

Perfectionism, Anxiety, and Depression among Postgraduate Students and Faculty at a Public University in Pakistan: A Cross-Sectional Study

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ABSTRACT

Perfectionism is a personality characteristic that underlies anxiety and depression in all diagnostic categories, though there is little empirical research from academic settings in South Asia. The purpose of this cross-sectional study was to investigate the association between multidimensional perfectionism, anxiety and depression, as well as comparison of perfectionism between postgraduate students and faculty members of a public university in the northwest region of Pakistan. A total of 163 participants (97 postgraduate students and 66 faculty members) from the University of Malakand were recruited through proportionate stratified random sampling and completed the Multidimensional Perfectionism Scale (MPS), Generalized Anxiety Disorder-7 (GAD-7), and Patient Health Questionnaire-9 (PHQ-9). Overall, 38.7% and 42.3% of participants had moderate to severe anxiety and depressive symptoms, respectively. Perfectionism was positively associated with both anxiety ($r = .229$, 95% CI [.08, .37], $p = .003$) and depression ($r = .188$, 95% CI [.04, .33], $p = .016$); dimension-level and demographic-adjusted regression analyses identified socially prescribed perfectionism as the only dimension with a unique association with both outcomes. Anxiety and depression were strongly correlated ($r = .607$, 95% CI [.50, .70], $p < .001$). There was no significant difference between students and faculty on perfectionism, $t(161) = 0.54$, $p = .593$, $d = 0.09$, although students reported significantly higher anxiety ($p = .034$) and depressive symptoms ($p < .001$) than faculty. Results confirm the significance of perfectionism, particularly socially prescribed perfectionism, for emotional distress in the collectivistic academic culture and indicate high anxiety–depression comorbidity in a largely unstudied academic group. Practically, the findings support embedding perfectionism-focused cognitive-behavioral components within institution-wide, transdiagnostic mental health services for both students and faculty in Pakistani higher education.

Keywords: Perfectionism, Anxiety, Depression, Postgraduate Students, Faculty, Pakistan, Comorbidity

INTRODUCTION

In modern psychology, perfectionism is considered a personality trait with multiple facets: striving for very high standards of performance, self-criticism arising from them, and anxiety about errors (Frost et al., 1990; Hewitt & Flett, 1991). Perfectionism is not merely a benign striving for excellence; rather, it is increasingly recognized as a transdiagnostic vulnerability associated with several mental disorders, including anxiety disorders, depressive disorders, and stress-related

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disorders (Egan et al., 2011; Limburg et al., 2017). University students are a population of concern as there is meta-analytic evidence that perfectionism has increased across successive cohorts of university students (Curran & Hill, 2019). Recent meta-analytic evidence confirms that perfectionism—particularly perfectionistic concerns—shows moderate positive associations with symptoms of anxiety and depression in both adults and young people (Callaghan et al., 2024; Lunn et al., 2023). Within this multi-dimensional view of Hewitt and Flett (1991), perfectionism can be broken down into three dimensions: self-oriented (SOP), other-oriented (OOP), and socially prescribed (SPP). Accumulating evidence indicates that these dimensions are differentially related to psychological distress. Perfectionistic concerns (SPP and concern with mistakes) are most strongly associated with anxiety and depression, whereas perfectionistic strivings have weaker and even protective associations with these problems (Limburg et al., 2017; Smith et al., 2021; Stoeber & Otto, 2006). Viewed comparatively, these meta-analytic syntheses converge on the maladaptive role of perfectionistic concerns but diverge in the magnitude of effects across dimensions, instruments, and populations, indicating that composite indices of perfectionism can mask dimension-specific associations—a measurement issue with direct relevance to the present study.

It is well established that there are empirical links between perfectionism and anxiety. Burcaş and Creţu (2021) conducted a meta-analysis that found perfectionistic concerns were moderately to strongly associated with test anxiety in educational contexts, and studies of university students have shown that perfectionism is associated with depressive symptoms through the mediating roles of coping styles, loneliness, and self-esteem (Liu & Sun, 2026). Similarly, a multivariate model tested among Colombian university students demonstrated that worry and rumination transmit the effects of perfectionism-related academic stress onto anxiety and depressive symptoms (Cuervo Gil et al., 2023). Cognitive accounts suggest that perfectionistic individuals have undue levels of worry about performance and expected evaluation, which increases their levels of anxious arousal (Burcaş & Creţu, 2021; Vanstone & Hicks, 2019). The relation between perfectionism and depression is similar: perfectionistic concerns predict future depressive symptoms (a vulnerability effect), and a meta-analysis of 67 longitudinal studies revealed a vulnerability and a complication effect (Smith et al., 2021). Several pathways have been proposed to account for this relation, including self-critical rumination, hopelessness, and shame following perceived failure (Watkins, 2008).

In clinical samples as well as in community samples, anxiety and depression are found in tandem at highly significant rates, and they are linked by common cognitive processes that include repetitive negative thinking and negative self-schemas (Beck, 1967; Watkins, 2008). This comorbid pattern has led to the idea of transdiagnostic models of emotional disorders and a common treatment paradigm, based on shared mechanisms, instead of diagnostic categories (Barlow et al., 2020; Egan et al., 2011). Students and faculty appear particularly susceptible to co-occurring anxious and depressive symptoms in academic environments, where they face chronic evaluative and publication pressures alongside a degree of financial insecurity (Pascoe et al., 2020).

However, there are still the following gaps in the literature that motivate the present study. First, the body of evidence comes largely from Western, individualistic cultures, and cross-cultural research indicates that the definition of perfectionism and correlates of achievement striving may vary within collectivistic cultures where family expectations, social obligations, and issues of honor or shame drive achievement (Rice et al., 2012; Wang et al., 2012). Although the evidence

remains scant, emerging Pakistani and South Asian research consistently links perfectionism to psychological distress. In a study of 323 Pakistani university students, overall perfectionism was positively associated with psychological distress, with the maladaptive dimensions (concern over mistakes, parental criticism, and doubts about actions) showing the strongest associations with anxiety and depression (Butt, 2010). More recently, academic perfectionism has been related to depression via self-concealment among Pakistani students (Malik et al., 2023), and perfectionistic tendencies were found to amplify the association between academic procrastination, test anxiety, and suicidal ideation in a large sample of Pakistani pre-medical students (Zhang et al., 2025). Critically, however, these local studies relied on undergraduate, adolescent, or pre-university samples, employed heterogeneous instruments, and rarely examined anxiety and depression concurrently, which limits their comparability with the international meta-analytic evidence and leaves academic staff entirely unexamined. Second, the research here is limited to undergraduate students, and postgraduate scholars and faculty members have been overlooked despite the heavy research, supervision, and performance demands placed on them. Thirdly, to the best of our knowledge, no study has been conducted in a comparatively under-resourced region of northwest Pakistan (Malakand Division of KP) in the context of perfectionism, anxiety, and depression. These gaps were filled in the present study by conducting a combined study of the post-graduate students and faculty of the University of Malakand.

HYPOTHESES

Guided by the multidimensional theory of perfectionism (Hewitt & Flett, 1991) and the transdiagnostic model of perfectionism in psychopathology (Egan et al., 2011), this study had two aims: (a) to estimate the prevalence of clinically relevant anxiety and depressive symptoms among postgraduate students and faculty, and (b) to test interrelationships between perfectionism, anxiety and depression, and role-based differences in perfectionism. Four hypotheses were tested:

H1: Multidimensional perfectionism is positively associated with anxiety.

H2: Multidimensional perfectionism is positively associated with depression.

H3: Anxiety is positively associated with depression.

H4: Postgraduate students and faculty members differ in perfectionism.

RESEARCH METHODOLOGY

Design and Setting

A cross-sectional survey design was used. Data were collected at the University of Malakand, a public sector university located in Chakdara (Lower Dir), Khyber Pakhtunkhwa, Pakistan, which has undergraduate, postgraduate, and doctoral programs in various faculties.

Participants and Sampling

The target population comprised around 1,550 people, with 900 postgraduate students (MPhil/PhD) and 650 faculty members (42%). There was no systematic difference in academic workload per faculty member between permanent and contract (on a per-hour basis) faculty members, so both types of faculty were eligible. A stratified random sampling method was used, and the stratification variable was academic role (student vs. faculty). Based on the recommendations for correlational design in the behavioral sciences (Creswell & Creswell, 2018; Field, 2018), 250 questionnaires were attempted, and 163 of the questionnaires were returned, with 163 being complete answers (67.1% of the questionnaires were returned, which was considered

adequate for survey research (Nulty, 2008)). Lastly, 163 subjects (97 post-graduate students and 66 faculty members) were selected. Most of the participants were in the age group of 26–30 years (modal age band, 38.7%), and most were either married (52.8%) or single (45.4%). Participants were drawn from 35 academic departments spanning the natural sciences, social sciences, humanities, and professional programs. By qualification, 56.4% were MPhil students, 15.3% PhD students, 6.1% held a completed MPhil, and 22.1% a completed PhD; 45.4% reported no teaching experience, whereas 16.0% reported more than 10 years. An a priori sample size calculation was not conducted, which is acknowledged as a limitation; however, a post hoc power analysis performed in G*Power indicated that the achieved sample size would yield at least .80 statistical power for correlational and independent-samples t-test analyses at $\alpha = .05$, for small-to-moderate effects. Table 1 shows demographic characteristics. The demographic information sheet recorded academic role, age band, marital status, academic department, highest qualification, and teaching experience.

MEASURES

Multidimensional Perfectionism

Self-oriented, other-oriented, and socially prescribed perfectionism were measured using the Multidimensional Perfectionism Scale (MPS; Hewitt & Flett, 1991) with 45 items rated on a 7-point scale (1 = strongly disagree to 7 = strongly agree). Following the official scoring key (Hewitt & Flett, 1991), the 18 reverse-keyed items were reverse-scored before summation; each 15-item subscale (SOP, OOP, SPP) was then summed (subscale range: 15–105), and the three subscales were summed to form the total score (range: 45–315), with higher scores indicating greater perfectionism. Both the total score, indexing perfectionism as a global transdiagnostic disposition (Egan et al., 2011), and the three-dimensional scores were analyzed. The MPS has demonstrated good psychometric properties in diverse cultural populations including South Asian populations (Hewitt & Flett, 1991; Wang et al., 2012). In the present sample, internal consistency was excellent for the total score (Cronbach's $\alpha = .90$) and acceptable/good for the subscales (SOP $\alpha = .77$, OOP $\alpha = .69$, SPP $\alpha = .77$).

Anxiety

Anxiety symptoms were measured on the 7 items of the Generalized Anxiety Disorder-7 (GAD-7; Spitzer et al., 2006) using a 4-point scale (0 = not at all to 3 = nearly every day) to examine anxiety symptoms over the past 2 weeks (range 0–21). Anxiety scores of 5, 10, and 15 are considered mild, moderate, and severe symptom thresholds, respectively; scores ≥ 10 are considered clinically significant. The reliability of the present sample was good, $\alpha = .86$.

Depression

Depressive symptoms were evaluated using the Patient Health Questionnaire (PHQ-9) (Kroenke et al., 2001) on the same 4-point scale (0–27) as above, but over the past 2 weeks. A score of 5, 10, 15, and 20 indicates mild, moderate, moderately severe, and severe depression, respectively, and clinically significant depression is assumed at scores ≥ 10 . The internal consistency for the present sample was good ($\alpha = .86$).

PROCEDURE AND ETHICAL CONSIDERATIONS

The study protocol was reviewed and approved by the Departmental Research Ethics Committee of the Department of Psychology, University of Malakand, and the study was carried out in accordance with the ethical principles of the Declaration of Helsinki. The participants were approached in their respective departments; the purpose of the study was explained, and participation was made voluntary, anonymous, and confidential. Informed written consent was given before the self-report battery, consisting of a demographic information sheet, followed by the MPS, PHQ-9, and GAD-7, was administered. Participant data were not recorded, and participants had the option to withdraw at any time without repercussion.

ANALYTIC STRATEGY

IBM SPSS Statistics (Version 21) was used to analyze the data. Preliminary screening showed that the distribution of all measures used in this study was suitable for parametric analysis. One out-of-range response on a GAD-7 item (a value of 4 on the 0–3 response scale) was recoded to the scale maximum of 3 before analysis. Descriptive statistics were computed, internal consistency coefficients were obtained, and the severity of symptoms was determined using the GAD-7 and PHQ-9 cut-off points. For Hypotheses 1-3, Pearson product-moment correlations were calculated and Cohen's (1988) *r* benchmarks (small = .10, medium = .30, large = .50) were used, and 95% confidence intervals for the correlations were computed using Fisher's *r*-to-*z* transformation. Independent-samples *t*-tests were used to test Hypothesis 4 and to compare students and faculty on anxiety and depression; each test was preceded by Levene's test for homogeneity of variance, with Welch's correction applied where variances were unequal, and Cohen's *d* was calculated as a standardized mean difference using the pooled standard deviation. To examine whether perfectionism was associated with anxiety and depression after adjusting for demographic characteristics, hierarchical multiple regression analyses were conducted for each outcome: academic role, age band, and marital status were entered at Step 1, and the three perfectionism dimensions were entered at Step 2. A two-tailed α value of .05 was used for statistical significance.

RESULTS

Descriptive Statistics and Symptom Prevalence

The descriptive statistics, reliability coefficients, and observed ranges of the study variables are given in Table 2. Perfectionism total scores ranged from 45 to 274 ($M = 202.37$, $SD = 35.75$), corresponding to a mean item response of 4.50 on the 7-point scale and indicating moderately high perfectionism overall, consistent with the achievement orientation of the postgraduate academic environment. Mean scores were comparable across the three dimensions (SOP: $M = 68.83$, $SD = 13.93$; OOP: $M = 66.24$, $SD = 12.05$; SPP: $M = 67.29$, $SD = 13.60$).

The scores for mean anxiety (GAD-7: $M = 8.05$, $SD = 5.67$) as well as depression (PHQ-9: $M = 8.97$, $SD = 6.52$) were in the mild symptom range, although the large standard deviations were indicative of significant variation. Table 3 also illustrates that 38.7% of the respondents had a GAD-7 score of 10 or higher (indicative of moderate to severe anxiety) and 42.3% had a PHQ-9 score of 10 or greater (moderate to severe depression), with 7.4% scoring in the severe depression band (see Figure 1). These data suggest that there is a substantial amount of clinically significant emotional distress in the sample.

Table 1: Demographic Characteristics of the Sample (N = 163)

Characteristic	n	%
Academic role		
Postgraduate student	97	59.5
Faculty member	66	40.5
Marital status		
Single	74	45.4
Married	86	52.8
Other	3	1.8
Age band		
20–25 years	29	17.8
26–30 years	63	38.7
31–40 years	43	26.4
40+ years	28	17.2
Highest qualification		
MPhil (in progress)	92	56.4
PhD (in progress)	25	15.3
MPhil (completed)	10	6.1
PhD (completed)	36	22.1
Teaching experience		
None	74	45.4
0–5 years	38	23.3
6–10 years	25	15.3
More than 10 years	26	16.0

Note. Faculty members held MPhil or PhD qualifications on permanent or visiting contracts.

Table 2: Descriptive Statistics and Internal Consistency of Study Measures (N = 163)

Measure	M	SD	Observed range	α
MPS total (perfectionism)	202.37	35.75	45–274	.90
Self-oriented perfectionism	68.83	13.93	15–100	.77
Other-oriented perfectionism	66.24	12.05	15–93	.69
Socially prescribed perfectionism	67.29	13.60	15–98	.77
GAD-7 (anxiety)	8.05	5.67	0–21	.86

Measure	M	SD	Observed range	α
PHQ-9 (depression)	8.97	6.52	0–27	.86

Note. MPS = Multidimensional Perfectionism Scale (Hewitt & Flett, 1991); GAD-7 = Generalized Anxiety Disorder-7 (Spitzer et al., 2006); PHQ-9 = Patient Health Questionnaire-9 (Kroenke et al., 2001); α = Cronbach's alpha. Perfectionism scores were computed following the official scoring key, with 18 reverse-keyed items reverse-scored before summation.

Table 3: Severity of Anxiety (GAD-7) and Depressive (PHQ-9) Symptoms

Severity band	Score range	N	%
Anxiety (GAD-7)			
Minimal	0–4	54	33.1
Mild	5–9	46	28.2
Moderate	10–14	39	23.9
Severe	15–21	24	14.7
Depression (PHQ-9)			
Minimal	0–4	44	27.0
Mild	5–9	50	30.7
Moderate	10–14	38	23.3
Moderately severe	15–19	19	11.7
Severe	20–27	12	7.4

Note. Scores ≥ 10 indicate clinically significant symptoms: 38.7% of participants met this threshold for anxiety and 42.3% for depression.

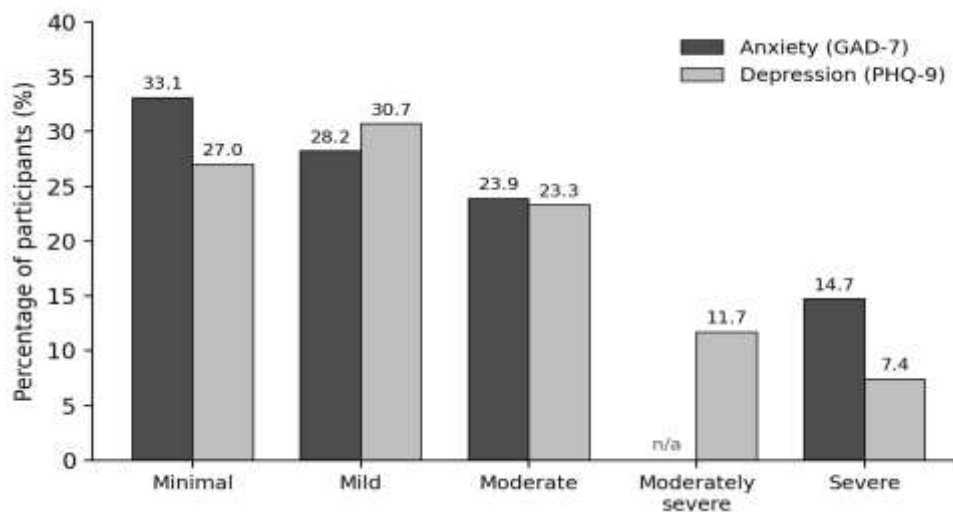


Figure 1: Distribution of Anxiety (GAD-7) and Depressive (PHQ-9) Symptom Severity (N = 163)

Note. Percentages are based on established GAD-7 and PHQ-9 severity cut-offs. The GAD-7 has no moderately severe band (n/a). Scores ≥ 10 indicate clinically significant symptoms.

Associations Among Perfectionism, Anxiety, and Depression (H1–H3)

Zero-order correlations among the study variables are shown in Table 4. As hypothesized, perfectionism was positively and significantly correlated with anxiety, $r(161) = .229$, 95% CI [.08, .37], $p = .003$, a small-to-medium effect by Cohen's (1988) benchmarks, and with depression, $r(161) = .188$, 95% CI [.04, .33], $p = .016$, a small effect, supporting Hypotheses 1 and 2. At the dimension level, socially prescribed perfectionism showed the strongest associations with both anxiety, $r(161) = .287$, 95% CI [.14, .42], $p < .001$, and depression, $r(161) = .276$, 95% CI [.13, .41], $p < .001$, whereas self-oriented perfectionism, $r(161) = .158$, $p = .044$, and other-oriented perfectionism, $r(161) = .174$, $p = .027$, were weakly associated with anxiety only and showed no significant associations with depression. As hypothesized, there was strong, positive, and significant covariation between anxiety and depression, $r(161) = .607$, 95% CI [.50, .70], a large effect, $p < .001$, supporting Hypothesis 3.

Table 4: Correlations Among Study Variables (N = 163)

Variable	1	2	3	4	5	6
1. MPS total	—					
2. SOP	.903***	—				
3. OOP	.906***	.739***	—			
4. SPP	.900***	.695***	.739***	—		
5. GAD-7 (anxiety)	.229**	.158*	.174*	.287***	—	
6. PHQ-9 (depression)	.188*	.101	.130	.276***	.607***	—

Note. MPS = Multidimensional Perfectionism Scale; SOP = self-oriented perfectionism; OOP = other-oriented perfectionism; SPP = socially prescribed perfectionism; GAD-7 = Generalized Anxiety Disorder-7; PHQ-9 = Patient Health Questionnaire-9. * $p < .05$. ** $p < .01$. *** $p < .001$ (two-tailed).

Demographic-Adjusted Regression Analyses

Hierarchical multiple regression analyses examined whether perfectionism was associated with anxiety and depression after adjusting for academic role, age band, and marital status (Table 5). For anxiety, demographic variables at Step 1 did not account for significant variance, $R^2 = .047$, $F(3, 159) = 2.59$, $p = .055$; adding the three perfectionism dimensions at Step 2 significantly improved the model, $\Delta R^2 = .079$, $F \text{ change}(3, 156) = 4.69$, $p = .004$, with socially prescribed perfectionism emerging as the only significant unique correlate, $\beta = .34$, $p = .004$. For depression, demographic variables accounted for significant variance at Step 1, $R^2 = .134$, $F(3, 159) = 8.18$, $p < .001$; the perfectionism dimensions again significantly improved the model, $\Delta R^2 = .083$, $F \text{ change}(3, 156) = 5.52$, $p = .001$, and socially prescribed perfectionism was again the only significant unique correlate, $\beta = .42$, $p < .001$. Parallel models entering the MPS total score in place of the three dimensions confirmed that perfectionism remained associated with both anxiety ($\beta = .22$, $\Delta R^2 = .050$, $p = .004$) and depression ($\beta = .18$, $\Delta R^2 = .031$, $p = .017$) after demographic adjustment.

Table 5: Hierarchical Multiple Regression of Anxiety and Depression on Demographic Variables and Perfectionism Dimensions (Step 2 Coefficients)

Predictor	B	SE	β	t	p
Anxiety (GAD-7)					
Academic role (faculty)	0.19	1.40	.02	0.14	.892
Age band	-0.92	0.74	-.16	-1.25	.215
Marital status (married)	-0.79	1.19	-.07	-0.67	.507
SOP	-0.01	0.05	-.03	-0.27	.787
OOP	-0.03	0.06	-.06	-0.49	.624
SPP	0.14	0.05	.34	2.91	.004
Depression (PHQ-9)					
Academic role (faculty)	-2.47	1.52	-.19	-1.63	.105
Age band	-1.04	0.80	-.16	-1.30	.195
Marital status (married)	-0.52	1.30	-.04	-0.40	.690
SOP	-0.04	0.05	-.08	-0.75	.456
OOP	-0.07	0.07	-.14	-1.13	.261
SPP	0.20	0.05	.42	3.73	< .001

Note. N = 163. Anxiety model: Step 1 $R^2 = .047$; Step 2 $R^2 = .126$. Depression model: Step 1 $R^2 = .134$; Step 2 $R^2 = .217$. β = standardized coefficient. SOP = self-oriented perfectionism; OOP = other-oriented perfectionism; SPP = socially prescribed perfectionism. Reference categories: academic role = postgraduate student; marital status = single/other; age band treated as ordinal (1–4).

Group Differences in Perfectionism (H4)

For perfectionism, the assumption of homogeneity of variance was satisfied (Levene's $p = .238$). As shown in Table 6, postgraduate students ($M = 203.61$, $SD = 32.57$) and faculty members ($M = 200.55$, $SD = 40.15$) did not differ significantly on total perfectionism, $t(161) = 0.54$, $p = .593$, $d = 0.09$, 95% CI for the mean difference $[-8.14, 14.27]$, nor on any of the three dimensions (all $ps \geq .350$). Contrary to Hypothesis 4, perfectionism was equally high regardless of academic position (see Figure 2). In contrast, students reported significantly higher anxiety than faculty ($M = 8.79$, $SD = 6.08$ vs. $M = 6.95$, $SD = 4.86$), Welch's $t(156.8) = 2.14$, $p = .034$, $d = 0.33$, and markedly higher depressive symptoms ($M = 10.79$, $SD = 6.92$ vs. $M = 6.29$, $SD = 4.78$), Welch's $t(160.9) = 4.91$, $p < .001$, $d = 0.73$. The results of the hypothesis testing are summarized in Table 7.

Table 6: Comparisons of Postgraduate Students and Faculty Members on Study Measures

Measure	Group	N	M	SD	t	df	p	d
MPS total	Students	97	203.61	32.57	0.54	161	.593	0.09
	Faculty	66	200.55	40.15				

Measure	Group	N	M	SD	t	df	p	d
GAD-7	Students	97	8.79	6.08	2.14	156.8	.034	0.33
	Faculty	66	6.95	4.86				
PHQ-9	Students	97	10.79	6.92	4.91	160.9	< .001	0.73
	Faculty	66	6.29	4.78				

Note. Welch's correction applied for GAD-7 and PHQ-9, for which Levene's test indicated unequal variances; equal variances assumed for MPS total. d = Cohen's d (pooled SD).

Table 7: Summary of Hypothesis-Testing Outcomes

H	Hypothesized relation	Statistic	p	Outcome
H1	Positive perfectionism–anxiety association	$r = .229$	.003	Supported
H2	Positive perfectionism–depression association	$r = .188$	.016	Supported
H3	Positive anxiety–depression association	$r = .607$	< .001	Supported
H4	Role difference in perfectionism	$t = 0.54$	.593	Not supported

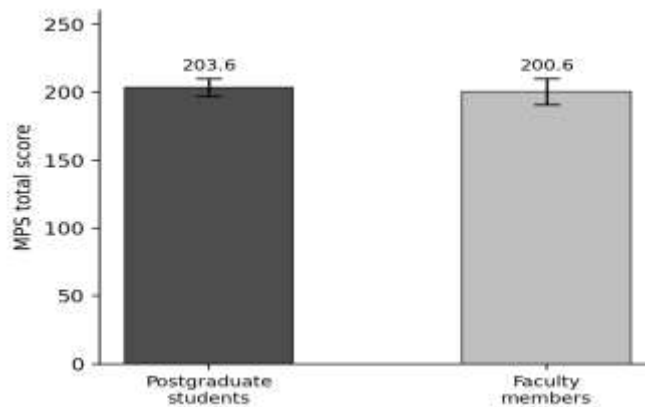


Figure 2: Mean Perfectionism (MPS Total) by Academic Role With 95% Confidence Intervals

Note. Error bars represent 95% confidence intervals. The group difference was not statistically significant, $t(161) = 0.54$, $p = .593$, $d = 0.09$.

DISCUSSION

This study examined the interrelations among multidimensional perfectionism, anxiety, and depression in a sample of postgraduate students and faculty at a public university in northwest Pakistan, the first such investigation in the Malakand region.

Three principal findings emerged. First, clinically significant emotional distress was prevalent: more than one-third of participants reported moderate to severe anxiety and more than two-fifths reported moderate to severe depressive symptoms. Second, perfectionism was significantly associated with both anxiety and depression, and dimension-level and demographic-adjusted analyses converged in identifying socially prescribed perfectionism as the principal correlate of both outcomes; anxiety and depression were, in addition, strongly intercorrelated. Third, perfectionism did not differ by academic role—suggesting that elevated perfectionistic standards characterize the institutional culture rather than any single group within it—although postgraduate students reported significantly higher anxiety and depressive symptoms than faculty members.

Perfectionism and Anxiety

The significant positive association between perfectionism and anxiety converges with meta-analytic evidence linking perfectionism dimensions to anxiety in educational contexts (Burcaş & Creţu, 2021) and with findings that perfectionism is associated with psychological distress among university students through maladaptive coping, loneliness, and low self-esteem (Liu & Sun, 2026). The result is consistent with cognitive models in which perfection-driven worry over performance and anticipated evaluation is theorized to heighten anxious arousal (Burcaş & Creţu, 2021; Vanstone & Hicks, 2019). In the present setting, continuous evaluation of research output, thesis progress, and teaching performance plausibly furnishes recurrent triggers for such worry.

The magnitude of the association, however, was small and warrants careful interpretation. The MPS total score aggregates self-oriented, other-oriented, and socially prescribed perfectionism, yet these dimensions relate differentially to distress: socially prescribed perfectionism typically shows the strongest associations, whereas other-oriented perfectionism shows weak or negligible ones (Hewitt & Flett, 1991; Smith et al., 2021). Consistent with this, dimension-level analyses showed that socially prescribed perfectionism exhibited the strongest association with anxiety and was the only dimension with a unique contribution in the demographic-adjusted model, whereas self-oriented and other-oriented perfectionism showed weaker bivariate associations. This relation can be further modified by cultural context, especially within collectivistic South Asian cultures, where family expectation, social obligation, and concerns related to honor can reinforce the externally referenced dimensions of perfectionism, dimensions that are only captured in a diffuse manner by composite scores (Rice et al., 2012; Wang et al., 2012).

Perfectionism and Depression

At the total-score level, perfectionism showed a modest but significant positive association with depressive symptoms, consistent with meta-analytic evidence (Limburg et al., 2017; Smith et al., 2021). Dimension-level analyses clarified the source of this association: socially prescribed perfectionism was the only dimension significantly related to depressive symptoms and the only

dimension carrying unique variance in the demographic-adjusted model, whereas self-oriented and other-oriented perfectionism were not significantly associated with depression. This pattern converges closely with meta-analytic findings that the perfectionism–depression link reflects primarily perfectionistic concerns rather than perfectionistic strivings (Callaghan et al., 2024) and with cognitive accounts implicating rumination and hopelessness as pathways (Watkins, 2008). The prominence of socially prescribed perfectionism may be amplified in collectivistic South Asian contexts, where family expectation, social obligation, and honor-related concerns render externally referenced standards especially salient (Rice et al., 2012; Wang et al., 2012). At the same time, protective sociocultural factors such as family cohesion and social support may buffer these associations (Wei et al., 2021), and longitudinal evidence indicates bidirectional perfectionism–depression relationships that cannot be captured in a single-occasion design (Smith et al., 2021).

Alternative explanations for the observed pattern of results also merit consideration. Unmeasured third variables—including financial strain, workload, sleep quality, and social support—could account for part of the shared variance among the study constructs, and reliance on a single self-report method raises the possibility that common-method variance inflated the anxiety–depression correlation. Because all data were collected at a single institution during one academic period, contextual factors specific to that setting (e.g., examination schedules or institutional workload cycles) cannot be ruled out as influences on symptom levels. The demographic-adjusted models reported above address part of this concern, although unmeasured contextual covariates remain an important caveat.

Anxiety–Depression Comorbidity

The high anxiety–depression correlation mirrors one of the strongest findings in psychopathology and is consistent with tripartite and cognitive explanations of the relationship between the two constructs, which argue that the link is due to a negative affectivity dimension, negative automatic thoughts, and repetitive negative thought (Beck, 1967; Watkins, 2008). In the context of chronic evaluative and financial stressors in an academic population, anxious and depressive symptoms seem to increase together, and therefore can be considered as dimensions of a larger problem of emotional distress rather than separate categories (Pascoe et al., 2020). This pattern reinforces the need for transdiagnostic approaches to treatment that target common processes (Barlow et al., 2020; Egan et al., 2011).

Role Differences in Perfectionism

There was no significant difference between the two groups (postgraduate students and faculty members), and the accompanying effect size was small. The two groups must deal with convergent institutional demands, such as thesis completion and supervision, publication demands, teaching loads and recurrent evaluation, and the observed convergence is consistent with a socialization account in which a shared institutionally oriented culture of achievement, not formal roles, shapes perfectionistic culture. The descriptively higher mean among faculty raises the possibility that perfectionistic standards intensify with career progression; however, the present comparison was underpowered to detect an effect of this magnitude, and this hypothesis should be tested in larger, stratified samples. In contrast, students reported significantly higher anxiety and markedly higher depressive symptoms than faculty members. This asymmetry suggests that although perfectionistic standards are shared across roles, the resources available for managing

evaluative pressure—professional status, income stability, and accumulated coping experience—differ between the groups, leaving postgraduate students comparatively more vulnerable to distress.

IMPLICATIONS

There are implications for higher education in Pakistan in the findings. The high rates of clinically significant anxiety (38.7%) and depression (42.3%) support the development and growth of on-campus psychological services that feature trained clinicians, with particular attention to postgraduate students, who reported the highest symptom burden. The perfectionism–distress associations, driven principally by socially prescribed perfectionism, support the use of cognitive-behavioral interventions targeting perfectionism—particularly perceived external expectations—for which there is accumulating evidence of efficacy (Egan et al., 2011), including scalable psychoeducational formats delivered through counseling centers or academic departments. Transdiagnostic approaches such as the Unified Protocol (Barlow et al., 2020) target the worry, rumination, and negative self-evaluation shared by anxiety and depression, and are well suited to service delivery in resource-limited environments. Lastly, there is evidence of perfectionism in every role, suggesting that the provision should support faculty as well as students, in line with a whole institution approach to academic wellbeing.

LIMITATIONS AND FUTURE DIRECTIONS

These conclusions are limited by several factors. Because of the cross-sectional design, it is not possible to conclude that there are causal links between perfectionism and distress; longitudinal and experimental studies are needed to determine causality. Although dimension-level and demographic-adjusted analyses were conducted, the substantial intercorrelations among the three MPS dimensions ($r_s = .70-.74$) mean that their unique contributions should be interpreted with caution, and future studies should test moderators (e.g., hope, mindfulness) and mediators (e.g., rumination, worry, self-compassion) identified in past studies (Karababa, 2020; Wei et al., 2021). The single-institution sample limits generalization even to similar public institutions in Khyber Pakhtunkhwa Province, and multi-site studies across provinces and institution types are required. In addition, gender was not recorded; future studies should include gender and finer-grained demographic and contextual measures to permit fuller covariate adjustment. Self-report should not be used as the sole method of diagnosis, as it might have introduced biases, especially in the context of mental health-related stigma in Pakistani society, which could have led to under-reporting of symptoms, and multi-method assessment (using clinician ratings) is recommended. The acceptable response rate of 67.1% (Nulty, 2008) does not rule out non-response bias. Lastly, while the MPS has cross-cultural validity evidence (Hewitt & Flett, 1991; Wang et al., 2012), formal validation in the sociocultural context of Khyber Pakhtunkhwa would enhance measurement assumptions, and qualitative research could help in understanding how perfectionism is culturally constructed in this context.

CONCLUSION

This study is the first empirical study to offer evidence regarding perfectionism, anxiety, and depression among postgraduate students and faculty members in the Malakand region of Pakistan. Perfectionism—driven principally by socially prescribed perfectionism—was associated with both anxiety and depression, anxious and depressive symptoms were highly comorbid, and clinically significant distress was prevalent, with postgraduate students bearing the greatest

symptom burden. The dimension-level findings emphasize the need for mediational and longitudinal analyses of socially prescribed perfectionism. Together, the results highlight the importance of implementing institution-wide, transdiagnostically oriented mental health services in universities in Pakistan, which would not only have a positive impact on the lives of the students and faculty but also on the vitality of the academic enterprise.

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