

LINKING WORKPLACE OSTRACISM, PSYCHOLOGICAL CONTRACT VIOLATION, EMOTIONAL EXHAUSTION AND NURSES' DEVIANT BEHAVIOUR: A SERIAL MEDIATION FRAMEWORK

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ABSTRACT

PURPOSE

Nurses form the backbone of healthcare delivery, yet their effectiveness is often undermined by adverse workplace dynamics. This study investigates how workplace ostracism (WO) translates into deviant behaviour (DB) among nurses in Indian public hospitals, with psychological contract violation (PCV) and emotional exhaustion (EE) as serial mediators.

METHOD

Using survey data from 381 nurses selected from public hospitals across four metropolitan Indian cities. The theoretical model was tested through Partial Least Squares Structural Equation Modelling (PLS-SEM) and the serial mediational analysis was tested through the Variance Accounted For (VAF) technique

RESULTS

The PLS-SEM results confirmed that WO positively predicts DB both directly and indirectly through PCV and EE in sequence. Findings extend Social Exchange Theory (SET) by demonstrating that deviance arises not merely as an immediate retaliatory response but through a progressive erosion of trust and depletion of emotional resources. This dual-path mechanism offers a nuanced explanation of how negative social exchanges culminate in counterproductive outcomes in resource-constrained healthcare contexts.

CONCLUSION

The study advances existing literature by elucidating the 'partial serial mediation effect' of psychological contract violation and emotional exhaustion in the workplace ostracism–deviant behaviour relationship, thereby offering a more nuanced and theoretically enriched understanding of this dynamic. Theoretically, the study advances SET by integrating relational contract breaches with resource depletion processes. Practically, it highlights the urgent need for reforms in Indian public hospitals, including dedicated human resource leadership, mandated nurse–patient ratios, inclusive workplace policies, psychological support systems, and leadership development for nurse supervisors. Strengthening reciprocity and fairness in professional relationships is not only central to workforce well-being but also critical for patient safety and healthcare quality.

KEYWORD

Workplace ostracism; psychological contract violation; emotional exhaustion; deviant behaviour; nursing; serial mediation model; PLS-S

INTRODUCTION

Nurses form the backbone of healthcare delivery, constituting the largest group of health professionals worldwide and playing a decisive role in safeguarding patient safety and ensuring quality care [1]. Their responsibilities extend well beyond bedside care to include patient advocacy, education, and coordination within multidisciplinary teams, thereby directly shaping treatment outcomes and patient experiences. Recognizing this, the World Health Organization underscores that strengthening the nursing workforce is essential for advancing universal health coverage and building sustainable health systems [2]. In resource-constrained settings such as India, where public hospitals remain severely overburdened and nurse-to-patient ratios are critically low, the role of nurses becomes even more indispensable [3]. Positioned at the frontline of service delivery, nurses are uniquely tasked with identifying complications, preventing errors, and ensuring adherence to care protocols [4, 5]. Consequently, their professional conduct, psychological well-being, and sustained engagement are fundamental not only to institutional performance but also to broader public health outcomes [4, 6].

Yet, nurses, like employees in other organizational domains are vulnerable to counterproductive work behaviours (CWB), defined as actions that hinder organizational objectives, strain interpersonal relations, or compromise patient care [7, 8]. In healthcare, such behaviours may manifest as withdrawal, absenteeism, diminished empathy, resistance to collaboration, or subtle forms of incivility [6, 10]. These responses often arise from chronic stressors, including excessive workload, scarce resources, interpersonal conflict, or breaches of perceived fairness, and they carry grave implications for both organizational functioning and patient safety [11, 12]. Among these stressors, negative interpersonal experiences within the workplace can be particularly consequential, shaping nurses' attitudes and behaviours in ways that reverberate across teams and care outcomes [7, 10, 11, 12].

WO, a subtle but pervasive form of social exclusion, erodes nurses' sense of belonging and professional identity [6, 9]. When such exclusion is compounded by PCV, that is, perceptions of unmet organizational obligations, it amplifies feelings of betrayal and disillusionment. These processes frequently culminate in EE, a core dimension of burnout, which depletes psychological resources and undermines professional functioning [13, 14, 15]. Collectively, WO, PCV, and EE create a toxic cycle that fosters DB, thereby weakening teamwork, diminishing service quality, and jeopardizing patient safety [6, 7].

Despite the significance of these dynamics, extant research remains fragmented. Much of the existing scholarship has examined ostracism, contract breaches, or exhaustion in isolation, with limited inquiry into their interconnected pathways leading to deviant behaviour [6, 9, 13, 14]. Furthermore, prior studies have been concentrated primarily in corporate or educational contexts, with relatively little focus on healthcare settings, despite the higher stakes associated with nurses' performance and conduct [7, 15, 16, 17]. In India's public hospitals, these gaps are particularly pressing. Nurses work in environments marked by chronic understaffing, severe work overload, limited organizational support, inadequate training, and persistent security concerns [3, 13, 17, 18, 19]. Such systemic adversities intensify psychological strain and increase the risk of norm-violating behaviours, yet the relational dynamics underpinning these outcomes remain largely unexplored in the Indian context.

This study responds to these gaps by investigating the interrelationships between WO, PCV, EE, and DB in Indian public hospitals. Grounded in Social Exchange Theory (SET) [20, 42], the study examines how negative workplace experiences trigger DB through processes of perceived reciprocity violation and resource depletion. Specifically, it proposes and empirically tests a serial mediation framework, wherein WO leads to DB through PCV and EE in sequence. By doing so, the study extends SET's explanatory scope by integrating the cognitive dimension of contract breaches with the affective depletion associated with emotional exhaustion. Beyond advancing theory, this work contributes practical insights for designing targeted interventions to mitigate ostracism, restore trust, and preserve nurses' psychological resources, thereby improving well-being, professional conduct, and the quality of patient care in India's strained public hospital system.

THEORETICAL FRAMEWORK AND HYPOTHESES

WORKPLACE OSTRACISM AND DEVIANT BEHAVIOUR

WO, the perception of being ignored or excluded, is a subtle yet damaging form of mistreatment that undermines teamwork, trust, and belonging, especially in interdependent nursing contexts [13, 21, 22]. Unlike overt hostility, ostracism, whether intentional or not, induces social pain comparable to physical pain [6, 22]. DB, defined as voluntary acts that violate organizational norms and threaten institutional well-being [21, 23], has been consistently linked to WO, predicting outcomes such as counterproductive work behaviour and knowledge hiding [17, 22]. Guided by Social Exchange Theory (SET), ostracism signals a violation of reciprocity, prompting nurses to reciprocate exclusion with deviant responses, including reduced commitment and norm-violating behaviour [12, 16, 20]. Thus, the following is hypothesized:

H1 – Workplace ostracism is positively related with deviant behaviour.

WORKPLACE OSTRACISM AND PSYCHOLOGICAL CONTRACT VIOLATION

Nurses, whose roles are highly interdependent and emotionally demanding, experiences of ostracism can have particularly damaging consequences, as they undermine collaboration and disrupt the supportive climate essential for patient care [14, 21, 22]. Drawing on the theoretical foundations of SET, workplace ostracism violates the norms of reciprocity and fairness that underpin the psychological contract between employees and their organizations [6, 20]. When nurses perceive that their colleagues/ supervisors fail to acknowledge or respect them, they are likely to interpret this as a breach of the implicit obligations of respect, recognition, and support, thereby experiencing PCV [4, 7, 17, 22]. Based on these perspectives it is hypothesized that workplace ostracism contributes to heightened perceptions of PCV among nurses.

H2 – Workplace ostracism is positively related with psychological contract violation.

PSYCHOLOGICAL CONTRACT VIOLATION AND EMOTIONAL EXHAUSTION

The psychological contract reflects employees' beliefs about reciprocal obligations with their organization. When these expectations are unmet, PCV arises, often accompanied by feelings of betrayal and unfairness [6, 18, 23, 24, 25, 40, 41]. For nurses, whose roles demand high emotional investment and strong organizational support, such violations can be especially damaging [1, 7, 11] Rai & Verma, 2023]. From a SET perspective, unmet obligations disrupt reciprocity, leaving employees feeling undervalued and unsupported [20]. This imbalance depletes emotional resources, heightening strain and contributing to EE and burnout. Empirical evidence further shows that PCV intensifies stress and drains psychological energy, making nurses particularly vulnerable to exhaustion in resource-constrained healthcare contexts [8, 10, 11, 24]. Accordingly, this study hypothesizes that:

H3 – Psychological contract violation is positively related with emotional exhaustion.

EMOTIONAL EXHAUSTION AND DEVIANT BEHAVIOUR

EE, the core dimension of burnout, reflects a state of chronic energy depletion resulting from prolonged job stressors [1, 26]. For nurses working in emotionally demanding and resource-constrained settings, exhaustion undermines self-regulation, reduces empathy, and weakens adherence to organizational norms [4, 5 27]. Grounded in SET, employees who feel overextended and unsupported perceive inequities in the exchange relationship, often responding with negative reciprocity [5, 8, 26]. In this context, exhausted nurses may resort to DB, voluntary acts that violate organizational norms as a coping mechanism or a means of restoring balance [7, 8, 11, 17, 26]. Empirical evidence further indicates that exhaustion increases the likelihood of counterproductive outcomes such as withdrawal, reduced compliance, and retaliatory behaviours. Accordingly, this study hypothesizes that:

H4 – Emotional exhaustion is positively related with deviant behaviour

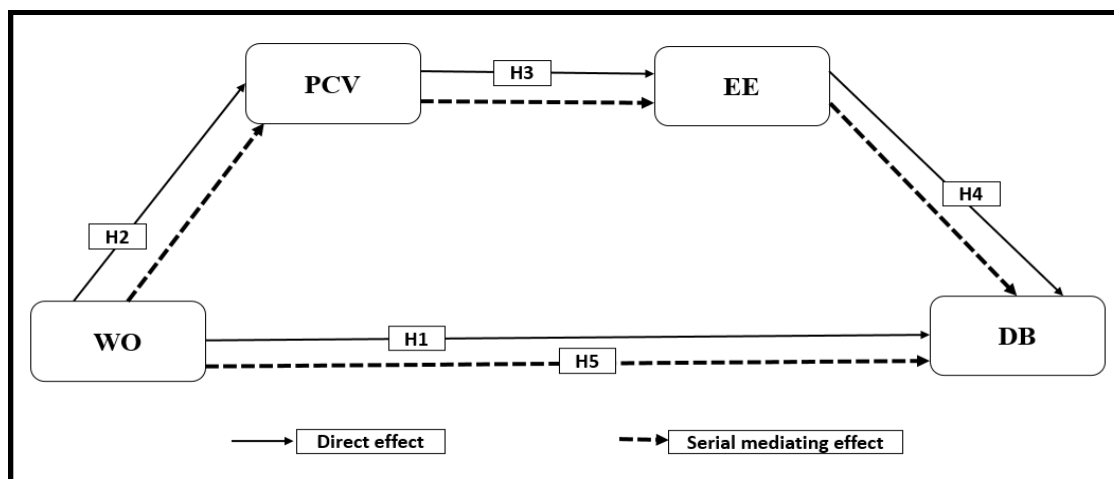
PSYCHOLOGICAL CONTRACT VIOLATION AND EMOTIONAL EXHAUSTION AS SERIAL MEDIATORS

In healthcare settings, particularly nursing, interpersonal relationships and organizational support are vital resources for sustaining performance and well-being. WO, by signalling exclusion and disregard, disrupts the reciprocity norms central to SET [20, 21, 28, 42]. Nurses perceiving ostracism are likely to interpret it as PCV, as expectations of respect, fairness, and collegial support are unmet [7, 16]. Such violations erode trust in the employment relationship, creating perceived

inequities and exchange imbalances [7, 10, 20]. The strain induced by PCV further manifests as EE, depleting nurses' psychological and social resources and reducing their capacity to cope with demanding work environments [5, 25, 26, 27]. Consistent with SET, persistent imbalance and lack of reciprocity may prompt nurses to engage in DB, violating organizational norms as a form of negative reciprocity or coping [23, 25, 28]. Accordingly, WO is expected to influence DB sequentially, first by generating PCV and subsequently heightening EE. The theoretical model is illustrated in Figure 1, and the following hypothesis is proposed:

H5. Psychological contract violation and emotional exhaustion sequentially mediate the relationship between workplace ostracism and deviant behaviour.

FIGURE 1: THEORETICAL MODEL



Note: WO-Workplace Ostracism; PCV-Psychological Contract Violation; EE- Emotional Exhaustion; DB-Deviant Behaviour.
Source: Author's own work

METHOD

PARTICIPANTS

The study sample comprised female nurses employed in public hospitals across four metropolitan cities in India, namely, Kolkata, Delhi, Hyderabad, and Chennai. A multi-stage sampling strategy was adopted. In the first stage, public hospitals in each city were identified in consultation with state health department listings. Subsequently, a random selection of hospitals was undertaken to ensure representation across major tertiary and secondary care institutions. In total, 43 hospitals participated in the study, with data collected from multiple functional units (e.g., general wards, intensive care units, and outpatient departments). In the second stage, the sampling frame comprised lists of staff nurses obtained through hospital administrative offices or nursing superintendents. Participants were recruited through coordinated administrative facilitation, and data were collected using a voluntary response approach. Questionnaires were distributed either in person or electronically, and respondents participated on a voluntary basis, with assurances of complete confidentiality and anonymity. The study employed a simple random sampling approach, which is commonly adopted in organizational research where access to respondents is mediated by institutional permissions. Inclusion criteria required participants to be full-time female staff nurses employed in public hospitals, with a minimum tenure of one year to ensure adequate exposure to workplace dynamics. Nurses on temporary contracts, interns, and those on extended leave during the data collection period were excluded from the study.

The focus on female nurses was theoretically and methodologically justified. Nursing in Indian public hospitals remains a predominantly female profession, with male nurses representing a relatively small minority [8, 10]. Their inclusion without adequate statistical representation could introduce sampling imbalance and potentially compromise parameter stability in the structural model. Furthermore, the focal constructs examined, workplace ostracism, psychological contract violation, deviant behaviour tendencies, and emotional exhaustion. These are closely embedded in gendered emotional labour expectations and relational workplace dynamics characteristic of female-dominated care work [1, 3]. As the study

did not aim to examine gender-based differences or moderation effects, maintaining gender homogeneity minimized potential confounding variance and enhanced the internal validity and interpretability of the findings.

Primary data were collected over a year, from July 2024 to June 2025. To mitigate the potential influence of common method bias (CMB), which is frequently associated with cross-sectional survey designs [7, 11], data collection was conducted in two temporally separated waves on a biannual basis. In the first wave, information pertaining to respondents' demographic characteristics and nurses' deviant behaviour tendencies was obtained. The second wave involved the collection of data on workplace ostracism, psychological contract violation, and emotional exhaustion experienced by the participants. Following the integration of responses from both phases (total responses = 397), a rigorous data-cleaning procedure was undertaken. This process involved the removal of six duplicate entries and ten incomplete questionnaires. Consequently, a final valid sample of 381 responses was retained for hypothesis testing and structural model estimation, yielding an effective response rate of 61.08%. The demographic characteristics of the respondents are presented in Table 1.

TABLE 1. DEMOGRAPHIC PROFILE

Demographic	Characteristics	Frequency	(%)
Age	18-25	193	50.66
	26-35	115	30.18
	36-45	58	15.22
	Above 45	15	3.94
Educational Qualification	Senior Secondary	211	55.38
	Diploma	118	30.97
	Graduation	52	13.65
Work Experience	0-10	201	52.76
	11-20	112	29.40
	21-30	52	13.65
	Above 31	16	4.20
Marital Status	Unmarried	152	39.90
	Married	201	52.76
	Widowed	3	0.79
	Separated	25	6.56

Source: Author's own work

ETHICAL CONSIDERATIONS

Ethical approval for the study was obtained prior to data collection in accordance with nationally recognized ethical standards governing research involving human participants in healthcare settings in India. Formal institutional authorization was secured from the administrative authorities of all participating hospitals and affiliated nursing colleges, including the respective Medical Superintendents and Principals, following the submission and review of a detailed research protocol and survey instrument. Participation in the study was entirely voluntary and based on informed consent. Each questionnaire was accompanied by a participant information sheet clearly outlining the objectives of the research, data privacy safeguards, confidentiality assurances, anonymity of responses, and the exclusive use of aggregated data for scholarly purposes. Participants were explicitly informed of their right to decline participation or withdraw from the study at any stage without penalty or adverse consequences. No personally identifiable information was collected at any stage of the research process. All responses were securely stored using restricted-access protocols and were accessed solely for academic analysis to ensure the confidentiality and protection of participant data.

MEASURES

Respondents used standard five-point Likert scale (1: "strongly disagree"; 5: "strongly agree") to respond to the survey questions as elucidated in Table 2.

TABLE 2. MEASUREMENT SCALES

Reflective Constructs	Reference	Items
Workplace Ostracism	[29]	WO1: Others ignored me at work WO2: My greetings have gone unanswered at work WO3: I involuntarily sat alone in a crowded lunchroom at work WO4: Others avoided me at work WO5: I noticed others would not look at me at work WO6: Others at work shut me out of the conversation WO7: Others refused to talk to me at work WO8: Others at work treated me as if I weren't there* WO9: Others at work did not invite me or ask me if I wanted anything when they went out for a coffee break WO10: I have not been included in conversations at work
Psychological Contract Violation	[28]	PCV1: Almost all the promises made by my organization during my recruitment have not been kept so far PCV2: I feel that my organization has not come through in fulfilling the promises made to me when I was hired PCV3: So far my organization has not done an excellent job of fulfilling its promises to me PCV4: I have not received everything promised to me in exchange for my contributions. PCV5: My employer has broken many of its promises to me even though I've upheld my side of the deal PCV6: I feel a great deal of anger toward my organization PCV7: I feel betrayed by my organization PCV8: I feel that my organization has violated the contract between us PCV9: I feel extremely frustrated by how I have been treated by my organization
Emotional Exhaustion	[30]	EE1: I have a good sense of why I have certain feelings most of the time EE2: I have good understanding of my own emotions* EE3: I am able to control my temper and handle difficulties rationally EE4: I am sensitive to the feelings and emotions of others EE5: I am a self-motivated person
Deviant Behavior	[31]	DB1: Spent too much time fantasizing or daydreaming instead of working DB2: Taken an additional or longer break than is acceptable at your workplace DB3: Come in late to work without permission DB4: Neglected to follow your supervisor's instructions DB5: Intentionally worked slower than you could have worked DB6: Discussed confidential company information with an unauthorized person* DB7: Put little effort into your work DB8: Dragged out work in order to get overtime DB9: Repeated a rumor or gossip about your boss or coworkers

* items removed due to low/ insignificant factor loadings ($p > 0.05$)

STATISTICAL PROCEDURES

The theoretical model was tested through partial least squares structural equation modelling (PLS-SEM) and the serial mediational analysis was tested through the Variance Accounted For (VAF) technique [10, 11, 32, 33, 34]. The hypothesized relationships were examined through SmartPLS version 4.1.1.7.

RESULTS

COMMON METHOD BIAS

In survey-based research, addressing the potential for Common Method Bias (CMB) is critical to ensure the validity and generalizability of PLS-SEM results [35]. A post-hoc Harman's single-factor test was conducted to assess CMB [35]. The analysis indicated that a single factor accounted for 39.18% of the total variance, below the recommended 50% threshold, suggesting that CMB is not a significant concern in this study. Additionally, as noted earlier, the study employed a multi-wave data collection design [35] to strengthen methodological rigor and mitigate potential sources of bias. In the first wave, information relating to nurses' demographic characteristics and the endogenous variable, deviant behaviour (DB), was collected. Subsequently, data concerning workplace ostracism, psychological contract violation, and emotional exhaustion experienced by the nurses were gathered during the second wave of data collection. The temporal separation of measurements served as a procedural remedy to minimize the likelihood of common method bias and enhance the robustness of the study's findings.

MEASUREMENT MODEL

The measurement model was initially assessed by specifying the reflective indicators associated with WO, PCV, EE, and DB. Internal consistency reliability was evaluated using Cronbach's alpha (α), Dillon–Goldstein's rho (ρ_A), and composite reliability (CR). As presented in Table 3, all reliability estimates exceeded the recommended threshold of 0.70, indicating satisfactory internal consistency and construct reliability [10, 11, 17, 32, 33]. Indicator reliability was subsequently examined through standardized outer loadings. The majority of indicators demonstrated loadings above the recommended threshold of 0.70, with the exception of EE2, WO8, and DB6. As all constructs were operationalized using a reflective measurement specification, indicators exhibiting loadings below 0.70 were removed following the guidelines proposed by Hair et al. [32], thereby improving the reliability and overall robustness of the measurement model.

Convergent validity was confirmed through Average Variance Extracted (AVE) values exceeding 0.50 [7, 11, 17, 32, 33]. Discriminant validity was evaluated using the Fornell-Larcker criterion and the Heterotrait-Monotrait (HTMT) ratio of correlations [37, 38]. The square root of AVE values (Table 4) exceeded the inter-construct correlations, and all HTMT values as exhibited in Table 5, were below 0.85, satisfying recommended thresholds [38]. Collectively, these results establish robust reliability and validity for the proposed constructs, confirming the suitability of the measurement model for path analyses.

TABLE 3. MEASUREMENT MODEL ASSESSMENT

Reflective Constructs	Indicators	Loadings/ Coefficients	t-value	VIF	α	ρ_A	CR	AVE
Workplace Ostracism	WO1	0.711	16.05	2.24	0.885	0.886	0.884	0.604
	WO2	0.775	16.81					
	WO3	0.763	17.98					
	WO4	0.811	19.2					
	WO5	0.822	19.32					
	WO6	0.829	19.48					
	WO7	0.789	18.54					
	WO9	0.882	20.73					
	WO10	0.703	16.52					

Psychological Contract Violation	PCV1	0.89	22.28		0.878	0.881	0.88	0.612
	PCV2	0.766	19.17					
	PCV3	0.795	19.90					
	PCV4	0.716	17.92	2.08				
	PCV5	0.777	19.45					
	PCV6	0.806	20.18					
	PCV7	0.79	19.78					
	PCV8	0.866	21.68					
	PCV9	0.781	19.55					
Emotional Exhaustion	EE1	0.732	12.27		0.78	0.798	0.789	0.655
	EE3	0.801	14.51	1.62				
	EE4	0.845	15.31					
	EE5	0.793	14.37					
Deviant Behaviour	DB1	0.892	20.89		0.809	0.883	0.879	0.698
	DB2	0.813	18.16					
	DB3	0.796	15.2	2.51				
	DB4	0.754	17.66					
	DB5	0.733	17.17					
	DB7	0.856	20.05					
	DB8	0.716	16.77					
	DB9	0.865	20.26					

All factor loadings are significant at 99% confidence levels.

Source: Author's own work

TABLE 4. DISCRIMINANT VALIDITY (FORNELL-LARCKER CRITERION)

Constructs	1	2	3	4
1. Deviant Behaviour	0.841			
2. Emotional Exhaustion	0.55	0.738		
3. Psychological Contract Violation	0.495	0.485	0.771	
4. Workplace Ostracism	0.445	0.459	0.749	0.777

Source: Author's own work

TABLE 5. DISCRIMINANT VALIDITY (HTMT)

Constructs	1	2	3	4
1. Deviant Behaviour				
2. Emotional Exhaustion	0.55			
3. Psychological Contract Violation	0.495	0.48		
4. Workplace Ostracism	0.444	0.453	0.748	

Source: Author's own work

STRUCTURAL MODEL DIRECT PATH ANALYSIS

Having established the reliability and validity of the measurement model, the hypothesized structural relationships were tested using PLS-SEM. Bootstrapping with 5,000 subsamples was employed to assess path significance and Bias-Corrected (BC) Confidence Intervals [7, 10, 11, 32, 33]. The results as exhibited in Table 6, indicate that WO is positively associated with nurses' DB ($\beta = 0.244$; $t = 3.477$; $p < 0.01$), supporting H1. WO also shows a strong positive relationship with PCV ($\beta = 0.749$; $t = 16.611$; $p < 0.01$), providing empirical support for H2. Furthermore, PCV significantly predicts EE ($\beta = 0.485$; $t = 7.321$; $p < 0.01$), confirming H3. Finally, EE has a significant positive effect on nurses' deviant behaviour ($\beta = 0.438$; $t = 6.147$; $p < 0.01$), thereby supporting H4. All structural path estimates were further substantiated using bias-corrected confidence intervals, wherein statistical significance was inferred from the absence of zero within the lower and

upper bounds of the interval [10, 11, 32, 33]. These findings collectively demonstrate strong association of ostracism at work with PCV, EE, and DB in the context of nurses in Indian public hospitals.

TABLE 6. DIRECT PATH ANALYSIS

Hypotheses	Paths	β	LLCI	ULCI	Support
H1	WO $\rightarrow$ DB	0.244	2.698	4.315	Yes
H2	WO $\rightarrow$ PCV	0.749	8.281	13.245	Yes
H3	PCV $\rightarrow$ EE	0.485	5.362	8.577	Yes
H4	EE $\rightarrow$ DB	0.438	4.842	7.746	Yes

Note: WO-Workplace Ostracism, PCV-Psychological Contract Violation, EE- Emotional Exhaustion, DB-Deviant Behaviour.

Source: Author's own work

SERIAL MEDIATIONAL PATH ANALYSIS

The indirect effect of WO on DB via the sequential mediators of PCV and EE was tested under H5. As presented in Table 7, the indirect path analysis revealed a significant positive effect ($\beta = 0.159$; $t = 4.553$; $p < 0.01$), supporting H5. To further classify the type of serial mediation, the Variance Accounted For (VAF) technique was employed, which calculates the proportion of the total effect explained by the indirect paths [10, 11, 32, 33, 38, 39]. Table 8 presents the indirect, total, and VAF values for the serial mediational pathway. The analysis confirms that the effect of WO on DB operates through the consecutive mediators, PCV and EE. The VAF value of 0.395 indicates a partial serial mediation effect, consistent with the recommended threshold of 0.20–0.80 [7, 10, 11, 32, 33, 34]. Furthermore, the statistical significance of the serial mediation effect is confirmed by the bias corrected confidence intervals as the lower and upper bounds are both positive, indicating that zero is not contained within the interval [11, 32, 33].

These results demonstrate that the relationship between WO and DB is not merely direct but unfolds sequentially, ostracism first triggers perceptions of contract violation, which deplete emotional resources, ultimately leading to deviant behaviours. The partial mediation highlights that while other mechanisms may also contribute, PCV and EE constitute significant explanatory pathways in understanding nurses' counterproductive behaviour in Indian public hospitals. Furthermore, the explanatory power and the predictive validity of the hypothesized conceptual model was demonstrated through R^2 and Q^2 as exhibited in Table 9. The results exhibited that the serial mediation model explained 34.9% variance ($R^2 = 0.349$) in nurses' deviant behaviour, 32.5% of emotional exhaustion, and 56.2% of contract violation. The predictive power of the model is evidenced by a positive Q^2 value ($Q^2 > 0$) of all the endogenous constructs [7, 10, 11, 32, 33]. Additionally, medium-relevance Q^2 values for all endogenous constructs, falling within the threshold ($Q^2 = 0.15 - 0.35$) [7, 34, 38] are demonstrated. This further reinforces the robustness and practical utility of the hypothesized conceptual model (PCV = 0.207; EE = 0.152; DB = 0.293) [11, 32, 33, 34, 39]. Finally, the overall model fit of the serial mediation model was assessed using the standardized root mean square residual (SRMR) [9, 34]. The obtained SRMR value of 0.072 was below the recommended threshold of 0.08, indicating an adequate level of model fit and suggesting that the conceptual model exhibited satisfactory correspondence with the observed data [11, 32, 34, 38].

TABLE 7. INDIRECT PATH ANALYSIS

Hypothesis	Paths	β	LLCI	ULCI	Support
H5	WO $\rightarrow$ PCV $\rightarrow$ EE $\rightarrow$ DB	0.159	1.758	2.812	Yes

Note: WO-Workplace Ostracism, PCV-Psychological Contract Violation, EE- Emotional Exhaustion, DB-Deviant Behaviour.

Source: Author's own work

TABLE 8. SERIAL MEDIATION MODEL

Hypothesis	Indirect Effect	Total Effect	VAF	Type	Support
H5	0.159	0.403	0.395	Partial Serial Mediation	Yes

Note: WO-Workplace Ostracism, PCV-Psychological Contract Violation, EE- Emotional Exhaustion, DB-Deviant Behaviour.

Source: Author's own work

TABLE 9. EXPLANATORY POWER AND PREDICTIVE RELEVANCE

Endogenous Reflective Construct	Q2	R2
Psychological Contract Violation	0.207	0.562
Emotional Exhaustion	0.152	0.325
Deviant Behaviour	0.293	0.349

Source: Author's own work

DISCUSSION

This study provides critical insights into the relational dynamics shaping nurses' experiences in Indian public hospitals by examining WO, PCV, EE, and DB. Consistent with prior research [3, 5, 7, 22, 25, 32, 40, 41], WO was positively associated with DB, indicating that nurses experiencing exclusion are more likely to engage in norm-violating actions. WO also significantly predicted PCV [3, 5, 19, 22, 33], highlighting that ostracism fosters perceptions of breached organizational obligations. PCV, in turn, intensified EE [12, 16, 17, 22], depleting emotional resources and leading to disengagement and DB [6, 12, 15, 17, 22].

The study's novel contribution lies in demonstrating the partial-serial mediation of PCV and EE between WO and DB. Grounded in SET [42], the findings extend the theory by illustrating that deviance emerges not as an immediate reaction to exclusion but through a sequential erosion of trust and emotional resources. PCV captures the cognitive and normative dimension of perceived broken exchange agreements, while EE reflects the affective and resource-depletion consequences. This dual-path process elucidates how ostracism disrupts relational reciprocity, drains psychological resources, and culminates in counterproductive behaviours, thereby advancing theoretical understanding of SET in high-stress healthcare environments.

Practically, these findings underscore urgent interventions for policymakers and hospital administrators. First, Indian public hospitals often lack a dedicated HR function with qualified personnel, compromising workforce morale and responsiveness to workplace issues; appointing a Chief Human Resources Officer (CHRO) is imperative [7]. Second, chronic understaffing amplifies stress and interpersonal tensions, highlighting the need for enforced minimum nurse-patient ratios. Third, WO should be recognized explicitly as a form of workplace mistreatment, with policies mandating anti-discrimination and inclusion codes of conduct. Fourth, hospitals must integrate psychological support mechanisms, including counselling, resilience training, and stress management workshops, to mitigate EE. Fifth, leadership development programs for nurse supervisors can foster inclusive, supportive, and fair work environments. Sixth, transparent communication regarding roles, expectations, and career progression, combined with periodic feedback, can reduce perceptions of PCV. Finally, embedding modules on civility, conflict management, and stress resilience into continuous professional education equips nurses to navigate challenging conditions effectively. Collectively, these interventions not only protect nurse well-being but also safeguard patient safety and service quality. A workforce free from ostracism, psychological contract breaches, and exhaustion is more engaged, empathetic, and reliable, enhancing organizational performance and public trust in healthcare institutions.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

The generalisability of the present findings should be interpreted with due caution. First, the study focuses exclusively on female nurses employed in public hospitals in India. Future research may extend this inquiry to male nurses and those working in private healthcare settings to examine whether the relationships among workplace ostracism, psychological contract violation, emotional exhaustion, and deviant behaviour tendencies vary across gender and institutional contexts. Second, the cross-sectional design of the study limits causal inferences. Although the proposed relationships are theoretically grounded, future studies should employ longitudinal or time-lagged designs to more rigorously capture causal dynamics and to validate the sequential mediation mechanisms identified in the present model. Third, while common method bias was addressed through a multi-wave data collection procedure and the application of Harman's single-factor test, additional methodological rigor may be achieved in future research by incorporating marker variables

and latent method factor techniques to further substantiate the independence of constructs. Finally, comparative cross-cultural investigations would provide valuable insights into the boundary conditions of the proposed model. Examining the perceptions and experiences of nurses in India relative to those in Western healthcare systems, which are often characterized by more advanced infrastructure and resource availability, may enrich the theoretical and practical understanding of workplace dynamics in nursing contexts.

CONCLUSION

To the author's knowledge, this study is the first to propose a serial mediation framework demonstrating how workplace ostracism translates into nurses' deviant behaviour through psychological contract violation and emotional exhaustion, grounded in Social Exchange Theory. The findings elucidate the sequential erosion of trust and emotional resources that underlies deviant behaviours, highlighting a dual-path mechanism whereby interpersonal mistreatment escalates into counterproductive outcomes in resource-constrained healthcare settings. Beyond theoretical contributions, the study underscores urgent practical imperatives: reducing ostracism, preventing contract breaches, and addressing emotional exhaustion are critical to safeguarding nurse well-being, organizational integrity, and patient safety. Policy interventions, including adequate staffing, inclusive workplace practices, leadership development, and psychological support are essential to cultivate resilient, supportive hospital environments. By promoting reciprocity, fairness, and care for the nursing workforce, Indian public hospitals can enhance both service quality and patient trust.

References:

1. Yeo A, Lee SS, Lim VKG, Godsey JA, Kuok K, Gunawan J, Liaw SY. Strategies to Elevate the brand Image of Nursing: A scoping review. *International Nursing Review*. 2025;72(2). <https://doi.org/10.1111/inr.70026>.
2. Kruger K, Brysiewicz P, Lori J, Bell SA. The role of the nursing workforce in health system resilience during disasters: A scoping review of empirical studies. *International Journal of Nursing Studies Advances*. 2025;9:100361. <https://doi.org/10.1016/j.ijnsa.2025.100361>.
3. Gulati K, Davies J, Singh AR. A call for transforming physicians-as-administrators into professional hybrid medical leaders: insights from northern India. *Leadership in Health Services*. 2025; 38(2):245–262. <https://doi.org/10.1108/lhs-07-2024-0058>.
4. Copeland S, Hinrichs-Krapels S, Fecondo F, Santizo ER, Bal R, Comes T. A resilience view on health system resilience: a scoping review of empirical studies and reviews. *BMC Health Services Research*. 2023;23(1). <https://doi.org/10.1186/s12913-023-10022-8>.
5. Burau V, Mejsner SB, Falkenbach M, Fehsenfeld M, Kotherová Z, Neri S, Wallenburg I, Kuhlmann E. Post-COVID health policy responses to healthcare workforce capacities: A comparative analysis of health system resilience in six European countries. *Health Policy*. 2024;139: 104962. <https://doi.org/10.1016/j.healthpol.2023.104962>.
6. Shafique I, Qammar A, Kalyar MN, Ahmad B, Mushtaq A. Workplace ostracism and deviant behaviour among nurses: a parallel mediation model. *Journal of Asia Business Studies*. 2020;15(1): 50–71. <https://doi.org/10.1108/jabs-03-2020-0096>.
7. Rai GD, Verma S. Quality of Work Life and Medical Teachers' Commitment: A moderated mediation analysis of fear of COVID-19 and job satisfaction. *Asia Pacific Journal of Health Management*. 2023;18(1). <https://doi.org/10.24083/apjhm.v18i1.1973>.
8. Bolton LR, Harvey RD, Grawitch MJ, Barber LK. Counterproductive Work Behaviours in Response to Emotional Exhaustion: A Moderated Mediation Approach. *Stress and Health*. 2011;28(3): 222–233. <https://doi.org/10.1002/smi.1425>.
9. Eliethey NS, Aly Abou Hashish E, Ahmed Mohamed Elbassal N. Work ethics and its relationship with workplace ostracism and counterproductive work behaviours among nurses: a structural equation model. *BMC Nursing*. 2024;23(1). <https://doi.org/10.1186/s12912-024-01785-4>.
10. Rai GD. Quality of work life, job satisfaction, technostress and psychological well-being in blended learning: a moderated mediation model. *European Journal of Training and Development*. 2025; <https://doi.org/10.1108/ejtd-09-2024-0128>.

11. Rai GD, Verma S. Quality of work life, fear of COVID-19, job satisfaction, and commitment: a moderated mediation model. *International Journal of Productivity and Performance Management*. 2022;72(10): 3137–3161. <https://doi.org/10.1108/ijppm-10-2021-0578>.
12. Robinson SL, O'Reilly J, Wang W. Invisible at Work. *Journal of Management*. 2012;39(1): 203–231. <https://doi.org/10.1177/0149206312466141>.
13. Gupta V, Agarwal UA, Khatri N. The relationships between perceived organizational support, affective commitment, psychological contract breach, organizational citizenship behaviour and work engagement. *Journal of Advanced Nursing*. 2016;72(11): 2806–2817. <https://doi.org/10.1111/jan.13043>.
14. Verma GG, Simha A, Sharin A H, Sai Chandra D, Kumar N. Psychological contract breach mediates ethical climate and deviance among nurses. *Nursing Ethics*. 2025; <https://doi.org/10.1177/09697330251328643>.
15. Luo J, Li S, Gong L, Zhang X, Wang S. How and when workplace ostracism influences employee deviant behavior: A self-determination theory perspective. *Frontiers in Psychology*. 2022;13. <https://doi.org/10.3389/fpsyg.2022.1002399>.
16. Wang L, Zhu L, Jin X. Exploring the process of workplace ostracism leads to workplace deviance: The moderated mediation effect of coworker incivility. *Acta Psychologica*. 2025;259: 105342. <https://doi.org/10.1016/j.actpsy.2025.105342>.
17. Shankar U, Kaul V, Gupta V, Mishra NK. Workplace ostracism and counterproductive work behaviour: parallel mediation of felt accountability and emotional exhaustion. *Journal of Management Development*. 2024;43(6): 849–862. <https://doi.org/10.1108/jmd-02-2024-0069>.
18. BMCRC grapples with severe staff shortage, affecting services. *The Times of India*. 2025 Sep 4 [Retrieved on April 7, 2026]. Available from: <https://timesofindia.indiatimes.com/city/hubbali/bmcrc-grapples-with-severe-staff-shortage-affecting-services/articleshow/123682313.cms>
19. Roy D. State of nursing in India: Persistent systemic challenges. *The Lancet Regional Health - Southeast Asia*. 2022;6: 100084. <https://doi.org/10.1016/j.lansea.2022.100084>.
20. Homans GC. Social behavior as exchange. *Am J Sociol*. 1958;63(6):597–606. <https://doi.org/10.1086/222355>.
21. Muhammad L, Sarwar A. When and why organizational dehumanization leads to deviant work behaviors in hospitality industry. *International Journal of Hospitality Management*. 2021;99: 103044. <https://doi.org/10.1016/j.ijhm.2021.103044>.
22. Jahanzeb S, Giles J, Mushtaq R. Workplace ostracism and organizational deviance: A self-regulatory perspective. *The Journal of Social Psychology*. 2023;163(5): 698–715. <https://doi.org/10.1080/00224545.2023.2185499>.
23. Robinson SL, Bennett RJ. A Typology of Deviant Workplace Behaviours: A Multidimensional Scaling Study. *Academy of Management Journal*. 1995;38(2): 555–572. <https://doi.org/10.2307/256693>.
24. Mensah J, Amponsah-Tawiah K, Baafi NKA. Psychological contract breach and mental health: the role of equity sensitivity and self-control. *Organization Management Journal*. 2024;21(2): 63–74. <https://doi.org/10.1108/omj-11-2022-1679>.
25. Hussain T, Deery S. Psychological contract breach and emotional exhaustion among self-initiated expatriates: The role of social support and cultural orientation. *Journal of General Management*. 2023; <https://doi.org/10.1177/03063070231159580>.
26. Jiang H, Jiang X, Sun P, Li X. Coping with workplace ostracism: the roles of emotional exhaustion and resilience in deviant behavior. *Management Decision*. 2020;59(2): 358–371. <https://doi.org/10.1108/md-06-2019-0848>.
27. Ağalday B. Do Ostracised Teachers Exhibit Deviant Behaviours? Examining the Relationship Between Organizational Ostracism and Organizational Deviance. *Psycho-Educational Research Reviews*. 2022;11(2): 339–353. https://doi.org/10.52963/perr_biruni_v11.n2.21.
28. Robinson SL, Wolfe Morrison E. The development of psychological contract breach and violation: a longitudinal study. *Journal of Organizational Behavior*. 2000;21(5): 525–546. [https://doi.org/10.1002/1099-1379\(200008\)21:5<525::aid-job40>3.0.co;2-t](https://doi.org/10.1002/1099-1379(200008)21:5<525::aid-job40>3.0.co;2-t).
29. Ferris DL, Brown DJ, Berry JW, Lian H. The development and validation of the Workplace Ostracism Scale. *Journal of Applied Psychology*. 2008;93(6): 1348–1366. <https://doi.org/10.1037/a0012743>.
30. Maslach C, Jackson SE. The measurement of experienced burnout. *Journal of Organizational Behavior*. 1981; 2(2):99–113. <https://doi.org/10.1002/job.4030020205>
31. Bennett RJ, Robinson SL. Development of a measure of workplace deviance. *Journal of Applied Psychology*. 2000;85(3):349–360 <https://psycnet.apa.org/doi/10.1037/0021-9010.85.3.349>

32. Hair JF Jr, Sarstedt M, Hopkins L, G. Kuppelwieser V. Partial least squares structural equation modeling (PLS-SEM). *European Business Review*. 2014;26(2): 106–121. <https://doi.org/10.1108/ebr-10-2013-0128>.
33. Sarstedt M, Hair JF, Ringle CM, Thiele KO, Gudergan SP. Estimation issues with PLS and CBSEM: Where the bias lies! *Journal of Business Research*. 2016;69(10): 3998–4010. <https://doi.org/10.1016/j.jbusres.2016.06.007>.
34. Rai GD. Unearthing the Complementary Effect of Tea Destination Quality and Tea Tourist Satisfaction on Revisit Intention: A Post-COVID-19 Perspective. *Journal of Tourism*. 2023;XXIV(1): 13–23. https://mzu.edu.in/NAAC_DVV_2024/3.4.4/DTHM/128%20%20%20%20%20%20%20%20%20%20June-%20JOT.pdf
35. Podsakoff PM, MacKenzie SB, Lee JY, Podsakoff NP. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*. 2003;88(5): 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>.
36. Kock F, Berbekova A, Assaf AG. Understanding and managing the threat of common method bias: Detection, prevention and control. *Tourism Management*. 2021;86: 104330. <https://doi.org/10.1016/j.tourman.2021.104330>.
37. Fornell C, Larcker DF. Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*. 1981;18(1): 39. <https://doi.org/10.2307/3151312>.
38. Henseler J, Ringle CM, Sarstedt M. A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*. 2014;43(1): 115–135. <https://doi.org/10.1007/s11747-014-0403-8>.
39. Meher JR, Nayak L, Mishra RK, Patel G. Impact of organizational learning culture on organizational effectiveness: a serial mediation analysis with knowledge sharing and employee competencies. *VINE Journal of Information and Knowledge Management Systems*. 2022;54(2): 324–338. <https://doi.org/10.1108/vjikms-10-2021-0230>.
40. Rousseau DM. Psychological and implied contracts in organizations. *Employee Responsibilities and Rights Journal*. 1989;2(2):121–39. <https://doi.org/10.1007/bf01384942>
41. Morrison EW, Robinson SL. When Employees Feel Betrayed: A model of how psychological contract violation develops. *Academy of Management Review*. 1997;22(1):226. <https://doi.org/10.2307/259230>
42. Blau PM. Justice in social exchange. *Sociological Inquiry*. 1964;34(2):193–206. <https://doi.org/10.1111/j.1475-682x.1964.tb00583.x>