



## **Gender and Socioeconomic Influences on Academic Jealousy: Differential Patterns in Competition and Gratitude Among Pakistani Undergraduates**

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### **Abstract**

Academic competition is an integral aspect of higher education, but it can elicit negative emotions such as jealousy, which may undermine well-being and interpersonal relationships. The present study examined gender and socioeconomic status-based differences in academic competition, academic jealousy, and gratitude among Pakistani undergraduate students, as well as the interactive effects of gender and socioeconomic status on these variables. Using a cross-sectional survey design, data were collected from 256 students through convenient sampling. Participants completed the Revised Competitiveness Index (CI-R), Academic Jealousy Scale (AJS), and Gratitude Questionnaire–Six Item Form (GQ-6). Data were analyzed using independent samples t-tests, one-way ANOVA, and two-way ANOVA in SPSS-27. Results revealed no significant gender or socioeconomic differences in academic competition and jealousy, although males reported higher levels of gratitude ( $M = 28.22$ ,  $SD = 9.46$ ) than females ( $M = 24.59$ ,  $SD = 8.97$ ). A significant interaction between gender and socioeconomic status was observed for academic jealousy, indicating that these demographic factors jointly influence students' jealousy experiences. Findings highlight the complex interaction between demographic variables and academic emotions and underscore the protective role of gratitude in promoting adaptive responses within competitive academic settings.

**Keywords:** Academic Competition, Academic Jealousy, Gratitude, Undergraduate Students, Gender, Socioeconomic Status

### **Introduction**

In contemporary higher education systems, academic life is increasingly shaped by competitive structures that emphasize achievement, performance, and comparative evaluation among students. Universities commonly employ grading systems, merit-based scholarships, limited seats for advanced studies, and competitive employment pathways, all of which contribute to an environment in which students are persistently exposed to social comparison and performance pressure (Johnson & Johnson, 2009). While academic competition is often regarded as a motivating force that encourages effort and excellence, an excessive focus on normative comparison may also give rise to maladaptive emotional experiences, including stress, anxiety, envy, and jealousy (Putwain et al., 2018). Among these emotional responses, academic jealousy has emerged as a particularly salient phenomenon, as it reflects students' negative reactions to



peers' academic success and perceived disparities in achievement. Such emotional experiences are especially relevant within developing countries like Pakistan, where intense competition for limited educational and occupational opportunities, combined with strong familial and societal expectations, places considerable psychological pressure on undergraduate students (Shah et al., 2019). Despite the centrality of academic competition in students' educational experiences, limited empirical attention has been given to understanding how demographic factors such as gender and socioeconomic status shape academic jealousy and related emotional constructs, highlighting the need for systematic investigation within the local cultural and educational context (Khan et al., 2025).

The academic environment within higher education institutions has become increasingly competitive, performance-oriented, and outcome-driven, particularly in systems that emphasize merit-based evaluation and limited advancement opportunities. Universities often rely on grading systems, scholarships, and ranking mechanisms that encourage students to compare their performance with peers, thereby intensifying academic competition (Johnson & Johnson, 2009). While competition can foster motivation and achievement when appropriately structured, excessive competition has been linked to adverse psychological outcomes, including stress, anxiety, and negative affect (Putwain et al., 2018). These competitive pressures create fertile ground for emotional responses that extend beyond academic motivation and performance.

Among the emotional consequences associated with competitive academic contexts, academic jealousy has received growing scholarly attention. Academic jealousy refers to negative emotional reactions elicited by unfavorable comparisons with peers who are perceived to possess superior academic abilities or achievements (Bayar & Koca, 2021). Such emotions are closely associated with feelings of resentment, frustration, and perceived injustice, which may undermine psychological well-being and interpersonal relationships within academic settings (Khan et al., 2025). Persistent experiences of academic jealousy have also been linked to disengagement, reduced self-esteem, and diminished academic satisfaction (Pekrun et al., 2017).

Academic competition itself is a multidimensional construct encompassing attitudes, motivations, and behaviors directed toward outperforming others. Research indicates that competitive orientations are shaped by both individual and contextual factors, including cultural norms, institutional practices, and perceived scarcity of academic rewards (Murayama & Elliot, 2012). In collectivistic societies, competition may coexist with strong social comparison pressures, creating internal conflicts between cooperation and achievement striving (Chiu et al., 2011). Such dynamics may heighten emotional sensitivity to peers' success and increase vulnerability to academic jealousy.

Gender differences have frequently been examined in relation to competitiveness and emotional responses in academic contexts, although findings remain inconsistent. Some studies suggest that male students demonstrate higher levels of competitiveness and achievement-oriented behavior, often attributed to gender socialization processes that emphasize assertiveness and dominance (Almås et al., 2016). Conversely, female students have been found to exhibit stronger emotional reactions to academic evaluation and social comparison, potentially increasing susceptibility to jealousy and academic stress (Else-Quest et al., 2012). However, other studies report negligible gender



differences, underscoring the role of cultural and contextual influences in shaping these patterns (Hyde, 2005).

Socioeconomic status represents another salient factor influencing students' academic experiences and emotional well-being. Students from lower socioeconomic backgrounds often face structural disadvantages, including limited access to educational resources, financial strain, and heightened pressure to succeed academically as a means of social mobility (Farhana, 2024). These challenges may intensify upward social comparisons with more privileged peers, thereby increasing feelings of inadequacy and academic jealousy (Reardon, 2011). Conversely, students from higher socioeconomic backgrounds may benefit from greater academic support and confidence, which can mitigate negative emotional responses to competition.

In contrast to negative academic emotions, positive psychological constructs such as gratitude have been identified as important protective factors that promote resilience and well-being. Gratitude is conceptualized as a dispositional tendency to recognize and appreciate positive aspects of one's life and the contributions of others (Wood et al., 2018). The Broaden-and-Build Theory of positive emotions posits that gratitude broadens individuals' thought-action repertoires and builds enduring psychological resources, facilitating adaptive coping with stressors (Fredrickson, 2013). Empirical research has consistently linked gratitude with reduced negative affect, enhanced life satisfaction, and improved emotional regulation (Wood et al., 2018).

Within academic contexts, gratitude has been shown to reduce maladaptive social comparisons and negative emotional reactions associated with competitive environments. Students with higher levels of gratitude are more likely to focus on personal growth and learning opportunities rather than engaging in detrimental comparisons with peers (Zhang et al., 2022). Prior research conducted among Pakistani undergraduate students demonstrated that gratitude buffered the relationship between academic competition and academic jealousy, suggesting that gratitude functions as an important emotional resource within high-pressure academic settings (Khan et al., 2025).

## **Theoretical Framework**

The present research was based on Social Comparison Theory which provides a foundational framework for understanding the emergence of academic jealousy. According to this theory, individuals have an inherent drive to evaluate their abilities and opinions by comparing themselves with others, particularly in situations where objective standards are ambiguous (Festinger, 1954). Academic environments, characterized by frequent evaluations and normative grading practices, naturally encourage such comparisons (Buunk & Gibbons, 2007). Upward social comparisons, in particular, have been shown to elicit negative emotional reactions when individuals perceive themselves as falling short of peers' achievements (Gerber et al., 2018). Within competitive academic climates, these processes may intensify and contribute to jealousy-related emotions.

## **Rationale of the Study**

The Pakistani higher education context presents a particularly relevant setting for examining academic jealousy due to intense competition for limited educational and occupational opportunities. Strong societal emphasis on academic success, combined with economic constraints and parental



expectations, places substantial pressure on undergraduate students (Farooq et al., 2020). These pressures may intensify social comparison processes and exacerbate emotional challenges, yet empirical research examining academic jealousy within Pakistani universities remains limited. Moreover, existing literature has largely neglected the combined influence of gender and socioeconomic status on academic competition, academic jealousy, and gratitude. Most studies have focused on single demographic variables or have been conducted in Western contexts, limiting their cultural generalizability (Else-Quest et al., 2012). Therefore, this research signifies as it investigated the combined effects of gender and socioeconomic status which is essential for understanding how multiple social identities intersect to shape academic emotional experiences.

## Research Objectives

- To examine gender-based differences in academic competition, academic jealousy, and gratitude among undergraduate students.
- To assess socioeconomic status-related variations in academic competition, academic jealousy, and gratitude.
- To investigate the interactive effects of gender and socioeconomic status on academic competition, academic jealousy, and gratitude among undergraduate students.

## Research Hypotheses

- H1:** Male students will report significantly higher levels of academic competition than female students.
- H2:** Female students will report significantly higher levels of academic jealousy than male students.
- H3:** There will be no significant differences between male and female students in levels of gratitude.
- H4:** Students from low SES backgrounds will report higher levels of academic jealousy and lower levels of gratitude compared to students from middle and high SES backgrounds.
- H5:** There will be no significant differences in academic competition across SES groups.
- H6:** Gender and SES will interact significantly in predicting levels of academic jealousy.
- H7:** There will be no significant interaction effects of gender and SES on academic competition and gratitude.

## Methods

### Research Design

The present study employed a cross-sectional survey research design to examine gender- and socioeconomic status-based differences in academic competition, academic jealousy, and gratitude among undergraduate students. A quantitative approach was considered appropriate as it allows systematic measurement of psychological constructs and statistical comparison between demographic groups.



## **Participants**

The sample consisted of 256 undergraduate students enrolled in public and private universities in Pakistan. Participants were recruited from multiple academic disciplines, including social sciences, natural sciences, and management sciences, to ensure variability in academic background.

## **Inclusion Criteria & Exclusion Criteria**

The age of the participants ranged from 18 to 30 years. Both male and female students were included in the study, and participants represented diverse socioeconomic backgrounds. Inclusion criteria required participants to be currently enrolled as undergraduate students and willing to provide informed consent. Students with incomplete responses were excluded from the final analysis.

## **Sampling Technique**

A convenient sampling technique was used to assess samples due to accessibility and time constraints.

## **Operational Definitions and Instruments**

### **Academic Competition**

*Academic competition was measured using the Revised Competitiveness Index (CI-R) developed by Houston et al. (2002). The scale consists of 14 items designed to assess individuals' competitive attitudes and tendencies. Participants responded to items on a Likert-type scale ranging from strongly disagree to strongly agree. The CI-R has demonstrated satisfactory psychometric properties in previous research, with reported reliability coefficients exceeding .80.*

### **Academic Jealousy**

*Academic jealousy was assessed using the Academic Jealousy Scale (AJS) developed by Koçak (2019). The scale measures emotional, cognitive, and behavioral aspects of jealousy related to peers' academic success. Participants rated items on a Likert-type response format indicating the extent to which each statement described their feelings and experiences. Previous studies have reported good internal consistency and construct validity for the scale.*

### **Gratitude**

*Gratitude was measured using the Gratitude Questionnaire–Six Item Form (GQ-6) developed by McCullough et al. (2002). The GQ-6 assesses dispositional gratitude and has been widely used across diverse cultural contexts. Participants responded to items on a seven-point Likert scale ranging from strongly disagree to strongly agree. The scale has demonstrated strong reliability and validity in previous research, including studies conducted with student populations. Higher scores indicate greater levels of gratitude.*

### **Gender**

Gender was measured through participants' self-reported response on the demographic sheet and categorized for analysis.



**Socioeconomic Status**

Socioeconomic status was measured through participants’ self-reported response on the demographic sheet and categorized into low, middle, and high SES groups.

**Ethical Considerations**

The study observed ethical guidelines, including obtaining informed consent, ensuring confidentiality, and guaranteeing anonymity. Participants were informed of their right to withdraw at any time without consequences, and the consent form outlined the study’s purpose, procedures, risks, and benefits.

**Results**

**Table 1: Descriptives, t-Values and Cohen’s d of Scores of the Males and Females Students on Academic Competition Index, Academic Jealousy Scale, and Gratitude Questionnaire (N = 256)**

Variables	Male (n=121)		Female (n=135)		t	p	95% CI		Cohen’s d
	M	SD	M	SD			LL	UL	
R-CI	38.77	13.96	44.57	14.49	-.30	.76	-	2.86	—
AJS	55.47	19.94	60.21	22.42	-.55	.58	-	3.58	—
GQ-6	28.22	9.46	24.59	8.97	2.2	.02	.36	4.90	0.3

Note: M= Mean, SD= Standard Deviation, R-CI= Revised Competitiveness Index, AJS= Academic Jealousy Scale, GQ-6= Gratitude Questionnaire-Six Item Form; LL= Lower limit; UL= Upper limit; CI= Confidence Interval.

Table 1 shows gender differences in academic competition, academic jealousy, and gratitude. No significant gender differences were found for academic competition or academic jealousy. However, males reported significantly higher gratitude than females, with a small effect size.

**Table 2: Mean, Standard Deviation and One Way Analysis of Variance in Academic**

*Competition, Academic Jealousy, and gratitude Across Socioeconomic Status (N = 256)*

Variables	Lower (n=78)		Middle (n=94)		Upper (n=39)		F (2,253)
	M	SD	M	SD	M	SD	
R-CI	39.41	15.23	37.91	11.97	39.96	14.05	.53
AJS	56.37	21.57	54.96	18.26	57.45	20.99	.34
GQ-6	26.19	9.75	27.99	8.34	26.14	9.81	1.14

Note; M= Mean, SD= Standard Deviation, R-CI= Revised Competitiveness Index, AJS= Academic Jealousy Scale, GQ-6= Gratitude Questionnaire-Six Item Form.

Table 2 presents differences in academic competition, academic jealousy, and gratitude across socioeconomic status groups. The results indicate no significant differences among lower, middle, and upper SES groups on any of the variables. Mean scores were largely comparable across groups.



**Table 3: Two-Way Analysis of Variance for Academic Jealousy by Gender and Socioeconomic Status**

Source	SS	df	MS	F	p	$\eta^2p$
Socioeconomic Status (SES)	374	2	187	0.48	.620	.004
Gender	106	1	106	0.27	.602	.001
SES × Gender	543	2	271	6.94	.001	.053
Error	978	25	391			
Total	912	25				
Corrected Total	103	25				

Note. SS = Sum of square, df = degree of freedom, MS = Mean square,  $\eta^2p$  = partial eta squared.  $R^2 = .056$ , Adjusted  $R^2 = .038$ .  $p < .05$ .

Table 3 reports the two-way ANOVA results for academic jealousy by gender and socioeconomic status. No significant main effects of gender or SES were observed. A significant interaction effect between gender and SES indicates differential patterns of academic jealousy across groups.

**Table 4: Two-Way Analysis of Variance for Gratitude by Gender and Socioeconomic Status**

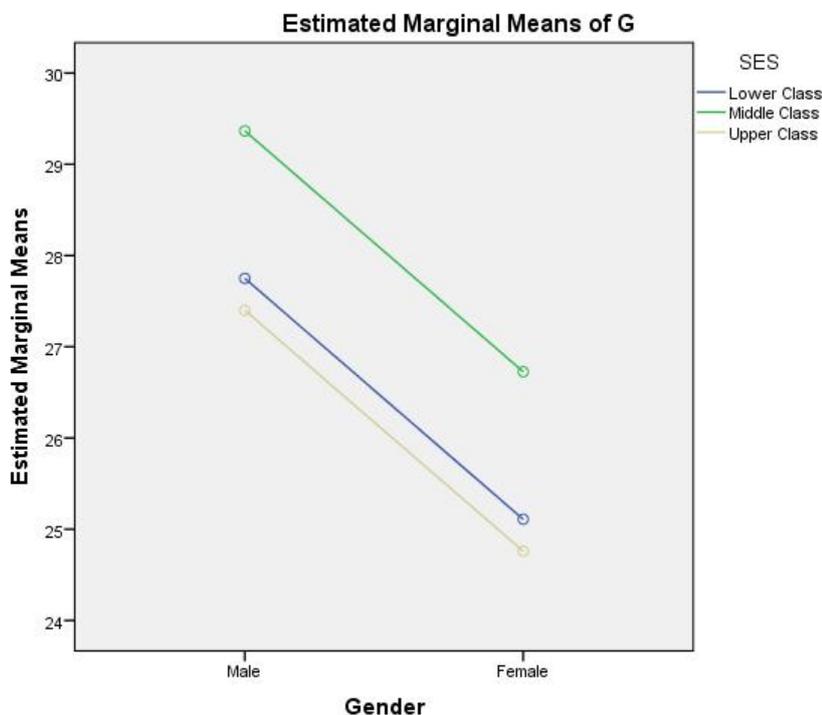
Source	SS	df	MS	F	p	$\eta^2p$
Socioeconomic Status (SES)	197	2	98	1.16	.314	.009
Gender	440	1	44	5.20	.023	.020
Error	213	25	84			
Corrected Total	219	25				

Note. SS = Sum of squares, df = degree of freedom, MS = Mean square,  $\eta^2p$  = partial eta squared.  $R^2 = .029$ , Adjusted  $R^2 = .017$ .

Table 4 presents two-way ANOVA findings for gratitude. A significant main effect of gender was found, whereas socioeconomic status showed no significant effect. This suggests that gratitude differed by gender but not by SES.



**Figure 1:** Two-Way Analysis of Variance for Gratitude by Gender and Socioeconomic Status



**Table 5:** Two-Way Analysis of Variance for Academic Competition by Gender and Socioeconomic Status

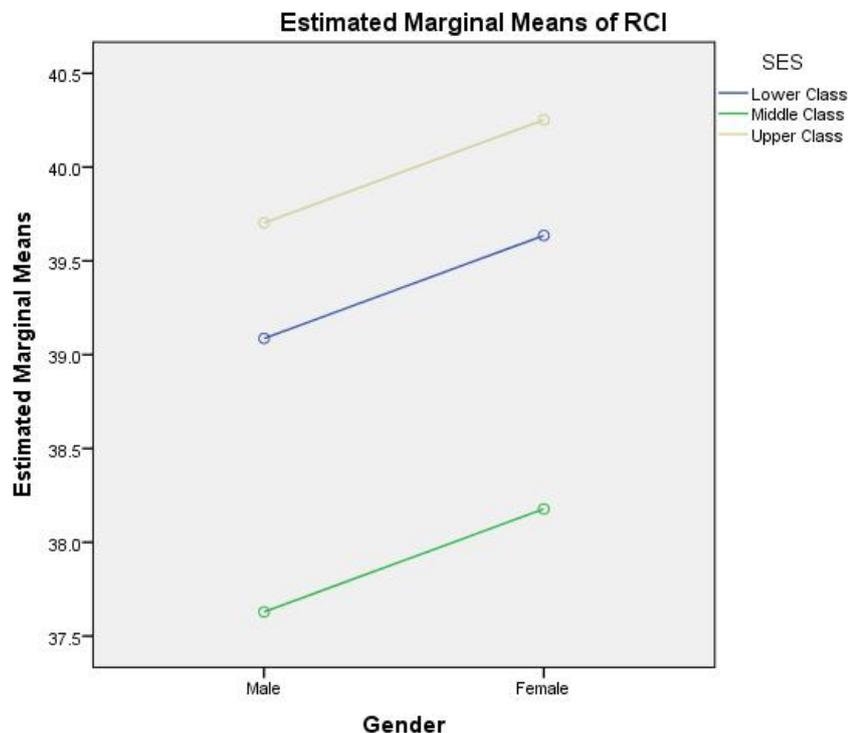
Source	SS	df	MS	F	p	$\eta^2p$
Socioeconomic Status (SES)	203	2	101	0.54	.585	.004
Gender	19.0	1	19.0	0.10	.751	.000
Error	475	25	188			
Corrected Total	478	25				

Note. SS = Sum of squares, df = degree of freedom, MS = Mean square,  $\eta^2p$  = partial eta squared.  $R^2 = .005$ , Adjusted  $R^2 = -.007$ .

Table 5 shows two-way ANOVA results for academic competition. Neither gender nor socioeconomic status had a significant main effect. Overall, academic competition levels were similar across groups.



**Figure 2: Two-Way Analysis of Variance for Academic Competition by Gender and Socioeconomic Status**



## Discussion

The present study examined gender- and socioeconomic status-based differences in academic competition, academic jealousy, and gratitude among Pakistani undergraduate students, as well as the interactive effects of gender and socioeconomic status on these constructs. The findings provide nuanced insights into how competitive academic environments shape students' emotional experiences and highlight the complex interplay between demographic factors and academic emotions within a developing country context.

Contrary to expectations that male students would demonstrate higher levels of academic competition, the results indicated no significant gender differences in competitive orientation. This finding suggests that competitive academic pressures are experienced similarly by male and female students, likely due to the standardized evaluation systems, merit-based assessments, and limited advancement opportunities that characterize higher education institutions (Johnson & Johnson, 2009). Within such environments, academic success is framed as a central determinant of future mobility, thereby creating uniform competitive demands across genders. These findings further align with evidence suggesting that contextual and institutional factors may reduce traditionally observed gender differences in competitiveness, particularly in academically demanding settings (Hyde, 2005).

Similarly, anticipated gender differences in academic jealousy were not supported, as male and female students reported comparable levels of jealousy. Although prior literature has indicated that females may experience stronger emotional reactions to academic evaluation and social comparison (Else-Quest et al., 2012), the current findings suggest that persistent exposure to performance comparison may normalize jealousy-related emotions across genders. Competitive academic climates, characterized by frequent assessments and peer



comparisons, may heighten emotional sensitivity for all students, thereby diminishing gender-based differences in jealousy (Putwain et al., 2018). This interpretation is consistent with the notion that academic jealousy emerges as a situational emotional response rather than a gender-specific tendency.

In contrast, gender differences emerged in gratitude, with male students reporting higher gratitude levels than females. This finding challenges assumptions that gratitude is uniformly distributed across genders and suggests that gendered academic experiences may influence positive emotional appraisal. Female students in competitive educational contexts may face heightened academic expectations, social pressures, and evaluative stress, which could reduce opportunities to engage in gratitude-based cognitive processing (Farooq et al., 2020). As gratitude has been conceptualized as a dispositional tendency that supports emotional regulation and well-being (Wood et al., 2018), lower gratitude among female students may reflect greater exposure to academic stressors rather than inherent emotional differences.

With respect to socioeconomic status, the findings indicated no significant differences in academic competition, academic jealousy, or gratitude across socioeconomic groups. Although students from lower socioeconomic backgrounds often encounter financial strain and limited access to educational resources (Farhana, 2024), the absence of SES-based differences suggests that institutional academic pressures may overshadow socioeconomic disparities within university settings. The shared experience of grading competition, scholarship scarcity, and employment uncertainty may expose students from all socioeconomic backgrounds to similar evaluative demands, thereby producing comparable emotional responses (Reardon, 2011). This finding underscores the pervasive influence of academic structures in shaping student emotions irrespective of socioeconomic positioning.

Notably, despite the absence of main effects, a significant interaction between gender and socioeconomic status was observed for academic jealousy. This interaction indicates that the influence of socioeconomic status on jealousy varies across genders, highlighting the importance of examining intersecting social identities. Drawing on Social Comparison Theory (Festinger, 1954), it is plausible that gendered expectations and socioeconomic positioning jointly influence how students interpret peer success and engage in upward comparisons. Within competitive academic environments, these intersecting identities may amplify vulnerability to jealousy for certain groups, particularly when academic achievement is perceived as a critical pathway to social mobility (Gerber et al., 2018).

In contrast, no interaction effects were found for academic competition or gratitude, suggesting that these constructs may be shaped more strongly by broader contextual influences than by demographic intersections. Academic competition appears to be largely institutional in nature, driven by evaluation systems and performance norms that apply uniformly to students (Johnson & Johnson, 2009). Similarly, gratitude may function as a relatively stable psychological resource that operates independently of gender–SES interactions. Prior research has shown that gratitude can buffer the negative emotional effects of academic competition, supporting adaptive coping within high-pressure environments (Khan, Ahmad, & Ilyas, 2025).

Taken together, these findings highlight academic jealousy as a particularly sensitive emotional outcome that is shaped by the intersection of gender and



socioeconomic status, whereas academic competition and gratitude appear to be more universally experienced among undergraduate students. The results emphasize the need to consider both structural academic conditions and intersecting demographic factors when addressing students' emotional well-being. By situating these findings within the Pakistani higher education context, the present study extends existing literature and underscores the importance of culturally grounded research on academic emotions.

## Limitations

Despite its contributions, the present study has several limitations. The cross-sectional design limits causal inferences regarding the relationships among academic competition, jealousy, and gratitude. Additionally, the use of self-report measures may have introduced response biases, including social desirability effects. Finally, as the sample was drawn exclusively from Pakistani undergraduate students, the generalizability of the findings to other cultural or educational contexts may be limited. Future research employing longitudinal designs and more diverse samples may further clarify the dynamics observed in this study.

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