

A HUMAN RESOURCE DEVELOPMENT PERSPECTIVE ON CONTEXTUAL PERFORMANCE SENSITIVITY IN HOTELS: A MULTI-GROUP SEM ANALYSIS

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ABSTRACT

Purpose: *This study examines the influence of developmental organizational resources—perceived organizational support, perceived supervisor support, and distributive justice—on organizational citizenship behavior (OCB) among frontline hotel employees. It further investigates the mediating role of work engagement as a key psychological mechanism linking organizational practices to discretionary performance.*

Design/methodology/approach: *Data were collected from 300 frontline employees across three-, four-, and five-star hotels in India using a structured questionnaire. Grounded in Social Exchange Theory and the Job Demands–Resources (JD–R) framework, covariance-based structural equation modeling (SEM) and multi-group analysis were employed to examine direct, indirect, and contextual relationships.*

Findings: *All developmental resources significantly enhance OCB, both directly and indirectly through work engagement. Perceived supervisor support emerged as the strongest predictor of work engagement, while distributive justice demonstrated the strongest total effect on OCB. Work engagement consistently translated into higher discretionary behavior across all hotel categories.*

Theoretical implications: *The study advances Human Resource Development (HRD) literature by establishing work engagement as a central developmental mechanism linking organizational resources to behavioral outcomes. It also introduces the concept of Contextual Performance Sensitivity (CPS), demonstrating that the effectiveness of developmental practices varies across organizational contexts.*

Practical implications: *Hospitality organizations should strengthen supervisory support, ensure fairness in resource allocation, and implement engagement-driven HR practices to enhance employee motivation and citizenship behavior.*

Originality/value: *This study offers a context-sensitive HRD framework integrating developmental resources, work engagement, and OCB, and provides empirical validation for the novel concept of Contextual Performance Sensitivity.*

Keywords

Human Resource Development, Work Engagement, Organizational Citizenship Behavior, Perceived Organizational Support, Perceived Supervisor Support, Distributive Justice, Hospitality Sector.

INTRODUCTION

Frontline hotel employees operate in highly demanding environments characterized by continuous guest interaction, service intensity, and performance pressure. In such settings, discretionary behaviors that extend beyond formal job requirements—commonly referred to as organizational citizenship behavior (OCB)—are critical for maintaining service quality, enhancing customer satisfaction, and strengthening organizational competitiveness (Karatepe, 2020; Podsakoff et al., 2000). As hospitality organizations increasingly emphasize personalized service and responsiveness, understanding the drivers of OCB has become a strategic priority. These environments demand more than routine task performance; they require adaptability, continuous development, and psychological readiness. From a Human Resource Development (HRD) perspective, organizations must foster supportive and development-oriented work systems that enhance employee capability and motivation (Saks, 2022). Practices such as supervisory support, fair reward systems, and organizational care represent key developmental resources that collectively shape a supportive developmental climate. This climate influences employees' psychological states and facilitates engagement-driven performance beyond formal role expectations (Bakker & Demerouti, 2017; Chiang & Hsieh, 2012).

Drawing on Social Exchange Theory, employees are likely to reciprocate supportive and fair organizational treatment with positive discretionary behaviors such as OCB (Cropanzano & Mitchell, 2005). Perceived organizational support, perceived supervisor support, and distributive justice shape employees' perceptions of trust, fairness, and psychological safety, thereby encouraging extra-role contributions. Complementing this perspective, the Job Demands–Resources (JD–R) model posits that such resources function as key motivational drivers that enhance work engagement. Engaged employees, in turn, are more likely to exhibit discretionary behaviors that contribute to organizational effectiveness (Bakker & Demerouti, 2017; Saks, 2022). Despite extensive research, several critical gaps remain. First, prior studies have largely examined supportive organizational practices in isolation, limiting understanding of how employees interpret these resources as part of an integrated developmental system (Sondakh et al., 2024; Sudiyani & Rihayana, 2024). Second, although multiple psychological mechanisms have been proposed, work engagement has emerged as a central pathway; however, its role requires further validation in high-pressure service environments such as hospitality (Karatepe, 2020). Third, existing research often assumes uniform employee responses, overlooking the influence of organizational context in shaping behavioral outcomes. Hotel organizations vary significantly across categories such as three-star, four-star, and five-star establishments in terms of structure, service expectations, and resource availability. These contextual differences may influence how employees perceive and respond to developmental resources, thereby affecting the strength and nature of relationships between organizational practices, work engagement, and OCB. However, limited research has systematically examined such context-based variations.

To address these gaps, the present study introduces the concept of Contextual Performance Sensitivity (CPS), defined as the extent to which developmental organizational

practices differentially translate into discretionary performance across varying organizational contexts. By incorporating contextual variation into the HRD–performance relationship, this study offers a more nuanced and realistic understanding of employee behavior in service-intensive environments (Abdullah & Wider, 2022; Aboramadan, 2022).

Statement of Purpose

The purpose of this study is to examine how developmental organizational resources—namely perceived organizational support, perceived supervisor support, and distributive justice—influence work engagement and organizational citizenship behavior (OCB) among frontline hotel employees. It further investigates whether these relationships vary across hotel categories.

Research Objectives

- To examine the effects of developmental organizational resources on work engagement and organizational citizenship behavior.
- To investigate the mediating role of work engagement in the relationship between developmental organizational resources and organizational citizenship behavior.
- To assess whether the structural relationships among developmental resources, work engagement, and organizational citizenship behavior differ across hotel categories.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

This section examines the relationships between developmental organizational resources, work engagement, and organizational citizenship behavior (OCB) within hospitality settings. Drawing on Social Exchange Theory (SET), the Job Demands–Resources (JD–R) model, and Human Resource Development (HRD) perspectives, the study explains how workplace conditions shape employee motivation and discretionary performance (Kim, Tavitiyaman, & Kim, 2009).

Perceived organizational support (POS), perceived supervisor support (PSS), and distributive justice (DJ) are conceptualized as key developmental resources that collectively form a supportive developmental climate. Rather than functioning independently, these resources represent a holistic system through which employees evaluate organizational care, fairness, and supervisory relationships (Saks, 2022; Sondakh et al., 2024). Such integrated perceptions play a crucial role in shaping employee engagement and behavioral outcomes, particularly in service-intensive environments like hospitality (Karatepe, 2020; Bakker, 2011).

Theoretical Background

Social Exchange Theory (SET) posits that employees reciprocate favorable organizational treatment with positive attitudes and behaviors (Cropanzano & Mitchell, 2005). When employees perceive support, fairness, and recognition, they develop a sense of obligation, which motivates them to contribute beyond formal job requirements. In hospitality settings, characterized by emotional labor and service intensity, such reciprocal exchanges are particularly critical in shaping discretionary behaviors (Chhabra & Mishra, 2022).

Complementing this perspective, the Job Demands–Resources (JD–R) model explains that job resources—such as supervisory support, fairness, and organizational care—serve as key motivational drivers that enhance work engagement (Bakker & Demerouti, 2017). These resources enable employees to cope with demanding work conditions while maintaining high

levels of energy, dedication, and absorption. From an HRD perspective, these mechanisms can be understood as part of a broader developmental system in which organizational practices enhance employee capability and motivation (Saks, 2022). Integrating SET and JD–R provides a comprehensive explanation of how developmental organizational resources are transformed into engagement-driven discretionary performance. While SET explains why employees reciprocate, the JD–R model explains how resources translate into engagement and performance outcomes.

Developmental Organizational Antecedents and Work Engagement

Developmental organizational resources are expected to enhance work engagement by fulfilling employees' psychological and relational needs. Consistent with SET, when employees perceive strong organizational and supervisory support, they feel valued and are more likely to reciprocate through higher levels of involvement in their work (Cropanzano & Mitchell, 2005). Similarly, distributive justice strengthens perceptions of fairness, reduces uncertainty, and builds trust.

Within the JD–R framework, these resources act as motivational drivers that energize employees and increase their vigor, dedication, and absorption (Bakker & Demerouti, 2017). In high-pressure hospitality environments, such resources are particularly important in sustaining engagement under continuous service demands (Karatepe, 2020). Empirical studies provide strong support for these relationships. Perceived organizational support and supervisory support have been shown to significantly enhance work engagement in hospitality contexts (Karatepe, 2020; Al-Hawary et al., 2021; Sondakh et al., 2024). Similarly, distributive justice has been found to positively influence employee motivation and engagement (Sudiyani & Rihayana, 2024). However, prior studies have largely examined these constructs independently, limiting understanding of how employees interpret these resources as part of a unified developmental system. This study addresses this gap by conceptualizing POS, PSS, and DJ as integrated antecedents of work engagement.

H1a: Perceived organizational support positively influences work engagement.

H1b: Perceived supervisor support positively influences work engagement.

H1c: Distributive justice positively influences work engagement.

Work Engagement and Organizational Citizenship Behavior

Work engagement is a positive, work-related psychological state characterized by vigor, dedication, and absorption (Schaufeli et al., 2006). Engaged employees exhibit high levels of intrinsic motivation, emotional investment, and persistence in their work roles.

From a behavioral perspective, work engagement plays a crucial role in promoting organizational citizenship behavior (OCB). Engaged employees are more likely to go beyond formal job requirements, demonstrate helping behaviors, adapt to customer needs, and contribute to service excellence. This occurs because engagement enhances intrinsic motivation and strengthens employees' psychological attachment to their work (Bakker & Demerouti, 2017). In hospitality settings, where service quality depends heavily on employee behavior, such discretionary actions are essential for maintaining customer satisfaction and organizational effectiveness (Karatepe, 2020). Empirical evidence consistently supports the positive relationship between work engagement and OCB (Yen San et al., 2023; Hasan et al., 2023; Khairy et al., 2023; Zhang, Liu & Wei, 2022).

H2: Work engagement positively influences organizational citizenship behavior.

Mediating Role of Work Engagement

Developmental organizational resources are unlikely to influence performance outcomes directly; instead, their effects are transmitted through psychological mechanisms. Work engagement serves as a key motivational pathway linking organizational inputs to discretionary behaviors. According to the JD–R model, job resources first enhance employee engagement, which subsequently leads to improved performance outcomes (Bakker & Demerouti, 2017). Similarly, SET suggests that supportive and fair treatment fosters positive psychological states, which in turn encourage reciprocal behaviors such as OCB (Cropanzano & Mitchell, 2005).

Empirical studies further support the mediating role of work engagement. Research has demonstrated that engagement mediates the relationship between perceived organizational support and citizenship behavior (Samroodh et al., 2022; Tawil, Ahmad & Karim, 2023; Park & Kim, 2024). These findings highlight engagement as a central mechanism through which developmental resources influence discretionary performance. However, limited research has examined this mediating mechanism within an integrated developmental framework while also accounting for contextual variability across different organizational settings. Addressing this gap, the present study investigates the mediating role of work engagement in linking developmental organizational antecedents to OCB.

H3: Work engagement mediates the relationship between developmental organizational antecedents and organizational citizenship behavior.

Conceptual Framework

The conceptual framework integrates Social Exchange Theory (SET), the Job Demands–Resources (JD–R) model, and Human Resource Development (HRD) perspectives to explain how developmental organizational resources influence discretionary performance. Perceived organizational support (POS), perceived supervisor support (PSS), and distributive justice (DJ) are conceptualized as developmental antecedents that shape work engagement, which in turn drives organizational citizenship behavior (OCB). This structure is consistent with prior research demonstrating that organizational resources enhance engagement, which subsequently leads to positive behavioral outcomes (Bakker & Demerouti, 2017; Saks, 2022; Karatepe, 2013). Hotel category is incorporated as a contextual grouping variable to examine structural differences across organizational environments. This enables the operationalization of Contextual Performance Sensitivity (CPS), which reflects the extent to which developmental organizational practices differentially influence engagement and discretionary performance across varying organizational contexts. The proposed conceptual framework illustrating these relationships is presented in Figure 1.

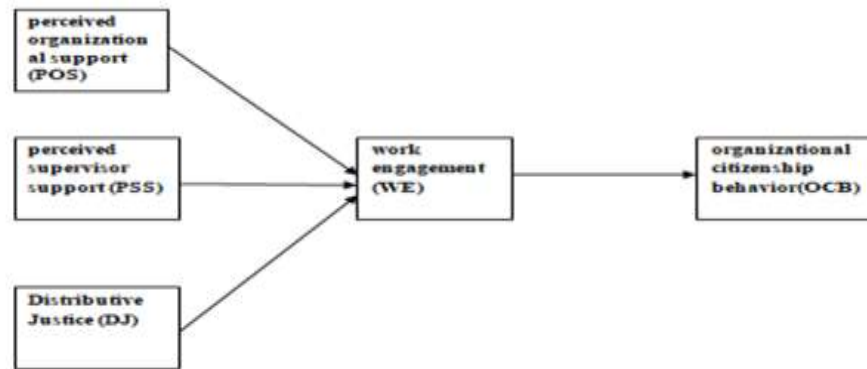


FIGURE-1.CONCEPTUAL FRAMEWORK OF THE STUDY

METHODOLOGY

Research Design

This study adopts a quantitative, cross-sectional survey design to examine the influence of developmental organizational resources on work engagement and organizational citizenship behavior (OCB) among frontline hotel employees. This design enables the systematic collection of standardized data within a single time frame and allows for the simultaneous examination of multiple relationships. The hypothesized mediation model was tested using covariance-based Structural Equation Modeling (SEM), which is particularly suitable for theory-driven research involving latent constructs and complex interrelationships (Hair et al., 2019). Compared to traditional regression techniques, SEM allows for the simultaneous estimation of measurement and structural models, thereby providing a more comprehensive assessment of direct and indirect effects. In addition, Multi-Group Analysis (MGA) was employed to examine whether structural relationships differ across employees working in three-star, four-star, and five-star hotels, capturing contextual variations consistent with the concept of Contextual Performance Sensitivity (CPS).

Participants and Sampling

The study targeted frontline operational and customer-facing employees, including those working in front office, food and beverage, and housekeeping departments. These roles involve high levels of customer interaction and emotional labor, making them particularly relevant for examining support perceptions and discretionary behaviors (Kottke & Sharafinski, 1988). A Convenience sampling approach was adopted to ensure that participants had adequate exposure to organizational practices and supervisory interactions. Only employees with a minimum tenure of six months were included to ensure meaningful evaluation of workplace conditions. A total of 320 questionnaires were distributed across hotels located in major metropolitan areas in India. Of these, 300 usable responses were obtained, yielding a response rate of approximately 90%. This sample size exceeds recommended thresholds for SEM analysis (Hair et al., 2019).

Research Instrument

Data were collected using a structured, self-administered questionnaire comprising validated multi-item scales. All constructs were measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The study included five latent constructs: perceived organizational support (POS), perceived supervisor support (PSS), distributive justice (DJ), work engagement (WE), and organizational citizenship behavior (OCB). The measurement scales and sources are presented in Table 1.

TABLE 1 MEASUREMENT INSTRUMENTS AND SCALE SOURCES		
Construct	Items	Source
Perceived Organizational Support	6	Eisenberger et al. (2017)
Perceived Supervisor Support	5	Rhoades & Eisenberger (2002)
Distributive Justice	5	Niehoff & Moorman (1993)
Work Engagement	9	Schaufeli et al. (2006)
Organizational Citizenship Behavior	9	Podsakoff et al. (1990)

To ensure content validity, the instrument was reviewed by subject experts, including hospitality academics and HR practitioners. Cognitive interviews were conducted with a subset of respondents, followed by pilot testing with 30 employees. Minor refinements were incorporated prior to final data collection.

Data Collection and Ethical Considerations

Data were collected through both physical and online survey administration with the cooperation of participating hotels. Organizational permission was obtained prior to data collection.

Participation was voluntary, and respondents were assured of anonymity and confidentiality. No personally identifiable information was collected, and responses were used solely for academic purposes. Informed consent was obtained from all participants. Ethical approval was granted by the institutional ethics committee, and all procedures adhered to established ethical research guidelines.

Data Analysis Plan

A multi-stage analytical approach was employed to validate the measurement and structural models. Initial data screening included the assessment of missing values, outliers, normality, and multicollinearity. Common method bias (CMB) was assessed using Harman's single-factor test, full collinearity variance inflation factors, and the common latent factor approach.

Exploratory Factor Analysis (EFA) was conducted to examine the underlying factor structure, followed by Confirmatory Factor Analysis (CFA) to validate the measurement model. Reliability was assessed using Cronbach's alpha and composite reliability, while convergent and discriminant validity were also established.

Structural Equation Modeling (SEM) was used to test direct and indirect relationships within the proposed mediation framework. Bootstrapping with 5,000 resamples was employed to assess mediation effects and generate confidence intervals. Multi-Group SEM (MGA) was conducted to compare structural relationships across hotel categories (Colquitt, 2001).

Given the ordinal nature of Likert-scale data, the Diagonally Weighted Least Squares (DWLS) estimator was employed for CFA and SEM, as it provides robust parameter estimates for non-normal and ordinal data (Li, 2016; Shi & Maydeu-Olivares, 2020).

FINDINGS / RESULTS

Data Screening and Preparation

Of the 320 questionnaires distributed, 300 usable responses were retained for analysis, yielding a response rate of approximately 90%. Prior to Structural Equation Modeling (SEM), the dataset was screened for missing values, outliers, normality, multicollinearity, and common method bias (CMB).

No missing data were observed. Univariate normality was assessed using skewness and kurtosis, with values ranging from -0.84 to 0.32 and -1.99 to 2.96, respectively, falling within acceptable thresholds for DWLS estimation ($|\text{skew}| < 2$; $|\text{kurtosis}| < 7$). Mahalanobis distance indicated the absence of multivariate outliers. Multicollinearity was not a concern, as variance inflation factor (VIF) values were below 3.0. Reliability analysis confirmed that Cronbach's alpha values exceeded the recommended threshold of 0.70 for all constructs, indicating satisfactory internal consistency. Common method bias (CMB) was assessed using multiple techniques. Harman's single-factor test revealed that the first factor accounted for 27.84% of the variance, below the critical threshold of 50%. Full collinearity VIF values ranged from 2.12 to 3.01, remaining below the threshold of 3.3. Furthermore, the inclusion of a common latent factor resulted in negligible changes in standardized loadings (≤ 0.03) and did not improve model fit. Collectively, these results confirm that the dataset satisfies the assumptions required for SEM analysis and that common method bias is unlikely to affect the findings. Descriptive statistics for demographic variables are presented in Table 2.

TABLE 2 DESCRIPTIVE STATISTICS AND NORMALITY INDICES FOR DEMOGRAPHIC VARIABLES										
Variable	Valid	Missing	Mean	Std. Dev.	Skewness	Skewness SE	Kurtosis	Kurtosis SE	Min	Max
Age	300	0	2.956	1.484	0.024	0.154	-1.404	0.307	1	5
Gender	300	0	1.54	0.499	-0.161	0.154	-1.99	0.307	1	2
Marital	300	0	1.572	0.564	0.323	0.154	-0.839	0.307	1	3

Status										
Education	300	0	2.708	1.108	-0.313	0.154	-1.24	0.307	1	4
Experience	300	0	2.336	1.086	0.267	0.154	-1.209	0.307	1	4
Job Position	300	0	2.392	1.126	0.068	0.154	-1.388	0.307	1	4
Hotel Category	300	0	2	0.841	0	0.154	-1.587	0.307	1	3
Org Size	300	0	1.868	0.783	0.236	0.154	-1.331	0.307	1	3
Monthly Income	300	0	2.51	1.09	-0.1	0.15	-1.3	0.31	1	4

Respondent Profile

The sample represents a diverse cross-section of frontline hotel employees across age, gender, education, tenure, job roles, and hotel categories, thereby enhancing the representativeness and contextual relevance of the findings within the hospitality sector. A one-way ANOVA was conducted to examine differences in organizational citizenship behavior (OCB) across hotel categories. As shown in Table 2, the results indicate a statistically significant difference, $F(2, 247) = 3.713$, $p = .026$. However, the effect size is small ($\eta^2 = .029$), suggesting limited practical significance. Post hoc descriptive comparisons indicate that employees in three-star hotels reported slightly higher levels of OCB ($M = 4.011$, $SD = 0.622$) compared to those in four-star ($M = 3.841$, $SD = 0.512$) and five-star hotels ($M = 3.768$, $SD = 0.663$). Despite statistical significance, the small effect size indicates that differences across hotel categories are modest. Accordingly, hotel category was not included as a control variable. Instead, it was treated as a grouping variable in subsequent multi-group SEM analysis to examine structural differences across organizational contexts.

TABLE 3 DESCRIPTIVE STATISTICS AND ANOVA FOR OCB BY HOTEL CATEGORY						
ANOVA Results						
Source	Sum of Squares	Df	Mean Square	F	p	η^2
Hotel Category	2.736	2	1.368	3.713	0.026	0.029
Residuals	91.006	247	0.368			
Group-wise Descriptive Statistics						
Hotel Category	N	Mean	SD	SE	Coefficient of Variation	
3-Star	105	4.011	0.622	0.066	0.155	

4-Star	88	3.841	0.512	0.059	0.133
5-Star	107	3.768	0.663	0.071	0.176

Measurement Model

Exploratory Factor Analysis (EFA) using promax rotation was conducted to assess the underlying factor structure. The Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy was 0.817, and Bartlett’s test of sphericity was significant ($\chi^2 = 2231.723$, $p < .001$), confirming the suitability of the data for factor analysis. Detailed results of sampling adequacy and factor structure are presented in Table 3.

The EFA results indicated a strong factor structure, with substantial loadings across all constructs. Importantly, the findings support the presence of distinct yet related constructs rather than a single-factor solution, thereby reinforcing construct validity.

Confirmatory Factor Analysis (CFA) was subsequently conducted using the Diagonally Weighted Least Squares (DWLS) estimator to validate the measurement model. All standardized factor loadings were statistically significant ($p < .001$), indicating adequate item reliability.

Internal consistency was high, with Cronbach’s alpha ($\alpha = 0.938$) and McDonald’s omega ($\omega = 0.956$) exceeding recommended thresholds. Reliability estimates and item-level diagnostics are reported in Table 4. Convergent validity was established, and discriminant validity confirmed that the constructs are empirically distinct.

Overall, the measurement model demonstrates strong reliability and validity, supporting its suitability for subsequent structural analysis.

TABLE 4 KMO AND MEASURE OF SAMPLING ADEQUACY (MSA)			
Test	Value	df	p-value
KMO (Overall MSA)	0.817	—	—
Bartlett’s Test of Sphericity	2231.723	10	< .001
MSA by Construct			
Construct	MSA		
Perceived Organizational Support (POS)	0.636		
Perceived Supervisor Support (PSS)	0.894		
Distributive Justice (DJ)	0.820		
Work Engagement (WE)	0.923		
Organizational Citizenship Behavior (OCB)	0.743		

TABLE 5 RELIABILITY FOR FINAL MEASUREMENT MODEL				
Coefficient	Estimate	Std. Error	Lower 95% CI	Upper 95% CI

McDonald's Omega (ω)	0.956	0.004	0.947	0.964
Cronbach's Alpha (α)	0.938	0.022	0.895	0.98
Item-wise Reliability (If Item Dropped)				
Construct	ω (Estimate)			
DJ	0.935			
OCB	0.924			
POS	0.980			
PSS	0.908			
WE	0.938			

Higher-Order Construct: Organizational Antecedents

Perceived Organizational Support (POS), Perceived Supervisor Support (PSS), and Distributive Justice (DJ) were modeled as first-order indicators of a second-order reflective construct, termed Organizational Antecedents. This specification reflects the assumption that employees interpret organizational support, supervisory support, and fairness as interrelated dimensions of a broader socio-emotional and developmental climate.

Theoretically, this conceptualization is grounded in Social Exchange Theory, which posits that employees form generalized perceptions of organizational treatment based on multiple sources of support and fairness. These perceptions collectively shape their attitudes and behaviors rather than operating in isolation. Empirically, moderate and statistically significant correlations among POS, PSS, and DJ—ranging from 0.451 to 0.482 ($p < .001$)—provide support for their integration into a higher-order construct, as presented in Table 6. These interrelationships indicate that the constructs share common variance while remaining conceptually distinct.

Overall, these findings provide both theoretical and empirical justification for modeling developmental organizational antecedents as a second-order construct, representing a unified developmental climate.

TABLE 6 CORRELATIONS AMONG FIRST-ORDER FACTORS					
Factor Pair	Correlation (r)	SE	z-value	p-value	95% CI (Lower–Upper)
POS ↔ PSS	0.482	0.041	11.71	< .001	0.401 – 0.563
POS ↔ DJ	0.451	0.039	11.56	< .001	0.374 – 0.528
PSS ↔ DJ	0.463	0.038	12.18	< .001	0.388 – 0.538

Model Fit

Model fit indices for the measurement and structural models are presented in Table 7. Incremental fit indices indicate excellent model fit (CFI = 0.986, TLI = 0.985, IFI = 0.986, NFI = 0.985), all exceeding recommended thresholds. Absolute fit indices also demonstrate good model

fit. The RMSEA value (0.020), with a 90% confidence interval ranging from 0.015 to 0.028 and a non-significant p-value ($> .05$), indicates a close fit of the model. Overall, all fit indices meet or exceed established criteria (Hu & Bentler, 1999; Hair et al., 2019), confirming that the proposed model provides an excellent representation of the data.

TABLE 7	
MEASUREMENT AND STRUCTURAL MODEL FIT INDICES	
Fit Index	Value
CFI	0.986
TLI	0.985
NFI	0.985
NNFI	0.985
IFI	0.986
RMSEA	0.02
RMSEA 90% CI	0.015–0.028
RMSEA p-value	$> .05$
χ^2/df	Significant ($p < .001$), DWLS-scaled

Structural Model and Hypothesis Testing

The structural model was estimated to examine the direct and mediated relationships among developmental organizational antecedents, work engagement (WE), and organizational citizenship behavior (OCB). The results are presented in Table 8.

The findings indicate that all developmental organizational antecedents exert significant positive effects on OCB. Specifically, perceived organizational support (POS; $\beta = 0.143$, $p < .001$), perceived supervisor support (PSS; $\beta = 0.278$, $p < .001$), and distributive justice (DJ; $\beta = 0.421$, $p < .001$) significantly predict OCB. In addition, work engagement has a significant positive effect on OCB ($\beta = 0.239$, $p < .001$), thereby supporting H2. Further analysis shows that all antecedents significantly influence work engagement. POS ($\beta = 0.187$, $p < .001$), PSS ($\beta = 0.536$, $p < .001$), and DJ ($\beta = 0.311$, $p < .001$) positively predict engagement, providing strong support for H1. Among these, PSS demonstrates the strongest effect on work engagement, highlighting the critical role of supervisory support in fostering employee motivation. Mediation analysis using bootstrapping confirms that work engagement significantly mediates the relationships between all antecedents and OCB. Indirect effects were observed for POS ($\beta = 0.045$, $p < .001$), PSS ($\beta = 0.128$, $p < .001$), and DJ ($\beta = 0.074$, $p < .001$), supporting H3. These results indicate that engagement serves as a key psychological mechanism linking developmental organizational resources to discretionary performance. Total effect estimates further reveal that distributive justice is the strongest predictor of OCB ($\beta = 0.495$, $p < .001$), followed by perceived supervisor support ($\beta = 0.406$, $p < .001$) and perceived organizational support ($\beta = 0.188$, $p < .001$).

Overall, the findings support a partial mediation model, wherein developmental organizational antecedents influence organizational citizenship behavior both directly and indirectly through work engagement. This underscores the central role of engagement as a core motivational pathway in the HRD–performance relationship.

TABLE 8
STRUCTURAL MODEL RESULTS (STANDARDIZED ESTIMATES)

DIRECT EFFECTS					
Path	β	SE	z-value	p-value	95% CI
WE $\rightarrow$ OCB	0.239	0.029	8.213	< .001	0.182 – 0.297
POS $\rightarrow$ OCB	0.143	0.015	9.748	< .001	0.114 – 0.172
PSS $\rightarrow$ OCB	0.278	0.034	8.138	< .001	0.211 – 0.345
DJ $\rightarrow$ OCB	0.421	0.031	13.384	< .001	0.359 – 0.482
POS $\rightarrow$ WE	0.187	0.025	7.531	< .001	0.139 – 0.236
PSS $\rightarrow$ WE	0.536	0.059	9.03	< .001	0.420 – 0.653
DJ $\rightarrow$ WE	0.311	0.059	5.256	< .001	0.195 – 0.427
Indirect Effects (via WE)					
Path	B	SE	z-value	p-value	95% CI
POS $\rightarrow$ WE $\rightarrow$ OCB	0.045	0.008	5.529	< .001	0.029 – 0.061
PSS $\rightarrow$ WE $\rightarrow$ OCB	0.128	0.021	6.063	< .001	0.087 – 0.170
DJ $\rightarrow$ WE $\rightarrow$ OCB	0.074	0.017	4.436	< .001	0.042 – 0.107
Total Effects					
Path	B	SE	z-value	p-value	95% CI
POS $\rightarrow$ OCB	0.188	0.016	11.948	< .001	0.157 – 0.219
PSS $\rightarrow$ OCB	0.406	0.034	12.075	< .001	0.340 – 0.472
DJ $\rightarrow$ OCB	0.495	0.033	14.909	< .001	0.430 – 0.560

Hypothesis Testing Summary

A summary of hypothesis testing is presented in Table 9. The results indicate that all proposed hypotheses (H1a–H3c) are supported. Developmental organizational antecedents—perceived organizational support (POS), perceived supervisor support (PSS), and distributive justice (DJ)—significantly enhance work engagement. Specifically, POS, PSS, and DJ exhibit significant positive effects on work engagement, supporting H1a, H1b, and H1c.

Work engagement, in turn, exerts a significant positive effect on organizational citizenship behavior (OCB), supporting H2. Mediation analysis further confirms that work engagement significantly transmits the effects of all antecedents to OCB. The indirect effects of POS, PSS, and DJ on OCB through work engagement are significant, supporting H3a, H3b, and H3c.

These findings demonstrate that developmental organizational resources influence discretionary employee behavior both directly and indirectly through engagement-driven mechanisms, reinforcing the central role of engagement as a key motivational pathway.

Table 9 Hypothesis Testing Summary			
Hypothesis	Statement	Result	Evidence
H1a	Perceived Organizational Support → Work Engagement	Supported	$\beta = 0.187$, $p < .001$
H1b	Perceived Supervisor Support → Work Engagement	Supported	$\beta = 0.536$, $p < .001$
H1c	Distributive Justice → Work Engagement	Supported	$\beta = 0.311$, $p < .001$
H2	Work Engagement → Organizational Citizenship Behavior	Supported	$\beta = 0.239$, $p < .001$
H3a	POS → WE → OCB	Supported	$\beta = 0.045$, $p < .001$
H3b	PSS → WE → OCB	Supported	$\beta = 0.128$, $p < .001$
H3c	DJ → WE → OCB	Supported	$\beta = 0.074$, $p < .001$

Multi-Group Analysis

Multi-group Structural Equation Modeling (SEM) was conducted to examine whether structural relationships differ across hotel categories. Measurement invariance testing supported configural and metric invariance, while scalar invariance was partially supported, indicating acceptable comparability across groups. A chi-square difference test revealed significant structural non-invariance ($\Delta\chi^2 = 33.884$, $\Delta df = 16$, $p = .006$), suggesting that relationships among constructs vary across hotel categories. As shown in Table 10, the effect of distributive justice (DJ) on work engagement (WE) increases across hotel tiers and is strongest in five-star hotels, indicating the growing importance of fairness in high-service environments. In contrast, perceived organizational support (POS) shows weaker and negative effects in higher-tier hotels, suggesting that organizational support may be perceived as a baseline expectation rather than a motivating resource in such contexts. Perceived supervisor support (PSS) demonstrates relatively stable effects across all hotel categories, highlighting its consistent role in fostering employee engagement. Additionally, the relationship between work engagement and organizational citizenship behavior (OCB) is strongest in five-star hotels, indicating that engagement translates more effectively into discretionary performance in high-service settings.

Overall, these findings support the concept of Contextual Performance Sensitivity (CPS), demonstrating that the effectiveness of developmental organizational resources varies across organizational contexts (Rich, Lepine & Crawford, 2010).

Table 10

Comparison of Key Structural Paths across Hotel Categories			
Structural Relationship	3-Star	4-Star	5-Star
POS → WE	0.099	−0.309	−0.329
PSS → WE	0.159	0.171	0.132
DJ → WE	0.324	0.548	0.621
WE → OCB	0.586	0.563	0.731

DISCUSSION OF FINDINGS

- The present study examined the role of developmental organizational resources in shaping work engagement and organizational citizenship behavior (OCB) among frontline hotel employees. The findings provide strong empirical support for the proposed model and offer important theoretical insights within the frameworks of Social Exchange Theory (SET), the Job Demands–Resources (JD–R) model, and Human Resource Development (HRD).
- The results demonstrate that work engagement is a significant predictor of OCB, indicating that employees with higher levels of vigor, dedication, and absorption are more likely to engage in discretionary behaviors. This finding is consistent with the JD–R model, which posits that job resources enhance motivational states that translate into positive performance outcomes. From an HRD perspective, this highlights engagement as a critical developmental mechanism through which organizations can enhance employee effectiveness.
- Further, developmental organizational antecedents—perceived organizational support (POS), perceived supervisor support (PSS), and distributive justice (DJ)—were found to significantly influence work engagement. Among these, PSS emerged as the strongest predictor, followed by DJ and POS. This supports Social Exchange Theory, which suggests that employees reciprocate supportive and fair treatment with higher levels of involvement in their work. The stronger influence of PSS and DJ indicates that employees respond more strongly to proximal and experience-based resources than to generalized organizational support.
- Distributive justice was identified as the strongest overall predictor of OCB, underscoring the critical role of fairness in shaping discretionary employee behavior. This finding extends both SET and JD–R perspectives by demonstrating that fairness-related resources not only enhance engagement but also directly influence behavioral outcomes.
- The mediating role of work engagement was also supported, confirming that engagement serves as a key psychological mechanism linking developmental organizational resources to OCB. This finding integrates SET and JD–R by showing that while employees reciprocate organizational treatment, this reciprocity operates through motivational states such as engagement.
- Importantly, the findings provide strong empirical support for the concept of Contextual Performance Sensitivity (CPS). The results reveal that the effectiveness of developmental organizational resources varies across hotel categories. Specifically, distributive justice exerts stronger effects in five-star hotels, while supervisory support is

more influential in three- and four-star hotels. This indicates that the relative importance of developmental resources is context-dependent.

- Furthermore, work engagement consistently predicts OCB across all hotel categories, demonstrating its stability as a core motivational mechanism. However, the strength of this relationship is greater in high-service environments, suggesting that engagement translates more effectively into discretionary performance when service expectations are higher.
- Overall, these findings extend HRD literature by demonstrating that developmental organizational practices do not operate uniformly across contexts. Instead, their effectiveness is shaped by organizational characteristics, reinforcing the importance of a context-sensitive approach to employee development and performance management.

Theoretical Implications

This study makes several important contributions to the Human Resource Development (HRD) literature:

- **Integration of developmental resources:**
The study conceptualizes perceived organizational support (POS), perceived supervisor support (PSS), and distributive justice (DJ) as a higher-order construct representing a unified developmental climate. This advances HRD literature by moving beyond isolated constructs toward a more integrated and systemic perspective.
- **Central role of work engagement:**
The findings establish work engagement as a key motivational mechanism through which developmental resources influence discretionary performance. This extends the integration of Social Exchange Theory and the Job Demands–Resources (JD–R) model by highlighting engagement as a core developmental pathway.
- **Differentiation of support mechanisms:**
The study distinguishes between proximal and distal forms of support, showing that supervisor support and distributive justice have stronger effects than generalized organizational support. This provides a more nuanced understanding of how different developmental resources operate within organizations.
- **Contextual contribution (CPS):**
The introduction of Contextual Performance Sensitivity (CPS) demonstrates that the effectiveness of developmental practices varies across hotel categories. This extends HRD theory by incorporating contextual variability into the HRD–performance relationship.

Practical Implications

The findings of this study offer several important implications for HR practitioners and hospitality managers.

- First, organizations should prioritize the development of supervisory capabilities, as perceived supervisor support emerged as a key driver of work engagement across all hotel categories. Training programs focused on coaching, communication, and supportive leadership can enhance employee motivation and performance.
- Second, enhancing fairness and transparency in organizational practices is essential. Distributive justice was found to be a strong predictor of both engagement and OCB,

particularly in higher-tier hotels. Managers should implement transparent reward systems, equitable workload distribution, and objective performance evaluation processes to strengthen employee trust and motivation.

- Third, organizations should actively promote work engagement as a central performance mechanism. HR practices such as job enrichment, recognition programs, and adequate resource provision can enhance employees' vigor, dedication, and absorption, thereby improving discretionary behaviors.
- Importantly, the findings highlight the need for context-specific HR strategies. A uniform approach may not be effective across different hotel categories:
- In three-star hotels, greater emphasis should be placed on supervisory support and interpersonal relationships, as employees rely more on direct interactions for motivation.
- In four-star hotels, a balanced approach combining supervisory support and fairness practices is recommended.
- In five-star hotels, fairness, transparency, and performance-based reward systems should be prioritized, as employees respond more strongly to distributive justice than to generalized organizational support.
- Finally, organizations should recognize that employee expectations vary across contexts. In higher-tier hotels, organizational support may be perceived as a baseline expectation rather than a motivating factor. Therefore, HR practices should focus on delivering value beyond baseline expectations through fairness, recognition, and meaningful supervisory engagement.

Limitations

Despite its contributions, this study has several limitations:

- **Cross-sectional design:**
The use of a cross-sectional design limits the ability to establish causal relationships among variables. Future studies should adopt longitudinal or time-lagged designs.
- **Self-reported data:**
The reliance on self-reported measures may introduce common method bias, although diagnostic tests indicated it was not a significant concern. Future research should incorporate multi-source data.
- **Context-specific sample:**
The sample is limited to frontline employees in Indian hotels, which may affect generalizability. Replication across different cultural and industry contexts is necessary.
- **Sample size constraints:**
Although adequate for SEM, the sample size limits the estimation of more complex or multi-level models.
- **Estimation method considerations:**
The use of the DWLS estimator may influence certain fit indices. Future research could explore alternative estimation techniques to enhance robustness.

Directions for Future Research

Future research can extend this study in several directions:

- Employ longitudinal or time-lagged designs to better establish causal relationships among developmental resources, engagement, and OCB.
- Use multi-source data (e.g., supervisor or peer evaluations) to improve measurement accuracy, particularly for discretionary behaviors.
- Expand research across different industries and cultural contexts to enhance generalizability and validate the higher-order developmental framework.
- Examine moderating variables such as leadership style, service climate, and cultural factors that may influence the strength of relationships.
- Explore additional outcomes, including employee retention, voice behavior, and service innovation.
- Conduct cross-cultural studies to assess whether Contextual Performance Sensitivity (CPS) operates consistently across different institutional environments.

CONCLUSION

This study demonstrates that developmental organizational resources influence discretionary service behavior primarily through their impact on work engagement. Among these resources, perceived supervisor support and distributive justice emerged as the most influential drivers of engagement, while perceived organizational support showed comparatively weaker effects. Work engagement consistently predicted organizational citizenship behavior across all hotel categories, highlighting its central role as a key motivational mechanism.

The findings further reveal that the strength of these relationships varies across organizational contexts, providing empirical support for the concept of Contextual Performance Sensitivity (CPS). This underscores the importance of adopting a context-sensitive approach to Human Resource Development (HRD), particularly in service-intensive environments such as hospitality. Overall, the study contributes to both theory and practice by offering a more integrated and context-aware understanding of how developmental organizational practices translate into enhanced employee performance. By emphasizing engagement as a core pathway and recognizing contextual variability, the study provides a foundation for future research and more effective HRD interventions.

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