Original Article

Fear of Failure: Its Prevalence and Impact Among Postgraduate Medical Students

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Abstract

Background: Fear of failure (FoF) is a psychological construct that can affect academic performance and mental health in students. Objectives: This study aimed to assess the level of FoF among medical students at the children Hospital Lahore, compare FoF across genders, academic years, GPA categories, and interest in studying medicine.

Objective To assess the prevalence and severity of fear of failure (FoF) among medical students at the CICH, Lahore during the academic year 2024, and to examine its association with gender, academic year, grade point average (GPA), and students' interest in studying medicine.

Methodology: A cross-sectional study was conducted among 420 undergraduate medical students from 2nd to 5th year during the academic year 2024. Participants completed the Performance Failure Appraisal Inventory (PFAI). Data were analyzed using SPSS 26.0, applying Mann-Whitney U-test and Kruskal-Wallis test to compare domain scores across groups. Cronbach's α was calculated for reliability.

Results: The overall mean FoF score was −0.28, indicating a relatively low level of FoF. Female students showed significantly higher fear of devaluing self-estimate, while males had higher fear of important others losing interest. Third-year students exhibited higher levels of FoF than other years. Students with GPA <3.5 and >4.9 reported the highest FoF. Reliability analysis showed excellent internal consistency (Cronbach's α = 0.92).

Conclusion: Although overall FoF was low, significant differences were observed across gender, GPA, and year of study. Targeted counseling is recommended, especially for high- and low-GPA students and those transitioning to clinical years.

Keywords: Fear Of Failure, Medical Students, Academic Performance, GPA, Psychological Stress, Pakistan, Medical Education, Performance Failure Appraisal Inventory (PFAI)

Introduction:

Fear of failure (FoF) is defined as a dispositional tendency to avoid failure in achievement settings due to anticipated negative outcomes such as shame, embarrassment, or devaluation of self-worth (1). FoF is not merely an emotional response but a multifaceted psychological construct that influences students' cognitive, behavioral, and motivational patterns (2). In educational contexts, FoF can have a dual role: in some students, it acts as a motivator that drives them to work harder, while in others, it may result in maladaptive behaviors such as procrastination, self-handicapping, and avoidance of challenging tasks (3-4).

Medical education is particularly demanding, requiring consistent academic performance, clinical competence, and emotional resilience. Students are exposed to frequent assessments, high competition, and societal expectations, all of which may increase vulnerability to FoF (5,6,7). Persistent FoF can lead to heightened stress, burnout, anxiety, and even depression, thereby impairing learning and professional development. Previous studies have reported varying levels of FoF among medical students worldwide, but data from Pakistan remain limited (8).

Understanding FoF is crucial because it allows medical educators to design interventions that promote adaptive coping mechanisms, encourage intrinsic motivation (9), and create supportive learning environments (10). The present study aimed to assess FoF among postgraduate medical students in 2024, comparing its prevalence and severity across gender, academic year, GPA, and students' interest in studying medicine.

Methods:

This cross-sectional observational study was conducted at Children Hospital Lahore in 2024. Using stratified random sampling, 420 students from the 2nd to 5th year residents were invited to participate. The Performance Failure Appraisal Inventory (PFAI), a validated 25-item tool measuring five domains (fear of shame/embarrassment, devaluing self-estimate, uncertain future, important others losing interest, upsetting important others) was administered via an online Google Form.

Responses were scored on a 5-point Likert scale (−2 to +2). Data were analyzed using SPSS 26.0. Non-parametric tests (Mann-Whitney U, Kruskal-Wallis) were used for comparisons. Reliability was assessed using Cronbach's α, and factor analysis confirmed construct validity.

Results:

Out of 420 students, 206 (49%) were male. Most participants (36%) were from third year. Mean FoF was −0.28 (SD = 0.79). Female students had significantly higher fear of devaluing self-estimate ($p < 0.001$), whereas male students had higher fear of important others losing interest ($p = 0.02$). Third-year students had significantly higher overall FoF compared to other years ($p = 0.001$). Students with GPA <3.5 and >4.9 showed significantly higher FoF compared to other GPA categories ($p = 0.01$). Cronbach's α for all items was 0.92, indicating excellent internal consistency.

Table 1: Demographic Characteristics of Participants

Variable	Categories	n (%)
Gender		
Male	206	49.0
Female	214	51.0
Academic Year		
Second Year	104	24.8
Third Year	151	36.0
Fourth Year	88	21.0
Fifth Year	77	18.2
GPA Category		
<3.5	65	15.5
3.5 – 4.0	92	21.9
4.01 – 4.5	108	25.7
4.5 – 4.9	105	25.0
>4.9	50	11.9

Table 2: Mean Fear of Failure (FoF) Domain Scores by Characteristics

Characteristic	FSE (Mean±SD)	FDSE (Mean±SD)	FUF (Mean± SD)	FIOLI (Mean ±SD)	FUIO (Mean ±SD)
Male	-0.05 ± 1.02	-0.42 ± 1.00	-0.20 ± 0.85	-0.68 ± 1.03	-0.30 ± 1.05
Female	0.02 ± 1.00	-0.30 ± 0.99	-0.18 ± 0.82	-0.74 ± 1.01	-0.24 ± 1.04
p-value	0.08	<0.001*	0.07	0.02 *	0.20
GPA < 3.5	0.12 ± 1.10	-0.25 ± 1.01	-0.12 ± 0.87	-0.55 ± 1.02	-0.10 ± 1.03
Year of Study (Clinical)	78 (27.0)	23 (8.0)	2 (0.7)		

Discussion:

This study found a generally low level of FoF among medical students at CICH, suggesting that most students are able to cope with academic challenges. However, subgroup analyses revealed meaningful differences. Female students reported significantly higher fear of devaluing self-estimate, which aligns with prior studies linking female students to greater self-criticism and perfectionistic tendencies. Conversely, male students reported higher fear of important others losing interest, potentially reflecting societal expectations on males to achieve academically and support their families.

The highest FoF levels were observed among third-year students, likely due to the transition from preclinical to clinical training, a period known to heighten stress as students face patient interaction, clinical evaluations, and increased responsibility. Similar findings have been reported in other studies, indicating that transitional years are critical periods where students may require additional mentoring and emotional support (11, 12).

Interestingly, both students with very low GPAs (<3.5) and those with very high GPAs (>4.9) showed elevated FoF. Low-GPA students may fear academic failure and dismissal, whereas high-achieving students may experience performance anxiety and fear of losing their academic standing (14-15). These findings highlight the importance of addressing FoF across the performance spectrum rather than focusing only on underperforming students.

Overall, this study underscores the need for student counseling services, peer mentoring programs, and workshops on stress management. Educators should foster a supportive learning climate that reduces punitive perceptions of failure and encourages constructive feedback (18). Future research should explore longitudinal trends of FoF and its correlation with psychological well-being, resilience, and professional outcomes.

Conclusion:

Fear of failure among postgraduate medical students CICH was generally low, but significant differences were observed by gender, GPA, and academic year. Interventions should focus on students at higher risk of FoF, particularly those in their third year and those with very low or very high scores.

Authors' Contribution:

T.A. conceptualized and designed the study, oversaw data interpretation, and contributed to the drafting and critical revision of the manuscript. She approved the final version for publication and takes full responsibility for the integrity of the work.

Conflict of Interest:

Authors declare no conflict of interest.

Funding and Ethics:

This research was self-funded by the author.

The study was conducted in accordance with

ethical guidelines.

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