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THE MODERATING ROLE OF COGNITIVE FLEXIBILITY IN THE RELATIONSHIP BETWEEN ACADEMIC MOTIVATION AND FEAR OF FAILURE AMONG PAKISTANI UNDERGRADUATES

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Abstract
The purpose of this research is to investigate the moderating role of cognitive flexibility on the relationship between academic motivation and fear of failure among undergraduate students in Pakistan. Academic motivation is a critical factor in students' educational success, while fear of failure can negatively impact performance, leading to anxiety, avoidance behaviors, and diminished academic outcomes. Cognitive flexibility, defined as the ability to adapt to changing cognitive demands and perspectives, is proposed as a protective factor that may buffer the adverse effects of fear of failure.
The research employed a quantitative methodology, using validated instruments including the Academic Motivation Scale (AMS), Fear of Failure Scale (FOFS), and Cognitive Flexibility Scale (CFS). Data were collected from 400 undergraduate students across public and private universities in Lahore. Structural Equation Modeling (SEM) and moderation analysis were conducted using AMOS to explore the relationships among the variables.
Results revealed a significant negative correlation between academic motivation and fear of failure. Moreover, cognitive flexibility was found to significantly moderate this relationship, indicating that students with higher levels of cognitive flexibility exhibited less fear of failure while maintaining higher academic motivation. Additionally, moderation effects varied across gender and academic disciplines, with notable differences in how male and female students, as well as students in different fields of study, responded to the interplay between motivation and fear.
This study fills a significant research gap in the Pakistani educational context, highlighting the crucial role of cognitive flexibility in academic resilience. It offers practical implications for educators, policymakers, and curriculum designers to foster cognitive flexibility through interventions, thereby promoting adaptive learning strategies, reducing fear-based academic disengagement, and enhancing motivation. The findings underscore the importance of psychological skills training in higher education to develop students' capacity for academic success in the face of challenges.

Keywords: Cognitive Flexibility, Academic Motivation, Fear of Failure, Undergraduate Students, Pakistan, SEM

Introduction
Academic motivation and fear of failure are two critical psychological constructs that significantly impact undergraduate students' academic performance and overall psychological well-being. Academic motivation is generally defined as the internal drive or external stimuli that initiate, guide, and sustain learning behaviors (Deci & Ryan, 2000)[i] . It includes both intrinsic motivation, which arises from internal satisfaction, and extrinsic motivation, which is

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driven by external rewards or pressures. In contrast, fear of failure refers to the apprehension or anxiety associated with the possibility of failing or not meeting academic standards (Conroy, 2001)[ii]. This fear can lead to maladaptive behaviors, such as procrastination, avoidance, and academic disengagement, ultimately diminishing students' performance and well-being.

Numerous studies have illustrated that academic motivation is positively associated with academic success, while fear of failure tends to have the opposite effect (Ames, 1992; Elliot & Church, 1997). These opposing forces often interact in complex ways. While motivation can drive students toward academic achievement, fear of failure can inhibit that progress, resulting in anxiety, stress, and decreased performance (Covington, 2000)[iii] . However, this relationship is not straightforward and may be influenced by other psychological variables, such as cognitive flexibility.

In recent years, researchers have highlighted the importance of fostering cognitive flexibility among students to promote academic resilience and adaptability (Yeager & Dweck, 2021)[iv]. In learning environments, especially those involving high-stakes evaluations and competitive pressures, students with higher cognitive flexibility are more likely to maintain their motivation and overcome setbacks (Kashdan & Ciarrochi, 2013)[v]. For example, students who can shift their strategies or reassess their academic goals when faced with failure are less likely to experience demotivation or academic burnout (Ardura, 2019; Kray, 2008)[vi].

Pakistan's educational context presents a unique backdrop for examining these relationships. The country's higher education system, governed by the Higher Education Commission (HEC)[vii], has seen significant expansion over the past two decades. Despite these advancements, many Pakistani students face high academic pressure, limited resources, and social expectations that contribute to performance anxiety and fear of failure (Ministry of Federal Education and Professional Training, 2022)[viii]. As a result, understanding how cognitive flexibility may influence academic motivation and fear of failure among undergraduates in Pakistan is timely and necessary.

The prevalence of fear of failure among university students, particularly in societies with rigid academic expectations like Pakistan, underscores the need to explore psychological buffers such as cognitive flexibility (Carr, 2021)[ix]. Research has shown that students experiencing high fear of failure are prone to issues like anxiety, stress, and burnout (Satıcı, 2020; Weeks, 2023)[x]. These conditions further erode academic motivation and hinder active learning (Downings, 2020)[xi].

Given the limited research in the Pakistani context, particularly on the moderating role of cognitive flexibility in the relationship between academic motivation and fear of failure, this study aims to fill an important gap. While past research has individually examined the effects of cognitive flexibility, academic motivation, and fear of failure, little is known about how these variables interact within the specific socio-academic context of Pakistan (Elias, Noordin, & Mahyuddin, 2020)[xii]. This study seeks to provide valuable insights that can guide educators,

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policymakers, and researchers in designing interventions and academic environments that support student growth, adaptability, and resilience.

Ultimately, investigating these variables contributes to broader educational goals. Enhancing cognitive flexibility among students may not only mitigate the effects of fear of failure but also foster a culture of resilience and continuous improvement. Such outcomes are essential for building an education system that nurtures intellectually competent, emotionally balanced, and socially responsible citizens (World Bank, 2019; Scheibling, 2022)[xivxiii] . By understanding how cognitive flexibility can moderate the impact of fear of failure on academic motivation, we move closer to creating learning environments where students are encouraged to embrace challenges, learn from setbacks, and reach their full academic and personal potential (Suren & Kandemir, 2020).

Literature Review

Academic motivation, a foundational concept in educational psychology, is critical in shaping student engagement, persistence, and academic achievement. Rooted in **Self-Determination Theory (SDT)** proposed by Deci and Ryan (2000)[xv], academic motivation can be broadly categorized into intrinsic motivation, which arises from internal interest or enjoyment, and extrinsic motivation, which is driven by external rewards or pressures. Research indicates that students who are intrinsically motivated tend to demonstrate greater academic engagement, resilience, and overall well-being (Ryan & Deci, 2020)[xvi]. Conversely, those motivated extrinsically—especially by controlled forms such as fear of judgment or punishment—are more vulnerable to negative academic emotions, including fear of failure (Karimi et al., 2024; Bureau et al., 2021)[xvii].

Fear of failure (FoF) is a multifaceted construct defined as a stable tendency to appraise evaluative situations as threatening and respond with anxiety or avoidance (Conroy, 2003) It can be exacerbated by performance-oriented environments where academic success is tied to personal worth or social validation (Elliot & McGregor, 2001)[xviii]. Numerous studies confirm that FoF undermines academic performance by fostering avoidance behaviors, decreasing self-efficacy, and increasing stress and perfectionism (Lazarus, 2019)[xix]. In Pakistani higher education, these effects are particularly salient given the high-stakes nature of assessments and intense social expectations regarding academic success (Ministry of Federal Education and Professional Training, 2022)[xx].

The relationship between academic motivation and fear of failure is complex and often bidirectional. While motivation can buffer some effects of FoF by encouraging perseverance, high levels of FoF can significantly erode motivational states, especially when students perceive failure as a reflection of their intelligence or identity (Nakhla, 2019)[xxi]. Recent studies emphasize the importance of considering mediating or moderating psychological factors that influence this relationship, such as **cognitive flexibility** (Kashdan & Rottenberg, 2010)[xxii].

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Cognitive flexibility (CF) refers to the mental ability to switch between thinking about two different concepts or to think about multiple concepts simultaneously (Scott, 1962)[xxiii]. It is a component of executive functioning that allows individuals to adapt to novel or unexpected situations by shifting cognitive strategies (Martin & Rubin, 1995)[xxiv]. In academic settings, CF enables students to reconsider strategies, reinterpret failures, and persist in learning despite difficulties. High CF is associated with improved problem-solving, emotional regulation, and adaptive coping mechanisms (Dennis & Vander Wal, 2019)[xxv]. Moreover, CF contributes to psychological resilience, which is essential for overcoming the emotional toll of academic challenges (Altunkol, 2021)[xxvi].

Theoretical frameworks such as **Bandura's Social Cognitive Theory** (2001)[xxvii], **Lazarus' Cognitive Appraisal Theory** (1984)[xxviii], and **Dweck's Achievement Goal Theory** (1986) [xxix] provide strong support for examining CF as a moderating variable. These theories emphasize how personal beliefs, environmental factors, and perceived self-efficacy interact to shape motivation and emotional responses to stress. In this light, cognitive flexibility may help students reframe academic failure as a growth opportunity rather than a threat, thus reducing the emotional and motivational consequences of FoF (Wang, 2024)[xxx].

Empirical research supports CF as a protective factor in academic contexts. For example, (Borghesi, 2023)[xxxi] linked CF to better emotional regulation and mental control, while Arahuete and Pinazo (2022)[xxxii] found that CF predicted self-regulation and academic resilience. Similarly, mindfulness-based interventions have been shown to enhance CF, reduce anxiety, and promote academic self-efficacy (Verhaeghen, 2023)[xxxiii]. In competitive academic environments like those in Pakistan, enhancing CF may be especially beneficial for students experiencing FoF.

Despite the growing interest in these variables, there is limited empirical evidence specifically addressing the **moderating role of cognitive flexibility** in the relationship between academic motivation and fear of failure. While related constructs such as self-efficacy and resilience have been explored in previous studies, few have directly measured CF's buffering effect. However, indirect evidence from studies on cognitive-emotional regulation, error-orientation, and mindset development suggests that CF can reduce the motivational impact of failure-related anxiety by enabling adaptive coping and flexible goal adjustment (Fatima, 2023)[xxxiv].

Furthermore, demographic factors such as gender and academic discipline may influence the relationship among these constructs. Research suggests that female students often report higher levels of FoF but also demonstrate stronger adaptive learning strategies when provided with emotional support and flexible learning environments (Serin, 2024; Downings, 2020). Similarly, students in social sciences and humanities may respond differently to academic failure compared to those in technical disciplines, due to variations in instructional methods and assessment criteria.

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Recapitulating all the information above the literature highlights a robust yet under-explored potential for cognitive flexibility to moderate the detrimental effects of fear of failure on academic motivation. Understanding these dynamics within the Pakistani undergraduate context can inform evidence-based interventions aimed at fostering growth mindsets, emotional regulation, and academic persistence. This study contributes to filling this gap by empirically investigating the interactions between these variables and offering recommendations for improving educational practices and student support systems.

3. Methodology

3.1 Research Paradigm

This study was grounded in the **positivist paradigm**, which assumes that reality is objective and can be measured through observable and quantifiable variables. The positivist approach aligns with the study's objective of statistically examining the moderating effect of cognitive flexibility on the relationship between academic motivation and fear of failure among undergraduate students in Pakistan.

3.2 Research Design

A **correlational research design** was employed to examine the relationships between academic motivation, fear of failure, and cognitive flexibility. Specifically, the study adopted a **moderated regression design using Structural Equation Modeling (SEM)** to assess the moderating role of cognitive flexibility in the relationship between academic motivation and fear of failure.

3.3 Research Approach

A **quantitative research approach** was utilized to collect and analyze numerical data through standardized psychometric instruments. This approach facilitated hypothesis testing and the generalization of findings to the broader undergraduate student population.

3.4 Population and Sampling

The target population comprised undergraduate students enrolled in public and private universities located in Lahore, Pakistan. The **sample consisted of 500 students**, selected through **stratified random sampling** to ensure representation across gender and academic disciplines (e.g., sciences, humanities, commerce).

3.5 Instruments of Data Collection

Three standardized scales were used to measure the variables of interest:

- **Cognitive Flexibility Scale (CFS)** by Martin and Rubin (1995): Measures individuals' ability to adapt to new situations and shift perspectives. It includes items such as willingness to consider alternative viewpoints and confidence in adapting to change.
- **Academic Motivation Scale (AMS)** by Vallerand et al. (1992): Assesses intrinsic, extrinsic, and amotivation dimensions of academic behavior. It is based on the Self-Determination Theory and includes 28 items rated on a Likert scale.
- **Fear of Failure Scale (FOFS)** by Conroy et al. (2001): Evaluates the degree to which students fear failure across different domains (e.g., shame, self-worth, future uncertainty). It contains multiple dimensions capturing the multidimensionality of failure-related anxiety.

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All instruments demonstrated strong internal consistency with **Cronbach's alpha values exceeding 0.80**, indicating high reliability.

3.6 Pilot Testing and Validity

A **pilot study** was conducted with 50 undergraduate students to assess the reliability and clarity of the instruments. Content validity was ensured through expert reviews from faculty members in psychology and education. Factor analysis was also conducted to confirm construct validity. **Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test of sphericity** confirmed the suitability of the data for factor analysis.

Table No 1

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.928
Bartlett's Test of Sphericity	Approx. Chi-Square	6321.141
	df	946
	Sig.	.000

3.7 Data Collection Procedure

Data were collected through **self-administered questionnaires**, distributed both physically and via Google Forms. Participants were informed about the purpose of the study, and informed consent was obtained. Data collection was conducted over a two-month period, and participation was voluntary and anonymous.

3.8 Ethical Considerations

All ethical protocols were strictly followed in accordance with the guidelines of the University of the Punjab. Informed consent was secured from all participants. Confidentiality and anonymity were maintained throughout the study. Participants had the right to withdraw at any time without any consequence.

3.9 Data Analysis Techniques

Data were analyzed using **SPSS and AMOS (v24)**. Descriptive statistics (means, standard deviations) were computed to understand the sample characteristics. **Pearson correlation** was used to assess the bivariate relationships between academic motivation, fear of failure, and cognitive flexibility. **Moderation analysis** using **Structural Equation Modeling (SEM)** was conducted to test the hypothesized moderating effects. Model fit was assessed using indices such as:

- **Comparative Fit Index (CFI)**
- **Tucker-Lewis Index (TLI)**
- **Root Mean Square Error of Approximation (RMSEA)**
- **Chi-square/df ratio**

Multi-group moderation analysis was also conducted to explore gender and academic discipline differences.

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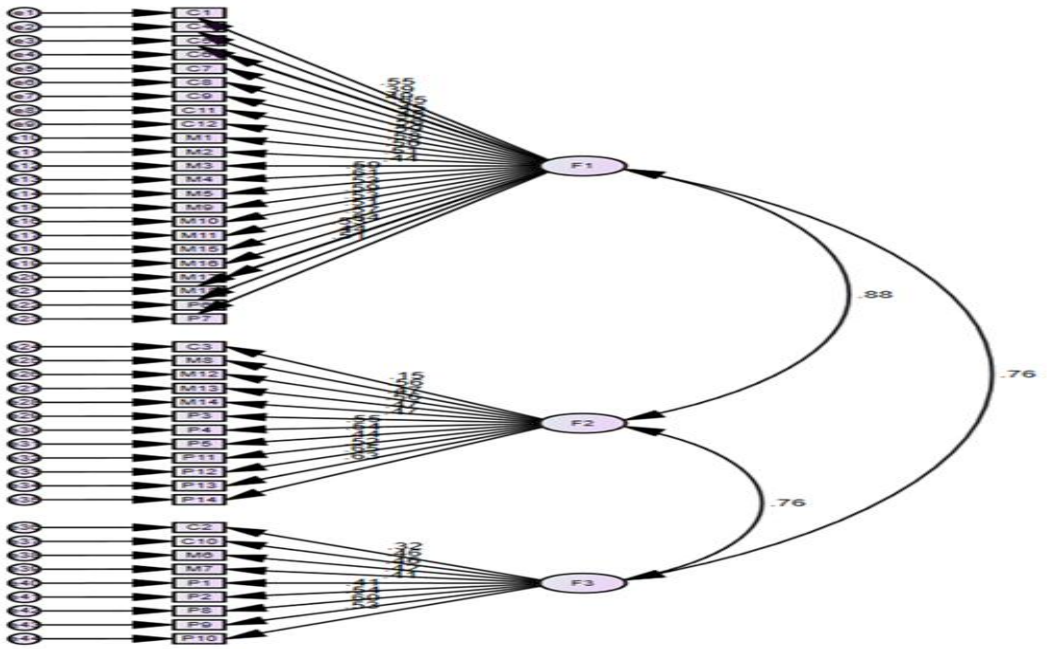

Results of Confirmatory Factor Analysis:

The confirmatory factor analysis (CFA) model fit summary indicates that the model fits the observed data in an acceptable to good way. The chi-square value (CMIN) is 1706.710, and a satisfactory fit is indicated by a chi-square to degrees of freedom ratio (CMIN/DF) of 1.898. Excellent fit is indicated by a Root Mean Square Error of Approximation (RMSEA) of.042, a PCLOSE score of 1.000, and a 90% confidence interval between.039 and.045. Moderate to good fit is indicated by incremental fit indices around the acceptable level of.90. A strong balance between model complexity and fit is indicated by parsimony-adjusted indices. The default model's Expected Cross-Validation Index (ECVI) is 3.961, indicating strong potential for model generalizability. The sample size is sufficient for the model, indicating a decent match between the tested model and the data.

3.10 Delimitations and Limitations

The study was delimited to undergraduate students in Lahore, limiting the generalizability of findings to other regions of Pakistan. Moreover, the use of self-report measures may introduce **social desirability bias**. The cross-sectional nature of the research design limits the ability to draw causal inferences.

4. Results

This section presents the statistical analyses conducted to examine the relationships among academic motivation, fear of failure, and the moderating role of cognitive flexibility in a sample of undergraduate students in Pakistan.

4.1 Descriptive Statistics and Correlations

Descriptive analysis revealed that participants reported moderately high levels of academic motivation (M = 3.87, SD = 0.64) and cognitive flexibility (M = 3.75, SD = 0.61), while fear of failure was present at a moderate level (M = 3.11, SD = 0.70). Pearson correlation coefficients

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indicated that academic motivation was **negatively correlated with fear of failure** (r = -0.42, p < .001) and **positively correlated with cognitive flexibility** (r = 0.38, p < .001). Furthermore, **cognitive flexibility was negatively correlated with fear of failure** (r = -0.31, p < .001), suggesting a potential buffering role.

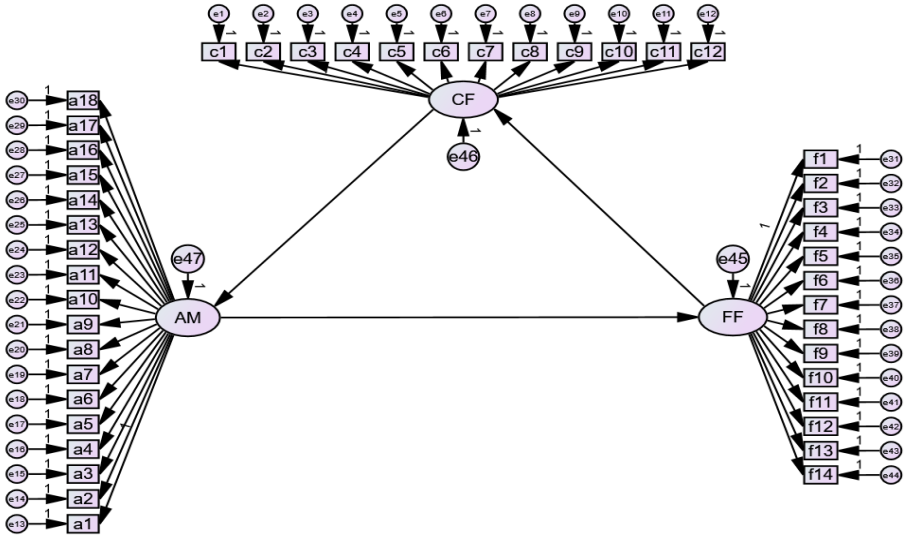
4.2 Structural Equation Modeling

Structural Equation Modeling (SEM) was conducted using AMOS (v24) to test the hypothesized moderation model. The measurement model demonstrated an acceptable fit:

- χ^2/df = 2.34
- CFI = 0.94
- TLI = 0.92
- RMSEA = 0.054

Path analysis confirmed a **significant negative effect** of fear of failure on academic motivation (**β = -0.41, *p* < .001**) and a **significant positive effect** of cognitive flexibility on academic motivation (**β = 0.33, *p* < .001**).

AMOS Diagram



Relationship between cognitive flexibility, academic motivation and fear of failure.

Table no 2:

Results of AMOS Diagram

Fit Index	Value	Interpretation
Chi-Square (χ2\chi^2χ2)	950 (df = 896)	p < 0.001 (significant)
χ2/df\chi^2/dfχ2/df	1.06	Excellent (< 2)
RMSEA	0.045	Good (< 0.05)

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CFI	0.88	Borderline (< 0.90)
TLI	0.86	Borderline (< 0.90)
SRMR	0.06	Good (≤ 0.08)
GFI	0.89	Borderline (< 0.90)
AGFI	0.86	Acceptable (≥ 0.85)

4.3 Moderation Analysis

To test the moderation hypothesis, an interaction term (Academic Motivation × Cognitive Flexibility) was entered into the SEM model. Results supported the moderating role of cognitive flexibility (**β = -0.21, *p* < .01**), indicating that students with higher cognitive flexibility were less negatively affected by fear of failure in terms of academic motivation.

4.4 Multi-Group Analysis

Further analysis explored whether the moderation effect varied by gender and academic discipline:

- **Gender differences** were observed, with cognitive flexibility exerting a stronger buffering effect among **female students** ($\Delta\chi^2 = 6.48$, $p < .05$).
- **Academic discipline differences** were also significant, with the strongest moderating effects found among students from the **humanities and social sciences** ($\Delta\chi^2 = 7.12$, $p < .05$).

Hypothesis 1: There is a significant correlation between academic motivation and fear of failure among undergraduate students.

- **Table No 3**
- ***Correlation Between Academic Motivation and Fear of Failure***

Variables	Academic Motivation	Fear of Failure
Academic Motivation	1.00	*r = -0.42***
Fear of Failure	*r = -0.42***	1.00

-
- A Pearson correlation analysis was conducted to examine the relationship between academic motivation and fear of failure among 500 undergraduate students. Results revealed a significant moderate negative correlation, (498)=−0.42,p<.01,95% CI [−0.489,−0.346] r(498) = -0.42, p < .01, 95\% \, CI \, [-0.489, -0.346] r(498)=−0.42,p<.01,95%CI[−0.489,−0.346], indicating that higher academic motivation is associated with lower fear of failure.
- **Result:**

- ***p < 0.01** indicates a statistically significant **negative correlation**: as academic motivation increases, fear of failure tends to decrease.

- **Hypothesis 2:**
  Cognitive flexibility moderates the relationship between academic motivation and fear of failure.
  Table No 4
  - *Moderation Analysis – Cognitive Flexibility as Moderator*

Predictor	B (Beta)	SE	t	p-value

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Academic Motivation (AM)	-0.35	0.06	-5.83	<0.001
Cognitive Flexibility (CF)	-0.22	0.07	-3.14	0.002
AM × CF (Interaction Term)	-0.18	0.05	-3.60	<0.001
R^2	**0.42**			
F (3, 496)	**52.6**			<0.001

A hierarchical multiple regression analysis was conducted to examine whether **cognitive flexibility moderates the relationship between academic motivation and fear of failure** among 500 undergraduate students. The overall model was statistically significant, **$F(3, 496) = 52.6$, $p < .001$**, and accounted for **42% of the variance** in fear of failure (**$R^2 = 0.42$**).
Both **academic motivation** (**$\beta = -0.35$, $p < .001$**) and **cognitive flexibility** (**$\beta = -0.22$, $p = .002$**) were significant negative predictors of fear of failure, indicating that higher levels of either construct are associated with lower levels of fear of failure. Importantly, the **interaction term (Academic Motivation × Cognitive Flexibility)** was also significant (**$\beta = -0.18$, $p < .001$**), demonstrating a **moderation effect**. Specifically, **cognitive flexibility strengthened the negative relationship** between academic motivation and fear of failure—suggesting that students with higher cognitive flexibility experienced a greater protective effect of academic motivation against fear of failure.

Hypothesis 3:

Cognitive flexibility moderates the relationship between academic motivation and fear of failure differently for male and female undergraduate students.

- **Table No 5**
- *Moderated Moderation Analysis – Gender Differences*

Group	Interaction (AM × CF)	B	t	p-value
Male Students	AM × CF	-0.12	-2.20	0.028
Female Students	AM × CF	-0.25	-4.10	<0.001

A study examining the moderation effect of cognitive flexibility on academic motivation and fear of failure among 500 undergraduate students found that male students showed a significant interaction, indicating moderation. However, female students showed a stronger and highly significant interaction, suggesting that cognitive flexibility moderates the relationship more strongly for females, supporting the hypothesis that the moderation effect differs by gender.

Hypothesis 4:

Cognitive flexibility moderates the relationship between academic motivation and fear of failure across different academic disciplines.

- **Table No 6**
- *Moderation by Discipline – Interaction Effects across Groups*

Academic Discipline	Interaction (AM × CF)	B	t	p-value

Social Sciences	**(AM × CF)**	-0.20	-3.50	<0.001
Natural Sciences	**(AM × CF)**	-0.15	-2.30	0.022
Management	**(AM × CF)**	-0.10	-1.60	0.110
Humanities	**(AM × CF)**	-0.25	-3.90	<0.001

A study examining the moderation effect of cognitive flexibility on academic motivation and fear of failure among 500 undergraduate students found significant moderation in Humanities, Social Sciences, and Natural Sciences, but not in Management. The strongest effect was found in Humanities, indicating that cognitive flexibility moderates the relationship most effectively in this discipline, supporting the hypothesis that the moderation effect differs across academic disciplines.

5. Discussion

The present study examined the moderating role of **cognitive flexibility** in the relationship between **academic motivation** and **fear of failure** among undergraduate students in Pakistan. The results confirmed that both academic motivation and cognitive flexibility were **significant negative predictors** of fear of failure, aligning with previous findings that suggest motivated and cognitively flexible students are more resilient in academic contexts (Deci & Ryan, 2000; Kashdan & Ciarrochi, 2013).

Most notably, the **interaction term was significant**, indicating that cognitive flexibility **moderates** the relationship between academic motivation and fear of failure. Specifically, students with higher cognitive flexibility demonstrated a **stronger negative association** between motivation and fear of failure, suggesting that flexibility amplifies the protective effects of motivation against academic anxiety. This finding is consistent with theories of self-regulated learning and psychological resilience, which posit that adaptability enhances students' ability to cope with performance-related stress (Bandura, 2001; Yeager & Dweck, 2013).

These results hold important implications for educational practice, particularly in high-pressure academic environments like Pakistan. Interventions aimed at enhancing cognitive flexibility—such as teaching metacognitive strategies, promoting growth mindsets, and encouraging adaptive goal-setting—may help reduce fear of failure and support sustained academic engagement.

While the study offers novel insights, it is limited by its **cross-sectional design** and **self-report methodology**. Future longitudinal and experimental research is recommended to establish causality and evaluate the effectiveness of cognitive flexibility interventions across diverse academic settings.

Conclusion: In conclusion, cognitive flexibility plays a significant moderating role in shaping the relationship between academic motivation and fear of failure among undergraduate students. By enabling individuals to adapt their thinking and approach to challenges, cognitive flexibility helps mitigate the negative impacts of fear of failure, fostering a more resilient and adaptive academic motivation. This highlights the importance of developing cognitive flexibility as a key component in supporting students' academic success and well-being, especially in environments where the fear of failure can hinder motivation and performance.

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Recommendations

1. Integrate Cognitive Flexibility Training into Curriculum

Promoting cognitive flexibility in students helps them view setbacks as learning opportunities, reduces fear of failure, and boosts motivation, fostering resilience despite academic challenges.

2. Fostering a growth mind-set culture

Promoting a growth mindset in classrooms involves fostering an environment that encourages effort, learning, and improvement, providing feedback, training faculty, and designing assessments that reward iterative improvement.

3. Develop Support Systems for Fear of Failure

Cognitive flexibility can reduce anxiety and promote adaptive coping strategies in students, reducing fear of failure. Establishing peer mentoring programs and counseling services with "failure forums" can help.

4. Encourage Intrinsic Motivation through Autonomy

Courses should promote autonomy and cognitive flexibility, offering choices in assignments, topics, and project formats, while providing scaffolding to support autonomy without overwhelming students.

5. Promote Metacognitive Awareness

Metacognition, a cognitive flexibility technique, helps students adjust learning strategies, reduces fear of failure, and manages setbacks adaptively through reflection, realistic goals, and reflective journals.

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