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THE TRINITY THAT HIJACKS GRADES: A CORRELATIONAL STUDY OF FAMILY ENVIRONMENT, SHAME PRONENESS AND ACADEMIC COMPETENCE AMONG UNIVERSITY STUDENTS

Original Research

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ABSTRACT

Background: Academic success is influenced by multiple psychological and environmental factors, with family environment playing a pivotal role in shaping students' self-concept, emotional resilience, and motivation. Family cohesion, which includes communication and satisfaction within the household, fosters a sense of security that enhances academic competence. Conversely, shame proneness can hinder academic performance by inducing self-doubt and avoidance behaviors. The complex interplay between these variables remains underexplored, particularly in collectivist societies where cultural values may modify the impact of shame proneness on academic outcomes.

Objective: This study aimed to examine the relationship between family cohesion, shame proneness, and academic competence among university students, investigating whether family communication and satisfaction predict academic success and whether gender and family structure influence these associations.

Methods: A cross-sectional correlational study was conducted on 370 university students (Men = 57.6%, Women = 42.4%) with a mean age of 23.12 years (SD = 4.13). The Family Cohesion Scale (Urdu version), including subscales for Family Communication and Family Satisfaction, was used to assess family environment. Shame proneness was measured using the Guilt and Shame Proneness Scale, while academic competence was evaluated using the Academic Competence Scale. Data were analyzed using Pearson correlation, multiple regression, and independent sample t-tests to determine relationships and group differences.

Results: Significant positive correlations were found between family cohesion and academic competence ($r = .54$, $p < .001$). Family communication ($r = .48$, $p < .001$) and family satisfaction ($r = .50$, $p < .01$) were also positively associated with academic competence. Regression analysis indicated that family satisfaction ($\beta = .35$, $p < .001$) and family communication ($\beta = .23$, $p < .001$) were significant predictors of academic competence, explaining 32% of the variance. Gender differences showed that men reported significantly higher family satisfaction ($p = .01$) and communication ($p = .04$) than women. Students from nuclear families demonstrated higher academic competence ($p = .01$) and family cohesion ($p = .03$) compared to those from joint families.

Conclusion: Family cohesion, particularly communication and satisfaction, plays a vital role in academic success. While shame proneness did not significantly hinder academic competence, cultural factors may moderate its effects. The findings highlight the need for interventions that strengthen family support systems to enhance students' academic resilience. Future research should explore the role of socioeconomic status, peer influence, and coping mechanisms in academic performance.

Keywords: Academic competence, family cohesion, family communication, family satisfaction, guilt proneness, shame proneness, university students.

INTRODUCTION

University students encounter unique academic and psychological challenges that shape their educational trajectories. The transition to higher education often involves adapting to a new academic environment, managing workload pressures, and maintaining emotional well-being. Among the many factors influencing academic success, family environment and shame proneness play a crucial role in shaping students' academic competence. The family environment acts as the foundational social structure that nurtures an individual's self-concept, emotional resilience, and coping strategies, which in turn influence their academic performance. A cohesive and supportive family provides encouragement, effective communication, and stability, fostering an environment conducive to academic success. In contrast, dysfunctional family settings, characterized by neglect, authoritarian control, or emotional instability, may contribute to stress, low self-esteem, and diminished academic motivation (1-3). Shame proneness, defined as a deep-seated tendency to experience feelings of inadequacy and self-consciousness, has significant implications for academic performance. Unlike guilt, which is linked to specific actions, shame is a pervasive emotional response that targets the self, often leading to avoidance behaviors and reduced academic engagement. Students who are prone to shame may internalize academic failures as personal shortcomings, impairing their confidence and willingness to participate in learning activities. Research has shown that individuals with high levels of shame proneness are more likely to experience anxiety, depression, and social withdrawal, all of which negatively impact their ability to perform academically. Additionally, the intersection of family environment and shame proneness can create a reinforcing cycle, where negative familial experiences exacerbate feelings of shame, further hindering academic progress (4,5).

Academic competence is a multidimensional construct encompassing cognitive abilities, self-efficacy, and motivation. It reflects a student's capacity to meet academic demands effectively and is influenced by various personal and environmental factors. A supportive family environment provides emotional and financial resources, fostering confidence and a strong sense of self-worth. Parental involvement, encouragement, and positive reinforcement contribute significantly to academic competence by instilling motivation and perseverance. Conversely, students from neglectful or dysfunctional family backgrounds may experience higher levels of stress and uncertainty, leading to lower academic achievement (6-8). The interplay between family environment, shame proneness, and academic competence highlights the complexity of student success in higher education. Existing research underscores the importance of a nurturing family structure in promoting academic resilience and emotional stability. However, the extent to which shame proneness mediates the relationship between family environment and academic competence remains underexplored. By examining these variables, this study aims to bridge the gap in existing literature and provide insights into how familial influences and emotional predispositions shape students' academic trajectories (9.10).

This study seeks to examine the relationship between family environment, shame proneness, and academic competence among university students. It aims to determine whether a supportive family environment fosters academic success and whether shame proneness serves as a barrier to academic achievement. Additionally, the study will explore whether family environment serves as a predictor of academic competence and whether gender differences exist in academic performance. Findings from this research will contribute to the development of targeted interventions designed to enhance academic resilience, mitigate the negative impact of shame, and foster positive familial support structures to optimize student success (11-13).

METHODS

A cross-sectional correlational research design was employed to examine the relationship between family environment, shame proneness, and academic competence among university students. This design was selected to assess the associations among these variables within a defined population at a single point in time using a survey-based methodology (14). Participants were recruited through a purposive sampling strategy, a non-probability sampling technique appropriate for selecting individuals who meet specific inclusion criteria. The sample comprised 370 university students, with equal representation of men (n=185) and women (n=185), aged between 18 and 30 years. Participants were enrolled in various public and private universities. Inclusion criteria required participants to be currently enrolled university students within the specified age range, willing to provide informed consent, and proficient in the language of the administered questionnaires. Students with self-reported severe psychological disorders or any condition that could impair their ability to complete the survey were excluded to maintain the validity of responses (15).

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Data collection was conducted using standardized psychometric instruments to assess the key study variables. Family environment was measured using the Family Adaptability and Cohesion Scale (FACS-IV), which consists of 42 items assessing balanced and unbalanced dimensions of family functioning. Responses were recorded on a five-point Likert scale ranging from 1 (never) to 5 (nearly always), with total scores ranging from 1 to 50. The Urdu-translated versions of the Family Communication and Family Satisfaction Scales were used to ensure linguistic and cultural relevance. Shame proneness was evaluated using the Guilt and Shame Proneness Scale (GASP), which comprises four subscales: Guilt Negative Behavior Evaluation (NBE), Guilt Repair (GR), Shame Negative Self-Evaluation (SNSE), and Shame Withdrawal (SW). These subscales capture various dimensions of guilt and shame experiences, including self-assessment of behavior, reparative tendencies, and avoidance behaviors linked to shame. Academic competence was assessed using the Academic Competence Scale, a 38-item instrument. Participants responded on a four-point Likert scale ranging from 0 to 3, with total scores varying between 34 and 136. The scale demonstrated a high internal consistency, as indicated by a Cronbach's alpha of 0.78 (16,17). The research process adhered to all ethical standards, with approval obtained from the relevant Institutional Review Board (IRB). Written informed consent was obtained from all participants before data collection, ensuring voluntary participation. Participants were provided with clear information regarding the study's objectives, procedures, and confidentiality measures. They were assured that their responses would remain anonymous and be used solely for research purposes. Additionally, they were informed of their right to withdraw from the study at any time without any consequences (18).

Data collection was conducted in university settings after obtaining permission from the respective institutions. Participants completed the self-report questionnaires in a structured format, ensuring minimal disruption to their academic schedules. They were instructed to carefully read each item and select responses that best described their experiences. The researcher remained available to address any concerns or clarifications during the process (19). Following data collection, responses were systematically coded and entered into statistical software for analysis. Descriptive statistics were computed to summarize demographic characteristics and scale scores. Pearson correlation analysis was employed to examine the relationships between family environment, shame proneness, and academic competence. Multiple regression analysis was conducted to assess the predictive role of family environment and shame proneness on academic competence. The assumptions of normality, linearity, and multicollinearity were checked before performing statistical tests to ensure the validity of the findings (20). This methodology provides a comprehensive approach to examining the complex interplay between family environment, shame proneness, and academic competence. The use of validated psychometric instruments, adherence to ethical research practices, and rigorous statistical analysis enhance the reliability and applicability of the study's findings (21). Participants were fully informed of their rights before data collection, including their right to withdraw from the study at any stage without any consequences. This ensured voluntary participation and adherence to ethical guidelines. Additionally, the Family Adaptability and Cohesion Scale (FACS-IV) was used to assess both adaptability and cohesion within family systems, capturing the extent to which family members adjust to change and maintain emotional bonds. This comprehensive approach provided a nuanced understanding of family dynamics in relation to academic competence (22).

Conceptual Framework

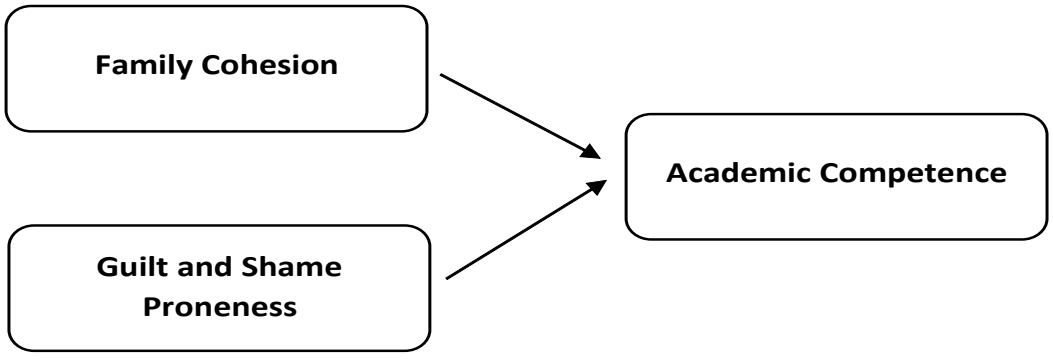

Figure 1. *Conceptual Framework of the Study*

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RESULTS

The sample consisted of 370 university students, with a mean age of 23.12 years (SD = 4.13). Among the participants, 57.6% were men, and 42.4% were women. The majority of participants (59.7%) belonged to a nuclear family system, while 40.3% were from a joint family system. The internal consistency of the measurement scales was assessed using Cronbach's alpha, revealing high reliability for all instruments. The Family Cohesion Scale demonstrated strong internal consistency (α = .93), with its subscales, Family Communication (α = .88) and Family Satisfaction (α = .91), also exhibiting high reliability. The Guilt and Shame Proneness Scale (α = .95) and its subscales, including Guilt Negative Behavior Evaluation (α = .81), Guilt Repair (α = .83), Shame Negative Self-Evaluation (α = .80), and Shame Withdrawal (α = .83), showed adequate internal consistency. The Academic Competence Scale had a high Cronbach's alpha (α = .95), indicating strong reliability.

Pearson's correlation analysis revealed significant positive relationships between family cohesion and all subscales of guilt and shame proneness, as well as academic competence. Higher levels of family cohesion were associated with increased academic competence ($r = .54$, $p < .001$). Family communication ($r = .48$, $p < .001$) and family satisfaction ($r = .50$, $p < .01$) were positively correlated with academic competence. A significant but weaker correlation was observed between guilt and shame proneness and academic competence ($r = .21$, $p < .001$), indicating a potential interplay between emotional predisposition and academic performance. Multiple regression analysis identified family cohesion as a significant predictor of academic competence ($\beta = .23$, $p < .001$). Family satisfaction ($\beta = .35$, $p < .001$) and family communication ($\beta = .23$, $p < .001$) were also significant predictors. However, guilt and shame proneness subscales were not significant predictors of academic competence. Age was found to be a negative predictor ($\beta = -.15$, $p < .01$), suggesting that as students grow older, their academic competence tends to decline.

Gender and family system were not significant predictors of academic competence. Gender-based comparisons indicated that men scored significantly higher than women on family cohesion ($p = .01$), family communication ($p = .04$), and family satisfaction ($p = .01$), suggesting stronger family support among male participants. However, no significant gender differences were observed in guilt and shame proneness or academic competence. Family system differences indicated that participants from joint families scored significantly higher on family cohesion ($p = .03$) and family satisfaction ($p = .03$), while nuclear family participants showed higher scores in guilt negative behavior evaluation ($p = .05$) and academic competence ($p = .01$).

Table: Means and Standard Deviations of Continuous Variables

Variables	M	SD
Age	23.12	4.13

Table: Frequencies and Percentages of Socio-demographic Characteristics

Variables	Frequency (f)	Percentage (%)
Gender		
Men	213	57.6
Women	157	42.4
Family System		
Nuclear	221	59.7
Joint	149	40.3

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Table: Psychometric Properties of Family Cohesion, Shame Proneness and Academic Competence in Participants (N=370)

Scales	M	SD	Range	Cronbach Alpha (α)	Skewness	Kurtosis
FCS	75.20	14.95	40.00	.93	-1.04	1.29
FC	40.07	7.83	40.00	.88	-.49	.35
FS	35.12	8.68	80.00	.91	-.78	1.26
GASPS	74.09	21.30	96.00	.95	-.58	-.01
GNBE	18.86	5.88	24.00	.81	-.59	-.24
GR	18.67	5.62	24.00	.83	-.37	-.44
NSE	18.42	5.64	24.00	.80	-.42	-.37
SW	18.14	5.84	24.00	.83	-.44	-.42
ACS	117.85	18.21	85.00	.95	-.32	-.27

M = Mean, SD=Standard Deviation, FCS = Family Cohesion Scale, FC=Family Communication, FS= Family Satisfaction, GASPS = Guilt and Shame Proneness Scale, GNBE= Guilt Negative Behavior Evaluation, GR= Guilt Repair, SNSE= Shame Negative Self-Evaluation, SW=Shame Withdraw, ACS = Academic Competence Scale.

Table: Multiple-Linear Regression Keeping Academic Competence as Dependent Variable (N=370)

Variable	B	LL	UL	SE	Î²
Age	-0.66	-1.11	-0.21	0.23	-0.15
Gender	1.01	-2.19	4.22	1.63	0.03
Family	3.3	0.05	6.56	1.66	0.09
FC	0.53	0.26	0.8	0.14	0.23
FS	0.73	0.48	0.98	0.13	0.35
GNBE	-0.34	-0.89	0.22	0.28	-0.11
GR	0.27	-0.32	0.86	0.3	0.08
SNSE	0.05	-0.57	0.67	0.31	0.02
SW	0.25	-0.27	0.76	0.26	0.08
RÂ²					0.32

B = Unstandardized Coefficients, SE = Standard Errors, β = Standardized Coefficients, CI= Confidence Interval, FCS = Family Cohesion Scale, FC=Family Communication, FS= Family Satisfaction, GASPS = Guilt and Shame Proneness Scale, GNBE= Guilt Negative Behavior Evaluation, GR= Guilt Repair, SNSE= Shame Negative Self-Evaluation, SW=Shame Withdraw. ***p < .001** p<.01, *p<.0.05.

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Table: Gender Differences in Family Cohesion, Shame Proneness and Academic Competence in Participants (N=370)

Variable	Men M	Men SD	Women M	Women SD	t(369)	p	Cohenâ d
FCS	76.99	14.99	72.75	14.58	2.72	0.01	0.28
FC	40.79	7.74	39.1	7.88	2.06	0.04	0.24
FS	36.2	8.95	33.65	8.1	2.82	0.01	0.32
GASPS	74.72	21.62	73.25	20.89	0.65	0.51	0.04
GNBE	18.97	5.81	18.72	5.99	0.4	0.69	0.29
GR	18.77	5.72	18.54	5.5	0.38	0.7	0.18
SNSE	18.45	5.75	18.45	5.75	0.13	0.1	0.05
SW	18.53	5.1	17.61	5.59	1.5	0.2	0.2
ACS	118.6	19.12	116.71	16.89	1.03	0.31	0.15

M = Mean, SD=Standard Deviation, CI= Confidence Interval, FCS = Family Cohesion Scale, FC=Family Communication, FS= Family Satisfaction, GASPS = Guilt and Shame Proneness Scale, GNBE= Guilt Negative Behavior Evaluation, GR= Guilt Repair, SNSE= Shame Negative Self-Evaluation, SW=Shame Withdraw, ACS = Academic Competence Scale. *p < .05, **p < .01.

Table: Family System Differences in Family Cohesion, Shame Proneness and Academic Competence in Participants (N=370)

Variable	Nuclear M	Nuclear SD	Joint M	Joint SD	t(369)	p	Cohenâ d
FCS	73.77	14.89	77.32	14.83	-2.26	0.03	0.25
FC	39.47	7.99	40.97	7.53	-1.82	0.07	0.08
FS	34.3	8.69	36.35	8.55	-2.24	0.03	0.28
GASPS	75.55	19.4	71.93	23.75	1.61	0.11	0.15
GNBE	19.36	5.31	18.12	6.59	1.98	0.05	0.25
GR	18.2	6.2	18.2	6.2	1.32	0.19	0.01
SNSE	18.82	5.29	17.83	6.09	1.67	0.11	0.05
SW	17.83	6.09	17.78	6.48	0.977	0.34	0.09
ACS	115.8	17.08	120.78	19.47	-2.56	0.01	0.35

M = Mean, SD=Standard Deviation, CI= Confidence Interval, FCS = Family Cohesion Scale, FC=Family Communication, FS= Family Satisfaction, GASPS = Guilt and Shame Proneness Scale, GNBE= Guilt Negative Behavior Evaluation, GR= Guilt, Repair, SNSE= Shame Negative Self-Evaluation, SW=Shame Withdraw, ACS = Academic Competence Scale. *p<0.05, **p<0.01.

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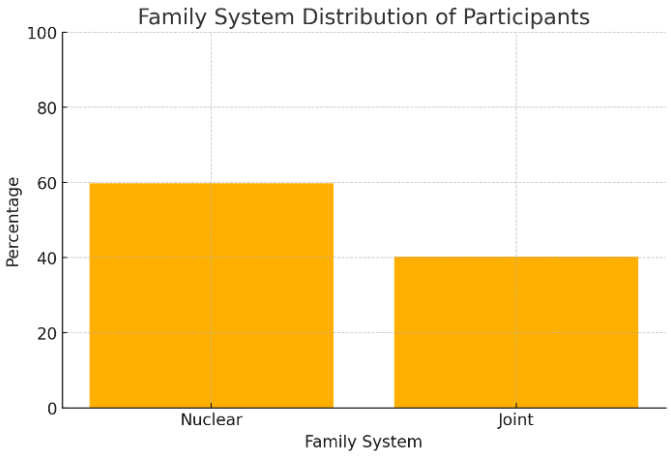

Figure 2 Family System Distribution of Participants

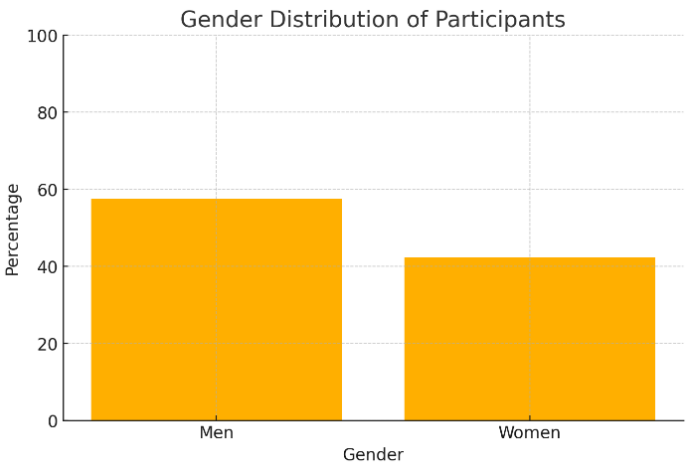

Figure 1 Gender Distribution of Participants

Table: Inter Correlations among Family Cohesion, Shame Proneness and Academic Competence in Participants (N=370)

Variables	M	SD	1	2	3	4	5	6	7	8	9
FCS	75.20	14.95	-	-	-	-	-	-	-	-	-
FC	40.07	7.83	.90***	-	-	-	-	-	-	-	-
FS	35.12	8.68	.92***	.64***	-	-	-	-	-	-	-
GASPS	74.09	21.30	.33***	.23***	.37**	-	-	-	-	-	-
GNBE	18.86	5.88	.30***	.21***	.33**	.93***	-	-	-	-	-
GR	18.67	5.62	.31***	.20***	.35**	.93***	.84***	-	-	-	-
SNSE	18.42	5.64	.33***	.25***	.35**	.94***	.84***	.84***	-	-	-
SW	18.14	5.84	.29***	.19***	.33**	.91***	.77***	.78***	.81***	-	-
ACS	121.26	18.61	.54***	.48***	.50**	.21***	.17***	.21***	.21***	18***	-

M = Mean, SD=Standard Deviation, FCS = Family Cohesion Scale, FC=Family Communication, FS= Family Satisfaction, GASPS = Guilt and Shame Proneness Scale, GNBE= Guilt Negative Behavior Evaluation, GR= Guilt Repair, SNSE= Shame Negative Self-Evaluation, SW=Shame Withdraw, ACS = Academic Competence Scale. ***p < .001, ** p<.01, *p<.0.05

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DISCUSSION

The findings of this study provided valuable insights into the relationship between family cohesion, shame proneness, and academic competence among university students. The results demonstrated a significant positive association between family cohesion and academic competence, reinforcing the notion that a supportive and communicative family environment contributes to students' educational success. These findings align with previous research, which emphasized that students from cohesive family structures experience higher motivation, emotional stability, and resilience, all of which enhance their academic performance. The importance of the family as a primary social unit influencing psychological and educational outcomes remains evident, as individuals with strong familial support systems tend to have greater confidence and self-regulation, ultimately fostering academic competence (23,24). Contrary to expectations, shame proneness did not exhibit a significant negative correlation with academic competence. This finding challenges the widely held assumption that shame negatively impacts academic success. The influence of cultural values, particularly in collectivist societies, may explain this outcome. The emphasis on family honor and communal responsibility might mitigate the detrimental effects of shame by providing students with a support system that fosters resilience. Moreover, students with effective coping strategies may be less affected by shame, using it as motivation to improve academic performance rather than as a barrier to success. These findings suggest that the relationship between shame and academic competence is complex and influenced by sociocultural factors, necessitating further exploration to understand its role in different educational settings (25,26).

The predictive role of family cohesion in academic competence was further established through regression analysis, which indicated that students from cohesive families exhibited better academic performance. Emotional regulation, encouragement, and practical support within the family environment likely serve as protective factors against academic stress. These findings are consistent with established psychological theories emphasizing the role of secure family attachments in emotional and cognitive development. Family cohesion provides a stable foundation that enhances students' ability to manage academic challenges, reinforcing the argument that a nurturing home environment plays a crucial role in educational achievement (27,28). The study also identified age as a significant negative predictor of academic competence, suggesting that older university students demonstrated lower academic performance compared to younger ones. This decline may be attributed to increased responsibilities, financial constraints, and cognitive overload as students progress through higher education. Older students often balance multiple commitments, including employment and family obligations, which may divert their focus from academic tasks. Psychological theories on young adulthood highlight the tension between personal responsibilities and educational aspirations, which may contribute to the observed decline in academic competence with age. This finding underscores the need for targeted academic interventions and support mechanisms for older students to help them maintain their academic performance (29,30).

Gender differences in academic competence were not statistically significant, indicating that both men and women demonstrated comparable levels of academic achievement. This aligns with the changing educational landscape, where both genders have similar access to academic resources and opportunities. However, men reported higher family cohesion and satisfaction, which may be reflective of traditional gender roles within family structures. While the study primarily focused on academic competence, underlying gender dynamics within family interactions warrant further investigation. Exploring how familial expectations and communication patterns differ for men and women could provide deeper insights into the gendered dimensions of family influence on education (15). Participants from joint families reported higher levels of family satisfaction and academic competence compared to those from nuclear families. This finding is consistent with the notion that joint family systems provide a broader support network, offering emotional, financial, and academic assistance. The collaborative nature of joint families fosters a shared sense of responsibility, which may enhance students' ability to navigate academic challenges. The presence of multiple caregivers and role models within a joint family structure could contribute to academic encouragement and resource sharing, ultimately benefiting students' educational outcomes. This supports the argument that social interactions within family environments play a critical role in cognitive development and learning (18-21).

The study had several strengths, including the use of validated psychometric instruments and a robust sample size that provided reliable and generalizable results. The findings contribute to existing literature by offering a culturally relevant perspective on the interplay between family environment, emotional regulation, and academic competence. However, limitations should be acknowledged. The cross-sectional design restricted the ability to infer causality, as the study only captured relationships at a single point in time. The reliance on self-reported measures introduced the possibility of response bias, where participants might have provided socially desirable answers rather than accurate reflections of their experiences. Future studies should consider longitudinal approaches to assess changes in academic competence over time and incorporate objective academic performance indicators to enhance reliability (22-24). Further

research should explore potential mediating and moderating factors that influence the relationship between family cohesion, shame proneness, and academic competence. Variables such as peer influence, self-efficacy, and coping mechanisms could provide deeper insights into how students navigate academic challenges. Additionally, comparative studies across different cultural contexts could help determine whether these findings are universally applicable or specific to particular sociocultural settings. Addressing these gaps would enhance the understanding of the mechanisms underlying academic success and inform targeted interventions aimed at improving students' educational experiences (26).

CONCLUSION

This study highlighted the crucial role of family cohesion in fostering academic competence among university students, reinforcing the idea that a supportive and communicative family environment enhances educational outcomes. While shame proneness was expected to negatively impact academic competence, cultural and social factors appeared to mitigate its effects, suggesting that in collectivist societies, external motivations such as maintaining family honor may drive academic perseverance. The findings also emphasized that older students face additional challenges that may hinder academic performance, warranting tailored support mechanisms. The absence of significant gender differences in academic competence reflects evolving educational opportunities, though differences in family dynamics between men and women suggest that gender roles within families still influence students' experiences. The advantage of joint family systems in providing academic and emotional support further underscores the significance of familial structures in shaping educational success. These insights contribute to a deeper understanding of the interconnectedness of family, emotional well-being, and academic achievement, offering a foundation for future research and interventions aimed at strengthening student resilience and support systems.

AUTHOR CONTRIBUTIONS

Author	Contribution
Ali Akbar Hussain	Substantial Contribution to study design, analysis, acquisition of Data Manuscript Writing Has given Final Approval of the version to be published
Aman Ullah Khan	Substantial Contribution to study design, acquisition and interpretation of Data Critical Review and Manuscript Writing Has given Final Approval of the version to be published
Syeda Malaika Atiq Shah	Substantial Contribution to acquisition and interpretation of Data Has given Final Approval of the version to be published
Sana Zaheer*	Contributed to Data Collection and Analysis Has given Final Approval of the version to be published
Kainaat Yousaf	Contributed to Data Collection and Analysis Has given Final Approval of the version to be published

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