional and non-professional courses, as well as gender-related disparities. Non-professional students showed higher aggression, while males and females did not differ significantly. The frustration-aggression hypothesis suggests that unclear career paths, less structured academics, and lower perceived control contribute to greater aggression in non-professional students, whereas professional courses provide clearer trajectories and stability. Perceived inequality, stress, and emotional dysregulation also predict aggression (Li et al., 2023; Zhang et al., 2024). Similar academic and social environments may explain the comparable aggression levels across genders.

From the above mentioned table no. 1 indicates that in Physical Aggression dimension, non-professional students scored significantly higher ($M = 25.24$, $SD = 1.890$) than professional students ($M = 23.22$, $SD = 2.873$; $t = 4.153$, $p < .01$), suggesting that structured routines and skill-based training in professional courses may encourage better emotional regulation. This aligns with findings from Buss and Perry (1992) and Mahajan and Kaur (2018), which indicate that higher levels of structured responsibility and career-focused engagement are associated with lower physical aggression. For Verbal Aggression, non-professional students also scored higher ($M = 26.18$, $SD = 1.837$) than professional students ($M = 24.66$, $SD = 2.086$; $t = 3.867$, $p < .01$), reflecting the influence of less structured educational settings on

interpersonal conflicts. Similar observations were reported by Li et al. (2017), who found that academic engagement and structured peer interactions in professional courses are inversely related to verbal aggression.

Conversely, differences in Anger ($M = 22.60$ vs. 22.28 ; $t = 0.486$) and Hostility ($M = 23.26$ vs. 22.62 ; $t = 1.335$) were not statistically significant, suggesting that internal emotional states and dispositional traits may be less influenced by course type. This is consistent with Deffenbacher et al. (1996), who found that anger is universal across educational settings, whereas its outward expression is context-dependent, and Buss and Perry (1992), who reported that hostility largely reflects personality traits rather than situational factors. Total Aggression scores were higher in non-professional students ($M = 97.26$, $SD = 6.088$) compared to professional students ($M = 92.78$, $SD = 7.280$; $t = 3.353$, $p < .01$), mainly driven by increased physical and verbal aggression, echoing findings by Singh and Rani (2020). These results highlight the relevance of interventions targeting external aggressive behaviors in non-professional courses, while internal emotional components may require alternative approaches. Despite these insights, the study had limitations, including a small sample size, reliance on self-report instruments, and a cross-sectional design, limiting generalizability and causal inference. Future research should incorporate more diverse samples and additional psychological variables to comprehensively examine the relationship between academic context and aggression.

Table 2: Mean and Standard Deviations on Aggression Questionnaire for Male and Female students

<i>Diminution</i>	<i>Male</i>	<i>Students Female</i>	<i>t</i>
Physical Agg.			
Mean	24.38	24.08	.206
SD	1.15	1.69	
Verbal Agg.			
Mean	25.50	25.34	.148
SD	1.15	.98	
Anger			
Mean	22.56	22.32	.526
SD	.62	.16	
Hostility			
Mean	23.02	22.86	.352
SD	.42	.48	
Total Aggression			
Mean	95.46	94.60	.270
SD	3.36	2.99	

* $p < .05$, ** $p < .01$

From the above mentioned Table no.2 findings on gender difference in aggression show that male and female students scored very similarly across all dimensions of the Aggression, where there is no meaningful or statistically significant difference between them. As in Physical dimension, males scored slightly higher ($M = 24.38$, $SD = 1.15$) than females ($M = 24.08$, $SD = 1.69$; $t = 0.206$), while Verbal Aggression was also comparable ($M = 25.50$, $SD = 1.15$ vs. $M = 25.34$, $SD = 0.98$; $t = 0.148$). Anger ($M = 22.56$ vs. 22.32 ; $t = 0.526$), Hostility ($M = 23.02$ vs. 22.86 ; $t = 0.352$), and the total Aggression ($M = 95.46$ vs. 94.60 ; $t = 0.270$) similarly showed negligible differences between genders. These findings suggest that males and females in modern educational settings demonstrate comparable levels of aggression, both in external behaviors and internal emotional states. This aligns with previous research indicating that gender differences in aggression are diminishing due to evolving social norms, equal opportunities, and similar environmental exposures (Archer, 2004; Card et al., 2008). Social learning theory provides further explanation, as exposure to analogous academic and social environments may produce similar behavioral patterns across genders (Bandura, 1977). Moreover, studies in university populations have reported that situational factors, such as academic stress and peer interactions, often have a greater influence on aggressive behaviors than biological sex, supporting the current findings (Li et al., 2023; Zhang et al., 2024). Overall, these results indicate that interventions targeting aggression need not be heavily gender-specific in contemporary college settings, but should rather focus on contextual and environmental factors that influence student behavior.

CONCLUSION

As seen in the current research, gender difference is not as critical as academic environment in affecting violence among students. Students that participated in non-professional courses were discovered to show increased degrees of overall aggression, especially regarding the physical and verbal aggression, as opposed to students in professional courses. This can be contributed to by the fact that they might lack organized academic activities, they may not know their career paths in the future, and the academic pressure that individuals go through can also lead to stress and frustration. Professional courses, on the contrary, having their structured program and more defined purpose, can allow students to gain more skills related to emotional control and coping mechanisms. The present research also found no meaningful variations in male and female students in any of the aggression dimensions, showing that alterations in social norms and related educational experiences might be shrinking gender-based

differences in aggressive behavior. The results in general indicate that situational and environmental factors are critical in determining aggression and not personality traits. Then, the educational institutions must work on the establishment of positive and effective learning conditions, as well as the implementation of stress management and emotional regulation initiatives that would help to decrease aggression and ensure the psychological well-being of students.

Implication of the Study

- Academic environments in non-professional courses should be improved to reduce student anxiety and uncertainty.
- Career guidance and counseling services should be strengthened to help students explore future opportunities.
- Stress management and emotional regulation programs should be introduced to reduce aggression.
- Workshops on communication and conflict resolution can help minimize verbal and physical aggression.
- Institutions should promote a supportive and inclusive academic climate to enhance students' well-being.
- Since no gender differences were found, interventions can be designed for all students.
- Teachers and parents should be trained to identify and address aggressive behavior early.
- Mental health services should be integrated into schools to address underlying psychological issues.

Future Directions for Further Study

The research process should include:

- A bigger and more diverse sample size in a study in various universities to enhance the generalizability.
- Longitudinal research designs should be used to investigate the change in aggression with time.
- Additional variables that should be used include personality traits, family background, socio-economic status, and peer influence.
- Investigate the association between factors of mental health (e.g., anxiety, depression) and aggression.
- Use qualitative data analysis (interviews, case studies) to get a better insight into the experiences of students.
- Carry out cross-cultural research to investigate the effect of cultural difference on aggression.
- The ways of comparing aggression among various academic disciplines in more detail.
- Research the efficiency of intervention measures, which include counseling, mindfulness, and stress management methods.

Conflict of Interest

The author declares no conflict of interest.

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