



EMPLOYEE ENGAGEMENT AND ORGANISATIONAL PERFORMANCE: EXAMINING THE MEDIATING ROLE OF ORGANIZATIONAL CITIZENSHIP BEHAVIOUR IN THE NIGERIAN CONSTRUCTION INDUSTRY

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ABSTRACT

Employee engagement has been widely recognised as a strategic driver of organisational performance, yet the behavioural mechanisms through which this relationship operates remain insufficiently explored in labour-intensive industries within developing economies. Grounded in Kahn's (1990) Psychological Engagement Theory and Social Exchange Theory, this study examines how employee engagement, operationalized through vigor, dedication, and absorption, influences organisational performance, with Organisational Citizenship Behaviour (OCB) as a mediating variable, in the Nigerian construction industry. A quantitative cross-sectional survey design was adopted. Data were collected from 176 employees across two purposively selected construction firms in Abuja, Nigeria- T.E.A.M. (Nigeria) Ltd and Jumob Nigeria Limited, representing a response rate of 87.6%. The Utrecht Work Engagement Scale (UWES-9) and adapted instruments measuring OCB and organisational performance (cost efficiency, quality output, safety compliance, timely delivery, and client satisfaction) were used. Data were analysed using multiple regression and bootstrapped mediation analysis via Hayes' PROCESS macro (Model 4, 5,000 samples). Results reveal that all three engagement dimensions exert significant positive effects on organisational performance: absorption ($\beta = .409, p < .001$) emerged as the strongest predictor, followed by dedication ($\beta = .326, p < .001$) and vigor ($\beta = .184, p = .004$), together explaining 65.8% of the variance in performance ($R^2 = .658$). OCB significantly and partially mediated the engagement-performance relationship (indirect effect = .289, 95% Boot CI [.188, .400]), with the full model accounting for 71.4% of performance variance. The study contributes novel empirical evidence to the engagement-performance literature in a Sub-Saharan African construction context and offers actionable implications for HR practitioners and construction managers.

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1.0. Introduction

The construction industry occupies a central position in national development, converting investment into physical infrastructure such as roads, bridges, hospitals, housing, and industrial facilities. In Nigeria, the sector accounts for a significant share of GDP, generates employment across skill levels, and underpins the delivery of infrastructure upon which other economic activities depend (National Bureau of Statistics [NBS], 2023). Given this strategic importance, understanding the human factors that drive organisational performance in construction is both theoretically significant and practically urgent. Among human resource constructs, employee engagement has attracted considerable scholarly and managerial attention. Kahn (1990) conceptualised engagement as the degree to which employees invest their physical, cognitive, and emotional resources into their work roles. Schaufeli et al. (2002) subsequently operationalized engagement through three distinct dimensions: vigor, characterized by high energy and mental resilience; dedication, reflecting a sense of significance and enthusiasm; and absorption, denoting deep concentration and immersion in work. Empirical evidence across multiple industries links higher engagement levels to improved productivity, reduced turnover, enhanced safety compliance, and superior client outcomes (Harter et al., 2002; Rich et al., 2010).

However, employee engagement does not directly translate into performance outcomes in isolation. Organizational Citizenship Behaviour (OCB) is the discretionary, non-

mandated behavioural tendencies through which employees voluntarily support colleagues, uphold organizational norms, and contribute beyond formal job requirements has been identified as a critical intermediary mechanism (Organ, 1988; Podsakoff et al., 2000). Rooted in Social Exchange Theory (Blau, 1964), the engagement–OCB–performance pathway posits that employees who perceive organizational investment in their well-being reciprocate through discretionary prosocial behaviours, which in turn enhance organizational performance. This reciprocity logic is particularly relevant in construction environments where informal coordination, teamwork, and voluntary initiative are essential to project success. Nigeria's construction sector presents a compelling yet underexplored context for examining these dynamics. The sector is characterized by diverse, often dispersed project teams; demanding timelines; complex technical requirements; and persistent structural challenges including funding delays, subcontracting dependency, and limited HR investment (Akinradewo et al., 2020). Most engagement research has focused on service-oriented sectors and developed economies, leaving a significant empirical gap within labour-intensive industries in Sub-Saharan Africa.

1.2 Objective: This study therefore seeks to fill this gap by empirically investigating how employee engagement dimensions: vigor, dedication, and absorption, influence organisational performance in the Nigerian construction industry, and the extent to which OCB mediates these relationships. The study is grounded in two complementary theoretical pillars: Kahn's (1990)

Psychological Engagement Theory and Social Exchange Theory (Blau, 1964). Evidence is drawn from two purposively selected construction firms in Abuja, Nigeria: T.E.A.M. (Nigeria) Ltd and Jumob Nigeria Limited. The study formulates the following hypotheses:

H1: *Vigor has a significant positive effect on organizational performance.*

H2: *Dedication has a significant positive effect on organizational performance.*

H3: *Absorption has a significant positive effect on organizational performance.*

H4: *OCB significantly mediates the relationship between employee engagement and organizational performance.*

2.0 Literature Review

2.1 Conceptual Review

2.1.1 Employee Engagement. Employee engagement was first systematically conceptualized by Kahn (1990) as the simultaneous expression of a person's physical, cognitive, and emotional self in role performance, the degree to which employees bring themselves into their work roles. Since then, the construct has been refined by successive scholars. Robinson et al. (2004) defined engagement as a positive attitude toward the organisation and its values, while Saks (2006) characterized it as a multidimensional construct comprising cognitive, emotional, and behavioural components tied to individual role performance. Schaufeli et al. (2002) provided the most widely adopted operational definition, describing engagement as a positive, fulfilling, work-related state of mind characterized by vigor, dedication, and

absorption. Empirical evidence consistently demonstrates a positive association between engagement and organizational performance, with engaged employees exhibiting higher productivity, lower absenteeism, stronger commitment, and greater alignment with organizational goals (Harter et al., 2002; Rich et al., 2010). Vigor refers to high levels of energy and mental resilience, the willingness to invest sustained effort in one's work, and persistence in the face of difficulty (Schaufeli & Demerouti, 2007). Vigorous employees sustain motivation under pressure, a quality particularly salient in construction environments characterized by demanding schedules and physical complexity. Dedication reflects a sense of significance, enthusiasm, inspiration, and pride in one's work (Schaufeli & Demerouti, 2007). Dedicated employees are deeply emotionally invested, take ownership of project outcomes, and are more likely to uphold quality standards and maintain client focus. Absorption describes the state of being fully concentrated and engrossed in work, where time passes quickly and disengagement from the task is difficult (Schaufeli & Demerouti, 2007). Absorbed employees demonstrate superior attention to detail, reducing rework and safety incidents in technical construction environments.

2.1.2 Organisational Performance.

Organisational performance refers to the actual outputs or results achieved by an organisation relative to its intended goals and objectives (Richard et al., 2009). In the construction sector, performance is characteristically multidimensional, encompassing both financial and non-financial indicators. Consistent with the

conceptual model underpinning this study, organisational performance is operationalized through five indicators that reflect the key output dimensions of construction project success: Cost Efficiency reflects the capacity to deliver project outputs using optimal resource allocation, minimizing waste, rework, and over-expenditure (Venkatraman & Ramanujam, 1986; Richard et al., 2009). Improved employee engagement and OCB contribute to cost efficiency by reducing absenteeism, errors, and delays that inflate project budgets. Quality Output captures the degree to which project deliverables conform to specifications and meet or exceed client expectations (Armstrong, 2014). Dedicated and absorbed employees who invest full cognitive and emotional attention in their tasks are more likely to produce high-quality outcomes with minimal defects. Moreover, Safety Compliance denotes adherence to organisational and regulatory occupational health and safety standards, a critical performance indicator in the construction industry where safety incidents carry both human and financial consequences (Christian et al., 2009; Albrecht et al., 2015). Engaged employees who exhibit conscientiousness and civic virtue tend to follow safety protocols diligently and report hazards proactively. Meanwhile, timely delivery measures the organisation's capacity to complete projects within planned schedules, reflecting coordination efficiency and employee commitment to deadlines (Kaplan & Norton, 1996). Vigorous and dedicated employees who sustain effort and take initiative contribute directly to on-time project completion. Client Satisfaction

captures the degree of client approval and perceived service quality as the ultimate external validation of organizational performance in construction (Harter et al., 2002; Kim, 2018). Engaged employees who exhibit OCB, such as going beyond minimum service requirements and maintaining professional courtesy, enhance client experience and organizational reputation.

2.1.3 Organizational Citizenship Behaviour (OCB).

OCB was first conceptualized by Organ (1988) as individual behaviour that is discretionary, not directly recognized by the formal reward system, and that in the aggregate, promotes the effective functioning of the organization. Organ identified five core dimensions: altruism (helping co-workers with job-related tasks), conscientiousness (exceeding minimum role requirements), sportsmanship (tolerating organizational inconveniences positively), courtesy (preventing interpersonal conflict through proactive communication), and civic virtue (responsible participation in organizational governance). These dimensions collectively create a cooperative climate that enhances teamwork, reduces friction, and improves organizational outcomes. More recent scholarship has acknowledged evolving complexity in OCB. Fan and Wider (2023) note that the boundaries between formal job roles and discretionary behaviours have been blurred by technology, hybrid work, and performance-driven cultures. Atan (2024) cautions that excessive or coerced OCB can produce employee burnout, underscoring the need for organisational cultures that encourage voluntary citizenship without exploiting employee goodwill, a concern

particularly relevant in construction settings where informal initiative is often expected but rarely formally recognized.

2.2 Theoretical Framework: This study is anchored on two complementary theoretical pillars: Kahn's (1990) Psychological Engagement Theory, which explains the nature and antecedents of employee engagement; and Social Exchange Theory (Blau, 1964), which explains the behavioural mechanism through which engagement translates into OCB and, consequently, organizational performance.

Kahn's Psychological Engagement Theory (1990). Kahn (1990) posits that engagement emerges when employees invest their physical, cognitive, and emotional energies into their roles, driven by three psychological conditions: meaningfulness the degree to which employees perceive their work as valuable and worthwhile; safety freedom to express oneself without fear of negative consequences; and availability, the possession of adequate personal and organizational resources to engage fully. When these three conditions are met, employees experience vigor (sustained energy), dedication (deep emotional investment), and absorption (full cognitive immersion), the three dimensions operationalised as the independent variables in this study. Kahn's framework thus provides the theoretical foundation for understanding both what employee engagement is and why it varies across individuals and organizational contexts. In the Nigerian construction sector, where demanding tasks, unpredictable site conditions, safety risks, and heavy workloads are commonplace, the cultivation of psychological meaningfulness, safety, and

resource availability becomes critical to sustaining engagement. The theory predicts that construction employees who find meaning in their project contributions, feel supported by their supervisors, and have access to adequate tools and training will exhibit higher levels of vigor, dedication, and absorption which in turn drive better performance outcomes across cost, quality, safety, timeliness, and client satisfaction dimensions.

Social Exchange Theory (Blau, 1964).

Social Exchange Theory (SET) posits that social behaviour is the result of an exchange process in which individuals seek to maximize benefits and minimize costs in their interactions with others and with organizations. Applied to the organizational context, SET suggests that when organizations invest in employees through fair compensation, supportive leadership, meaningful work, training and recognition, employees feel obligated to reciprocate with positive behaviours that extend beyond their formal contractual obligations (Cropanzano & Mitchell, 2005). This reciprocity norm is the theoretical engine that explains why engaged employees are more likely to exhibit OCB. Employees who perceive that the organization is investing in their psychological conditions of engagement respond by going above and beyond their formal job descriptions helping colleagues, demonstrating initiative, safeguarding resources, and participating actively in organizational life. SET thus directly underpins the mediation pathway at the core of this study: employee engagement (perceived organisational investment in psychological conditions) through OCB

(reciprocal discretionary behaviour) and organizational performance (aggregate outcome of discretionary effort). In the Nigerian construction context, where contractual boundaries between formal duties and informal cooperation are often fluid, SET helps explain why employees in firms with strong engagement practices are more likely to exhibit the voluntary citizenship behaviours that distinguish high-performing construction organizations from their peers. Together, Kahn's theory and SET provide a coherent, mutually reinforcing theoretical architecture. Kahn explains the antecedents and structure of engagement, while SET explains the behavioural mechanism OCB through which engagement converts into organizational performance.

2.3 Empirical Review

Empirical evidence across sectors consistently supports the positive relationship between employee engagement, OCB, and organizational performance. Green (2018) conducted a survey-based study among healthcare professionals and found a significant positive association between higher levels of employee engagement and improved patient satisfaction, reduced turnover rates, and enhanced clinical outcomes. Engaged employees were more likely to exhibit behaviors consistent with OCB going beyond formal requirements to foster collaborative teamwork and deliver quality care. Yang (2019) employed a mixed-methods approach in manufacturing firms and found that organizations with comprehensive employee engagement programs experienced higher profitability, cost savings, and productivity gains. Engaged employees demonstrated greater

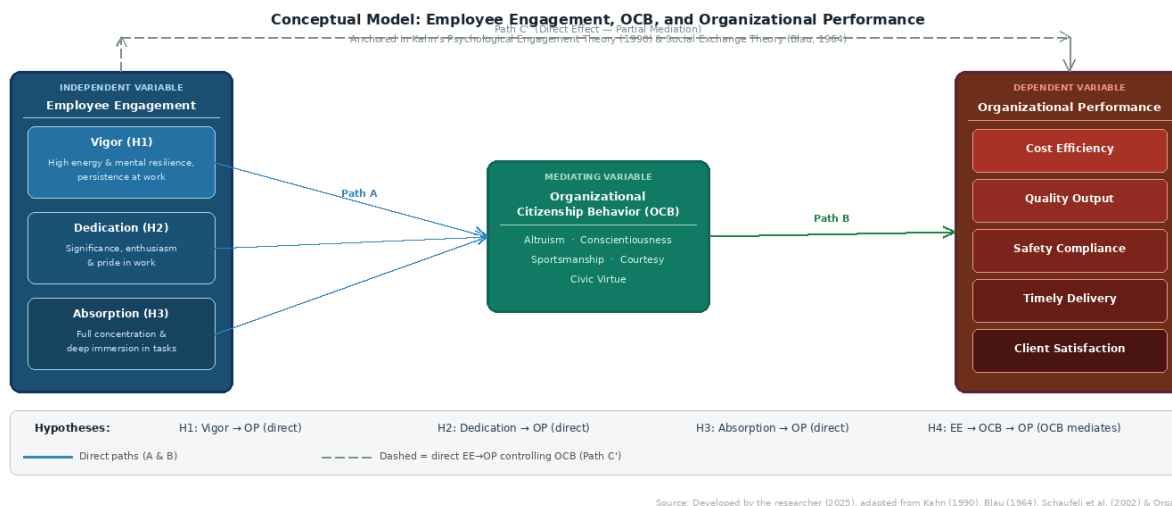
commitment, innovation, and alignment with organizational goals, all of which resonate with the discretionary behaviors OCB describes. Patel (2020) examined the banking sector and found that transformational leadership fostered higher engagement, which in turn improved customer retention and financial performance. Garcia (2021) demonstrated in a retail context that structured recognition programs, a key engagement driver significantly improved employee engagement, job satisfaction, and sales performance, consistent with Social Exchange Theory's reciprocity proposition.

Kim (2018) established a strong positive correlation in the hospitality sector between employee engagement, client satisfaction, and financial performance metrics, noting that engaged employees were more likely to deliver exceptional service and build client rapport behaviors consistent with the altruism and courtesy dimensions of OCB. Sharma (2019) found in IT firms that work-life balance policies fostered higher engagement and reduced absenteeism, improving project performance outcomes. Tan (2022) demonstrated in manufacturing organizations that employee voice mechanisms channels through which employees could contribute ideas enhanced engagement, job satisfaction, and operational performance metrics. Within the Nigerian and African construction context, Akinradewo et al. (2020) identified key drivers of employee engagement in construction and noted their link to performance outcomes, yet stopped short of examining OCB as a mediating mechanism. This gap the absence of empirical work integrating engagement dimensions, OCB mediation, and multidimensional

performance indicators within Nigerian construction firms, provides the direct motivation for the present study. Despite substantial empirical progress, significant gaps persist. First, the majority of engagement research has been conducted in developed economies and service-oriented sectors, with limited attention to labour-intensive industries in Sub-Saharan Africa. Second, while OCB has been widely studied in Western and Asian contexts, its mediating role in the engagement-performance relationship within Nigerian construction

firms remains empirically underexplored. Third, prior Nigerian construction research has prioritized technical and financial determinants of performance while neglecting behavioural and psychological dimensions.

2.4 Conceptual Model



Source: Developed by the researcher (2025), adapted from Kahn (1990), Blau (1964), Schaufeli et al. (2002) and Organ (1988)

Figure 1: Conceptual Model of the Study

3.0. Methodology

This study adopts a quantitative method, appropriate for examining relationships among latent constructs using structured instruments and for generalizing findings to a defined population (Creswell, 2014). A cross-sectional approach was employed, with data collected at a single point in time. The

target population comprised all employees of the two purposively selected construction firms in Abuja, Nigeria: T.E.A.M. (Nigeria) Ltd (302 employees) and Jumob Nigeria Limited (approximately 103 employees), giving a total population of 405 employees. The sample size was determined using Yamane's (1967) formula: $n = N / [1 + N(e^2)]$, where $N = 405$ and $e = 0.05$, yielding $n = 201$ respondents. A multistage sampling

procedure was employed with purposive firm selection, stratification by occupational category, and proportionate random selection within strata, ensuring representativeness and minimizing sampling bias. Data were collected via a structured, self-administered questionnaire divided into three sections. Section A captured demographic information. Section B measured employee engagement using the Utrecht Work Engagement Scale (UWES-9; Schaufeli et al., 2006) and OCB items adapted from Podsakoff et al. (2000). Section C measured organizational performance across five indicators (cost efficiency, quality output, safety compliance, timely delivery, and client satisfaction-adapted from Richard et al. (2009) and Kaplan and Norton (1996). All items were rated on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Cronbach's alpha coefficients for all constructs exceeded 0.70 (Nunnally, 1978), and content validity was confirmed through expert review.

The Questionnaire copies were administered physically and electronically to employees of both firms. Of the 201 questionnaires distributed, 176 were returned and deemed valid, yielding a response rate of 87.6%.

Participation was voluntary and respondent anonymity was assured. Data were analyzed using SPSS version 23. Descriptive statistics summarized demographic and Multiple regression analysis tested H1-H3. While the mediation analysis using Hayes' (2018) PROCESS macro (Model 4) with 5,000 bootstrap samples and 95% bias-corrected confidence intervals tested H4. All hypotheses were tested at $\alpha = .05$. Ethical approval was obtained prior to data collection. All participants provided informed consent, participation was voluntary, and no personally identifiable information was collected. Data were stored securely and used exclusively for academic research purposes.

4.0 Results and Discussion

4.1 Data Analysis

4.1.1 Response Rate

From the 201 questionnaires distributed, 176 were returned and valid, yielding an 87.6% response rate, exceeding the 70% threshold recommended for survey-based organisational research (Mugenda & Mugenda, 2003).

Table 1: Demographic Profile of Respondents (N = 176)

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	116	65.9
	Female	60	34.1
Age Bracket	Below 30 years	34	19.3

	30–39 years	84	47.7
	40–49 years	35	19.9
	50 years and above	23	13.1
Marital Status	Single	112	63.6
	Married	61	34.7
	Divorced	3	1.7
Length of Service	1–5 years	84	47.7
	6–10 years	38	21.6
	11–15 years	23	13.1
	16–20 years	19	10.8
	21 years and above	12	6.8
Department	Engineering	94	53.4
	Data Management	29	16.5
	Architecture	20	11.4
	Administration	12	6.8
	Procurement	6	3.4
	Others	10	5.7
	HRM/Finance	4	2.3

Educational Qualification	HND/BSc	144	81.8
	Master's Degree	19	10.8
	NCE/OND	10	5.7
	PhD	3	1.7
Total		176	100.0

Source: Field Survey, 2025

From Table 1: The sample was predominantly male (65.9%, $n = 116$), consistent with the gender composition typical of the Nigerian construction industry, while female respondents accounted for 34.1%. The majority fell within the 30–39 age bracket (47.7%), followed by those aged 40–49 years (19.9%) and below 30 years (19.3%), indicating a predominantly mid-career workforce. Most respondents were single (63.6%), with 34.7% married. Regarding tenure, nearly half (47.7%) had 1–5 years of service, reflecting the project-based, high-turnover nature of construction employment, while only 6.8% had exceeded 21 years. Engineering was the dominant department (53.4%), followed by Data Management (16.5%) and Architecture (11.4%), reflecting the technical orientation

of the sampled firms. The overwhelming majority held HND or BSc degrees (81.8%), with 10.8% holding a Master's degree and 1.7% a PhD, confirming a technically literate and professionally qualified sample.

4.1.2 Multiple Regression Analysis: Direct Effects of Employee Engagement on Organizational Performance

To test H1, H2, and H3, a multiple regression analysis was conducted with organizational performance (OP) as the dependent variable and vigor (EEV), dedication (EED), and absorption (EEA) as predictors. All VIF values were below 3.0 and tolerance values exceeded 0.40, confirming the absence of multicollinearity (Field, 2018). Tables 2 and 3 present the results.

Table 2: Model Summary

Model	R	R ²	Adj. R ²	Std. Error	F	df1	df2	Sig.
1	.811	.658	.652	.368	111.137	3	173	.000

Note. Predictors: Vigor (EEV), Dedication (EED), Absorption (EEA). Dependent variable: Organizational Performance (OP).

Source: Field Survey, 2025

Table 3: Regression Coefficients

Predictor	B	SE	β	t	p	95% CI LL	95% CI UL	Tolerance	VIF
Constant	.774	.173	—	4.480	.000	.433	1.115	—	—
Vigor (EEV)	.164	.057	.184	2.899	.004	.052	.276	.489	2.044
Dedication (EED)	.279	.054	.326	5.128	.000	.172	.387	.487	2.052
Absorption (EEA)	.349	.055	.409	6.364	.000	.241	.457	.479	2.087

Note. B = unstandardized coefficient; SE = standard error; β = standardized coefficient; CI = confidence interval. * $p < .05$, ** $p < .001$.

Source: Field Survey, 2025

Model Fit. The overall model was statistically significant ($F(3, 173) = 111.137$, $p < .001$), explaining 65.8% of the variance in organizational performance ($R^2 = .658$, Adj. $R^2 = .652$).

H1-Vigor. Vigor exerted a significant positive effect on organizational performance ($B = .164$, $\beta = .184$, $t = 2.899$, $p = .004$, 95% CI [.052, .276]). H1 is supported.

H2-Dedication. Dedication demonstrated a significant positive effect ($B = .279$, $\beta = .326$, $t = 5.128$, $p < .001$, 95% CI [.172, .387]). H2 is supported.

H3-Absorption. Absorption was the strongest predictor ($B = .349$, $\beta = .409$, $t = 6.364$, $p < .001$, 95% CI [.241, .457]). H3 is supported. In summary, absorption made the greatest relative contribution ($\beta = .409$), followed by dedication ($\beta = .326$) and vigor ($\beta = .184$), providing empirical support for H1, H2, and H3.

4.1.3 Mediation Analysis: The Intervening Role of OCB (H4)

To test H4, a simple mediation analysis was conducted using Hayes' (2018) PROCESS macro (Model 4) with 5,000 bootstrap samples and 95% bias-corrected confidence intervals. Table 4 presents the full results.

Table 4: Mediation Analysis-Intervening Role of OCB in the EE–OP Relationship

Path / Effect	B	SE	t	p	LLCI	ULCI	β
Path A: EE $\rightarrow$ OCB ($R^2 = .575$, $F(1,175) = 236.394$, $p < .001$)							
Employee Engagement (EE)	.802	.052	15.375	< .001	.699	.905	.758
Paths B & C': EE + OCB $\rightarrow$ OP ($R^2 = .714$, $F(2,174) = 216.703$, $p < .001$)							
EE Direct Effect (C')	.509	.062	8.273	< .001	.387	.630	.515
OCB — Path B	.360	.058	6.189	< .001	.245	.475	.385
Total Effect (C): EE $\rightarrow$ OP ($R^2 = .650$, $F(1,175) = 325.676$, $p < .001$)							
EE Total Effect (C)	.797	.044	18.047	< .001	.710	.885	.807
Indirect Effect (A$\times$B): EE $\rightarrow$ OCB $\rightarrow$ OP (Bootstrap, 5,000 samples)							
OCB as Mediator	.289	.053	—	—	.188	.400	.292

Note. B = unstandardized coefficient; SE = standard error; β = standardized coefficient; LLCI/ULCI = lower/upper limit of 95% bias-corrected bootstrap CI based on 5,000 samples. — = not applicable for bootstrapped indirect effects.

Source: Field Survey, 2025

Path A — EE $\rightarrow$ OCB. Employee engagement significantly predicted OCB (B = .802, β = .758, $t = 15.375$, $p < .001$, 95% CI [.699, .905]), explaining 57.5% of the variance in OCB ($R^2 = .575$).

Paths B and C'. With EE and OCB entered simultaneously, OCB significantly predicted OP (B = .360, β = .385, $p < .001$), and the

direct effect of EE on OP remained significant (B = .509, β = .515, $p < .001$). Together they explained 71.4% of performance variance ($R^2 = .714$).

Total Effect (C). The total effect of EE on OP was B = .797 (β = .807, $p < .001$), accounting for 65.0% of performance variance.

Indirect Effect. The bootstrapped indirect effect through OCB was $B = .289$ ($\beta = .292$, 95% Boot CI [.188, .400]). Since the confidence interval excludes zero, the indirect effect is statistically significant, confirming partial mediation. H4 is supported.

4.2. Discussion of Findings

This study investigated the effect of employee engagement on organizational performance in the Nigerian construction industry, with OCB as a mediating variable, anchored in Kahn's (1990) Psychological Engagement Theory and Social Exchange Theory (Blau, 1964). The findings provide strong empirical support for all four hypotheses and offer theoretically grounded insights for both the engagement literature and construction management practice. The significant positive effect of vigor on organizational performance ($\beta = .184$, $p = .004$) is directly consistent with Kahn's (1990) conceptualization of physical engagement, the willingness to sustain effort and persist through demanding work conditions. Kahn argued that when employees find meaning in their work and perceive adequate resources, they invest physical energy in their roles. In the construction context, where site conditions are physically and cognitively intensive, vigorous employees maintain productivity under pressure, contributing directly to cost efficiency and timely delivery. This finding also aligns with Rich et al. (2010), who established energy investment as a proximal antecedent of role performance, and Christian et al. (2009), who linked energized engagement states to safer workplace

behaviour. The effect of dedication on performance ($\beta = .326$, $p < .001$) reflects Kahn's (1990) condition of meaningfulness, the degree to which employees find their work valuable, significant, and purposeful. When employees perceive meaning in their construction roles, they develop the enthusiasm, pride, and sense of challenge that characterize dedication, which in turn motivates higher-quality work, ownership of project outcomes, and client focus. This result corroborates Yang (2019), who found that engagement dimensions emphasizing commitment and goal alignment improved operational performance in manufacturing a comparably task-intensive industry. Consistent with SET (Blau, 1964), dedicated employees who perceive organizational investment reciprocate through higher performance contributions. Moreover, Absorption emerged as the strongest direct predictor of organizational performance ($\beta = .409$, $p < .001$), a finding that directly supports Kahn's (1990) cognitive engagement dimension of full psychological presence in one's role. Kahn argued that cognitively engaged employees are fully attentive, present, and focused a state of immersion that prevents distraction and sustains concentration on complex tasks. In technical construction environments, where errors in design, measurement, or safety adherence carry severe operational and financial consequences, this cognitive presence translates into reduced rework, higher quality output, and stronger safety compliance. The primacy of absorption over vigor and dedication in this study suggests that cognitive immersion, not merely energy or motivation is the engagement dimension

most proximally linked to the multidimensional performance outcomes examined.

The most theoretically significant finding of this study is the significant partial mediation of OCB in the engagement and performance relationship (indirect effect = .289, β = .292, 95% Boot CI [.188, .400]). This finding validates both theoretical pillars simultaneously. From Kahn's (1990) perspective, employees whose psychological conditions of meaningfulness, safety, and availability are met not only engage more fully but also extend their contributions beyond formal role boundaries of the behavioural expression of which is OCB. From SET's perspective (Blau, 1964), employees who perceive organizational investment in their engagement reciprocate through discretionary prosocial behaviours altruism, conscientiousness, sportsmanship, courtesy, and civic virtue that collectively enhance coordination, reduce conflict, strengthen safety culture, and improve project delivery outcomes. The partial mediation pattern further reveals that engagement influences performance through two pathways: an indirect behavioural pathway via OCB, and a direct pathway through which the physical, emotional, and cognitive energy of engaged employees translates immediately into performance outputs. This dual-pathway finding advances the literature by demonstrating that engagement and OCB are complementary rather than substitutable mechanisms of performance enhancement in construction organizations.

The exceptional explanatory power of the full model (R^2 = .714), wherein engagement and OCB together account for over 71% of performance variance underscores a conclusion with broad implications: behavioral and psychological workforce dimensions are at least as consequential as the technical and financial factors traditionally emphasized in Nigerian construction research (Akinradewo et al., 2020). These findings extend the generalizability of Kahn's engagement theory and SET beyond their predominantly Western, service-sector empirical base, establishing their relevance to labour-intensive industries in Sub-Saharan Africa.

5.0. Conclusion, Recommendations and Future Research

5.1 Conclusion: This study examined the effect of employee engagement, operationalized through vigor, dedication, and absorption on organisational performance in the Nigerian construction industry, with OCB as a mediating variable. Grounded in Kahn's (1990) Psychological Engagement Theory and Social Exchange Theory (Blau, 1964), and drawing on data from 176 employees across two construction firms in Abuja, Nigeria, the findings demonstrate that all three engagement dimensions exert significant positive effects on organisational performance, with absorption as the strongest predictor. OCB partially but significantly mediates the engagement performance relationship, accounting for 71.4% of performance variance alongside engagement. These results confirm that behavioural and psychological workforce dimensions are

critical and previously underappreciated drivers of organizational performance in the Nigerian construction sector.

5.2. Recommendations: The study recommends that, for construction firm managers and HR practitioners, these findings highlight the strategic value of cultivating the three psychological conditions Kahn (1990) as identified, meaningfulness, safety, and availability. Firms should design work environments that foster role clarity, purposeful project assignments, and recognition (meaningfulness); supportive leadership and open communication (safety); and adequate training, fair compensation, and equipment provision (availability). Given that absorption is the strongest predictor of performance, particular attention should be paid to reducing task interruptions, designing focused work schedules, and structuring project teams to minimize coordination friction. The mediation finding, consistent with SET, further suggests that organisations should actively cultivate OCB through leadership modelling, peer recognition systems, and inclusive organisational cultures. Since OCB is discretionary and cannot be mandated, its development depends on the quality of the social exchange relationship between the organisation and its employees. Construction firms that invest in engagement and foster reciprocal citizenship cultures are likely to achieve superior performance across all five dimensions: cost efficiency, quality output, safety compliance, timely delivery, and client satisfaction.

This study is subject to several limitations. First, the cross-sectional design precludes causal inference; longitudinal data could

more robustly establish temporal precedence in the engagement-OCB-performance chain. Second, the study is limited to two construction firms in Abuja, constraining generalizability to the broader Nigerian construction sector. Future research should adopt longitudinal designs to establish causal directionality. Studies should extend the framework to other construction contexts across Nigeria and Sub-Saharan Africa. Examining potential moderators such as leadership style, organisational culture, and job insecurity could clarify boundary conditions. Future work might also test whether the relative predictive strength of vigor, dedication, and absorption varies across project phases, organizational levels, or firm sizes in the construction industry.

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