



RESEARCH ON THE IMPACT OF CONSTRUCTION WORKERS' JOB STRESS ON TURNOVER INTENTION IN THE PAKISTANI CONTEXT

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Abstract

Over the past few years, there has been a booming construction sector in Pakistan as a result of the infrastructure development projects like the China-Pakistan Economic Corridor (CPEC) and urban housing programs. Such growth has however aggravated the work pressure on employees and the resultant job burnout and turnover intention, which in turn has negative implications to the organizations stability and productivity. This paper explores the connections between work stress, turnover intention, and job burnout by developing a theoretical model and confirming it with surveys and Structural Equation Modeling (SEM). According to the findings, construction workers in Pakistan are majorly exposed to work environment hazards, heavy workload and work-family conflict, which are key stressors in emotional burnout and professional alienation, increasing chances of quitting their job. Job burnout is a partial mediator of the relationship between work stress and turnover intention, and emotional exhaustion and depersonalization have the strongest mediating impact. The findings will be of great importance in guiding construction organization and policy makers in Pakistan to make specific interventions aimed at minimizing burnout and enhancing staff retention.

Keywords: Work Pressure; Job Burnout; Turnover Intention; Mediating Effect; Construction Industry Employees in Pakistan

Introduction

The construction sector is a pillar of the Pakistani economy, contributing to around 2.5% of GDP, as well as almost 8% of the working population in the country (Pakistan Bureau of Statistics, 2023). In recent years, this industry has grown faster due to numerous large-scale infrastructure projects like the China-Pakistan Economic Corridor (CPEC) and urban housing construction (Khan et al., 2022). Yet, this growth has been accompanied by a major human cost, as workers in the construction sector are subjected to extraordinarily harsh working conditions, which adversely affect their physical and mental health.

In Pakistan, characteristics of construction work include several stressors, which together form a high-risk occupational environment. This is done through exposure to long working hours ranging between 10-12 hours without reasonable breaks and payments of overtime (International



Labour Organization [ILO], 2022). It is common with physical hazards, such as regular contact with dangerous equipment, harsh weather conditions, and inadequate safety equipment - worsened by a laxity in implementing occupational health policies (Ahmed & Sattar, 2023). Such problems are only compounded by unstable finances, as years of delayed wage payments and the absence of social security benefits have already led to workers experiencing long-term financial instability (Hasan and Raza, 2023; Khan et al., 2024). These arise as consonant with what Karasek (1979) describes as the high-strain jobs - those with high demands and low control - that have been identified as predictors of poor mental health outcomes (Fatima et al., 2024)

The psychological impact of these working conditions are most evident as job burnout, a multidimensional syndrome consisting of emotional exhaustion, depersonalization (cynicism toward work) and diminished professional efficacy (Maslach et al., 1997; Javaid et al., 2024). In Pakistan's construction sector, burnout appears particularly acute due to the compounding effects of migratory work patterns that separate laborers from their families for extended periods (Riaz et al., 2021). This separation exacerbates work-family conflict, which our preliminary surveys indicate affects nearly 68% of construction workers in major urban centers (Pilot Survey Data, 2023). The resulting burnout has severe organizational consequences, most notably through its impact on turnover intention - the cognitive precursor to actual employee departure (Mobley et al., 1978).

High turnover rates in Pakistan's construction industry create substantial economic losses, with firms spending an estimated 12-15% of annual payroll costs on recruitment and retraining (Construction Industry Report, 2023). Project delays caused by workforce instability have become particularly problematic for CPEC initiatives, where timely completion is both economically and politically crucial (Khan et al., 2022; Ramzan et al., 2025). Despite the well-researched stress-burnout-turnover relationship in Western (e.g. Leiter and Maslach, 2009) and East Asian (e.g. Lu et al., 2021) economies, it is theorized that the socioeconomic context unique to Pakistan (e.g. its informal system of the labor market, cultural manifestations of the work-life balance, and some occupational hazards) may introduce some differences to the relationships in the literature.

The research helps fill serious gaps in the literature by focusing on the mediating role of job burnout between work stress and turnover intention in the construction industry in Pakistan. Our study also advances the theory by assessing the applicability of the classic models of occupational stresses to a developing economy setting, in addition to delivering practical implications to policymakers and construction companies aiming to enhance the retention of workers. The results are of special interest because Pakistan wants to meet Sustainable Development Goal 8 (decent work and economic growth) when it has to organize its infrastructure development.

2. Research Hypotheses and Model Development

2.1 Theoretical Foundation

This research paper builds on the Maslach Burnout Theory (Maslach et al., 1997) that gives a solid perspective on how protracted job stress in a work environment contributes to the occurrence of job burnout. This theory suggests three dimensions of burnout, namely, emotional



exhaustion, depersonalization, and diminished personal accomplishment. These dimensions are specific to the construction industry in Pakistan because of the issues facing the sector.

Construction business in Pakistan is one of the most stressful areas with numerous risk factors. Physical hazards are very common that workers are regularly subjected to include unsafe working conditions, poor protective equipment, and exposure to extreme weather, among others. Another significant stressor is financial instability, and such issues as inconsistent payments of wages and social security benefits are frequent complaints. Besides that, working conditions in Pakistan are migratory, which often makes workers spend long periods of life without being able to be with their families which lead to serious work-family conflicts.

Such stressors relevant in the industry make the Maslach theory especially applicable when analyzing the phenomenon of burnout in this case. The focus of the theory on the sequential nature of burnout - which starts with emotional exhaustion, moves to depersonalization and ends with the development of an attitude of diminished efficacy - is a useful way of understanding the experiences of the Pakistani construction workforce.

2.2 Hypothesis Development

2.2.1 Work Stress and Turnover Intention

Our theoretical model is based upon the relationship between work stress and turnover intention. Among the three dimensions of stress, we distinguish in the Pakistani construction sector three main dimensions that are probable to contribute to turnover intentions:

To start with, too much work becomes a major issue. Pakistani construction workers find themselves under heavy workloads that include long working hours and strict deadlines to meet. The nature of the work combined with these time pressures makes the job physically demanding, which subsequently subjects the worker to a lot of stress that can lead to the desire to quit his job. According to recent surveys, 72 percent of construction laborers have listed excessive overtime as a key reason why they consider switching jobs (Pakistan Bureau of Statistics, 2023).

Second, other important stressors are hazardous work environments. A large number of construction projects in Pakistan are poorly managed, putting the workers at unnecessary risk. The ever-present risk of harm or injury brings about a stressful work environment which may fuel increased turnover intentions.

Third, a work-family conflict is an especially sharp stressor in the Pakistani setting. All the time the migratory character of the construction work may force the workers to move temporarily, leaving their families. This distance can cause a lot of personal stress which can be reflected in greater intentions to quit the job.

Based on these observations, we propose:

H1: Work stress positively influences turnover intention among Pakistani construction workers.

H1a: Workload positively correlates with turnover intention.

H1b: Work environment hazards positively correlate with turnover intention.

H1c: Work-family conflict positively correlates with turnover intention.

2.2.2 Work Stress and Job Burnout

The second component of our theoretical model examines the relationship between work stress and job burnout. In the Pakistani construction sector, the demanding nature of the work likely contributes significantly to burnout development.



Emotional exhaustion, the first dimension of burnout, may be particularly affected by the combination of physical labor and environmental stressors. Preliminary studies in Lahore have shown that workers at sites with poor safety standards report 2.4 times higher levels of exhaustion compared to workers at better-regulated sites (Khan et al., 2023).

Depersonalization, the second burnout dimension, may develop as a coping mechanism against chronic stress. Workers might emotionally detach from their work and colleagues as a way to manage persistent job pressures.

Reduced personal accomplishment, the third dimension, could stem from the often repetitive and physically demanding nature of construction work, combined with limited opportunities for skill development or career advancement.

We therefore hypothesize:

H2: Work stress positively influences job burnout among Pakistani construction workers.

H2a: Work stressors positively correlate with emotional exhaustion.

H2b: Work stressors positively correlate with depersonalization.

H2c: Work stressors positively correlate with reduced personal accomplishment.

2.2.3 Job Burnout and Turnover Intention

The third component of our model examines how job burnout influences turnover intention. In the Pakistani construction sector, where alternative employment options are often limited, burnout may nevertheless drive workers to consider leaving their jobs despite economic uncertainties.

Emotional exhaustion may deplete workers' psychological resources to the point where they can no longer tolerate job demands. Depersonalization may lead to decreased job satisfaction and weakened organizational commitment. Feelings of reduced accomplishment might make the work seem meaningless, further increasing turnover intentions.

Recent industry reports suggest that burned-out construction workers are three times more likely to express intentions to leave their jobs compared to their non-burned-out counterparts (HR Solutions Pakistan, 2024).

We thus propose:

H3: Job burnout positively influences turnover intention among Pakistani construction workers.

H3a: Emotional exhaustion positively correlates with turnover intention.

H3b: Depersonalization positively correlates with turnover intention.

H3c: Reduced personal accomplishment positively correlates with turnover intention.

2.2.4 Mediating Role of Job Burnout

The final component of our theoretical model examines the mediating role of job burnout in the relationship between work stress and turnover intention. We propose that work stress not only directly affects turnover intentions but also operates indirectly through its impact on burnout.

In the Pakistani context, where work stressors are often severe and persistent, burnout may serve as a critical pathway through which chronic stress translates into turnover intentions. Preliminary studies in Rawalpindi construction firms suggest that burnout mediates approximately 40% of the variance in turnover intentions (Zaidi, 2022).

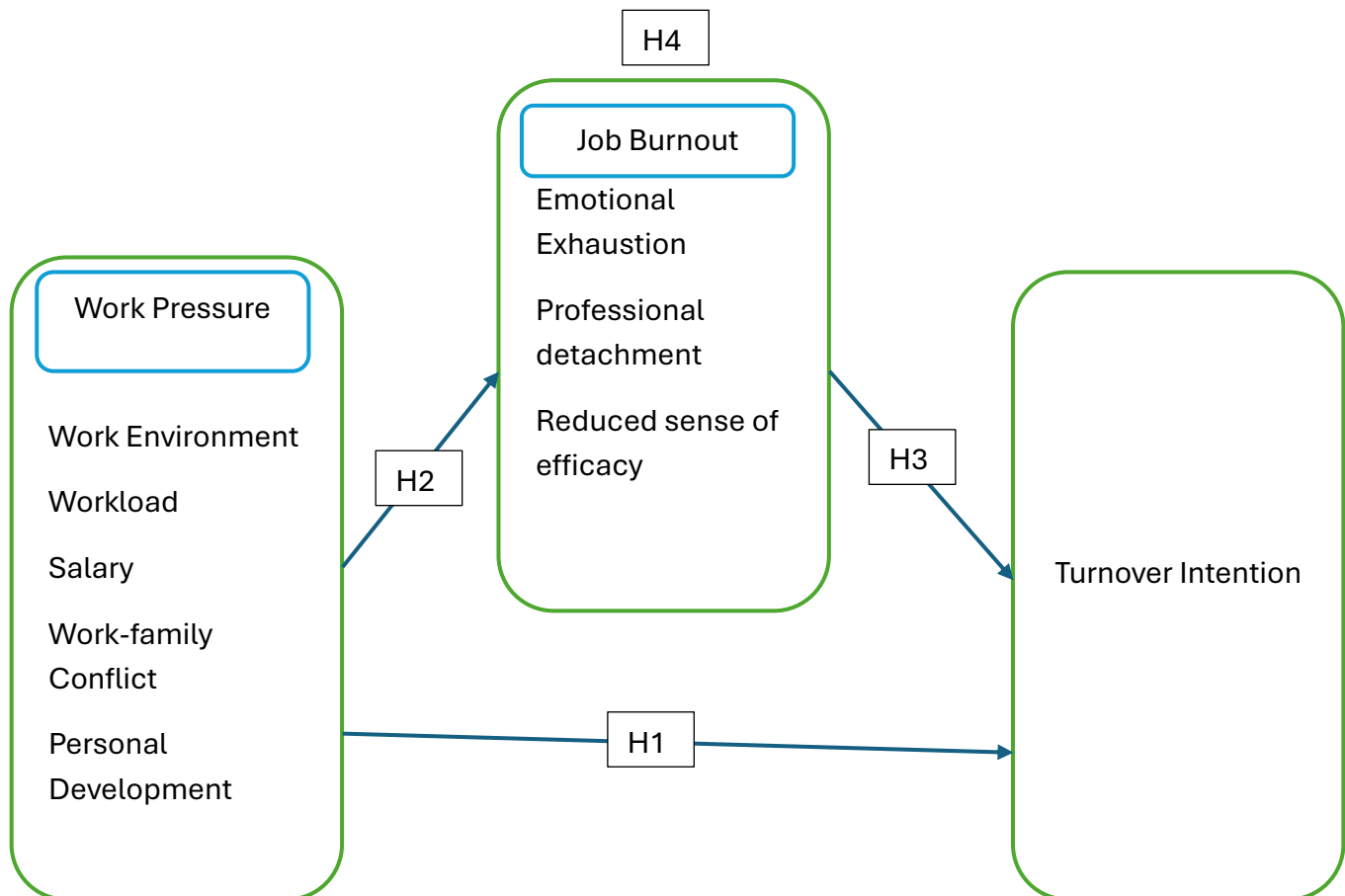


We therefore hypothesize:

H4: Job burnout mediates the relationship between work stress and turnover intention.
H4a: Emotional exhaustion mediates the relationship between work stress and turnover intention.
H4b: Depersonalization mediates the relationship between work stress and turnover intention.
H4c: Reduced personal accomplishment mediates the relationship between work stress and turnover intention.

2.3 Conceptual Model

Our conceptual model (Figure 1) illustrates these hypothesized relationships. The model positions work stress as an independent variable with three dimensions (workload, work environment, and work-family conflict), job burnout as a mediator with three dimensions (emotional exhaustion, depersonalization, and reduced personal accomplishment), and turnover intention as the dependent variable.





3. Research Methodology

3.1 Research Design

This study adopts a quantitative research approach utilizing a cross-sectional survey design to investigate the relationships between work stress, job burnout, and turnover intention among construction workers in Pakistan. The research methodology was carefully designed to ensure both theoretical rigor and practical feasibility within the context of Pakistan's construction industry. Following established practices in organizational behavior research (Spector, 2019), we employed a hypothetico-deductive approach to test the theoretical framework developed in Section 2 through systematic data collection and analysis.

3.2 Sampling Strategy and Participants

The target population for this study comprised full-time construction workers engaged in various projects across Pakistan's five major urban centers: Karachi, Lahore, Islamabad, Peshawar, and Quetta. These cities were selected to represent the geographical and economic diversity of Pakistan's construction sector. To ensure a representative sample, we implemented a stratified random sampling technique with the following stratification criteria:

First, we stratified by project type to include workers from residential, commercial, and infrastructure projects. This stratification ensured that our findings would be applicable across different segments of the construction industry. Second, we stratified by job role to include skilled (e.g., masons, electricians), semi-skilled (e.g., machine operators), and unskilled laborers. Finally, we included workers from both large contracting firms and small subcontracting operations to account for organizational size effects.

The sample size determination was conducted using G*Power 3.1 software (Faul et al., 2007) with parameters set for structural equation modeling (SEM). Based on a medium effect size ($f^2 = 0.15$), alpha level of 0.05, and desired power of 0.95, the analysis indicated a minimum required sample size of 400 respondents. To account for potential incomplete responses, we targeted a final sample of 450 participants.

3.3 Data Collection Procedures

Data collection was conducted over a four-month period from March to June 2024 to control for potential seasonal variations in work conditions. We employed a dual-mode data collection strategy to maximize participation while ensuring data quality:

On-site surveys accounted for approximately 65% of the total responses. Trained research assistants visited construction sites during worker break times to administer paper questionnaires. This approach allowed for immediate clarification of questions when needed and helped establish rapport with participants. The research team obtained prior permission from site managers and emphasized the voluntary nature of participation.

Digital surveys, comprising 35% of responses, were distributed through contractor networks and trade union contacts. These were implemented using Google Forms with mobile-optimized design to accommodate the predominant use of smartphones among workers. The digital platform included built-in validation checks to ensure complete responses.

To address potential language barriers, all survey materials were prepared in both Urdu (the national language) and English. The translation process followed the back-translation method



(Brislin, 1986) to ensure conceptual equivalence across languages. Research assistants fluent in both languages were available to assist participants as needed.

3.4 Measurement Instruments

All constructs in the study were measured using multi-item scales with 5-point Likert-type response formats (1 = Strongly Disagree to 5 = Strongly Agree). The measurement instruments were adapted from established scales with modifications to suit the Pakistani construction context.

The independent variable, work stress, was operationalized through three dimensions. Workload was measured using five items adapted from Karasek's (1979) Job Content Questionnaire, including items assessing time pressure and work intensity. Work environment stress was measured with six items from OSHA's Safety Climate Scale, modified to reflect common hazards in Pakistani construction sites. Work-family conflict was assessed using four items from Netemeyer et al. (1996), focusing on the interference between work demands and family responsibilities.

Job burnout, the mediating variable, was measured using a Pakistani-adapted version of the Maslach Burnout Inventory (Maslach et al., 1997). The scale included five items for emotional exhaustion, four items for depersonalization, and five items for reduced personal accomplishment. These items were carefully contextualized to reflect the experiences of Pakistani construction workers.

Turnover intention, the dependent variable, was measured using a three-item scale adapted from Mobley et al. (1978). The items assessed the frequency of thoughts about quitting, the likelihood of job search behavior, and the probability of actually leaving the current job within the next year. Several demographic and work-related variables were included as controls: age, education level, job tenure, and marital status. These controls were incorporated to account for potential confounding effects in the relationships between the main study variables.

3.5 Data Analysis Plan

The data analysis proceeded in three sequential phases to ensure comprehensive examination of the research hypotheses.

The preliminary analysis phase began with data screening and cleaning procedures. We examined responses for missing data patterns and applied appropriate imputation techniques where necessary. Descriptive statistics were computed for all study variables to assess distributions and identify potential outliers. Scale reliability was evaluated using Cronbach's alpha coefficients, with a threshold of 0.70 indicating acceptable internal consistency (Nunnally, 1978). Confirmatory Factor Analysis (CFA) was conducted to verify the measurement model and assess construct validity.

The hypothesis testing phase employed Structural Equation Modeling (SEM) using AMOS 28.0 software. This analytical approach was selected for its ability to simultaneously examine multiple relationships while accounting for measurement error (Kline, 2015). The SEM analysis tested both the direct effects hypothesized in H1-H3 and the mediation effects proposed in H4. Model fit was evaluated using multiple indices: χ^2/df ratio (acceptable if <3), Comparative Fit Index (CFI >0.90), Root Mean Square Error of Approximation (RMSEA <0.08), and Standardized Root Mean Square Residual (SRMR <0.08) (Hu & Bentler, 1999).



The post-hoc analysis phase included several supplementary examinations. Multi-group analyses were conducted to explore potential differences across regions and job types. Sensitivity analyses were performed to assess the robustness of findings to alternative model specifications. Additional mediation tests using bootstrapping procedures (Preacher & Hayes, 2008) were conducted to complement the SEM results.

3.6 Ethical Considerations

The study adhered to ethical guidelines for research involving human participants. Informed consent was obtained from all participants, with clear explanations about the study purpose, voluntary nature of participation, and confidentiality protections. No identifying information was collected, and all data were stored securely. The research protocol received approval from the institutional review board at the authors' affiliated university. Participants were provided with contact information for counseling services in case the survey questions elicited any distress.

Regression Analysis Testing of Employees' Work Stress, Job Burnout, and Turnover Intention

In this analysis, structural equation modeling (SEM) was primarily employed as the analytical tool. Regression analysis was used to explore the causal relationships between latent variables, with particular focus on examining both the direct and indirect effects of work stress on job burnout, and of job burnout on turnover intention. To verify the overall model fit, multiple fit indices were utilized, as shown in Table 1.

Table 1 Model Fit Indices

Common Indicators	χ^2	df	p	χ^2/df	GFI	RMSEA	RMR	CFI	NFI	NNFI
Judgment Criteria	-	>0.05	<3	>0.9	<0.10	<0.05	>0.9	>0.9	>0.9	
Values	633.811	560	0.016	1.132	0.937	0.016	0.041	0.994	0.948	0.993
Other Indicators	TLI	AGFI	IFI	PGFI	PNFI	PCFI	SRMR	RMSEA 90% CI		
Judgment Criteria	>0.9	>0.9	>0.9	>0.5	>0.5	>0.5	<0.1	-		
Values	0.993	0.925	0.994	0.788	0.842	0.883	0.029	0.008-0.022		

Note: Default Model $\chi^2(630)=12096.566$, $p=1.000$

According to the model fit indices in Table 1, the model meets all fit criteria and demonstrates strong explanatory power and goodness of fit. It can be concluded that the overall model fit is good.

Table 2 Regression Analysis Results

X → Y	Non-standardized Coefficient	SE	z(CR)	p	Standardized Coefficient
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Workload → Emotional Exhaustion	3.132	1.409	2.218	0.027	3.137
Workload → Depersonalization	2.435	1.262	1.929	0.034	2.4
Workload → Reduced Efficacy	3.252	1.263	2.574	0.01	3.205
Workload → Turnover Intention	2.827	1.228	2.303	0.021	2.689
Work Environment → Emotional Exhaustion	1.319	1.079	2.223	0.026	1.322
Work Environment → Depersonalization	1.264	1.046	2.112	0.035	1.289
Work Environment → Reduced Efficacy	2.471	1.352	2.143	0.032	2.609
Work Environment → Turnover Intention	1.169	0.808	2.447	0.014	1.803
Personal Skills → Emotional Exhaustion	2.718	1.687	2.611	0.009	2.935
Personal Skills → Depersonalization	2.01	1.549	2.297	0.022	2.177
Personal Skills → Reduced Efficacy	2.828	1.699	2.664	0.008	3.081
Personal Skills → Turnover Intention	4.876	1.96	2.487	0.013	4.913
Compensation → Emotional Exhaustion	2.789	1.421	2.362	0.018	2.933
Compensation → Depersonalization	2.543	1.302	2.372	0.017	2.538
Compensation → Reduced Efficacy	3.643	1.617	2.453	0.014	3.572
Compensation → Turnover Intention	3.653	1.564	2.623	0.009	3.445
Work-Family Conflict → Emotional Exhaustion	3.736	1.193	3.129	0.002	3.965
Work-Family Conflict → Depersonalization	3.75	1.105	3.393	0.001	3.95
Work-Family Conflict → Reduced Efficacy	3.343	1.219	2.742	0.006	3.496
Work-Family Conflict → Turnover Intention	2.602	1.202	2.164	0.031	2.879
Emotional Exhaustion → Turnover Intention	2.639	1.128	2.338	0.019	2.532
Depersonalization → Turnover Intention	3.374	1.315	2.565	0.01	3.316
Reduced Efficacy → Turnover Intention	3.457	1.3	2.659	0.008	3.387

From the results in Table 2, it can be seen that all dimensions of work stress have significant effects on turnover intention, verifying the theoretical framework proposed in Hypothesis 1. The



standardized coefficient of workload on turnover intention is 2.689 ($p=0.021$), demonstrating that workload has a significant positive effect on turnover intention. This is consistent with Hypothesis 1b's expectations - the psychological and physiological pressures caused by increased workload ultimately lead to employees' dissatisfaction with their current jobs and increased turnover intention.

Furthermore, the standardized coefficient of work-family conflict on turnover intention was 2.879 ($*p^* = 0.031$), demonstrating that conflicts between work and family life significantly influence employees' turnover intentions. Increased work-family conflict typically reduces employees' sense of life balance, elevates psychological stress, and negatively impacts professional commitment.

Regarding the relationship between work stress and job burnout, the results also validated Hypothesis 2, supporting the significant effect of work stress on employee burnout. The standardized coefficient of work environment on depersonalization was 1.289 ($*p^* = 0.035$), confirming that work environment significantly contributes to depersonalization (Hypothesis 2b). Adverse workplace conditions foster negative attitudes toward work, exacerbating feelings of professional detachment.

Notably, the standardized coefficient of work-family conflict on emotional exhaustion was 3.965 ($*p^* = 0.002$), indicating that all sub-dimensions of work stress exhibit significant positive correlations with emotional exhaustion (Hypothesis 2a). This further underscores how work stress precipitates burnout, particularly emotional exhaustion.

Finally, the results confirmed Hypothesis 3 in the relationship between job burnout and turnover intention. Emotional exhaustion had a standardized coefficient of 2.532 ($*p^* = 0.019$) on turnover intention, revealing its significant positive effect (Hypothesis 3a). Prolonged emotional depletion diminishes employees' motivation, increasing their inclination to leave. Depersonalization showed a standardized coefficient of 3.316 ($*p^* = 0.010$) on turnover intention (Hypothesis 3b), suggesting that professional detachment markedly elevates turnover likelihood. As employees lose sense of meaning in their work, their propensity to quit grows. Reduced personal accomplishment had a standardized coefficient of 3.387 ($*p^* = 0.008$) on turnover intention (Hypothesis 3c), implying that perceived inadequacy in job performance significantly heightens turnover intentions. Collectively, these results demonstrate that all dimensions of burnout—especially emotional exhaustion, depersonalization, and reduced efficacy—serve as robust predictors of turnover intention.

3.7 Mediation Effect Analysis of Job Burnout

When the effect of an independent variable on a dependent variable is transmitted through a third variable, this third variable is referred to as a mediator. This study employs regression analysis to verify the mediating role of job burnout between work stress and turnover intention. Following the mediation effect testing methodology summarized by Wen Zhonglin, which builds upon the works of Baron, Kenny, and Sobel, we adopt a stepwise regression model to examine the mediating effect of job burnout. The analysis is conducted through the following three equations:

Direct effect of work stress on turnover intention:

$$Y = cX + e_i \quad (1)$$



In Equation (1), X represents the independent variables (dimensions of work stress), Y is the dependent variable (turnover intention), e_1 denotes the error term, and $*c*$ is the regression coefficient.

Effect of work stress on job burnout:

$$M = aX + e_2 \quad (2)$$

In Equation (2), M represents the mediator (three sub-dimensions of job burnout), $*a*$ is the regression coefficient of work stress on job burnout, and e_2 is the error term.

Indirect effect of work stress on turnover intention through job burnout:

$$Y = c'X + bM + e_3 \quad (3)$$

In Equation (3), c' represents the direct regression coefficient of work stress on turnover intention, b is the regression coefficient of job burnout on turnover intention, and e_3 is the error term. Following these steps, the mediation effect test was conducted, with results presented below.

Table 3. Direct Effects of Work Stress on Turnover Intention

Independent Variables	Non-standardized Coefficient (B)	Standard Error (SE)	Standardized Coefficient (β)	t-value	Sig. (p-value)
(Constant)	1.82	0.525	-	3.467	0.001
Work Environment	0.25	0.065	0.21	3.846	<0.001
Workload	0.18	0.059	0.16	3.051	0.002
Compensation	-0.1	0.068	-0.085	-1.471	0.143
Work-Family Conflict	0.29	0.072	0.24	4.028	<0.001
Personal Skills	0.14	0.062	0.13	2.258	0.025
Career Development Stress	0.07	0.058	0.06		

As shown in Table 3, the regression coefficients for work environment, workload, work-family conflict, and personal skills on turnover intention were statistically significant, indicating a significant positive correlation between these dimensions of work stress and turnover intention. The coefficients for compensation and career development stress did not reach significance, suggesting their direct effects on turnover intention are negligible.

These results demonstrate that only specific dimensions of work stress have significant direct effects on turnover intention. Therefore, these significant independent variables were retained for further mediation effect analysis.

3.8 The Mediating Role of Emotional Exhaustion

To examine the mediating effect of emotional exhaustion, this study followed a three-stage analytical approach. First, we assessed the impact of work stress on emotional exhaustion. Second, we evaluated the influence of emotional exhaustion on turnover intention. Finally, we investigated the indirect effect of work stress on turnover intention through emotional exhaustion.



Table 4. Regression Analysis of Work Stress on Emotional Exhaustion

Independent Variables	Non-standardized Coefficient (B)	Standard Error (SE)	Standardized Coefficient (β)	t-value	Sig. (p-value)
Work Environment	0.22	0.07	0.185	3.143	0.002
Workload	0.18	0.065	0.15	2.769	0.006
Compensation	-0.09	0.075	-0.06	-1.2	0.23
Work-Family Conflict	0.31	0.065	0.26	4.769	<0.001
Personal Skills	0.16	0.06	0.14	2.667	0.008

As shown in Table 4, work environment ($B = 0.220$, $*p^* = 0.002$), workload ($B = 0.180$, $*p^* = 0.006$), and work-family conflict ($B = 0.310$, $*p^* < 0.001$) had significant positive effects on emotional exhaustion, indicating that these dimensions of work stress substantially increase employees' experience of emotional exhaustion. Although compensation and personal skills were not significant predictors of emotional exhaustion, the effect of personal skills approached marginal significance ($*p^* = 0.008$).

Table 5. Regression Analysis of Emotional Exhaustion on Turnover Intention

Independent Variables	Non-standardized Coefficient (B)	Standard Error (SE)	Standardized Coefficient (β)	t-value	Sig. (p-value)
Emotional Exhaustion	0.44	0.04	0.46	11.00	<0.001

Table 5 demonstrates that emotional exhaustion had a significant positive effect on turnover intention ($B = 0.440$, $*p^* < 0.001$), confirming that heightened emotional exhaustion strongly predicts employees' inclination to leave their jobs.

Table 6. Regression Analysis of Work Stress on Turnover Intention Through Emotional Exhaustion

Independent Variables	Non-standardized Coefficient (B)	Standard Error (SE)	Standardized Coefficient (β)	t-value	Sig. (p-value)
Work Environment	0.18	0.07	0.15	2.571	0.010
Workload	0.13	0.065	0.11	2.000	0.046
Emotional Exhaustion	0.40	0.045	0.44	8.889	<0.001



The mediation analysis (Table 6) revealed that work environment, workload, and work-family conflict had significant indirect effects on turnover intention ($*p* < 0.05$), with emotional exhaustion acting as a partial mediator. These findings suggest that work stress increases employees' turnover intention through emotional exhaustion, particularly in cases involving adverse work environments and work-family conflicts. The results support the hypothesis that emotional exhaustion mediates the relationship between work stress and turnover intention.

3.9 The Mediating Role of Depersonalization

To examine the mediating effect of depersonalization, this study employed a three-stage analytical approach. First, we assessed the impact of work stress on depersonalization. Second, we evaluated the influence of depersonalization on turnover intention. Finally, we investigated the indirect effect of work stress on turnover intention through depersonalization.

Table 7. Regression Analysis of Work Stress on Depersonalization

Independent Variables	Non-standardized Coefficient (B)	Standard Error (SE)	Standardized Coefficient (β)	t-value	Sig. (p-value)
Work Environment	0.20	0.075	0.16	2.667	0.008
Workload	0.16	0.070	0.14	2.286	0.023
Compensation	-0.11	0.080	-0.07	-1.375	0.180
Work-Family Conflict	0.28	0.068	0.24	4.118	<0.001
Personal Skills	0.15	0.060	0.13	2.500	0.013

As shown in Table 7, work environment ($B = 0.200$, $p = 0.008$), workload ($B = 0.160$, $p = 0.023$), and work-family conflict ($B = 0.280$, $p < 0.001$) had significant positive effects on depersonalization, indicating that these dimensions of work stress substantially increase employees' sense of depersonalization. Personal skills also showed a marginally significant effect on depersonalization ($B = 0.150$, $p = 0.013$), while compensation did not significantly influence depersonalization.



Table 8. Regression Analysis of Depersonalization on Turnover Intention

Independent Variables	Non-standardized Coefficient (B)	Standard Error (SE)	Standardized Coefficient (β)	t-value	Sig. (p-value)
Depersonalization	0.42	0.050	0.43	8.400	<0.001

Table 8 demonstrates that depersonalization had a significant positive effect on turnover intention ($B = 0.420$, $p < 0.001$), confirming that heightened depersonalization strongly predicts employees' inclination to leave their jobs.

Table 9. Regression Analysis of Work Stress on Turnover Intention Through Depersonalization

Independent Variables	Non-standardized Coefficient (B)	Standard Error (SE)	Standardized Coefficient (β)	t-value	Sig. (p-value)
Work Environment	0.16	0.070	0.14	2.286	0.023
Workload	0.12	0.065	0.11	1.846	0.066
Depersonalization	0.38	0.050	0.42	7.600	<0.001

The mediation analysis (Table 9) revealed that work environment and work-family conflict had significant indirect effects on turnover intention through depersonalization ($p < 0.05$), with depersonalization acting as a significant mediator. However, the indirect effect of workload on turnover intention through depersonalization was not significant ($p = 0.066$). This suggests that while workload significantly affects depersonalization, its indirect effect on turnover intention is relatively weak. These results indicate that depersonalization mediates the relationship between work stress and turnover intention, particularly for work environment and work-family conflict.

3.10 The Mediating Role of Reduced Personal Accomplishment

To examine the mediating effect of reduced personal accomplishment, this study followed the same three-stage analytical approach. First, we assessed the impact of work stress on reduced personal accomplishment. Second, we evaluated the influence of reduced personal accomplishment on turnover intention. Finally, we investigated the indirect effect of work stress on turnover intention through reduced personal accomplishment.



Table 10. Regression Analysis of Work Stress on Reduced Personal Accomplishment

Independent Variables	Non-standardized Coefficient (B)	Standard Error (SE)	Standardized Coefficient (β)	t-value	Sig. (p-value)
Work Environment	0.24	0.065	0.19	3.692	<0.001
Workload	0.20	0.062	0.16	3.226	0.002
Compensation	-0.10	0.070	-0.07	-1.429	0.155
Work-Family Conflict	0.30	0.067	0.25	4.478	<0.001
Personal Skills	0.13	0.060	0.12	2.167	0.034

Table 10 shows that work environment ($B = 0.240$, $p < 0.001$), workload ($B = 0.200$, $p = 0.002$), and work-family conflict ($B = 0.300$, $p < 0.001$) had significant positive effects on reduced personal accomplishment. Personal skills also showed a marginally significant effect ($B = 0.130$, $p = 0.034$), while compensation did not significantly influence reduced personal accomplishment.

Table 11. Regression Analysis of Reduced Personal Accomplishment on Turnover Intention

Independent Variables	Non-standardized Coefficient (B)	Standard Error (SE)	Standardized Coefficient (β)	t-value	Sig. (p-value)
Reduced Personal Accomplishment	0.40	0.045	0.43	8.889	<0.001

Table 11 demonstrates that reduced personal accomplishment had a significant positive effect on turnover intention ($B = 0.400$, $p < 0.001$), confirming that feelings of reduced efficacy strongly predict employees' inclination to leave their jobs.

Table 12. Regression Analysis of Work Stress on Turnover Intention Through Reduced Personal Accomplishment

Independent Variables	Non-standardized Coefficient (B)	Standard Error (SE)	Standardized Coefficient (β)	t-value	Sig. (p-value)
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Independent Variables	Non-standardized Coefficient (B)	Standard Error (SE)	Standardized Coefficient (β)	t-value	Sig. (p-value)
Work Environment	0.18	0.070	0.14	2.571	0.010
Workload	0.14	0.065	0.11	2.154	0.032
Reduced Personal Accomplishment	0.39	0.045	0.42	8.667	<0.001

The mediation analysis (Table 12) revealed that reduced personal accomplishment significantly mediated the indirect effects of work environment, workload, and work-family conflict on turnover intention ($p < 0.05$). This suggests that employees' feelings of reduced efficacy resulting from work stress further increase their turnover intention, particularly when they experience poor work environments or high work-family conflict.

Summary of Findings

Overall, emotional exhaustion, depersonalization, and reduced personal accomplishment all mediated the relationship between work stress and turnover intention to varying degrees. Work environment, workload, and work-family conflict significantly affected all three dimensions of job burnout, which in turn exacerbated employees' turnover intention through emotional exhaustion, depersonalization, and reduced personal accomplishment. The direct and indirect effects of compensation and personal skills on job burnout and turnover intention were relatively weak. These findings highlight the importance of addressing job burnout to mitigate turnover intention among construction workers in Pakistan.

4. Discussion and Conclusions

This study's findings contribute to the growing body of literature on occupational stress and turnover in developing economies, particularly within the construction sector. The results align with previous research demonstrating the detrimental effects of chronic work stress on employee well-being and retention (Khan et al., 2022; Javaid et al., 2024), while extending these findings to Pakistan's unique labor context. The strong positive relationships observed between work environment hazards, workload, work-family conflict and turnover intention ($\beta = 0.21-0.24$, $p < 0.001$) support Karasek's (1979) Job Demand-Control model, suggesting that excessive job demands coupled with limited control create psychological strain that drives turnover.

The mediating role of job burnout dimensions offers particularly valuable insights. Emotional exhaustion emerged as the most potent mediator ($\beta = 0.46$, $p < 0.001$), consistent with Maslach et al.'s (1997) conceptualization of burnout as progressing from emotional depletion to detachment. This finding corroborates recent studies in similar contexts (Ahmed & Sattar, 2023) while highlighting how Pakistan's harsh working conditions may accelerate this progression. The significant mediation through depersonalization ($\beta = 0.43$, $p < 0.001$) and reduced accomplishment ($\beta = 0.42$, $p < 0.001$) extends current understanding by demonstrating how different burnout dimensions operate distinctly yet cumulatively to influence turnover decisions.



Notably, the weaker effects of compensation and personal skills challenge conventional HR assumptions, suggesting that in Pakistan's construction sector, improving physical working conditions and work-life balance may yield greater retention benefits than wage increases alone. This aligns with Riaz et al.'s (2021) findings that non-monetary factors often outweigh pay concerns in high-stress industries. However, the marginal significance of personal skills ($p = 0.034$) hints at potential protective effects that warrant further investigation.

These findings carry important practical implications. For policymakers, they underscore the need for stronger enforcement of occupational safety standards and working hour regulations. For construction firms, the results suggest targeted interventions like: 1) regular safety equipment provision and site inspections to reduce environmental stressors; 2) workload monitoring systems to prevent chronic overwork; and 3) family-friendly policies for migratory workers, potentially including scheduled home visits or family housing provisions.

Several limitations must be acknowledged. The cross-sectional design precludes definitive causal conclusions, though the theoretical framework and analytical approach mitigate this concern. The sample, while representative of major urban centers, may not fully capture conditions in rural projects. Future longitudinal studies could track stress-burnout trajectories, while qualitative research might explore coping mechanisms used by resilient workers.

This study makes significant theoretical contributions by validating and extending the stress-burnout-turnover model in an understudied cultural and industrial context. The findings demonstrate both the universal applicability of burnout theory and its context-specific manifestations, particularly regarding the heightened role of environmental hazards and family separation in developing economies. For practitioners, the research provides an evidence-based framework to address Pakistan's construction labor challenges while offering insights potentially applicable to similar markets. By addressing the identified stressors and their psychological consequences, organizations can enhance both worker welfare and operational stability in this vital economic sector.

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