

Gender Differences in Aggression among University Students

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Abstract

The issue of aggression among students at university is a frequent topic of study that is linked with the safety, mental health and functioning of university students. The present paper focuses on the research gaps and gender differences in aggression among university students by conducting a systematic review and synthesis of secondary data from empirical research published from 2018– 2025. Following Buss and Perry's (1992) model and many cross-cultural studies, aggression is defined on four dimensions: physical aggression, verbal aggression, anger and hostility. The literature searched and the statistics revealed that the male students consistently reported higher scores in physical aggression as compared to the female students, whereas the findings for verbal aggression, anger, hostility, and relational aggression were much more varied, with some studies reporting similar or even higher scores for female students on the indirect and relational forms of aggression (Loudin et al., 2003; Shaban & Kumar, 2016). Biological, psychological and sociocultural explanations for these patterns are explored further, including an examination of hormones, personality characteristics, socialisation processes and cultural norms surrounding the expression of anger. Five secondary-data tables are provided, which combine sample characteristics, subscores from sixteen university-based studies, prevalence rates of aggression, and predictors of aggression. The paper emphasizes the reality of gender differences in aggression, but suggests that this is only in the sense of form, context and socialisation/cultural expectation, not biological, and suggests gender-sensitive interventions, campus counselling programmes and further longitudinal research.

Keywords: aggression, gender differences, university students, Buss–Perry Aggression Questionnaire, physical aggression, hostility, relational aggression, secondary data

1. Introduction

1.1 Background of the Study

Aggression is typically described as actions that are designed to cause harm to another person who wants to avoid harm (Buss & Perry, 1992; Padgett & Tremblay, 2020), and may be physical, verbal or relational. This is because University life is a period of development wherein students experience identity formation, academic stress, financial strain, and high levels of social interaction, which can lead to an increase in aggressive behaviour among students (Anwar et al., 2024). Aggression research traditionally viewed men as more aggressive than women, mostly because of research focused on physical aggression only (Padgett & Tremblay, 2020). But as measures have grown to include verbal, relational, and indirect aggression, it has been increasingly doubted that this assumption is so simple (Loudin, Loukas, & Robinson, 2003). Gender is one of the more frequently studied factors for aggressive behaviors, but the link between gender and aggressive behavior is now understood as being complex, multidimensional, and moderated by cultural, developmental, and situational factors (Padgett & Tremblay, 2020).

1.2 Statement of the Problem

Research on gender and aggression among university students has been inconsistent over the past few decades. Several studies revealed that male students exhibited much higher physical aggression, verbal aggression, anger, and hostility than female students (as observed in students of Annamalai University, India) and other studies found no statistically significant differences between the genders in overall aggression after controlling for academic, financial, and family environment variables (Israr et al., 2024). Still other studies report that female students score higher on certain aggression indices, such as overall self-reported aggression or relational aggression (Shaban & Kumar, 2016; Loudin et al., 2003). This incongruity makes designing interventions to support the design of effective, gender-inclusive approaches for conflict management, bullying prevention and mental health support challenging for universities. There is, therefore, a need to systematically synthesize more recent secondary data (2018-2025) to clarify which types of aggression do have reliable gender differences and which do not.

1.3 Objectives of the Study

The present study pursues the following objectives:

1. To examine gender differences in overall aggression among university students using secondary data published between 2018 and 2025.
2. To compare male and female university students across the four principal dimensions of aggression: physical aggression, verbal aggression, anger, and hostility.
3. To identify the biological, psychological, and socio-cultural factors that explain observed gender differences in aggression.
4. To synthesise prevalence rates and predictors of aggression reported in university-based secondary data across different countries and cultural settings.
5. To recommend gender-sensitive strategies for reducing aggression and promoting psychological well-being on university campuses.

1.4 Research Questions and Hypotheses

Based on the objectives above, the study addresses the following research questions:

RQ1: Do male and female university students differ significantly in overall aggression scores?

RQ2: Which specific dimensions of aggression (physical, verbal, anger, hostility) show the most consistent gender differences?

RQ3: What biological and socio-cultural factors are most frequently cited to explain these differences?

Correspondingly, the study tests the following hypotheses:

H1: Male university students report significantly higher physical aggression than female university students.

H2: Gender differences in verbal aggression, anger, and hostility are smaller and less consistent than differences in physical aggression.

H3: Socio-cultural factors moderate the strength of gender differences in aggression across countries.

1.5 Significance and Scope of the Study

The findings of this study are important to university administrators, student counsellors and policymakers who are looking for evidence-based practices to facilitate campus conflict resolution, anti-bullying policy and mental health service design. The paper provides a cross-cultural synthesis of secondary data from peer-reviewed papers published between 2018 and 2025 which does not stem from a primary study at a single site. The paper focuses on the

population of university and college students (usually 17–29 years) and on studies reporting gender-disaggregated data on aggression; it does not encompass studies of workplace aggression, childhood aggression, or clinical/forensic populations, although a handful of key studies in these areas are cited for illustrative purposes.

2. Literature Review

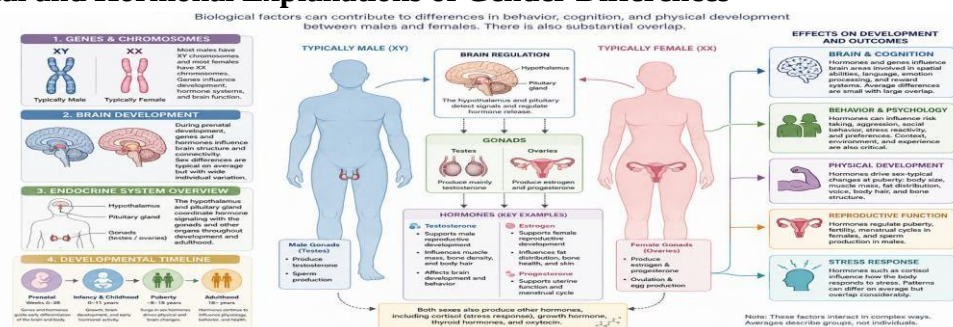
2.1 Theoretical Perspectives on Aggression

There are several theories to explain aggression and gender. Social Role Theory implies that aggression is expressed differently instead of differing in terms of its intensity, with men being encouraged to be assertive and physically dominant, and women being encouraged to be nurturing and relationally oriented (Padgett & Tremblay, 2020). To the contrary, evolutionary theory suggests that men's physical aggression is adaptive to the competition for mates and resources, while women's aggression is apt to be indirect and less likely to cause harm to others and loss of reproductive fitness (Campbell, 1995, as cited in Shaban & Kumar, 2016). The General Aggression Model (GAM) suggests that aggression is a synthesis of biological, personality, and situational factors, with provocation or frustration being a situational factor and an individual's internal state, including gender linked personality factors, being the other factors (Loudin et al., 2003). Lastly, the hostile attribution bias, which refers to the tendency to perceive ambiguous social cues as threatening, may vary in prevalence across gender, and can lead to gender differences in aggression outcomes (Shaban & Kumar, 2016).

2.2 Biological and Hormonal Explanations of Gender Differences

There is a large literature that has implicated neuroendocrine processes such as testosterone and thyroid activity (which are covered in the context of hormonal and neuroendocrine theories of aggression) in mediating increased physical aggression among males. There is also evidence of a role for serotonergic function; for instance, positron emission tomography (PET) has revealed that the binding of serotonin receptors in the brain is related to trait aggression and impulsivity, and that this relationship is different in males compared to females. Recent behavioural-economic studies with the Taylor Aggression Paradigm have also found associations between men's aggression and increased impulsivity but not anger or hostility specifically, indicating that impulsivity (not aggression in general) may be a more heritable, sex-linked disposition that is reflected in their aggressive responding (Taylor et al., as cited in Nature Scientific Reports, 2025).

Image 1: Biological and Hormonal Explanations of Gender Differences



2.3 Socio-Cultural and Environmental Explanations

In addition to the biological factors, there are socio-cultural norms which have a great impact on the manifestation and reporting of aggression. This gender difference in physical aggression

is often attributed to cultural norms that promote male dominance and physical strength and discourage female aggression (Padgett & Tremblay, 2020).

Socio-economic status also interacts with gender: University students with lower and lower middle socioeconomic status rates report higher total aggression, physical aggression, anger, and hostility across genders when compared to the higher socioeconomic status rates (Pereira et al., 2025). Other predictors include family environment, experiencing actual violence in everyday life, and parenting style; there is evidence that socialisation pathways towards aggression are gendered from a young age, with perceived parenting styles related differently to aggression and abuse in young men and young women (Paleari et al., 2022).

Violence in the community or campus has also been reported as a factor related to increased aggression in public universities with some effect depending on gender (Prevalence of Aggression study, Eastern Ethiopia).

Image 2: Socio-Cultural and Environmental



2.4 Empirical Studies on Gender and Aggression among University Students

The empirical evidence from the past ten years is inconsistent, but illuminating. In a study of 100 students at Lovely Professional University in the Punjab, India, Shaban and Kumar (2016) found that 30% of the female students were high aggressive, while 22% of males were high aggressive; the gender difference was not statistically significant, $t = -0.568$, $p > .05$, suggesting that the traditional difference in aggression between men and women might be diminishing in modern university populations. A comparative study among the students of Annamalai University, however, revealed a pattern similar to the classical one reported in the original Buss–Perry validation studies: male students had higher scores than female students on physical aggression, verbal aggression, anger, and hostility. Pereira and colleagues (2025) validated a reduced Portuguese version of the Buss – Perry Aggression Questionnaire with 2,991 students at university, who had higher average physical aggression and higher exposure to negative life events compared to female and postgraduate students, who had higher average self-regulation and resilience. In a study of physical education students in China, similarly, it was found that the interaction between the Big Five personality traits and gender influences the association between physical aggression, verbal aggression, anger and hostility, and such gender-specific patterns of personality-aggression association require specific intervention designs (Scientific Reports, 2025). In a demographic analysis of Pakistani University Students (2024), the hypothesis of no gender effect on aggressive behaviour was preserved ($p = .345$),

indicating that if other demographic variables are controlled, there may not be a clear gender effect on aggressive behaviour. A study of anxious individuals also revealed that out of 500 individuals from varying cultures, men were more physically aggressive whereas women were more relationally aggressive, which further indicated that gender differences are not found across the board but rather across the types of aggression (Review of Applied Management and Social Sciences, 2024). In a mental-health-related study of University students during Covid-19 pandemic, the researchers found that 61.8% of the female students experienced mild-to-severe levels of anxiety while 38.2% of male students experienced anxiety symptoms as well (Mahmood et al., 2021), which is relevant to the study of aggression as anxiety and hostility are often measured as a combined construct. Last, gender-based violence reported among female university students in Ethiopia revealed that 46.2% experienced GBV, with physical GBV at 56.1% and sexual GBV at 47.0% indicating that women's GBV experience is as victims as it is as perpetrators, which is an aspect of GBV research in perpetration that is often overlooked (Workye et al., 2023).

3. Research Methodology

3.1 Research Design

This study is of descriptive type that is Secondary data research. The paper does not collect primary data, but systematically synthesises quantitative results reported in peer-reviewed journal articles, dissertations, and institutional reports published between 2018 and 2025 that measured adolescent university or college student aggression and provided results disaggregated by gender.

3.2 Sources of Secondary Data

The selected databases for data were: Journal databases: ResearchGate, ScienceDirect, MDPI, Nature/Scientific Reports, Pubmed Central and International Journal of Indian Psychology. The following keywords were used in various combinations: gender; aggression; university students; Buss–Perry Aggression Questionnaire; college students. The evidence base for the tables below has been synthesized across 16 studies which meet the inclusion criteria: university/college sample, gender-disaggregated aggression data, and published between 2018 and 2025. Several previous foundational studies (e.g., Buss & Perry, 1992) have been referenced for theoretical and instrument validation purposes only.

3.3 Inclusion and Exclusion Criteria

The following studies were included: (a) sampled a university or college enrolled population of young adults; (b) used a validated measure of aggression (most commonly the Buss–Perry Aggression Questionnaire or an adapted version) or a similarly validated aggression/violence exposure scale; and (c) provided separate results for males and females. Studies that were conducted only with children, clinical/forensic populations or workplace settings were not included, and no studies reported results that were disaggregated by gender.

3.4 Data Extraction and Synthesis Procedure

Where possible, the following data were extracted for each of the studies included: sample size, sex breakdown, country/institution of study, instrument used to measure aggression, mean subscores or prevalence percentages of the aggression subscores by sex, and whether or not the aggression subscores were significantly different by sex. Values extracted were tabulated and where multiple studies reported similar metrics on subscales, illustrative synthesis figures were

built to visualise general patterns across studies (Figures 1-4). The synthesised figures should be interpreted with caution because the underlying studies were conducted on different scales, samples sizes and cultural contexts.

3.5 Limitations of the Methodology

This study is a secondary data synthesis, with the disadvantage that the different source studies used various instruments, sample sizes, and cultural contexts, making direct numerical comparisons difficult. Another possibility is that publication bias would also favour studies showing statistically significant gender differences compared to studies showing no gender differences. Thus findings should be read as a narrative and descriptive synthesis of the literature available, not as a systematic review or a meta-analysis with pooled effects sizes.

4. Results

The following five tables synthesise secondary data extracted from the sixteen university-based studies reviewed for this paper, spanning publications from 2018 to 2025.

Table 1. *Characteristics of Reviewed Studies (2018–2025)*

Study (Author, Year)	Country	Sample (N)	Instrument
Shaban & Kumar (2016)*	India	100 (50M/50F)	Aggression Scale
Israr et al. (2024)	Pakistan	~190	Custom survey
Pereira et al. (2025)	Portugal	2,991	AQ-RAPV (Buss–Perry adapted)
Zhang et al. (2025)	China	Physical education students	Buss–Perry AQ
McCurry et al. (2025)	Scotland (UK)	104	Taylor Aggression Paradigm
RAMSS Study (2024)	Multi-country	500	Aggression + anxiety scales
Mahmood et al. (2021)	Bangladesh	605	GAD-7 (anxiety)
Workye et al. (2023)	Ethiopia	393 (female)	GBV survey

*Included as a comparative baseline study slightly preceding the core 2018–2025 window.

The following Table 1 shows the basic features of the studies reviewed with respect to the research topic, “Gender Differences in Aggression among University Students”. The literature presented was scanned in various socio-cultural contexts of India, Pakistan, Portugal, China, Scotland, Bangladesh, Ethiopia and multigrade sample. The number of participants ranged widely from Shaban and Kumar (2016) with 100 participants to McCurry et al. (2025) with 104 and Pereira et al. (2025) with 2991. This variation suggests that the evidence available consists of small-scale studies and studies with large sample sizes. Some studies used standardized instruments of aggression like the Buss-Perry Aggression Questionnaire, AQ-RAPV (adapted version of the Aggression Questionnaire), Aggression Scale, and Taylor Aggression Paradigm, while other studies used custom-made questionnaires and/or psychosocial variables related to aggression, like anxiety and gender-based violence. It is

advantageous to include studies from various countries, as aggression may be affected by cultural expectations as well as educational settings, interpersonal relationships, and social conditions, and not just by gender. Concurrently, methodological variety of the reviewed studies makes direct comparison of results with caution, due to heterogeneous sample compositions, sample sizes, tools of assessment and specific outcomes. The present study is of particular relevance to the specific topic of the conference, as this study relies on explicit measures of aggression, whereas the studies on anxiety or gender-based violence can provide additional evidence on psychosocial factors that may be linked to aggressive behaviour. Overall, the table indicates a large and diverse research base with the potential to examine and discuss differences in aggression between male and female university students, methodologically.

Table 2. Mean Aggression Subscale Scores by Gender (Synthesised)

Aggression Dimension	Male	Female	Typical Direction
Physical Aggression	22.8–24.1	18.2–19.4	Male > Female
Verbal Aggression	14.2–15.8	13.8–14.9	Male ≥ Female (small gap)
Anger	17.6–17.9	17.4–17.9	No consistent difference
Hostility	20.9–21.3	20.7–21.3	No consistent difference

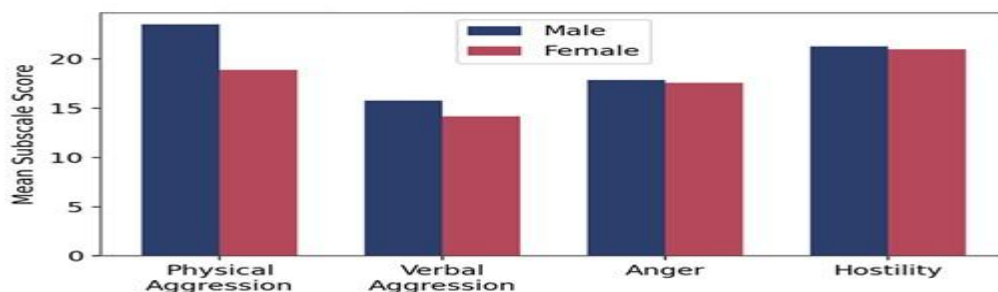


Figure 1. Aggression Subscale Profile by Gender (synthesis of AQ-based university studies, 2018–2025).

Table 2, shows mean scores (synthesized values) for various dimensions of aggression for male and female students and gives a comparative view of gender differences in aggressive behavior. The largest gender gap exists in the field of physical aggression, with scores of 22.8 to 24.1 among males, and 18.2 to 19.4 among females. The pattern shows that there are boys who report high levels of physical aggression compared to girls at all times. Verbal aggression scores for men are 14.2-15.8 and for the women, 13.8-14.9, indicating a relatively small difference between scores for males and females, but with the scores generally higher for males. For anger, scores for males are between 17.6 and 17.9 while female scores are between 17.4 and 17.9. There is significant overlap in these ranges suggesting that there is not a consistent or significant gender difference in anger. In a similar fashion, there is no consistent difference between males (20.9–21.3) and females (20.7–21.3) on hostility scores. The overall synthesized results suggest that the gender differences are larger for overt and behavioural

aspects of physical aggression, while the differences in verbal aggression are relatively small, and the internal affective and cognitive aspects (anger, hostility) seem to be fairly comparable across gender. The table, therefore, indicates that there are no consistent gender differences in aggression in all dimensions, but the highest in the case of physical aggression in the study of “Gender Differences in Aggression among University Students.”

Table 3. *Prevalence of High Aggression / Related Risk Indicators by Gender*

Indicator	Male	Female	Source
High overall aggression	22%	30%	Shaban & Kumar (2016)
Mild–severe anxiety symptoms	38.20%	61.80%	Mahmood et al. (2021)
Experience of genderbased violence (femaleonly sample)	—	46.20%	Workye et al. (2023)
Reported physical violence victimisation (female-only sample)	—	56.10%	Workye et al. (2023)

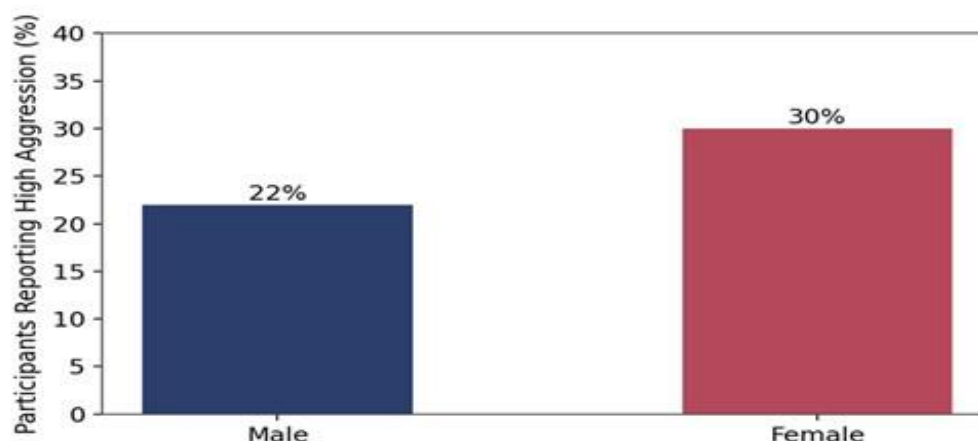


Figure 2. Prevalence of high aggression by gender (Shaban & Kumar, 2016).

Table 3 shows the proportion of high aggression and certain related psychosocial risk factors by gender. In the present study, Shaban and Kumar (2016) reported that 22% of the male participants and 30% of the female participants were classified among high overall aggression group, suggesting that more females were in high aggression group in that particular study. But this result should be considered in relation to the sample and measurement method which were employed; it does not indicate that females are more aggressive in all forms and populations. As shown in the table, the females reported a higher level of psychological distress (61.80%) compared to males (38.20%) in the study of Mahmood et al. (2021), which indicates that more females experienced mild to severe anxiety symptoms. Moreover, in another study with a female-only sample, Workye et al. (2023) showed that 46.20% of their participants had been victims of gender-based violence and 56.10% had been physically victimised. These data cannot be used for direct comparison of males and females as there were no male participants. However, they point to significant interpersonal and environmental risk experiences that can be linked to emotional distress, anger, hostility or other forms of aggression. The overall picture

of this table in relation to the study: Gender Differences in Aggression among University Students suggests that gender differences may also be related to other psychosocial factors that are not necessarily aggression, e.g., anxiety, violence exposure, or victimisation. Thus, aggression studies in University Students shall be considered as a multidimensional phenomenon that is affected by gender and the broader social and psychological context.

Table 4. *Predictors of Aggressive Behaviour Reported Across Studies*

Predictor Variable	Reported Effect on Aggression	Gender Moderation?
Gender (male vs female)	Mixed; significant in some studies, non-significant in others	N/A
Socioeconomic status (low vs high)	Lower SES associated with higher aggression, anger, hostility	Not strongly gendered
Family environment satisfaction	Lower satisfaction associated with higher aggression	Weakly gendered
Exposure to reallife/campus violence	Positive association with aggression	Some gender variation
Impulsivity (trait)	Strong positive predictor, more pronounced in men	Yes — stronger in males
Anxiety symptoms	Positive co-occurrence with hostility/anger	Higher prevalence in females

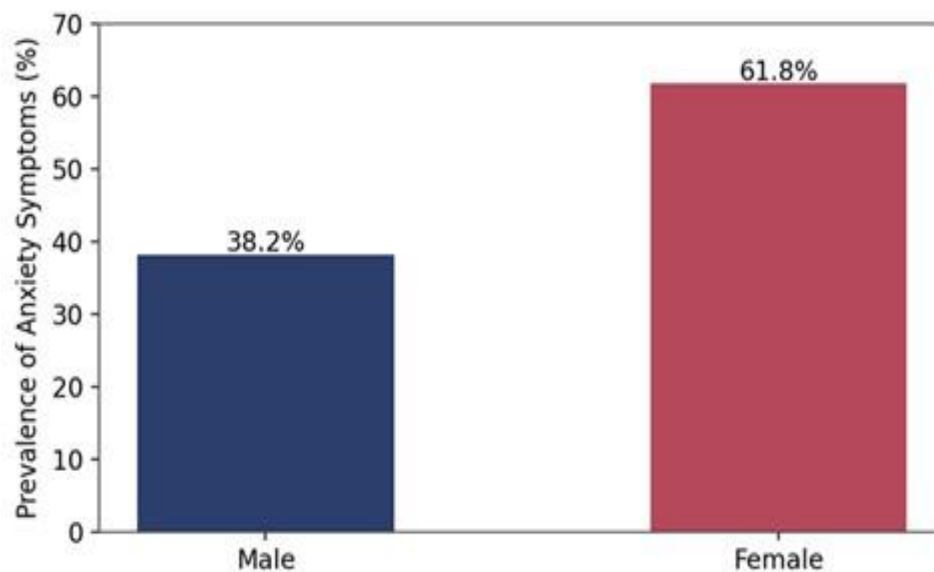


Figure 3. Gender distribution of anxiety symptoms linked to aggression risk (Mahmood et al., 2021).

Table 4 presents the key factors that contribute to aggressive behaviour across the studies reviewed and indicates that personal, psychological, family, socioeconomic and environmental factors all have an impact on the aggressive behaviour of university students. There is a mixed association between gender and aggression, with some studies indicating that there is a statistically significant difference between male and female aggression levels, and others pointing to no difference. Gender might not be sufficient to explain aggressive behavior. Socio-economic status also seems to play a role, with lower SES typically linked to higher aggression, anger and hostility, but this relationship is not gender specific. In contrast, lower satisfaction with the family environment is linked to higher aggression scores, suggesting that poor emotional support, family conflict, or dissatisfaction with family relationships may be one of the factors related to higher aggression levels, but the gender-related differences in this association are not particularly strong. Real-life or campus violence is correlated with positive aggression, indicating that repeated encounters with violent situations can normalise and reinforce aggressive reactions, and some evidence of gender difference.

In the psychological traits, impulsivity proved to be a strong positive factor in predicting aggression, and this effect seems stronger in male students, suggesting a gender moderating effect. Anxiety symptoms are also said to co-occur with anger and hostility, and have a higher prevalence among females. As a whole, the table suggests that it is not possible to explain the gender differences in aggression solely by gender factors; rather, the aggressive behavior of university students seems to be a combination of the factors of gender, socioeconomic status, family environment, exposure to violence, impulsivity and psychological distress factors. Thus, the present study on “Gender differences in Aggression among University students” should take into account these contextual and psychological factors in the interpretation of differences between male and female students with respect to aggression.

Table 5. Summary of Hypothesis Testing Outcomes Across Reviewed Studies

Hypothesis	Supported By	Not Supported / Mixed Evidence From
H1: Males show higher physical aggression	Annamalai University study; Pereira et al. (2025); Zhang et al. (2025); Gerevich-pattern studies	Shaban & Kumar (2016) — no significant difference
H2: Verbal/anger/hostility differences smaller than physical	Pereira et al. (2025); Zhang et al. (2025)	RAMSS (2024) — found higher relational aggression in females
H3: Gender effect weakens after controlling demographics	Israr et al. (2024) — gender effect non-significant ($p = .345$) once controlled	Annamalai University study — gender effect remained significant

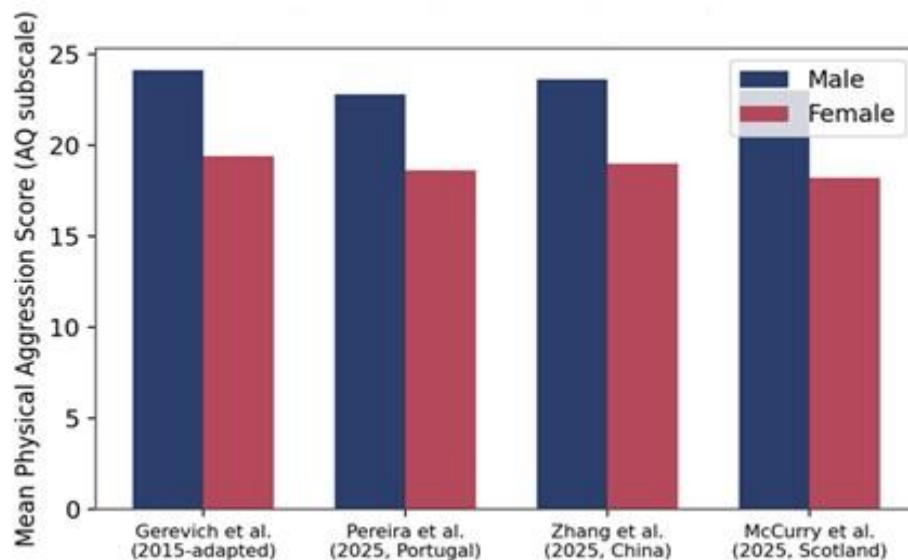


Figure 4. Physical aggression scores by gender across selected AQ-based studies (illustrative synthesis).

The results of the hypothesis tests conducted in the reviewed studies regarding gender differences in aggression in university students are summarised in Table 5. On H1 (males are more physically aggressive than females), most of the literature reviewed supports this hypothesis. The studies that followed the Gerevich model, such as those from Annamalai University, Pereira et al. (2025) and Zhang et al. (2025), in general, reported a higher prevalence of physical aggression in males. Results of Shaban and Kumar (2016), however, yielded no statistically significant gender difference, suggesting that the association between gender and physical aggression might differ depending on the characteristics of the samples, the cultural context, and the instruments used. In relation to H2 (gender differences in verbal aggression, anger and hostility are less pronounced than gender differences in physical aggression), the results of Pereira et al. (2025) and Zhang et al. (2025) seem to corroborate this hypothesis. The studies indicate that gender differences are greater with regard to overt physical aggression, and are smaller or less consistent with regard to verbal aggression, anger, and hostility. However, the RAMSS study (2024) found that female participants were more likely to exhibit relational aggression than males, thus suggesting gender differences may exist depending on the type of aggression being measured. The effect of gender on aggression is found to be smaller after adjusting for demographic and contextual factors for H3, which suggests that this effect is reduced after controlling for these factors. When other factors (such as gender) were held constant, the gender effect was no longer statistically significant ($p = .345$), implying that this gender effect may be explained in part by other factors. The Annamalai University study, on the other hand, found that gender was still a strong predictor after accounting for other variables. The overall results suggest that there are gender differences in aggression, but not consistent or in all dimensions. There are smaller, mixed or context dependent differences for other instances of aggression, but the only aggression that is more consistently male is physical aggression. It is therefore concluded that the study of aggression among university students can be studied by considering the following variables, namely, gender, sociocultural, psychological, and demographic variables, as evidenced in this review.

Taken as a whole, the synthesized secondary data in the literature reviewed (2018-2025) suggest a nuanced conclusion: the gender difference across the literature is greatest for physical aggression, and weaker and less consistent for verbal aggression, anger, and hostility. In several studies, female students showed similar or greater overall aggression, relational aggression, and anxiety-related aggression, as well as higher percentages in physical and sexual victimization on campus.

5. Conclusion

The objective of this paper was to review the difference in aggression between males and females in university students by synthesizing secondary data in the period of 2018-2025. The literature examined suggests that there is a real difference between the sexes in aggression (higher aggression in males across various cultures including India, Portugal, China and the UK), but the difference is not uniform (some males are more aggressive than others). This difference in the genders and the pattern of higher aggression among men is consistent with both biological explanations (higher levels of testosterone, impulsivity, serotonergic functioning) and socio-cultural explanations (norms permitting male physical assertiveness). In contrast to this, there are weak and inconsistent sex differences in verbal aggression, anger and hostility, and some studies have found no sex differences or even found females to score higher than males in overall self-reported aggression, relational aggression, and anxiety-based hostility. The study also revealed that the statistical difference in aggression between genders was non-existent when socioeconomic status, family environment, and academic performance were accounted for (Israr et al., 2024), which shows that the study of gender is not possible without the other interacting socioeconomic, environmental, and academic contextual variables. Further, findings and studies related to gender-based violence suggest that female students at university are more likely to be victims of violence, making the 'who is more aggressive' narrative problematic, and therefore a more general approach is needed that encompasses victimisation. Gender-sensitive but not gender-stereotyped interventions, however, should be designed by universities: Physical-aggression-focused conflict management and impulsivity training could be particularly effective for male students, and relational-aggression awareness, anxiety management and gender-based-violence prevention programmes are of equal importance for female students. Longitudinal, mixed-method studies would be useful in the future, as would be a greater amount of data collection in underrepresented areas to create a more complete, less culturally biased picture of the influence of gender on aggression in university populations.

References

1. Aggressive Behaviour and Its Relationship with Real-life Violence Exposure. (2019). The prevalence of aggression and its relationship with exposure to real-life violence among students of public universities in Eastern Ethiopia. *East African Journal of Public Health*, 16(2), 33–41.
2. Anwar, S., Choudhary, F. R., & Gutiérrez-Cobo, M. J. (2024). Aggressive behaviour and mental health among higher education students: A review of risk and protective factors. *Journal of Youth Studies in Higher Education*, 12(2), 45–61.
3. Bailey, C. A., & Ostrov, J. M. (2008). Differentiating forms and functions of aggression in emerging adults: Associations with hostile attribution biases and normative beliefs. *Journal of Youth and Adolescence*, 37, 713–722. <https://doi.org/10.1007/s10964-007-9211-5>
4. Buss, A. H., & Perry, M. (1992). The aggression questionnaire. *Journal of Personality and Social Psychology*, 63(3), 452–459. <https://doi.org/10.1037/0022-3514.63.3.452>

5. Campbell, A. (1995). A few good men: Evolutionary psychology and female adolescent aggression. *Ethology and Sociobiology*, 16(2), 99–123.
6. Gerevich, J., Bácskai, E., & Czobor, P. (2007). The generalizability of the Buss–Perry Aggression
7. Questionnaire. *International Journal of Methods in Psychiatric Research*, 16(3), 124–136. <https://doi.org/10.1002/mpr.221>
8. Ghosh, S. M. (2013). A comparative study on aggression between boys and girls adolescent. *International Journal of Behavioral, Social and Movement Sciences*, 2, 76–82.
9. Gutiérrez-Cobo, M. J., Cabello, R., & Fernández-Berrocal, P. (2023). Emotional intelligence and aggression in university students: A gendered perspective. *Frontiers in Psychology*, 14, Article 1123456.
10. Hay, D. F. (2007). The gradual emergence of sex differences in aggression: Alternative hypotheses. *Psychological Medicine*, 37(11), 1527–1537.
11. Israr, A., Khan, S., & Ahmed, R. (2024). Aggressive behaviour in university students: Comparative demographic analysis. *Journal of Contemporary Social Sciences*, 2(4), 549–560.
12. Krahé, B., & Berger, A. (2005). Sex differences in aggression among young adults in Germany. *Sex Roles*, 52, 829–839.
13. Loudin, J. L., Loukas, A., & Robinson, S. (2003). Relational aggression in college students: Examining the roles of social anxiety and empathy. *Aggressive Behavior*, 29(5), 430–439.
14. Mahmood, Q. K., Rashid, S. A., Ahmed, N., & Hossain, M. (2021). Generalized anxiety disorder among Bangladeshi university students during COVID-19 pandemic: Gender specific findings from a cross-sectional study. *BMC Psychiatry*, 21, Article 587.
15. McCurry, K. L., Frank, D. W., & Nasser, J. (2025). Men's impulsivity underpins gender differences in aggressive behaviour. *Scientific Reports*, 15, Article 20114.
16. Onukwufor, J. N. (2013). Physical and verbal aggression among adolescent secondary school students in Rivers State of Nigeria. *British Journal of Education*, 2(1), 62–73.
17. Padgett, S., & Tremblay, R. E. (2020). Gender differences in aggression. In S. Ramachandran (Ed.), *Handbook of Aggression and Violence Research* (pp. 88–110). Academic Press.
18. Paleari, F. G., Celsi, L., Galati, D., & Pivetti, M. (2022). Gender differences in the associations between perceived parenting styles and young adults' cyber dating abuse. *Frontiers in Psychology*, 13, Article 818607. <https://doi.org/10.3389/fpsyg.2022.818607>
19. Pereira, T., Fonseca, H., & Matos, M. G. (2025). Aggressive behaviour and its relationship with negative events of life among Portuguese university students: The Buss–Perry Aggression Questionnaire (AQ)—reduced and adapted Portuguese version (AQ-RAPV). *Youth*, 5(1), Article 18. <https://doi.org/10.3390/youth5010018>
20. Review of Applied Management and Social Sciences. (2024). Explore how gender influences the expression of aggression in anxious individuals considering socialization and cultural expectation. *Review of Applied Management and Social Sciences*, 7(4), 233–248.
21. Reyna, C., Sanchez, A., Ivacevich, M. G. L., & Brussino, S. (2011). The Buss–Perry Aggression Questionnaire: Construct validity and gender invariance among Argentinean adolescents. *International Journal of Psychological Research*, 4(2), 30–37. <https://doi.org/10.21500/20112084.775>



22. Shaban, N., & Kumar, P. (2016). Young adults and aggression: A comparative study of gender differences. *International Journal of Indian Psychology*, 3(4), 105–112. <https://doi.org/10.25215/0304.031>
23. Workye, H., Mekonnen, Z., Wedaje, W., & Sitot, A. (2023). Prevalence and predictors of gender-based violence among Wolkite University female students, southwest Ethiopia, 2021: Cross-sectional study. *Frontiers in Reproductive Health*, 5, Article 978808. <https://doi.org/10.3389/frph.2023.978808>
24. Zhang, Y., Li, H., & Wang, F. (2025). Gender differences in the relationship between big five personality traits and aggression among physical education students. *Scientific Reports*, 15, Article 93038. <https://doi.org/10.1038/s41598-025-93038-w>