

Financial Stress and Job Performance among Young Doctors: The Mediating Role of Work Engagement in Public-Sector Hospitals of Hazara Division, Pakistan

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Abstract

Financial stress may undermine the effectiveness of early-career medical professionals by consuming psychological resources and diverting attention from work. This study examines the relationship between financial stress and job performance among young doctors working in public-sector teaching hospitals in Hazara Division, Khyber Pakhtunkhwa, Pakistan, and tests whether work engagement mediates this relationship. Drawing on Conservation of Resources (COR) theory and the Job Demands–Resources (JD–R) model, the study uses a quantitative, cross-sectional survey of 224 young doctors selected through stratified random sampling from four public teaching hospitals. Data were collected through a structured questionnaire and analyzed using descriptive statistics, correlation and regression analyses, and Hayes' PROCESS Model 4 with 5,000 bootstrap samples. The thesis reports negative associations between financial stress and work engagement ($r = -.752, p < .01$) and between financial stress and job performance ($r = -.893, p < .01$), alongside a positive association between work engagement and job performance ($r = .756, p < .01$). The mediation analysis reports a negative indirect effect of financial stress on job performance through work engagement (effect = $-.1269$, 95% bootstrap CI [$-.1983, -.0582$]) and a significant negative direct effect (reported coefficient = $-.6449, p < .001$), indicating partial mediation. The findings suggest that financial well-being and engagement should be considered together in workforce-support strategies for public healthcare institutions. Because the study is cross-sectional and based on self-reports, causal interpretations and generalization beyond the study setting should remain cautious.

Keywords: financial stress; work engagement; job performance; young doctors; public hospitals; Pakistan; mediation.

Introduction

Healthcare organizations depend on doctors' sustained attention, clinical judgment, and reliable execution of professional responsibilities (Kaben et al., 2006; Wenghofer et al., 2009). Early-career doctors may experience financial pressure associated with high living costs, family obligations, debt, and the transition from medical education to employment (Tocco, et al., 2025; Seehausen DA, et al., 2024; Carr, Kelly, & Kelly, 2015). Such pressures can extend into the workplace, occupying cognitive resources and reducing the energy available for work (Wei

et al., 2024). Financial stress is more than an objective shortage of money: it also concerns the psychological strain arising when people perceive that available resources are insufficient to meet current or anticipated obligations (Samuel et al., 2025; Friedline, 2020). In demanding clinical settings, persistent financial concerns may compete with work-related attention and motivation (Wei et al., 2024). This issue is especially relevant in public-sector health systems, where resource constraints and demanding workloads may coexist. The study examines financial stress and job performance among young doctors in Hazara Division, Pakistan. It further considers work engagement as a potential explanatory mechanism. Work engagement commonly described through vigor, dedication, and absorption may help explain why financial strain is associated with work outcomes. The study contributes context-specific evidence from public hospitals in a region for which the thesis identifies limited empirical research on this particular relationship.

Financial stress is an important yet underexplored challenge affecting young doctors' psychological well-being, work engagement, job performance, and potentially patient care (Maslach & Jackson, 1981; Marzouk et al., 2024). Despite their professional responsibilities, young doctors often experience financial strain due to educational debt, relatively low trainee salaries, rising living costs, heavy workloads, employment insecurity, and limited financial literacy (Carr et al., 2015; Antoniou et al., 2008; Mercante et al., 2025). Persistent financial pressure may contribute to anxiety, depression, and burnout, potentially undermining decision-making, and job satisfaction, potentially increasing medical errors, patient safety, and influencing career choices (Dill et al., 2018; West et al., 2016). Despite growing evidence of burnout and psychological distress in the medical workforce the specific and direct impact of **financial stress** as a primary antecedent of work engagement and job performance remains insufficiently examined (West, & Shanafelt et al., 2016). In particular, little empirical research has explored how financial strain influences the engagement levels and performance outcomes of young doctors working in the context of developing health systems specifically, at Hazara Division in Pakistan (Zaheer, Aziz., & Sheikh et al, 2019). Moreover, recently, in September 2026 young Doctors were on strike for several weeks due to low income at their early career in Hazara division and other Region of KP. Therefore, the current research study seeks to bridge a crucial research gap by systematically examining the impact that financial-stress has on the job-performance of young doctors in Hazara Division, with a particular attention to the role of work engagement as mediator. Understanding these associations could provide evidence-based insights for hospitals administrator's, policymakers, and medical educators to create focused strategies that enhance doctors' financial well-being, maintain their engagement, and ultimately improves the patient's quality care.

Building on the issue of rising financial stress among young doctors and the potential impact that such stress has on job performance, the aims that the present research needs to accomplish are as follows:

1. To study the direct relationship between financial stress and job performance among young doctors serving at Hazara Division.
2. To explore the association between financial-stress & work-engagement among young doctors in the Hazara Division.
3. To investigate the effect of work-engagement on job-performance among young doctors in the Hazara Division.
4. To analyze work-engagement as mediator between financial stress and job performance of young doctors in the Hazara Division.

The present research dissertation provides its contribution by expanding knowledge on financial stress, work engagement, and worker's performance at job, particularly within the healthcare

sector. It fills a gap by concentrating on doctors in the Hazara Division of Pakistan, a developing region where limited empirical research exists. This study is based on The Young Doctors Holistic Financial Stress Framework, which combines well-established psychological and organizational theories to offer a thorough perspective on how a financial stress affects individuals. The study applies and validates key hypothetical frameworks such as, Job's Demands-Resources (JD-R) Model, Conservation of Resources (COR), and Stress & Coping Theory within the context of healthcare professionals facing financial challenges. By investigating the role work engagement as mediator, it enhances the understanding of psychological processes that connect job performance to financial stress.

Literature Review and Hypothesis development

This study is grounded in the Young Doctors' Holistic Stress Framework, which integrates established psychological and organizational theories to provide a comprehensive understanding of how financial stress affects young doctors.

Conservation of Resources theory

Conservation of Resources (COR) theory proposes that stress emerges when valued resources are threatened, lost, or insufficiently replenished. Financial insecurity can represent a threat to a valued resource and may consume emotional and cognitive capacity (Hobfoll, Stevan, et al., 2018). Applied to young doctors, this perspective suggests that financial stress may be associated with lower work engagement and poorer job performance.

Job Demands–Resources model

The Job Demands–Resources (JD–R) model distinguishes demands that require sustained effort from resources that support motivation and goal attainment. Financial strain can function as a personal demand that competes with work-related energy, while engagement represents a motivational state relevant to effective performance (Bakker, Demerit, 2007; Schaufeli, Bakker, 2004). Together, COR and JD–R provide a rationale for examining both a direct association and an indirect association through engagement.

Model of Stress and Copying (Lazarus and Folkman, 1984)

This theory demonstrates how social support influences stress appraisal and coping strategies. Social support can help individuals reinterpret stressful situations, identify available resources, and develop effective coping mechanisms. It serves as a vital resource, when facing difficulties influence stress level and copying abilities. “Within the context of coping, people will invest resources to prevent future resources loss” (Lazarus and Folkman ,1984).

Financial Stress and Job Performance

Financial stress refers to the psychological pressure individuals experience when their financial resources are insufficient to meet current obligations and anticipated needs. It may arise from inadequate income, debt, rising living expenses, financial uncertainty, and difficulties managing personal finances (Northern et al., 2010; Ryu & Fan, 2023). Financial concerns can extend beyond an individual's personal life and affect workplace functioning by consuming cognitive resources, disrupting concentration, and reducing psychological well-being. From a healthcare management perspective, these consequences are particularly important because doctors must maintain concentration, make timely clinical decisions, and deliver reliable patient care while managing demanding workloads.

Job performance refers to work-related behaviors and contributions that support organizational objectives. Campbell (1990) conceptualized performance as an individual-level construct concerned with behavior's relevant to organizational goals. Financial stress may influence performance by diverting attention from professional responsibilities and increasing psychological strain. Previous research has associated financial difficulties with reduced productivity, lower job satisfaction, absenteeism, and impaired work functioning (Kim & Garman, 2004; Sabri et al., 2020). However, the relationship is not consistently negative. Some studies involving Chinese employees suggest that financial pressure may motivate individuals

to increase their work effort to improve their financial circumstances (Ma et al., 2014; Mao & Hou, 2018).

Such findings indicate that employees may respond differently to financial stress depending on their personal circumstances and work environments. Despite these contrasting findings, the evidence summarized in the literature suggests that persistent financial stress can create substantial barriers to effective job performance. Nevertheless, the relationship requires further examination among young doctors, whose professional responsibilities, training demands, and financial expectations may create a distinctive combination of pressures. Accordingly, this study examines the association between financial stress and job performance among young doctors working in hospitals.

The hypothesis given below is proposed based on the above reasoning.

H1: Financial stress is significantly associated with job performance

Financial Stress and Work Engagement

Work engagement is a positive, fulfilling work-related psychological state characterized by vigor, dedication, and absorption (Schaufeli et al., 2002). Vigor involves energy and persistence at work, dedication reflects enthusiasm and a sense of significance and absorption refers to being deeply concentrated on professional activities. Kahn (1990), further emphasized the expression of an individual's preferred self through work-related roles. Together, these perspectives position work engagement as an important factor in understanding employees' motivation and involvement in their professional responsibilities.

Financial stress may undermine work engagement by diverting employees' attention and emotional energy toward personal financial concerns. Employees who are worried about meeting expenses, managing debt, or supporting their families may find it difficult to remain enthusiastic, focused, and psychologically available at work. Previous studies have reported negative associations between financial stress and work engagement, suggesting that financial worries can reduce concentration, motivation, and work-related involvement (Fiabane et al., 2013; Rahim et al., 2020). Financial strain may also contribute to presenteeism, whereby employees remain physically present at work but experience reduced mental focus and effectiveness. However, the relationship may not be uniformly negative. Some employees may respond to financial pressure by increasing their effort or working longer hours to improve their financial circumstances (Wei et al., 2012).

These contrasting findings suggest that the relationship between financial stress and engagement may depend on individual coping responses and organizational conditions. For young doctors, financial concerns may compete with the substantial cognitive and emotional demands of hospital work. Examining this relationship can therefore help clarify whether financial stress is associated with reduced engagement in this professional group.

Following hypothesis is proposed based on the following reasoning.

H2: Financial stress has significant relationship with work-engagement.

Work Engagement and Job Performance

Work engagement is widely recognized as an important factor associated with employee performance. Engaged employees are more likely to invest energy in their responsibilities, demonstrate persistence, and contribute positively to organizational objectives. Christian et al. (2011), in a quantitative review, found support for the relationship between work engagement and task and contextual performance. Similarly, the Job Demands–Resources model explains how job demands and available resources influence employee well-being and motivation, providing a useful framework for understanding engagement and work outcomes (Bakker & Demerouti, 2007).

Higher engagement may support job performance by strengthening employees' motivation, concentration, and willingness to make sustained efforts. In hospital settings, these qualities are particularly relevant because doctors must manage competing responsibilities, communicate

effectively with colleagues, and maintain attention during demanding clinical tasks. Employees who are engaged in their work may be better positioned to fulfill professional responsibilities and contribute to organizational effectiveness. Nevertheless, engagement should not be assumed to guarantee superior performance under all circumstances. Excessive demands, insufficient resources, and difficult working conditions may limit employees' ability to translate motivation into effective outcomes. The relationship between engagement and performance should therefore be examined within the particular occupational context. In the present study, work engagement is considered a potential mechanism connecting financial stress with job performance among young doctors.

Following hypothesis is proposed based on the following reasoning.

H3: work Engagement has significantly related to job performance.

The Mediating Role of Work Engagement

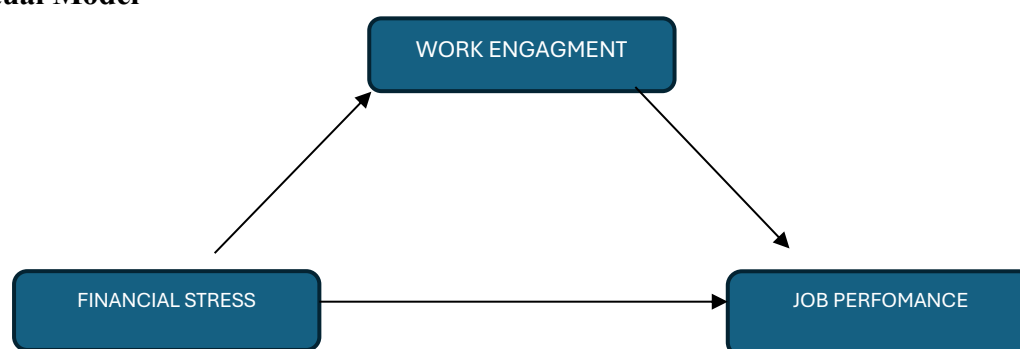
The relationship between financial stress and job performance may be better understood by examining the psychological processes through which financial concerns influence workplace behavior. Work engagement provides a plausible mediating mechanism because financial stress may affect the energy, motivation, and concentration employees bring to their professional responsibilities. When financial worries consume psychological resources, employees may experience reduced vigor, dedication, and absorption, which may subsequently affect their job performance. The Job Demands–Resources framework offers a theoretical basis for this proposed relationship (Christian, Garza, & Slaughter, 2011).

Bakker and Demerouti (2007) explain how job demands and resources shape employee well-being and motivation. Applied to the present study, financial stress may function as a personal or non-work demand that competes with the psychological resources needed for effective work engagement. Reduced engagement may then be associated with poorer performance. Conversely, supportive working conditions and adequate organizational resources may help employees maintain engagement despite personal financial difficulties. However, the possibility that financial pressure motivates some employees to increase their effort indicates that the indirect relationship should be tested empirically rather than presumed. Although prior research has examined financial stress, engagement, and performance, further evidence is needed to establish whether work engagement mediates the relationship among young doctors working in hospitals in the Hazara division of Pakistan. Addressing this gap may extend understanding of the psychological pathways linking financial well-being with healthcare workforce performance and inform organizational strategies to support doctors.

Following hypothesis is proposed based on the following reasoning.

H4: Work engagement has a mediating relationship between financial stress and job performance.

Conceptual Model



The proposed model specifies financial stress as the predictor, work engagement as the mediator, and job performance as the outcome. The model includes both the direct path from financial stress to job performance and the indirect path through work engagement.

Path	Proposed relationship
a: Financial stress → Work engagement	Negative
b: Work engagement → Job performance	Positive
c': Financial stress → Job performance	Negative direct association
Indirect effect: $a \times b$	Negative; tested with bootstrap confidence interval

Methodology

The study employed a quantitative, cross-sectional research design. The study setting comprised four major public teaching hospitals in Hazara Division, Khyber Pakhtunkhwa, Pakistan. Total population of the study was 1349 from different hospital of Hazara division. The reported sample consisted of 302 young doctor's selected using stratified random sampling. Data were collected in person through a structured questionnaire using five-point Likert response scales for financial stress, work engagement, and job performance. The Study reports that all 224 cases were retained in the analysis.

The questionnaire included measures of financial stress, work engagement, and job performance. The study reports use of SPSS for descriptive statistics, reliability analysis, correlation, and regression, and Hayes' PROCESS macro Model 4 for mediation. The indirect effect was evaluated using 5,000 bootstrap samples. Full scale-item details and complete reliability output should be inserted from the thesis appendix and SPSS output in the journal-ready version.

The study contains an author declaration that ethical issues were considered and addressed. Before submission, the authors should confirm the ethics approval/waiver details, consent procedure, hospital permissions, and any required approval identifiers. As the design is cross-sectional, results are interpreted as associations rather than definitive causal effects.

Results

A total of 224 cases were reported as valid, with no cases excluded from the analysis. Demographic frequencies are not reproduced here because the complete distribution was not available in the retrieved Study extracts; these should be added from the original demographic tables if required by the target journal.

Correlations and simple regression findings

The study reports a strong negative correlation between financial stress and job performance, a negative correlation between financial stress and work engagement, and a positive correlation between work engagement and job performance. These associations are summarized in this table.

Table 1

Relationship	Reported r	Reported significance	Interpretation
Financial stress – Job performance	-.893	$p < .01$	Negative association
Financial stress – Work engagement	-.752	$p < .01$	Negative association
Work engagement – Job performance	.756	$p < .01$	Positive association

The results show a strong negative relationship between financial stress and job performance. This indicates that higher levels of financial stress are associated with lower levels of job performance. In other words, doctors experiencing greater financial difficulties tend to report poorer job performance. The relationship is statistically significant at the 1% level. The findings indicate a strong negative relationship between financial stress and work engagement. This suggests that as financial stress increases, work engagement tends to decrease. Doctors

experiencing financial worries may have less energy, motivation, and concentration to devote to their professional responsibilities. This relationship is statistically significant at the 1% level. The results reveal a strong positive relationship between work engagement and job performance. This means that doctors with higher levels of work engagement tend to demonstrate better job performance. Engaged doctors may be more energetic, dedicated, and focused on their work. This relationship is also statistically significant at the 1% level.

Table 2:

Predictor → outcome	Reported β	R ²	Model result reported in thesis
Financial stress → Job performance	-.893	.798	Significant association negative
Financial stress → Work engagement	-.752	.565	Significant association negative
Work engagement → Job performance	.756	.572	Significant association positive

The results indicate a strong negative relationship between financial stress and job performance. The negative beta coefficient (-0.893) suggests that higher financial stress is associated with lower job performance. The R² value of 0.798 indicates that the model explains 79.8% of the variation in job performance. This suggests that financial stress is an important predictor of job performance in the study sample. The results show a strong negative relationship between financial stress and work engagement. The beta coefficient (-0.752) indicates that higher financial stress is associated with lower work engagement. The R² value of 0.565 means that the model explains 56.5% of the variation in work engagement. This finding suggests that financial stress may be an important factor associated with doctors' energy, dedication, and concentration at work.

The findings reveal a strong positive relationship between work engagement and job performance. The beta coefficient (0.756) indicates that higher work engagement is associated with higher job performance. The R² value of 0.572 suggests that the model explains 57.2% of the variation in job performance. This highlights the potential importance of work engagement in supporting doctors' performance.

Mediation analysis

The Study reports a mediation analysis using PROCESS Model 4 with 5,000 bootstrap samples. The reported indirect effect is negative and its 95% bootstrap confidence interval does not include zero, supporting an indirect association through work engagement. The thesis also reports a significant direct effect after accounting for the mediator; it therefore characterizes the pattern as partial mediation.

Table 3:

Mediation component	Reported estimate	p / 95% CI	Conclusion
Path a: Financial stress → Work engagement	-.4832	p < .001	Negative, significant
Path b: Work engagement → Job performance	.2627	p < .001	Positive, significant
Direct effect c': Financial stress → Job performance	-.6449	p < .001	Negative, significant
Indirect effect a × b	-.1269	95% bootstrap CI [-.1983, -.0582]	Significant; CI excludes zero

Bootstrap resamples	5,000	PROCESS Model 4	As reported in thesis
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The results show a statistically significant negative relationship between financial stress and work engagement. This indicates that higher financial stress is associated with lower work engagement among young doctors. Financial concerns may make it more difficult for doctors to maintain energy, dedication, and concentration in their professional responsibilities. The findings indicate a statistically significant positive relationship between work engagement and job performance. This suggests that higher work engagement is associated with better job performance. Doctors who feel more energetic, dedicated, and absorbed in their work tend to report better performance.

The direct effect of financial stress on job performance remains negative and statistically significant after accounting for work engagement. This suggests that financial stress is associated with lower job performance even when the mediating variable is included in the model. The indirect effect of financial stress on job performance through work engagement is negative. The 95% bootstrap confidence interval ranges from -0.1983 to -0.0582 . Because this interval does not include zero, the indirect effect is statistically significant.

This finding supports the conclusion that work engagement is a significant mediator of the relationship between financial stress and job performance. In other words, financial stress is associated with lower work engagement, which is in turn associated with lower job performance.

Hypothesis summary

Hypothesis	Thesis-reported result	Decision
H1: Financial stress is negatively associated with work engagement	Negative and significant	Supported
H2: Work engagement is positively associated with job performance	Positive and significant	Supported
H3: Financial stress is negatively associated with job performance	Negative and significant	Supported
H4: Work engagement mediates the financial stress–performance relationship	Indirect effect CI excludes zero; direct effect remains significant	Partial mediation reported

Discussion

The findings reported in the study suggest that financial stress is associated with poorer job performance among young doctors. The strong negative bivariate association indicates that financial strain may be an important correlate of doctors' perceived effectiveness in the study setting. In line with Conservation of Resources (COR) theory, persistent concerns about financial resources may be associated with reduced psychological capacity available for work, as individuals strive to protect and preserve valued resources (Hobfoll, 1989; Hobfoll et al., 2018). However, the cross-sectional design does not establish that financial stress causes changes in performance.

The magnitude of the reported associations is unusually large for many organizational survey settings. In addition, the thesis narrative includes coefficients from separate simple regressions and PROCESS mediation output that may not be directly comparable. These issues do not invalidate the reported direction of results, but they make verification of the original data output essential before the article is submitted to a peer-reviewed journal. In particular, the regression coefficients, model specifications, sample size, and bootstrap confidence intervals should be checked against the original statistical output before drawing definitive conclusions.

Theoretical and Practical Implications

The study brings COR theory and the JD–R model together to examine financial stress as a resource-related strain and work engagement as a potential motivational mechanism. Its setting extends the discussion to young doctors in public-sector hospitals in Hazara Division. The evidence is consistent with the proposed model, subject to the methodological and reporting limitations noted above.

Hospital administrators can assess financial-wellness needs confidentially and provide access to financial counseling or planning resources. Policy makers and hospital management may review the adequacy and predictability of early-career doctors' compensation, allowances, and reimbursement processes. Supervisors can support engagement through respectful leadership, recognition, professional development, mentoring, and fair work allocation. Employee-support initiatives should be evaluated rather than assumed effective; future evaluations could use longitudinal or quasi-experimental designs and objective performance indicators. Doctors should be able to seek support without stigma or fear that financial difficulty will affect their professional standing.

Conclusion

This study examines financial stress, work engagement, and job performance among 224 young doctors in public-sector teaching hospitals in Hazara Division, Pakistan. The thesis reports that financial stress is negatively associated with both work engagement and job performance, whereas work engagement is positively associated with job performance. Mediation analysis further reports a significant negative indirect association through work engagement alongside a significant direct association. These findings point to the value of addressing doctors' financial well-being and work engagement together. Before journal submission, all coefficients, confidence intervals, scale reliabilities, demographic statistics, and ethics details should be verified against the original analysis files.

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