

Original Article

Abusive Supervision, Work-Family Conflict, and Employee Deviance in Public Hospitals: Mediating Role of Stress and Moderating Role of Islamic Work Ethics

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ABSTRACT

Background: Employee deviance in healthcare organizations can undermine staff wellbeing, teamwork, and service quality, yet its relationship with abusive supervision and work-family conflict remains insufficiently examined in public hospital settings. **Objective:** To investigate the effects of abusive supervision and work-family conflict on employee deviance in public hospitals of Bahawalpur Division, Pakistan, while testing stress as a mediator and Islamic work ethics as a moderator. **Methods:** A quantitative cross-sectional survey was conducted among nurses and paramedical staff employed in public healthcare facilities. A total of 350 questionnaires were distributed, and 317 valid responses were analyzed. Standardized Likert-scale measures were used for abusive supervision, work-family conflict, stress, Islamic work ethics, and deviance behaviour. Data were analyzed using SPSS for descriptive statistics and Smart-PLS 4.0 for measurement and structural model assessment. **Results:** Abusive supervision significantly predicted deviance behaviour ($\beta=0.353$, $p<0.001$) and stress ($\beta=0.587$, $p<0.001$). Work-family conflict also significantly predicted deviance behaviour ($\beta=0.279$, $p<0.001$) and stress ($\beta=0.320$, $p<0.001$). Stress had a significant positive effect on deviance behaviour ($\beta=0.312$, $p<0.001$) and significantly mediated the effects of abusive supervision ($\beta=0.100$, $p<0.001$) and work-family conflict ($\beta=0.183$, $p<0.001$) on deviance behaviour. Islamic work ethics significantly moderated the stress-deviance relationship, although the interaction effect was small ($\beta=0.060$, $p=0.039$). **Conclusion:** Abusive supervision and work-family conflict were significant correlates of employee deviance in public hospitals, and their effects were partly transmitted through stress. Islamic work ethics showed a modest buffering role, suggesting that organizational reform and stress reduction remain central to reducing deviance in healthcare workplaces. **Keywords:** Abusive supervision; work-family conflict; stress; employee deviance; Islamic work ethics; public hospitals; Pakistan.

INTRODUCTION

Workplace deviance has become a persistent organizational concern because it undermines employee wellbeing, service quality, and institutional performance, particularly in labor-intensive sectors where interpersonal conduct directly shapes outcomes. In healthcare settings, where service delivery depends heavily on coordinated human effort, the consequences of negative workplace behaviours extend beyond staff morale to patient safety, organizational trust, and continuity of care. Deviant workplace behaviour refers to voluntary conduct that violates important organizational norms and threatens the wellbeing of the organization, its members, or both, and may take organizational forms such as absenteeism, lateness, reduced effort, and policy violation, or interpersonal forms such as hostility, disrespect, gossip, and

aggression (1,2). Evidence from organizational behaviour research indicates that such behaviours often emerge in environments characterized by unfair treatment, emotional strain, and deteriorating supervisory relationships, making workplace deviance an especially relevant issue in public health institutions operating under high workload and resource pressure (3,4).

Among the antecedents most consistently linked with harmful employee outcomes is abusive supervision, defined as subordinates' perceptions of sustained hostile verbal and non-verbal behaviours by supervisors, excluding physical contact (5). Abusive supervision has been associated with reduced job satisfaction, psychological distress, emotional exhaustion, poor organizational commitment, and counterproductive work behaviours across diverse employment contexts (5–7). In healthcare environments, these effects may be amplified because employees function within steep hierarchies, emotionally demanding clinical roles, and limited margins for interpersonal breakdown. When supervisors publicly criticize, demean, blame, or dismiss staff concerns, employees may experience humiliation, injustice, and frustration, which can erode normative compliance and increase the likelihood of retaliatory or withdrawal-based deviance (6,8). Social exchange theory provides a strong explanatory basis for this relationship by proposing that employees reciprocate adverse treatment with adverse responses, including behaviours that damage the organization or its members (9,10).

Work-family conflict represents another critical but incompletely examined predictor of deviant conduct in healthcare workers. This construct refers to a form of inter-role conflict in which pressures from work and family domains are mutually incompatible, so that participation in one role becomes more difficult because of participation in the other (11). Healthcare professionals, particularly nurses and allied staff, are especially vulnerable to such conflict because of long duty hours, rotating shifts, emotional fatigue, and family-care responsibilities. Prior studies have linked work-family conflict with lower job satisfaction, weaker commitment, turnover intention, emotional exhaustion, and impaired performance (12,13). Theoretical and empirical work further suggests that when employees are unable to maintain equilibrium between occupational and family demands, they may develop irritability, disengagement, and frustration that spill over into workplace misconduct, including absenteeism, rule breaking, interpersonal hostility, and reduced cooperation (13–15). Despite this, the relationship between work-family conflict and employee deviance remains insufficiently contextualized within public sector healthcare systems in low- and middle-income settings.

Stress appears to be a plausible explanatory mechanism through which abusive supervision and work-family conflict translate into deviant behaviour. Occupational stress reflects the psychological and physiological response to demands that exceed an individual's perceived coping resources, and sustained stress has been associated with emotional dysregulation, burnout, impaired judgement, and negative workplace conduct (16,17). Employees exposed to abusive supervisory practices may experience chronic tension, helplessness, and emotional depletion, while those facing work-family conflict may experience persistent overload and role strain. In both pathways, stress may reduce self-regulation and increase the probability of acting out through deviant behaviour. Prior studies have separately linked abusive supervision with stress, work-family conflict with stress, and stress with counterproductive or deviant outcomes, but integrated examination of these pathways within a single explanatory model remains limited, especially in hospital-based employees in Pakistan (6,13,16–18).

The present study is further strengthened by examining Islamic work ethics as a moderator of the stress–deviance relationship. Islamic work ethics emphasize diligence, honesty, justice, responsibility, and social benefit, and previous research suggests that stronger ethical commitment may buffer the behavioural consequences of adverse workplace experiences by promoting self-restraint, moral accountability, and constructive coping (19,20). This dimension is especially relevant in Pakistan, where religiously informed ethical norms may shape employees' responses to workplace adversity. Although Islamic work ethics have been studied in relation to job attitudes and selected organizational behaviours, their role in

attenuating the link between stress and employee deviance within public healthcare settings remains underexplored (19,21).

Public hospitals in Pakistan provide a particularly important setting in which to study these relationships. These institutions commonly operate under workforce shortages, bureaucratic structures, role overload, and constrained resources, all of which may intensify exposure to supervisory mistreatment, work-family strain, and stress-related behavioural outcomes. Yet, despite the practical importance of these issues, the combined influence of abusive supervision and work-family conflict on employee deviance, along with the mediating role of stress and the moderating role of Islamic work ethics, has not been adequately examined in this context. Addressing this gap may help clarify the behavioural mechanisms through which workplace adversity affects healthcare staff and may generate evidence for leadership reform, staff support strategies, and ethics-sensitive organizational interventions in public hospitals (6,13,19,21). Accordingly, this study aimed to investigate the effects of abusive supervision and work-family conflict on employee deviance among public hospital staff in Bahawalpur Division, Pakistan, to test the mediating role of stress in these relationships, and to examine whether Islamic work ethics moderate the association between stress and employee deviance.

MATERIALS AND METHODS

This study used a quantitative cross-sectional survey design to examine the relationships among abusive supervision, work-family conflict, stress, Islamic work ethics, and employee deviance in the public healthcare sector of Bahawalpur Division, Punjab, Pakistan. A cross-sectional design was considered appropriate because the study sought to measure prevailing perceptions, attitudes, and self-reported behavioural tendencies within a defined workforce at a single time point and to test a theoretically specified structural model linking exogenous, mediating, moderating, and outcome variables (22,23). The study setting comprised public sector health facilities within Bahawalpur Division, including teaching hospitals, tehsil-level institutions, rural health centers, and basic health units. According to the study frame used by the manuscript, the target population included nurses and paramedical personnel employed in government healthcare facilities in the division, with an estimated accessible population of 1,867 eligible staff members (24). Public hospitals were selected because the study was specifically concerned with employee behaviour in institutional environments characterized by workload pressure, hierarchical administration, and comparatively rigid supervisory structures.

Eligible participants were permanent nursing and paramedical employees working in public healthcare facilities in Bahawalpur Division during the study period. Staff who were actively serving on duty schedules and able to complete the questionnaire independently were considered eligible for inclusion. Employees not serving in the designated public sector facilities or those who returned incomplete or patterned questionnaires unsuitable for analysis were excluded at the data screening stage. The manuscript indicates that approximately 350 questionnaires were circulated to obtain an analyzable sample that would exceed the minimum requirement estimated for the study population. Based on the sample size guidance cited in the manuscript for a population approaching 2,000 at a 95% confidence level and 5% margin of error, a minimum sample in the range of just above 300 respondents was considered adequate; accordingly, the investigators targeted 308 completed responses and distributed additional questionnaires to compensate for non-response and unusable forms (23,25). Data collection was conducted through structured self-administered questionnaires delivered in person and through online circulation, with follow-up through direct visits, phone contact, SMS, and WhatsApp to improve response yield. Of the 350 questionnaires distributed, 317 were returned in valid form and included in the final analysis after screening for missing responses and non-differentiated answering patterns, such as uniform neutral responses across all items.

The survey instrument consisted of two parts: a demographic section and a set of standardized multi-item scales measuring the study constructs. Demographic variables included gender, age, religion,

marital status, qualification, duty shift, and work experience. All substantive items were scored on a five-point Likert scale ranging from 1 for strongly disagree to 5 for strongly agree. Abusive supervision was assessed using a 5-item measure adapted from prior supervisory abuse literature; work-family conflict was measured using a 5-item instrument derived from the work-family conflict framework of Netemeyer and colleagues; stress was assessed using a 7-item measure based on perceived stress-related experiences; Islamic work ethics were measured using a 12-item scale adapted from Ali's work ethic framework after item reduction through face-validity review; and employee deviance was evaluated using a 9-item instrument reflecting deviant attitudes and behaviours in the workplace context (5,11,19,26,27). The manuscript indicates that the selected scales were adopted from previously published studies and contextualized for the study setting. Construct operationalization followed the conceptual model in which abusive supervision and work-family conflict were treated as independent variables, stress as the mediator, Islamic work ethics as the moderator, and employee deviance as the dependent variable.

To enhance content relevance, the questionnaire used items directly reflecting supervisory hostility, work-family interference, perceived stress, work ethic orientation, and deviance-related workplace conduct. Data integrity procedures included questionnaire screening before final analysis, exclusion of unusable forms, and assessment of the psychometric performance of all retained items. The manuscript reports that no item demonstrated an outer loading below the pre-specified threshold of 0.50 in the measurement model, so all retained items were preserved in the final analysis. Internal consistency was evaluated using Cronbach's alpha and composite reliability, while convergent validity was assessed using average variance extracted and discriminant validity using the Fornell-Larcker criterion. These procedures supported the adequacy of the reflective measurement model before testing the hypothesized structural relationships (22,28). Although the study employed non-probability convenience sampling for feasibility, several measures were used to reduce information bias, including standardized administration, uniform response scaling, confidentiality assurance, and the use of previously published measurement instruments. Potential confounding by demographic characteristics was explored descriptively, and the manuscript states that no meaningful differences were identified in dependent variables that warranted additional adjustment in the reported model.

Statistical analysis was performed using SPSS for descriptive summaries and Smart-PLS 4.0 for partial least squares structural equation modeling. Descriptive statistics were used to summarize respondent characteristics and response distributions. The PLS-SEM approach was selected because the study aimed to evaluate both the measurement properties of multiple latent constructs and the direct, mediating, and moderating pathways specified in the conceptual framework. Measurement model assessment included examination of outer loadings, composite reliability, Cronbach's alpha, average variance extracted, and discriminant validity. Structural model assessment was then conducted using bootstrapping procedures to estimate path coefficients, t statistics, and p values for the hypothesized direct and indirect relationships. Mediation was evaluated through the indirect paths from abusive supervision and work-family conflict to employee deviance through stress, while moderation was examined through the interaction effect of Islamic work ethics on the stress-deviance pathway. Statistical significance was interpreted at a conventional alpha threshold of 0.05 (22,28). Cases excluded during screening were not carried forward into the final dataset, and the analysis was therefore conducted on complete valid responses only. Reproducibility was supported through use of standardized instruments, explicit construct definitions, a fixed response scale, prespecified analytical thresholds, and sequential evaluation of measurement and structural models. Participants were informed that their responses would remain confidential and would be used for research purposes only, which served as the ethical basis for voluntary participation and protected disclosure in a sensitive workplace topic.

RESULTS

Of the 350 questionnaires distributed to eligible employees working in public hospitals across Bahawalpur Division, 317 were returned complete and suitable for analysis, corresponding to a response

rate of 90.57%. The final sample was predominantly female, with 228 women accounting for 72.2% of participants, compared with 88 men (27.8%) and 1 participant categorized as other (0.3%). The age distribution was concentrated in younger and middle adult groups, as 156 respondents (49.2%) were aged 18–30 years and 116 (36.6%) were aged 31–40 years, while only 39 (12.3%) and 6 (1.9%) belonged to the 41–50 and >50 year categories, respectively. Most respondents were Muslim (80.8%), and the largest educational group held a bachelor's degree (41.0%), followed by intermediate qualification (27.8%) and master's degree (18.0%). In terms of professional profile, 156 respondents (49.2%) had 1–5 years of work experience and 132 (41.6%) had 6–10 years, showing that more than 90% of the sample represented early- to mid-career employees. Morning duty was the most common shift pattern, reported by 174 participants (54.9%), followed by evening shift in 98 (30.9%) and night shift in 45 (14.2%). Overall, the sample profile indicates that the study primarily captured responses from relatively young, professionally active nursing and paramedical employees in routine public-sector hospital settings.

Table 1. Demographic Characteristics of the Study Participants (n = 317)

Variable	Category	n	%
Gender	Male	88	27.8
	Female	228	72.2
	Other	1	0.3
Age	18–30 years	156	49.2
	31–40 years	116	36.6
	41–50 years	39	12.3
	>50 years	6	1.9
Religion	Muslim	256	80.8
	Non-Muslim	61	19.2
Qualification	Matric	23	7.3
	Intermediate	88	27.8
	Bachelor	130	41.0
	Master	57	18.0
	PhD	19	6.0
Work experience	1–5 years	156	49.2
	6–10 years	132	41.6
	11–15 years	15	4.7
	>15 years	14	4.4
Duty shift	Morning	174	54.9
	Evening	98	30.9
	Night	45	14.2

The measurement model showed satisfactory indicator-level performance across all constructs. Outer loadings ranged from 0.760 to 0.925, exceeding the minimum acceptable threshold of 0.50 for all retained items. The highest loading was observed for DB8 within the deviance behaviour construct (0.925), followed by DB2 (0.895) and IWE10 (0.878), indicating particularly strong item representation for these dimensions. The lowest retained loading was S5 (0.760), which remained within the acceptable range. Internal consistency was also strong across all latent variables. Cronbach's alpha ranged from 0.871 for abusive supervision to 0.957 for Islamic work ethics, while composite reliability ranged from 0.901 to 0.962. The deviance behaviour and Islamic work ethics constructs demonstrated the strongest overall reliability, each showing composite reliability of 0.962. Taken together, these results support adequate consistency and stability of the reflective measurement scales used in the analysis.

Table 2. Reliability and Indicator Loadings of the Reflective Measurement Model

Construct	Item	Loading	Cronbach's alpha	Composite reliability
Abusive Supervision	AS1	0.842	0.871	0.901
	AS2	0.831		
	AS3	0.807		
	AS4	0.773		
	AS5	0.809		
Deviance Behaviour of Employees	DB1	0.821	0.955	0.962
	DB2	0.895		

Construct	Item	Loading	Cronbach's alpha	Composite reliability
Islamic Work Ethics	DB3	0.877	0.957	0.962
	DB4	0.862		
	DB5	0.871		
	DB6	0.864		
	DB7	0.859		
	DB8	0.925		
	IWE1	0.784		
	IWE10	0.878		
	IWE11	0.826		
	IWE12	0.834		
	IWE2	0.807		
	IWE3	0.800		
	IWE4	0.859		
	IWE5	0.821		
Stress	IWE6	0.773	0.921	0.937
	IWE7	0.836		
	IWE8	0.852		
	IWE9	0.824		
	S1	0.791		
	S2	0.834		
	S3	0.862		
	S4	0.821		
Work-Family Conflict	S5	0.760	0.897	0.924
	S6	0.833		
	S7	0.868		
	WFC1	0.822		
	WFC2	0.824		
	WFC3	0.876		
WFC4	0.849			
WFC5	0.834			

Construct-level validity statistics also supported the adequacy of the measurement model. Average variance extracted values ranged from 0.661 for abusive supervision to 0.761 for deviance behaviour, meaning that all constructs exceeded the recommended threshold of 0.50 and demonstrated acceptable convergent validity. Deviance behaviour showed the highest AVE (0.761), followed by work-family conflict (0.708), Islamic work ethics (0.681), stress (0.680), and abusive supervision (0.661). The Fornell-Larcker matrix further suggested acceptable discriminant validity, as the square root of AVE for each construct remained comparatively strong on the diagonal. Numerically, the square root of AVE values were 0.813 for abusive supervision, 0.872 for deviance behaviour, 0.825 for Islamic work ethics, 0.825 for stress, and 0.841 for work-family conflict. These findings indicate that the latent constructs were sufficiently distinct and psychometrically robust for subsequent structural model evaluation.

Table 3. Convergent and Discriminant Validity of the Constructs

Construct	AVE				
Abusive Supervision	0.661				
Deviance Behaviour of Employees	0.761				
Islamic Work Ethics	0.681				
Stress	0.680				
Work-Family Conflict	0.708				
Construct	AS	DBE	IWE	Stress	WFC
Abusive Supervision (AS)	0.813				
Deviance Behaviour of Employees (DBE)	0.809	0.872			
Islamic Work Ethics (IWE)	0.775	0.826	0.825		
Stress	0.800	0.844	0.815	0.825	
Work-Family Conflict (WFC)	0.804	0.837	0.788	0.821	0.841

The structural model results supported all five direct hypotheses. Abusive supervision had a significant positive effect on deviance behaviour ($\beta = 0.353$, $SD = 0.079$, $t = 4.454$, $p < 0.001$), indicating that higher exposure to hostile supervisory behaviour was associated with greater employee deviance. Work-family conflict also had a significant positive effect on deviance behaviour ($\beta = 0.279$, $SD = 0.067$, $t = 4.176$, $p <$

0.001), although its direct effect was somewhat smaller than that of abusive supervision. The strongest direct path in the model was from abusive supervision to stress ($\beta = 0.587$, $SD = 0.062$, $t = 9.507$, $p < 0.001$), suggesting that abusive supervisory practices were the most powerful determinant of stress among the tested predictors. Work-family conflict was likewise positively associated with stress ($\beta = 0.320$, $SD = 0.058$, $t = 5.540$, $p < 0.001$). Stress itself had a significant positive effect on deviance behaviour ($\beta = 0.312$, $SD = 0.066$, $t = 4.760$, $p < 0.001$), confirming that increases in perceived stress were associated with higher levels of deviance-related behaviour. Overall, these direct effects indicate that both adverse supervisory experiences and work-family strain were meaningfully linked to employee deviance, with part of this burden transmitted through elevated stress.

Table 4. Direct Structural Relationships

Hypothesis	Path	β	SD	t-value	p-value	Decision
H1	Abusive Supervision → Deviance Behaviour	0.353	0.079	4.454	<0.001	Supported
H2	Work-Family Conflict → Deviance Behaviour	0.279	0.067	4.176	<0.001	Supported
H3	Abusive Supervision → Stress	0.587	0.062	9.507	<0.001	Supported
H4	Work-Family Conflict → Stress	0.320	0.058	5.540	<0.001	Supported
H5	Stress → Deviance Behaviour	0.312	0.066	4.760	<0.001	Supported

Indirect effect testing showed that stress significantly mediated both proposed pathways. The indirect effect of abusive supervision on deviance behaviour through stress was $\beta = 0.100$ with $t = 3.496$ and $p < 0.001$, confirming a statistically significant mediated pathway. The indirect effect of work-family conflict on deviance behaviour through stress was larger, at $\beta = 0.183$ with $t = 4.445$ and $p < 0.001$, suggesting that stress carried a stronger proportion of the behavioural effect for work-family conflict than for abusive supervision. Moderation analysis showed that Islamic work ethics had a significant direct association with deviance behaviour in the reported structural output ($\beta = 0.331$, $SD = 0.064$, $t = 4.739$, $p < 0.001$). In addition, the interaction term between Islamic work ethics and stress was statistically significant ($\beta = 0.060$, $SD = 0.059$, $t = 1.820$, $p = 0.039$), although its magnitude was clearly smaller than the main direct and mediated paths. This indicates that Islamic work ethics modified the strength of the stress–deviance relationship, but the size of this interaction was modest in practical terms relative to the primary structural associations in the model.

Table 5. Indirect and Moderating Effects

Hypothesis	Path	β	SD	t-value	p-value	Decision
H6	Abusive Supervision → Stress → Deviance Behaviour	0.100	—	3.496	<0.001	Supported
H7	Work-Family Conflict → Stress → Deviance Behaviour	0.183	—	4.445	<0.001	Supported
—	Islamic Work Ethics → Deviance Behaviour	0.331	0.064	4.739	<0.001	Significant
H8	Islamic Work Ethics × Stress → Deviance Behaviour	0.060	0.059	1.820	0.039	Supported

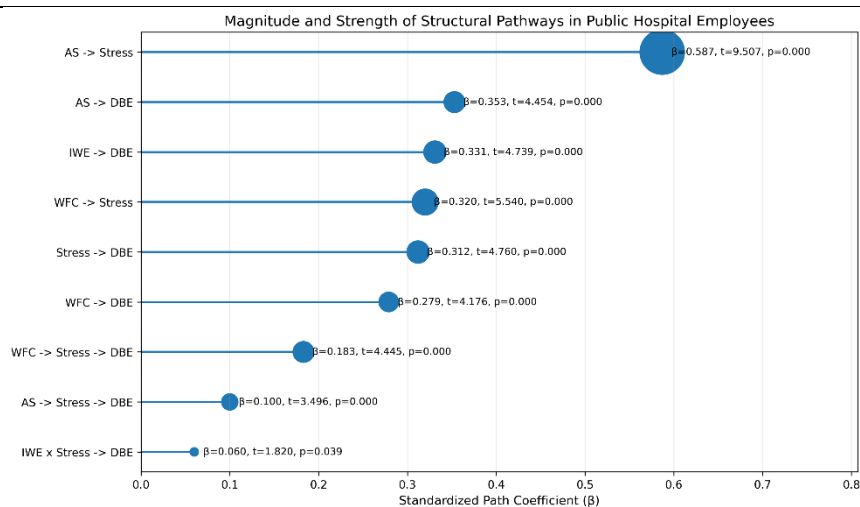


Figure 1 Magnitude and Strength of Structural Pathways in Public Hospital Employees

The structural effect map shows that the strongest pathway in the model was from abusive supervision to stress ($\beta = 0.587$, $t = 9.507$), markedly exceeding the direct effects of abusive supervision on deviance behaviour ($\beta = 0.353$) and stress on deviance behaviour ($\beta = 0.312$). Work-family conflict demonstrated a moderate direct association with stress ($\beta = 0.320$) and a somewhat smaller direct association with deviance behaviour ($\beta = 0.279$), while its indirect effect through stress ($\beta = 0.183$) remained larger than the corresponding mediated effect of abusive supervision ($\beta = 0.100$). The weakest relationship in the model was the interaction effect of Islamic work ethics on the stress–deviance pathway ($\beta = 0.060$, $p = 0.039$), indicating statistical significance but limited magnitude relative to the principal occupational stress pathways.

DISCUSSION

The present study examined how abusive supervision and work-family conflict were associated with employee deviance in public hospitals, while also testing stress as a mediator and Islamic work ethics as a moderator. The findings indicate that both abusive supervision and work-family conflict were positively associated with deviance behaviour, supporting the proposition that adverse relational and role-based workplace conditions can foster harmful behavioural responses among healthcare employees. The direct effect of abusive supervision on deviance behaviour was statistically significant, suggesting that employees who perceived sustained hostile supervisory conduct were more likely to report deviance-related tendencies. This finding is consistent with prior work showing that abusive supervision undermines perceptions of justice, increases frustration, and promotes retaliatory or counterproductive responses at work (29–32). Within public hospital settings, such dynamics are particularly important because supervisory relationships influence not only staff morale but also teamwork, adherence to institutional norms, and ultimately service quality.

Work-family conflict also showed a significant positive relationship with deviance behaviour, indicating that pressures arising from incompatible work and family roles may spill over into harmful workplace conduct. This result is in line with earlier research showing that employees experiencing higher work-family conflict are more likely to report withdrawal, irritability, absenteeism, and other forms of counterproductive behaviour (33,34). In the present context, this association is plausible because public hospital employees often operate under rotating duties, emotional exhaustion, time scarcity, and family-role overload. When employees are unable to maintain equilibrium across work and family domains, the resulting strain may erode emotional control and reduce compliance with expected organizational conduct. The finding therefore strengthens the view that employee deviance in healthcare should not be understood solely as an attitudinal or disciplinary issue, but also as a behavioural outcome of unresolved role conflict.

A central contribution of the study lies in demonstrating the role of stress as an intervening mechanism. Abusive supervision had the strongest direct effect on stress in the structural model, while work-family conflict also significantly predicted higher stress. Stress, in turn, was positively associated with deviance behaviour. These findings support theoretical expectations that hostile supervision and role conflict generate psychological strain which may weaken self-regulation and increase the likelihood of deviant responses (30,32,34–36). In practical terms, the model suggests that employee deviance may not emerge immediately from supervisory hostility or work-family interference alone; rather, these exposures may first elevate emotional and psychological burden, which then contributes to maladaptive behaviour. This interpretation is consistent with stress-based and conservation-of-resources perspectives, where sustained demand without adequate support depletes coping capacity and increases behavioural dysregulation (36).

The mediation findings further clarify this mechanism. Stress significantly mediated the relationship between abusive supervision and deviance behaviour and also mediated the relationship between work-family conflict and deviance behaviour. This indicates that part of the effect of supervisory mistreatment

and role conflict on deviance operates indirectly through heightened stress. The mediated pathway was somewhat larger for work-family conflict than for abusive supervision, suggesting that role strain may exert a substantial behavioural effect when filtered through stress. This pattern is conceptually meaningful in healthcare settings, where emotional exhaustion may accumulate from repeated work-family interference even when overt supervisory hostility is less frequent. The present results therefore extend earlier literature by testing these pathways simultaneously within one hospital-based model rather than examining each relationship in isolation (34,35).

The moderating findings should be interpreted with caution. Islamic work ethics showed a statistically significant interaction with stress in predicting deviance behaviour, but the interaction coefficient was small. This suggests that although ethical orientation may shape how employees respond to stress, its buffering effect in this dataset was limited in magnitude. Conceptually, this remains important because Islamic work ethics emphasize diligence, responsibility, justice, self-restraint, and moral accountability, all of which may discourage deviant responses under adverse conditions (37,38). However, the modest size of the interaction indicates that ethical orientation alone is unlikely to neutralize the harmful behavioural consequences of chronic stress in public hospitals. Organizational intervention therefore remains essential. Ethical values may strengthen coping and restraint, but they should not be treated as substitutes for fair supervision, reasonable workload design, and supportive work environments.

The discussion of these findings must also acknowledge several methodological considerations. First, the study used a cross-sectional design, so causal inferences cannot be established definitively. The hypothesized paths are theoretically plausible and statistically supported, but temporal ordering cannot be confirmed. Second, the use of self-reported questionnaire data may have introduced common-method variance and social desirability effects, especially for deviance-related items. Third, the sample was limited to public hospitals in Bahawalpur Division and was obtained through convenience-based access, which may reduce generalizability beyond comparable public healthcare settings. Fourth, the original manuscript contained inconsistencies in some structural tables, and the interpretation in this revised discussion is based on the coefficient values reported consistently across the hypothesis-wise narrative and summary sections rather than the mislabeled rows in the direct and mediation tables. These issues do not invalidate the main pattern of results, but they do underscore the need for careful statistical presentation in the final manuscript.

Despite these limitations, the study offers meaningful implications for hospital administration and workforce policy. The findings suggest that employee deviance in public hospitals may be reduced not only through disciplinary control but also through preventive organizational strategies, including supervisor training, respectful communication practices, workload rationalization, and stronger support for employees facing work-family strain. Interventions that reduce stress exposure may produce dual benefits by improving employee wellbeing and lowering deviance-related conduct. At the same time, ethics-based organizational culture may offer an additional, though partial, protective layer. Future studies should test this model in broader hospital samples, use longitudinal or multi-wave designs, incorporate supervisory or peer-rated behavioural outcomes, and explore whether demographic, occupational, or institutional factors modify these pathways. Such work would strengthen the causal and contextual interpretation of the relationships identified here.

CONCLUSION

In conclusion, this study found that abusive supervision and work-family conflict were significant positive correlates of employee deviance in public hospitals, with stress functioning as an important mediating mechanism and Islamic work ethics exerting a small but significant moderating influence on the stress-deviance pathway. The findings suggest that employee deviance in healthcare settings is shaped not only by individual disposition but also by the quality of supervisory conduct, the burden of competing role demands, and the psychological strain generated by these exposures. Reducing hostile

supervision, managing work-family pressures, and strengthening supportive and ethically grounded workplace environments may therefore help improve employee wellbeing and reduce deviance-related behaviours in public sector hospitals.

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