QUANTIFYING THE MODERATING ROLE OF CITIZENSHIP BEHAVIOR ON PSYCHOLOGICAL SAFETY AND TEAM PERFORMANCE OF ACADEMIC INSTITUTIONS IN NIGERIA

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ABSTRACT

This study provides a novel theoretical framework for explaining the link between psychological safety, citizenship behavior, and team performance. The goal of this study is to better understand the function of organizational citizenship behavior as a moderator of psychological safety and team performance among employees at Kaduna's higher education institutions. The study used a survey-based cross-sectional research approach with an infinite population size. Copies of the questionnaire were distributed to a sample size of 385 respondents, which was determined using Cochran's formula for unknown populations. An additional 10% was added to the sample size to account for non-response, increasing participation to 423. A total of 383 valid responses were retrieved and analyzed. This yields a response rate of approximately 90.5%, which is considered highly satisfactory for survey-based research. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings indicate that psychological safety has a significant effect on team performance, while organizational citizenship behavior has a positive effect on team performance. Also, citizenship behavior was found to significantly moderate the link between psychological safety and team performance. According to the study, firms should promote collaboration and teamwork toward common goals by creating a psychologically safe workplace and cultivating citizenship behavior. This study recommends that employees who demonstrate citizenship activities such as aiding or volunteering should be recognized and rewarded.

Keywords: *Psychological safety, Team performance, Citizenship behavior, Conservation of resource (COR) theory*
JEL Classification Code: *M12, M24*

1.0   Introduction

Academic staff are the most valued human resources at the university. With increased rivalry among higher education institutions, academic staff are expected to take on a greater range of activities beyond teaching, including as research, publication, consulting, supervision, tutoring, and community service (Wan et al, 2020). Teams outperform individuals (Glassop, 2002), contributing to institutions' long-term competitive advantage. Employee performance refers to an employee's qualitative and quantitative performance while carrying out his or her assigned obligations (Rasheed et al., 2023). Through horizontal connection, team knowledge leads to organizational success (Edmondson, 2012). There is growing awareness about how to increase team performance within enterprises (Kim et al, 2020). Although decades of research have concentrated on individual motivation, there is little research to increase our understanding of team motivation processes (Kim et al, 2020).

According to Edmondson and Lei (2014), the group level is the best level of analysis. Edmondson (1999) proposed psychological safety as a team phenomena after discovering considerable differences in psychological safety among teams within the same business. Team psychological safety is defined as a team environment in which members feel comfortable enough to take risks, suggest new ideas, and test new techniques without fear of negative repercussions (Jin & Peng, 2024). Psychological safety is especially critical in today's workplace, which is characterised by volatility, ambiguity, complexity, and uncertainty (Patil et al 2023). While the effect of psychological safety on performance has been investigated in intra-organizational settings, research on the psychological safety-performance relationship in inter-organizational contexts is limited (Lee 2021). Notably, in the psychological safety literature, group-level research is limited as compared to individual-level research (Kim et al, 2020). As opined by Kim et al. (2020), there is a need to validate the impact of psychological safety on group performance, hence increasing its explanatory power and application in the workplace. This study also tries to close this gap.

Academic staff possesses knowledge, creativity and autonomy; thus, their organizational citizenship behavior (OCB), which refers to discretionary, non-reward-based behavior that improves the organization, is beneficial to university development, student learning, and quality education delivery (Guo et al, 2019). OCB may include aiding absent colleagues, volunteering for specific duties as needed, actively representing the organization at public activities, and acting in ways that boost morale and settle interpersonal conflicts (Davison et al., 2020). As a result, OCB contributes significantly to an institution's effectiveness (Simakhajornboon et al, 2024).

Employees who have made big emotional investments in their company are proud to work there and express positive organizational citizenship behaviors (OCBs), but this is not true in the public sector (Mulea, Ngirande, & Terera, 2022). Educators have positive perceptions of organizational citizenship, with behaviors such as suggesting improvements for academic institutions, voluntarily assisting new lecturers, and devoting personal time to improving student and institutional performance (Bastian & Widodo, 2022). It is uncommon for government employees to go above and beyond what is expected of them (Grego-Planer, 2019). As a result, there is a large study vacuum in the domain of employee manifestations of citizenship behaviors based on the kind of company (private or public sector) (Grego-Planer, 2019).

Previous empirical studies reveal mixed or inconsistent findings regarding the psychological safety-team performance relationship, necessitating a clearer understanding of this association. Hence, the conflicting results emphasize the importance of investigating the complex effect of OCB on the psychological safety-team performance correlation. For example, Yang and Sid (2025); Jindal et al. (2024); Fyhn et al. (2023); Patil et al. (2023). In contrast, Lee (2022), Higgins et al. (2022), and Kim et al. (2020), among others, discovered no significant association between team psychological safety and performance. This study attempts to fill that information gap by investigating the moderating influence of OCB on the connection between psychological safety and team performance.

2.0   Literature Review

This section reviews related literature based on conceptual, empirical and theoretical.

2.1 Conceptual Review

2.1.1 Concept of Team performance

Parks-Leduc et al. (2024) defined team performance as the efficacy of two or more people who collaborate interdependently to achieve shared goals while adhering to within-group norms, roles and duties. Team psychological safety is defined as a team environment in which members feel comfortable enough to take risks, suggest new ideas, and test new techniques without fear of negative repercussions (Jin & Peng, 2024). According to Wang (2023), team performance, also known as team effectiveness or team efficacy, refers to the outcomes of team members' collaborative efforts as well as the reflection of team members working effectively together to achieve goals and preserve team climate. Team performance is the outcome of a dynamic interaction between members (Kim et al, 2020). Similarly, Xuehui (2018) said that team performance represents the outcomes of business operations over a specific time period and can be split into behaviors, results, and capacities, which are comprehensive indicators that can assess a company's ability to sustain and function profitably. Team performance is defined as how successfully the team achieves the original objectives (Lianya, 2016). Team performance is typically characterized as a team's ability to achieve a foreseeable objective or fully meet the expected quality of a task (Faraj & Sproull, 2000). According to Wu and Chen (2000), team performance represents the collaboration attitude, competence, and culture of each member institute and team member. This study defines team performance as the collective efforts and accomplishments of a group of persons working together toward a common objective, as assessed by productivity, effectiveness, and efficiency in achieving the desired outcome.

2.1.2 Concept of Team Psychological safety

Amy Edmondson, a professor of Leadership and Management at Harvard Business School, is credited with developing the concept of psychological safety in the workplace (Edmonson & Besieux, 2021). The concept gained prominence after she published her landmark study "Psychological Safety and Learning Behavior in Work Teams" in 1999, and it is still applicable today (Jindal et al, 2024). Schein and Bennis (1965) pioneered the idea of team psychological safety in organizational phenomena, which Kahn (1990) expanded to include a representative definition of individual psychological safety. Mutonyi et al. (2025) define psychological safety as the anticipation of how other members of the organization will react if one makes an error, suggests new ideas, or takes risks. Psychological safety is the belief that taking interpersonal risks within a team is acceptable (Patil et al, 2023). Psychological safety is the notion of whether the corporate climate is accommodating and forgiving of mistakes. Psychological safety refers to people's perceptions of the consequences of taking interpersonal risks at work (Edmondson & Bransby, 2023). According to Almahri and Abd Wahab (2023), psychological safety is a key cognitive state that determines how employees engage with their professions. It is the belief that people can express their opinions, concerns, anxieties, and blunders without fear of retaliation or disgrace. Based on the preceding conceptualizations, this study defines team psychological safety as a shared sense of trust, security and freedom to take chances, speak up and be vulnerable without fear of judgment, rejection, or punishment.

2.1.3 Concept of Citizenship Behaviour

Deming Organ coined the term OCB in 1980 to indicate contributions beyond one's employment function (Sumarsi et al., 2022). OCB includes behaviours like altruism, collaboration, and proactive involvement that are not formally rewarded but have a major impact on an organization's overall performance (Nadira, 2023). OCB is the act of engaged employees going beyond their formal jobs, voluntarily assisting others and providing advice, which eventually improves job performance (Bogler and Somech, 2023). OCB is viewed as

employees' voluntary extra effort for the organization (Al-Mahdy et al., 2021). OCB, or "extra role behaviour," refers to work behaviors that exceed expected performance criteria (Karyatun et al., 2022). OCB refers to voluntary and discretionary behaviors by employees that are not explicitly recognized by traditional reward systems but are critical to company success (Wang & Siu, 2021). It is a phrase used to define any good and constructive employee activities and behaviors that are not explicitly stated in their job description (Vanaja et al., 2021). Organizational citizenship behavior (OCB) is the voluntary behaviors that go beyond employees' official requirements and have a substantial impact on the organization's overall efficiency (Grego-Planer, 2019). Recently, the author reframed OCB as a voluntary activity of collaboration and contributions that participants see as a function of job satisfaction and fairness (Organ, 2018). Based on the definitions provided above, this study defines organizational citizenship behavior as voluntary efforts taken by individuals to support the well-being and success of their colleagues and organizations outside of their formal work responsibilities.

2.2 Empirical Review

2.2.1 Team Psychological Safety and Team Performance

TPS is a group variable that describes the team context. In the recent decade, the concept of psychological safety has gained traction as a key element in predicting team success (Kim et al, 2020). According to Yang and Sid (2025), psychological safety has a significant impact on employee performance. Jindal et al. (2024) argued that psychological safety is significantly related to organizational success. As asserted by Fyhn et al (2023), the greater the agreement among team members on the level of team psychological safety, the bigger the effect on team performance. Patil et al. (2023) discovered that team psychological safety improves team performance and benefits the organization's bottom line. Lavelle et al. (2021) discovered that psychological safety, low interpersonal conflict, and a low reliance on team members' unproven knowledge all predicted team success in hospitals. Jha (2019) proposed that team psychological safety has an impact on team performance. In contrast, Lee (2022) discovered that the direct influence of psychological safety on performance was non-significant. To put it another way, psychological safety is unrelated to performance, regardless of the benefits of job crafting or thriving at work. Similarly, Kim et al. (2020) discovered that psychological safety had no direct effect on team performance among sales and service teams in South Korea; the findings indicate that psychological safety is the engine of performance, not the fuel. Higgins et al. (2022) conducted a longitudinal study in New York City public schools over a three-year period, and the multilevel analyses unexpectedly revealed that psychological safety is not on its own, not necessarily "helpful" in terms of organizational performance over time. Hence, this study hypothesized that:

H0$_{1a}$: Team psychological safety has no significant impact on team performance of Academic staff in Public Universities in Nigeria.

2.2.2 Organizational Citizenship Behavior and Team Performance

In today's work situations, where adaptability and collaboration are critical, the importance of OCB has grown (Saad et al, 2024). The OCB idea has attracted scholarly attention in recent years due to its significant impact on achieving and maintaining an organization's competitive edge (Ali Alhashedi et al., 2021). The importance of OCB is shown by its favorable link with productivity, teamwork, and resource optimization, all of which are required to achieve superior organizational outcomes (Uma & Radhamani, 2022; Hossain, 2020; Zainuddin & Asaari, 2020). According to Aghighi et al. (2025), the non-economic incentives of organizational citizenship conduct have a positive impact on team performance. Research indicates that, OCB not only boosts employee morale but also instills a sense of purpose,

which is critical for maintaining high levels of engagement and productivity (Ahmadi et al., 2016; Yang & Sid 2025). Ultimately, OCB is required for service sector experts to provide the best service quality in a competitive market (Said et al., 2024). Wonda (2024) found that all dimensions of OCB (helping conduct, sportsmanship, civic virtue, organizational loyalty and individual initiative) have a favorable and significant impact on employee performance. The preceding submissions clearly demonstrate that citizenship conduct influences team performance. Thus, the study hypothesized that:

$H0_{1b}$: Organizational citizenship behavior has no significant impact on team performance of Academic staff in public universities in Nigeria.

2.2.3   Organizational citizenship Behavior as a Moderator

Hakim et al. (2017) found that organizational citizenship behavior moderated the link between personality, organizational commitment, work satisfaction, and lecturers' performance in Makassar. Ombandan (2024) claimed that citizenship behavior moderated the relationship between employee organizational identification and employee performance. While a plethora of studies has utilised organizational citizenship behavior as a mediator on several relationships (Miraj et al, 2025; Amir et al, 2025; Yang & Sid, 2025; Melike et al, 2024; Simakhajornboon et al, 2024; Syah & Safrida, 2024; Wardani & Dewi, 2022; Bozdogan, 2021; Alshihabat & Atan , 2020; Wijaya, 2020) among many others, there is a dearth of research considering organizational citizenship behavior as a moderating variable of organizational associations. Consequently, this study aims to extend the extant literature in this regard. Hence, this study hypothesised that:

$H0_2$: Organizational citizenship behavior does not moderate the relationship between psychological safety and team performance.

2.2.4   Conservation of Resources Theory

Conservation of Resources (COR) theory posited that, people are motivated to collect, preserve and protect valuable resources, such as material things, conditions, personal qualities or energy (Hobfoll et al., 2018). A crucial notion in COR theory is "resource investment," which occurs when individuals invest existing resources in order to get more or prevent losing present resources (Hobfoll 2001). In academic work situations, COR theory provides a solid theoretical platform for analyzing the relationships between factors such as psychological safety, organizational citizenship behavior, and team success.

Based on COR theory, in an environment characterized by enhanced PS, employees do not need to utilize resources for self-defense and can devote more resources to their work (Amoadu et al., 2024). Employees have sufficient psychological resources to engage in additional extra-role behaviors, therefore this effective use of resources may assist the demonstration of corporate citizenship behavior. At the same time, psychological safety may directly boost employee performance by allowing employees to concentrate more cognitive and affective resources to task completion (Edmondson & Lei, 2014).

From a statndpoint of COR theory, organizational citizenship behavior is a sort of resource investment (Organ, 1988). Employees that experience corporate citizenship behavior may develop social capital and other valuable resources, which will improve their performance (Fernandes et al., 2021). For example, assisting coworkers may improve teamwork and provide a more conducive work environment for individual achievement.

Finally, COR theory argues that PS as an initial resource may have an indirect effect on employee performance by encouraging organizational citizenship behavior, which is a

resource investment behavior (Frazier et al., 2017). This mediating relationship exemplifies the process of resource accumulation, in which initial resources such as PS inspire resource investment behaviors such as organizational citizenship, resulting in greater resources and improved performance.

3.0   Research Methodology

3.1   Research Design

This study employed a survey-based cross-sectional research design to explore the interrelationships among team psychological safety, organizational citizenship behavior, and team performance within public higher education institutions in Kaduna, Nigeria. The objective was to develop and test a theoretical framework that explains how organizational citizenship behavior moderates the relationship between psychological safety and team performance. The cross-sectional approach was appropriate, as it enabled the collection of data at a single point in time to capture the perceptions of academic staff across multiple institutions.

3.2   Study Area

The study was conducted in Kaduna State, located in Nigeria's North-West geopolitical zone. Kaduna is a major educational hub in Northern Nigeria, hosting numerous tertiary institutions. The selected institutions—Kaduna State University (KASU) and Kaduna Polytechnic (KadPoly)—are two of the largest and most prominent public higher education institutions in the state. These institutions provide a wide range of academic programs, and their faculty structure and administrative systems reflect typical public academic institutions in Nigeria, making them ideal for this study.

3.3   Population and Sample Size

The study population comprises academic staff members from the aforementioned institutions. Due to the unavailability of a definitive sampling frame (i.e., total number of academic staffs across the two institutions), the sample size was determined using Cochran's formula for an infinite population:

$$n_0 = \frac{Z^2.p.(1-p)}{e^2}$$

Where:

- n_0 = required sample size
- Z = z-value (1.95 for 95% confidence level)
- p = estimated proportion of the population (0.5, for maximum variability)
- e = margin of error (0.05)

Substituting into the formula:

$$n_0 = \frac{(1.96)^2.0.5.(1-0.5)}{(0.05)^2} = \frac{3.8416-0.25}{0.0025} = \frac{0.9604}{0.0025} = 384.16 \approx 385$$

To accommodate potential non-responses or incomplete submissions, an additional 10% was added:

$$385 + (0.10 \times 385) = 423 \text{ questionnaires}$$

Thus, a total of 423 questionnaires were distributed.

3.4   Sampling Technique

The study employed a multi-stage sampling technique to ensure accurate representation across diverse academic units. Initially, a stratified sampling approach was used to divide the academic population within the two selected institutions—Kaduna State University and Kaduna Polytechnic—into relevant strata based on faculties such as Sciences, Management, Engineering, and Social Sciences. This stratification allowed the researchers to capture variations across academic disciplines. Following this, purposive sampling was employed within each faculty to select departments and academic staff who were actively engaged in core university functions such as teaching, research, supervision, and administrative roles. This deliberate selection was essential to focus the study on individuals directly involved in collaborative and performance-driven academic activities. The multi-stage approach improved the generalizability of the findings by ensuring diversity and depth in the sample while minimizing sampling bias.

3.5   Data Collection Procedure

The researchers distributed the questionnaires physically and electronically to increase reach and response rates. Participants were informed about the study's purpose, assured of the confidentiality of their responses, and participation was voluntary. Ethical considerations such as anonymity, informed consent, and the right to withdraw were observed throughout the data collection process.

3.6   Validity and Reliability

To ensure the accuracy and appropriateness of the research instrument, content validity and face validity were established prior to data collection. Content validity was ensured through a thorough review of the questionnaire by academic experts in management sciences and organizational behavior, who assessed whether each item adequately captured the dimensions of team psychological safety, organizational citizenship behavior, and team performance. Feedback from these experts was used to refine the language, remove ambiguity, and align the items with established theoretical constructs. In addition, face validity was established by administering the draft questionnaire to a small group of academic staff from the target institutions to confirm clarity, relevance, and interpretability of the items. The feedback confirmed that the items were clear, understandable, and appeared to measure what they were intended to. To assess the internal consistency of the instrument, Cronbach's Alpha was calculated for each construct, with all values exceeding the minimum acceptable threshold of 0.70, indicating good reliability.

Table 1: Cronbach's Alpha for Internal Consistency Reliability

Construct	Cronbach's Alpha
Team Psychological Safety (TPS)	0.73
Organizational Citizenship Behavior (OCB)	0.82
Team Performance (TP)	0.76

Source: Researchers' Computation

4.0   Results and Discussions

4.1   Response Rate

Out of the 423 questionnaires distributed to academic staff across Kaduna State University and Kaduna Polytechnic, a total of 383 valid responses were retrieved and analyzed. This yields a response rate of approximately 90.5%, which is considered highly satisfactory for survey-based research. The high response rate can be attributed to the use of both physical and electronic distribution methods, follow-up reminders, and clear communication about the purpose and confidentiality of the study. This robust response rate enhances the reliability and generalizability of the findings.

4.2   Data Analysis Techniques

Preliminary data screening and preparation were conducted using the Statistical Package for the Social Sciences (SPSS). This included checks for missing values, outliers, normality, and data coding. After ensuring that data met the assumptions for multivariate analysis, the study employed Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS software for hypothesis testing.

PLS-SEM was selected as the analytical technique due to its robustness in handling complex models with latent variables, particularly in behavioral studies. It enabled simultaneous evaluation of the measurement model (to assess reliability and validity of constructs) and the structural model (to test direct and moderating relationships).

4.3   Analytical Procedure

Before conducting the primary analysis, this study ensured that assumptions regarding outlier checks, normality, and multicollinearity were met, following the guidelines outlined by Hair, Hult, Ringle, and Sarstedt (2017). Having successfully addressed these assumptions, we proceeded to adopt the partial least squares (PLS) path modeling method. To validate and assess the research model, Hair, Sarstedt, Ringle, and Gudergan (2017) recommended a two-stage evaluation process, comprising measurement models (referred to as external models in PLS-SEM) and structural models (referred to as internal models in PLS-SEM).

4.4   Measurement Model

To assess the measurement model in this study, the researchers scrutinized the reliability of individual items measuring each potential structure. This evaluation encompassed internal consistency reliability, specifically the composite reliability, as well as discriminant validity and convergence validity for each reflective construct, following the guidelines by Hair et al. (2017). While Hair et al. (2017) suggests that an outer loading of 0.70 is deemed reliable and acceptable, they contend that an indicator should only be removed if its elimination results in an increase in the construct's Average Variance Extracted (AVE) or composite reliability.

Table 2: Measurement Model

Variables	Indicators	Outer Loadings	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Organizational citizenship behavior	OCB1	0.76	0.82	0.87	0.53
	OCB2	0.78			
	OCB3	0.66			
	OCB4	0.78			
	OCB5	0.79			
	OCB6	0.55			
Team Performance	TP1	0.67	0.76	0.85	0.59
	TP3	0.86			
	TP4	0.86			
	TP5	0.64			
Team psychological safety	TPS1	0.77	0.73	0.83	0.55
	TPS2	0.68			
	TPS3	0.80			
	TPS5	0.72			

Source: PLS, 2025

The measurement model results confirm that the constructs of Organizational Citizenship Behavior (OCB), Team Psychological Safety (TPS), and Team Performance (TP) possess acceptable levels of reliability and convergent validity. Most item loadings exceeded the recommended threshold of 0.70, with a few marginal cases such as OCB3 (0.66), OCB6 (0.55), and TP5 (0.64), which are still tolerable given that the Average Variance Extracted (AVE) values are above 0.50. The Composite Reliability (CR) values for all constructs range from 0.83 to 0.87, indicating strong internal consistency. Likewise, Cronbach's Alpha values—0.82 for OCB, 0.76 for TP, and 0.73 for TPS—demonstrate satisfactory reliability. Specifically, OCB has an AVE of 0.53, TP has 0.59, and TPS has 0.55, all surpassing the minimum threshold of 0.50 required for convergent validity. These results collectively validate the adequacy of the measurement model, supporting the use of these constructs in the subsequent structural model analysis.

To ensure discriminant validity, Duarte and Amaro (2018) recommended utilizing the multitrait-multimethod (HTMT) matrix as a more suitable and sensitive approach.

Table 3: Heterotrait-Monotrait Ratio (HTMT)

Constructs	Organizational citizenship behavior	Team Performance	Team psychological safety
Organizational citizenship behavior			
Team Performance	0.64		
Team psychological safety	0.75	0.67	

Source: PLS 2025

As indicated in the presented Table 2, the HTMT statistics are provided, reflecting the correlations among the items of their respective reflective constructs. Given that the HTMT value falls below the 0.85 threshold suggested by Hair et al. (2017), the reflective latent variable in this study demonstrates discriminant validity.

4.5   Structural Model

Upon fulfilling all the criteria of the measurement model, the evaluation shifts to the structural model. The initial phase of the structural model assessment entails testing the theoretical relationships. In particular, the direct and moderating effects were scrutinized based on 383 cases, utilizing 5000 bootstrap samples, as outlined by Hair, Sarstedt, Hopkins, and Kuppelwieser (2014).

Table 4: Structural Model

R/Ship	Beta Values	Standard Deviation	T Statistics	P Values
Organizational citizenship behavior -> Team Performance	0.25	0.04	7.23	0.00
TPS*OCB -> Team Performance	0.13	0.02	7.62	0.00
Team psychological safety -> Team Performance	0.44	0.04	12.04	0.00

Source: PLS 2025

The structural model results presented in Table 3 reveal significant and positive relationships among team psychological safety (TPS), organizational citizenship behavior (OCB), and team performance within academic institutions. Firstly, team psychological safety shows the strongest direct effect on team performance with a beta value of 0.44, a standard deviation of 0.04, and a t-statistic of 12.04 (p = 0.00). This indicates that when team members perceive the environment as psychologically safe—where they can express ideas, take risks, and collaborate without fear of blame or punishment—they are more likely to perform effectively. This outcome underscores the importance of fostering an open, inclusive, and respectful team culture in higher education institutions to enhance performance outcomes.

Furthermore, the findings reveal that organizational citizenship behavior has a significant positive impact on team performance (β = 0.25, t = 7.23, p = 0.00). This suggests that when academic staff engage in extra-role behaviors such as helping colleagues, volunteering for tasks, or supporting institutional goals without being formally rewarded, their collective efforts enhance team functionality and productivity. These voluntary behaviors, though not explicitly recognized in job descriptions, contribute significantly to a collaborative and high-performing team environment.

In addition to these direct effects, the interaction term between team psychological safety and organizational citizenship behavior (TPS*OCB) also shows a significant positive influence on team performance (β = 0.13, t = 7.62, p = 0.00). This moderating effect implies that the impact of psychological safety on team performance is even stronger when team members also demonstrate high levels of citizenship behavior. Essentially, organizational citizenship behavior enhances the beneficial influence of psychological safety, leading to superior team performance. This synergistic relationship supports the Conservation of Resources (COR) theory, which posits that combining internal (psychological safety) and behavioral (citizenship behavior) resources results in greater performance gains. Collectively, these results highlight the importance of nurturing both a psychologically safe team environment and a culture of citizenship behavior to optimize team outcomes in academic settings.

4.6   Discussion of Findings

The findings of this study provide meaningful insights into how team psychological safety (TPS) and organizational citizenship behavior (OCB) influence team performance, particularly within the context of academic institutions in Nigeria. The significant direct effect of team psychological safety on team performance (β = 0.44, p = 0.00) aligns with earlier research (Edmondson & Lei, 2014; Patil et al., 2023), confirming that when team members feel psychologically secure, they are more likely to share ideas, collaborate effectively, and take necessary interpersonal risks that drive performance. This finding supports the notion that psychological safety is foundational to fostering an innovative and open team climate where members feel respected and valued.

Similarly, the positive and significant effect of organizational citizenship behavior on team performance (β = 0.25, p = 0.00) is consistent with existing literature (Aghighi et al., 2025; Bogler & Somech, 2023). It affirms that voluntary, non-compulsory behaviors such as helping others, being cooperative, and engaging in organizational support contribute to improved team cohesion and effectiveness. Within academic institutions, where interdependence is high and team success often hinges on informal collaboration, such behaviors play a critical role in boosting productivity and maintaining morale.

Crucially, the study reveals that OCB significantly moderates the relationship between TPS and team performance (β = 0.13, p = 0.00), indicating a synergistic interaction. In essence, psychological safety alone is a strong predictor of team performance, but its effect is magnified when coupled with high levels of citizenship behavior. This interaction echoes findings from Hakim et al. (2017) and supports the Conservation of Resources (COR) theory (Hobfoll et al., 2018), which posits that individuals and groups perform better when they can draw upon and invest a combination of psychological and social resources. In this case, TPS represents a cognitive-affective resource, while OCB functions as a behavioral resource.

Moreover, this result addresses inconsistencies in the literature concerning the TPS–performance link, as noted by Lee (2022) and Higgins et al. (2022), who found no direct relationship in some contexts. The current study clarifies that such discrepancies may arise when moderating variables like OCB are not considered. It suggests that the effectiveness of psychological safety in predicting performance is not automatic but context-dependent— enhanced when a culture of citizenship behavior exists.

5.0   Conclusion and Recommendations

This study examined the interconnected roles of team psychological safety (TPS) and organizational citizenship behavior (OCB) in shaping team performance within Nigerian academic institutions. The findings provide strong empirical evidence that both TPS and OCB individually and significantly enhance team performance, emphasizing their vital roles in fostering effective collaboration and productivity among academic staff. More importantly, the study confirms that OCB acts as a significant moderator in the relationship between TPS and team performance—demonstrating that the benefits of psychological safety are magnified when team members voluntarily engage in supportive and cooperative behaviours.

These results offer critical contributions to both theory and practice. Theoretically, they support the Conservation of Resources (COR) theory, suggesting that psychological and behavioural resources not only operate independently but also interact synergistically to strengthen team outcomes. Practically, the findings underscore the importance of cultivating environments where staff feel safe to express themselves and are encouraged to go beyond their formal duties for the collective good.

Based on the findings of this study, the following recommendations are proposed to enhance team performance through the development of psychological safety and the encouragement of organizational citizenship behavior within academic institutions:

1. University management should prioritize the creation of inclusive and non-threatening team environments where academic staff feel safe to share ideas, admit mistakes, and provide constructive feedback. This can be achieved through leadership training focused on empathy, open communication, and non-punitive responses to failure or dissent.
2. Institutions should formally recognize and reward voluntary behaviors such as mentoring, collaboration, and proactive engagement in institutional development. Recognition programs, peer nominations, and performance appraisals that include OCB metrics can help institutionalize such behaviors.
3. Training programs and workshops should incorporate elements of psychological safety and citizenship behavior, helping staff understand their importance and how to embody them in daily interactions. Role-playing, feedback simulations, and reflective practices can be effective tools.
4. Leaders at all levels, especially heads of departments and research teams, should adopt participative and inclusive leadership styles that empower staff and promote shared decision-making. This helps to build trust, a key foundation of psychological safety and citizenship behavior.
5. Institutions should implement anonymous feedback systems that allow staff to report interpersonal or structural challenges that threaten psychological safety. Clear protocols for addressing these issues can improve transparency and institutional trust.
6. Academic institutions should design team assignments and cross-departmental initiatives that rely on interdependence. These experiences encourage staff to practice citizenship behaviors while operating in psychologically safe settings.

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