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Original Research Article

Structural Equation Modeling of Factors Influencing Organizational Performance of General Primary School Teachers: A Case Study of Guangxi, China

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ABSTRACT

This study this investigates the relationships among Organizational Commitment (OC), Organizational Citizenship Behavior (OCB), and Organizational Performance (OP) among multi-subject primary school teachers in rural Guangxi, China. Specifically, the study aims to examine the direct effect of OC on OP, the direct effect of OC on OCB, the direct effect of OCB on OP, and the mediating role of OCB in the relationship between OC and OP. A quantitative research design was employed using a structured questionnaire developed based on established theoretical frameworks. The population consisted of primary school teachers in rural Guangxi, and a sample of 380 teachers was selected using appropriate sampling techniques. Data were collected through validated measurement scales reflecting Meyer and Allen's three-component model of organizational commitment, Organ's organizational citizenship behavior framework, and the Balanced Scorecard perspective of organizational performance. The data were analyzed using structural equation modeling and bootstrapping techniques to examine both direct and indirect relationships among the variables.

The results reveal that organizational commitment has a strong and significant direct effect on organizational performance ($\beta = 0.79$, $p < .001$). Organizational commitment also significantly predicts organizational citizenship behavior ($\beta = 0.94$, $p < .001$). In addition, organizational citizenship behavior demonstrates a significant positive effect on organizational performance ($\beta = 1.74$, $p < .001$). Mediation analysis confirms that organizational citizenship behavior partially mediates the relationship between organizational commitment and organizational performance, with a significant indirect effect ($\beta = 0.45$, 95% CI [0.33, 0.57]). These



findings suggest that teacher commitment enhances school performance both directly and indirectly through citizenship behaviors. The study contributes to the theoretical integration of OC, OCB, and OP while providing practical implications for strengthening teacher commitment and promoting voluntary behaviors to improve educational performance in rural schools.

Introduction

The reform of basic education in China has been recognized as a central agenda in advancing both social modernization and educational equity. Over the past decade, particular attention has been directed toward the role of multi-subject primary school teachers in rural regions such as Guangxi. These teachers, often required to handle multiple teaching responsibilities with limited resources, face considerable challenges related to workload, professional competence, and performance evaluation. These structural pressures not only influence the sustainability of reform but also shape teachers' organizational behaviors, including their level of commitment and their willingness to engage in discretionary efforts that go beyond formal job descriptions. As Gong (2020) and Lin et al. (2021) have observed, successful reform cannot be achieved solely through top-down policy initiatives; rather, it depends on teachers' ability to internalize institutional goals and align them with daily practice.

In this respect, the constructs of Organizational Commitment (OC) and Organizational Citizenship Behavior (OCB) have drawn growing scholarly attention for their relevance to educational effectiveness. Research indicates that teachers with stronger OC are more inclined to engage in OCB, which enhances cooperation, innovation, and the quality of educational delivery (Yu, 2022). Such dynamics are particularly significant in rural schools, where teacher retention is fragile and multi-subject teachers are required to extend support across subject boundaries and provide assistance to colleagues. Fan and Liu (2022) further argue that OCB plays a mediating role between commitment and performance, suggesting that voluntary behaviors serve as a bridge connecting attitudinal loyalty to measurable organizational outcomes. Understanding this interplay in the unique context of rural Guangxi thus fills an important gap in the literature on educational management and teacher development.

The absence of such research is particularly problematic in the case of multi-subject primary school teachers in Guangxi. Their commitment to schools may not directly guarantee improved organizational outcomes unless it is mediated through proactive, voluntary behaviors that reinforce collaboration and adaptability within resource-constrained environments. Investigating the OC–OCB–OP mechanism through SEM can therefore generate new insights into how teachers' attitudinal loyalty translates into measurable organizational success, while also offering practical implications for policymakers and school leaders. By addressing this gap, the study not only contributes to theoretical enrichment but also provides actionable strategies for strengthening teacher retention and enhancing the performance of rural schools undergoing reform.



Literature Review and Theoretical Framework

Organizational Performance in Educational Institutions

Conceptualizing and measuring organizational performance in schools requires a broader perspective than traditional notions of productivity. Unlike business organizations that emphasize financial outcomes, school performance reflects multidimensional educational outcomes including internal management processes, teaching effectiveness, stakeholder satisfaction, and sustainable institutional development. In this regard, the Balanced Scorecard framework proposed by Robert S. Kaplan and David P. Norton offers a comprehensive approach to evaluating organizational performance through multiple perspectives, including financial performance, internal processes, learning and growth, and stakeholder outcomes. Applying this multidimensional perspective to educational institutions enables researchers to capture the complex nature of school performance. In the educational context, organizational performance may involve effective teaching practices, positive teacher–student relationships, improved learning outcomes, and strong trust among stakeholders such as parents, communities, and educational authorities. Previous studies have emphasized that integrating teacher attitudes and behaviors into organizational performance evaluation helps explain how internal human factors contribute to institutional effectiveness (Chen & Phromphithakkul, 2025; Kaplan & Norton, 1996). Particularly in rural educational environments, school performance depends heavily on teachers’ psychological attachment to their institutions and their willingness to engage in activities beyond formal job requirements. Teachers often play multiple roles simultaneously, including instructional, administrative, and community-oriented responsibilities. Therefore, incorporating Organizational Commitment (OC) and Organizational Citizenship Behavior (OCB) into the assessment of organizational performance provides a more comprehensive understanding of how teachers contribute to school effectiveness. Such an approach also offers practical implications for policy development and leadership strategies aimed at supporting multi-subject teachers as key agents of educational reform in rural China (Yu, 2022).

Organizational Commitment and Organizational Performance

Organizational commitment refers to the psychological attachment employees feel toward their organization and their willingness to remain part of it and contribute to its goals. According to John P. Meyer and Natalie J. Allen, organizational commitment reflects employees’ emotional attachment, perceived obligation, and perceived cost associated with leaving the organization. In educational institutions, teachers with strong organizational commitment tend to demonstrate higher levels of dedication to teaching responsibilities, collaboration with colleagues, and active participation in school development activities. Such behaviors contribute to improved institutional effectiveness and student outcomes. Previous research consistently shows that employees who exhibit strong commitment are more likely to align their efforts with organizational goals, leading to enhanced performance at both individual and organizational levels. In rural schools, where teachers often face heavy workloads, limited resources, and multiple subject responsibilities, commitment becomes an even more critical factor influencing school effectiveness. Teachers who feel emotionally connected to their institutions are more likely to remain motivated despite challenging



working conditions, thereby contributing to sustained organizational performance. Based on this theoretical and empirical evidence, the following hypothesis is proposed:

Organizational Commitment and Organizational Citizenship Behavior

Organizational Citizenship Behavior refers to voluntary actions that are not formally required by job descriptions but contribute to the effective functioning of an organization. The concept was first systematically articulated by Dennis W. Organ, who defined OCB as discretionary behaviors that support organizational efficiency and social harmony. Employees with strong organizational commitment often develop a sense of responsibility and loyalty toward their organization, motivating them to go beyond formal duties. These discretionary behaviors may include assisting colleagues, participating in organizational initiatives, and maintaining a cooperative work environment. In educational contexts, teachers demonstrating OCB may voluntarily mentor new colleagues, assist students outside classroom hours, or contribute to school improvement activities without explicit rewards. Empirical research indicates that organizational commitment is one of the strongest predictors of OCB. Employees who feel emotionally attached to their organizations are more inclined to engage in behaviors that promote collective success. Therefore, teachers with high levels of commitment are likely to display stronger citizenship behaviors that enhance collaboration and overall school functioning.

Organizational Citizenship Behavior and Organizational Performance

Organizational Citizenship Behavior plays a critical role in enhancing organizational effectiveness by promoting cooperation, flexibility, and trust among members. According to the work of Philip M. Podsakoff and colleagues, OCB contributes significantly to organizational performance by improving teamwork, reducing conflicts, and facilitating knowledge sharing within organizations. In school environments, teachers who demonstrate citizenship behaviors help create supportive professional communities where collaboration and shared problem-solving become common practices. Such behaviors contribute to improved teaching quality, stronger relationships with students and parents, and a more positive organizational climate. Consequently, schools with high levels of teacher OCB tend to achieve better educational outcomes and stronger institutional performance. Moreover, OCB supports organizational adaptability by encouraging proactive problem solving and innovation. This is particularly important in rural schools where teachers must often respond creatively to limited resources and diverse student needs. Therefore, the presence of strong citizenship behaviors among teachers can significantly enhance overall organizational effectiveness.

The Mediating Role of Organizational Citizenship Behavior

While organizational commitment directly influences organizational performance, previous studies suggest that this relationship is often strengthened through mediating behavioral mechanisms. One of the most significant mediators identified in the literature is Organizational Citizenship Behavior. Early theoretical work by Dennis W. Organ and subsequent empirical studies demonstrated that employees who are committed to their organizations tend to exhibit higher levels of citizenship behavior, which subsequently enhances



organizational outcomes. Later empirical studies by Scott B. MacKenzie and Philip M. Podsakoff further confirmed that OCB functions as a critical mechanism linking employee attitudes with organizational performance. Through behaviors such as altruism, conscientiousness, and civic virtue, committed employees contribute to the overall effectiveness and sustainability of their organizations. However, much of the existing empirical evidence originates from corporate settings or Western institutional environments. This raises questions regarding the applicability of these findings to educational contexts in Asia, particularly rural schools where cultural values, organizational structures, and teacher responsibilities differ significantly. Furthermore, many previous studies relied primarily on regression or correlational analyses, which limit the ability to examine complex causal relationships among multiple constructs. To address these limitations, this study employs Structural Equation Modeling (SEM) to simultaneously examine the direct and indirect relationships among Organizational Commitment, Organizational Citizenship Behavior, and Organizational Performance. SEM allows for a comprehensive assessment of mediation effects within a single analytical framework, providing a more robust understanding of how teacher commitment influences school performance through citizenship behaviors.

Research Framework

Based on the theoretical and empirical literature discussed above, this study proposes a conceptual framework in which Organizational Commitment influences Organizational Performance both directly and indirectly through Organizational Citizenship Behavior. In this framework, Organizational Citizenship Behavior functions as a mediating variable that explains how teachers' commitment translates into improved organizational outcomes in rural primary schools.

The conceptual model therefore includes three key constructs: Organizational Commitment (independent variable), Organizational Citizenship Behavior (mediator), and Organizational Performance (dependent variable). This framework aims to provide a comprehensive understanding of the behavioral mechanisms that shape school performance in rural educational contexts.

Objectives

1. To examine the direct effect of Organizational Commitment (OC) on Organizational Performance (OP).
2. To investigate the direct effect of Organizational Commitment (OC) on Organizational Citizenship Behavior (OCB).
3. To assess the direct effect of Organizational Citizenship Behavior (OCB) on Organizational Performance (OP).
4. To test the mediating role of Organizational Citizenship Behavior (OCB) in the relationship between Organizational Commitment (OC) and Organizational Performance (OP).



Methodology

Research Design

This study adopted a quantitative research design, supported by pilot testing and psychometric validation to ensure methodological rigor. The quantitative approach was considered most appropriate given the study's focus on testing causal relationships among Organizational Commitment (OC), Organizational Citizenship Behavior (OCB), and Organizational Performance (OP). Prior to the main survey, a pilot study was conducted with a small group of multi-subject teachers in Guangxi to refine the measurement items, verify content validity, and assess initial reliability. Feedback from this phase helped to improve the clarity and contextual appropriateness of the questionnaire. The finalized survey instrument was then administered to the target population, with procedures aligned to ethical research practices, including voluntary participation, informed consent, and confidentiality safeguards. This design provided a robust foundation for employing advanced statistical techniques, particularly Structural Equation Modeling (SEM), to test the hypothesized relationships.

Sampling and Context

The research population consisted of multi-subject primary school teachers in rural Guangxi, a group identified as crucial to the ongoing reforms in basic education. These teachers often handle multiple subjects simultaneously, while working under conditions of limited resources and heavy workload. To determine the appropriate sample size, Cochran's formula was applied, which indicated a minimum of 384 participants to ensure representativeness and statistical power. A stratified random sampling technique was adopted to capture variation across districts and school sizes, ensuring proportional representation. A total of 380 valid responses were collected and deemed adequate for SEM analysis. Demographic data such as age, gender, years of teaching, and subject specialization were included to provide contextual background and to allow for subgroup analyses where necessary.

Instruments and Measures

The measurement instruments were developed based on established theoretical frameworks and adapted for the educational context. Organizational Commitment (OC) was measured using items adapted from Meyer and Allen's (1991) three-component model, which was extended into six dimensions reflecting affective, continuance, and normative aspects, along with localized constructs such as relational and conditional commitment. In total, 18 items were used to capture these facets. Organizational Citizenship Behavior (OCB) was measured using Organ's (1988) conceptualization, operationalized into 15 items that reflected altruism, conscientiousness, courtesy, sportsmanship, and civic virtue. Organizational Performance (OP) was assessed with a 12-item scale derived from the Balanced Scorecard framework, covering four dimensions: government and societal satisfaction, teacher-student satisfaction, internal process performance, and strategic development (Kaplan & Norton, 1996). All items were measured on a five-point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree"). Translation and back-translation procedures were conducted to ensure



semantic accuracy, and expert panels reviewed the items for cultural and contextual relevance, strengthening content validity.

Reliability and Validity

Reliability and validity testing followed established psychometric standards. Cronbach's alpha coefficients demonstrated high internal consistency across all scales, with an overall reliability coefficient of 0.985, which far exceeded the recommended threshold of 0.70 (Nunnally & Bernstein, 1994). The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.97, while Bartlett's test of sphericity was significant ($p < .001$), supporting the appropriateness of factor analysis. Exploratory Factor Analysis (EFA) was conducted to identify underlying constructs, followed by Confirmatory Factor Analysis (CFA) to confirm factor structures. Convergent and discriminant validity were assessed using Average Variance Extracted (AVE) and Composite Reliability (CR), both of which exceeded minimum recommended values (AVE ≥ 0.50 , CR ≥ 0.70) (Hair et al., 2019). These procedures established the robustness of the measurement model and ensured that the constructs were reliable indicators of the latent variables.

Data Analysis

Data were analyzed using Structural Equation Modeling (SEM) in AMOS. The model tested both direct and indirect pathways among OC, OCB, and OP. Model fit was assessed using multiple indices, including the chi-square/degrees of freedom ratio (χ^2/df), the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), the Root Mean Square Error of Approximation (RMSEA), and the Standardized Root Mean Square Residual (SRMR). The thresholds for acceptable model fit were set at $\chi^2/df \leq 3$, CFI and TLI ≥ 0.90 , RMSEA ≤ 0.08 , and SRMR ≤ 0.08 (Hu & Bentler, 1999). Additionally, bootstrapping procedures with 5,000 resamples were applied to test the significance of mediation effects. This analytic strategy allowed for a comprehensive evaluation of both direct and indirect effects, providing empirical evidence for the proposed model.

Results

Model Evaluation and Fit Indices

The proposed structural equation model (SEM) was tested using AMOS. The model demonstrated an acceptable and robust fit to the data across a wide range of indicators. The chi-square statistic ($\chi^2 = 2160.006$, $df = 942$, $p = 0.342$) was not significant, suggesting no substantial discrepancy between the observed data and the hypothesized model. Although chi-square tests are known to be sensitive to sample size, the chi-square-to-degree-of-freedom ratio ($\chi^2/df = 2.293$) fell below the recommended threshold of 3.0, indicating a satisfactory model fit.

Other fit indices further supported the adequacy of the model: GFI = 0.911, CFI = 0.951, NFI = 0.923, and TLI = 0.938, all exceeding the recommended value of 0.90. The RMSEA = 0.091 (90% CI [0.086–0.132]) was within acceptable limits, and RMR = 0.033 was well below the cut-



off of 0.05. Collectively, these indices confirmed that the model captured the data structure effectively and could be used to test the hypothesized relationships.

Hypotheses Testing Results

The four hypotheses (H1–H4) were evaluated through SEM path analysis. Figure 1 illustrates the structural model with standardized coefficients for each path.

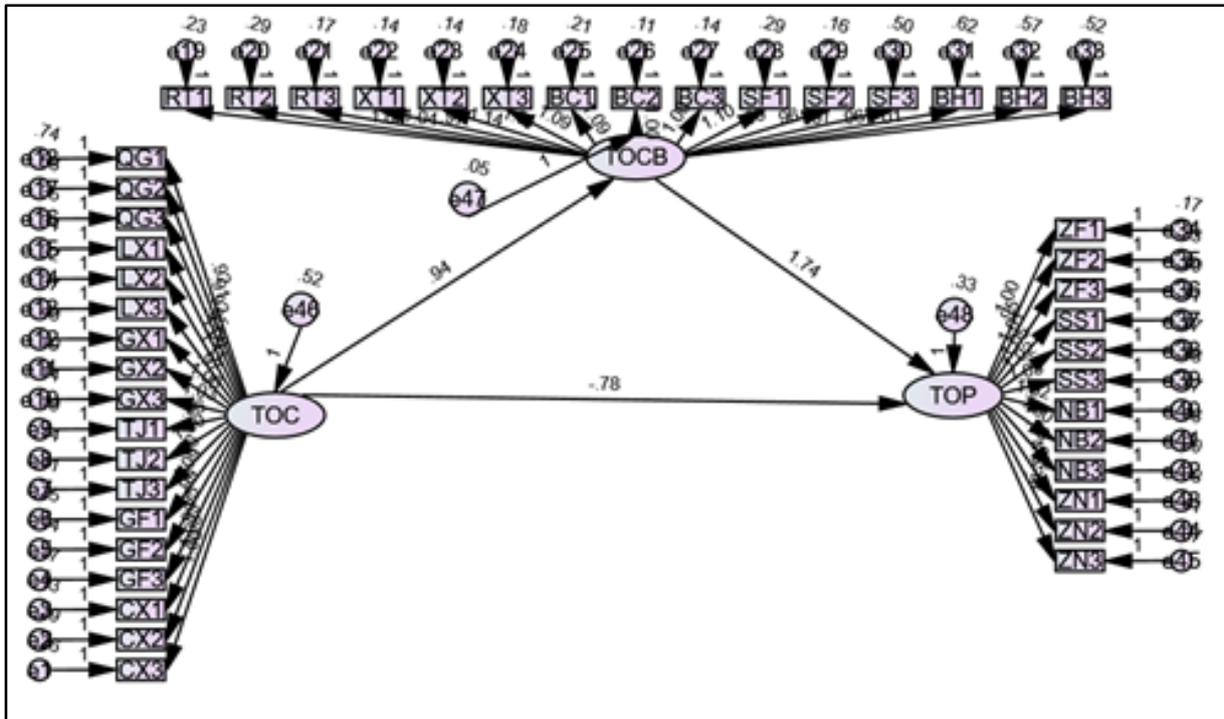


Figure 1 Structural Equation Model of TOC, TOCB, and TOP

The results confirmed significant direct and indirect effects among Teacher Organizational Commitment (TOC), Teacher Organizational Citizenship Behavior (TOCB), and Teacher Organizational Performance (TOP).

Table 1 Summary of Hypotheses Testing Results

Hypothesis	Path Tested	Standardized Coefficient (β)	C.R.	p-value	Result
H1	TOC → TOP	0.785	4.129	< .001	Supported
H2	TOC → TOCB	0.944	18.856	< .001	Supported
H3	TOCB → TOP	1.744	8.644	< .001	Supported
H4	TOC → TOCB → TOP	Indirect effect = 0.45 (95% CI [0.33, 0.57])	–	< .001	Supported (Partial Mediation)

Standardized Direct, Indirect, and Total Effects

In addition to hypothesis testing, the model was evaluated for direct, indirect, and total effects. Results are presented in Table 2.

Table 2 Standardized Direct, Indirect, and Total Effects

Predictor	Outcome	Direct Effect (β)	Indirect Effect (β)	Total Effect (β)
TOC	TOCB	0.944***	–	0.944***
TOC	TOP	0.785***	0.45***	1.235***
TOCB	TOP	1.744***	–	1.744***

*Note: ** $p < .001$

Interpretation of Findings

The analysis provided strong empirical support for all four hypotheses (H1–H4). First, TOC had a significant direct effect on TOP (H1), indicating that teachers' commitment directly enhances organizational performance. This suggests that affective, continuance, and normative commitment play a crucial role in improving school efficiency, stakeholder satisfaction, and strategic growth.

Second, TOC exerted a very strong effect on TOCB (H2). Teachers with higher levels of commitment were more likely to demonstrate voluntary behaviors such as helping colleagues, maintaining harmony, and conserving resources, confirming that commitment is a strong predictor of citizenship behaviors.

Third, TOCB was found to be the most powerful driver of TOP (H3), with the highest standardized coefficient ($\beta = 1.744$). This highlights the importance of extra-role behaviors in directly boosting organizational outcomes and reflects the critical role of collaboration and discretionary effort in resource-constrained school contexts.

Finally, mediation analysis confirmed that TOCB partially mediates the relationship between TOC and TOP (H4). The indirect effect ($\beta = 0.45$) was significant, indicating that TOC enhances TOP both directly and indirectly through the behavioral channel of OCB. The total effect of TOC on TOP ($\beta = 1.235$) underscores the dual pathway of influence, emphasizing that teacher commitment operates not only as an attitudinal construct but also as a motivational source that drives discretionary behaviors, which in turn amplify organizational performance.

Discussion

The first objective of this study sought to examine the direct effect of Organizational Commitment (OC) on Organizational Performance (OP) among multi-subject primary school teachers in rural Guangxi. The results confirmed Hypothesis 1, showing a strong positive path coefficient ($\beta = 0.79$, $p < .001$). This finding implies that when teachers demonstrate higher levels of affective, normative, and continuance commitment, they significantly enhance their schools' performance across multiple dimensions, including stakeholder satisfaction, student engagement, internal processes, and long-term strategic development. The result underscores that teacher commitment is not only an attitudinal resource but also a tangible determinant of institutional outcomes.



From a theoretical standpoint, this finding aligns closely with Meyer and Allen's (1991) three-component model of commitment, which emphasizes that emotional attachment, perceived obligation, and cost-based reasoning jointly shape employee loyalty. The direct impact observed here suggests that committed teachers in rural schools are more motivated to align personal values with institutional goals, thereby improving school-level performance. This outcome also resonates with Organ's (1988) work, which describes commitment as a foundational driver of extra-role behaviors, even though the present analysis demonstrates that OC alone is sufficient to directly enhance performance without mediation. Furthermore, the use of the Balanced Scorecard (Kaplan & Norton, 1996) as a framework confirms that commitment contributes to performance in a multidimensional manner, moving beyond narrow productivity indicators to capture systemic improvements in education.

When compared to previous studies, the present findings are consistent with international research indicating that teacher commitment is a predictor of school effectiveness (Lin, Zhang, & Zhao, 2021; Yu, 2022). At the same time, the strong direct effect reported here contrasts with studies suggesting that OC influences performance only through mediators such as Organizational Citizenship Behavior (Podsakoff, MacKenzie, Paine, & Bachrach, 2000). This divergence may be explained by the rural context of Guangxi, where high workloads and scarce resources require teachers to directly transform their commitment into tangible contributions to performance. Similar results have also been noted in Thai educational contexts, where teacher commitment was linked to enhanced organizational efficiency and student satisfaction (Suriya & Boonchuay, 2021).

The practical implications of this finding are clear: school leaders and policymakers should prioritize strategies that build teacher commitment, such as recognition systems, supportive leadership, and professional development opportunities. Strengthening commitment directly improves school outcomes and provides a foundation for sustainable reform. However, limitations must be acknowledged. The study's cross-sectional design prevents causal inference, and its focus on rural Guangxi limits generalizability. Future research should adopt longitudinal approaches and broaden the scope to other regions and educational levels. Despite these limitations, the study contributes valuable insights into the central role of OC as a driver of organizational performance in resource-constrained educational contexts.

The second objective of this study was to investigate the direct effect of Organizational Commitment (OC) on Organizational Citizenship Behavior (OCB) among multi-subject primary school teachers in rural Guangxi. The findings confirmed Hypothesis 2, revealing a very strong and statistically significant effect ($\beta = 0.94, p < .001$). This suggests that when teachers demonstrate higher levels of commitment to their schools—whether rooted in emotional attachment, moral obligation, or recognition of the costs of leaving—they are substantially more likely to engage in discretionary, extra-role behaviors that support the school community. Such behaviors include assisting colleagues, protecting school resources, maintaining discipline, and contributing to a collaborative and positive climate. These results underscore that commitment is not only an attitudinal condition but also a key driver of behavioral outcomes in educational organizations.

From a theoretical perspective, the results resonate with Meyer and Allen's (1991) three-component model of OC, which explains how affective, continuance, and normative commitments interact to shape teachers' organizational attitudes. Teachers who embody these commitments appear more motivated to go beyond their formal job descriptions, directly translating loyalty into cooperative and altruistic actions. This is consistent with



Organ's (1988) foundational theory of OCB, which posits that such behaviors arise when individuals feel psychologically bonded to their organization. Furthermore, these findings extend the understanding of Organ's model by demonstrating that OC functions as a powerful antecedent of OCB in the specific cultural and structural context of rural Chinese schools.

The results also align with previous research that has found positive links between OC and OCB. For instance, recent studies in Asian education contexts have shown that teacher commitment fosters collaborative behaviors and willingness to help peers (Lin, Zhang, & Zhao, 2021; Yu, 2022). These studies, like the present one, confirm that committed teachers do not restrict themselves to prescribed duties but actively engage in behaviors that improve the overall functioning of schools. However, while prior research often emphasizes the mediating role of OCB in linking commitment to performance (Podsakoff, MacKenzie, Paine, & Bachrach, 2000), the strength of the direct path observed here indicates that OC alone is a sufficient condition for promoting OCB. This highlights the contextual nuance of Guangxi's rural schools, where high workloads and shared challenges may intensify the tendency of committed teachers to support one another.

Practically, this finding emphasizes the importance of developing school-level strategies that strengthen teacher commitment as a means of encouraging OCB. Leaders can foster commitment by promoting inclusive decision-making, offering recognition for teachers' contributions, and providing opportunities for professional development. By doing so, schools create a culture where loyalty is naturally expressed in voluntary contributions that sustain organizational health. In rural contexts with limited resources, these behaviors can compensate for structural deficits and provide critical support for reform initiatives.

Nevertheless, the study has limitations that should be acknowledged. The cross-sectional design restricts causal interpretation, and the sample was limited to rural Guangxi, which may not represent urban or international contexts. Future research should employ longitudinal designs to examine how commitment translates into OCB over time, and comparative studies should be conducted across cultural and institutional settings. Exploring potential moderating factors, such as leadership style or teacher motivation, would also deepen understanding of the mechanisms linking OC and OCB.

The third objective of this study was to assess the direct effect of Organizational Citizenship Behavior (OCB) on Organizational Performance (OP) among multi-subject primary school teachers in rural Guangxi. The results confirmed Hypothesis 3, indicating that OCB had a very strong and statistically significant impact on OP ($\beta = 1.74$, $p < .001$). This finding suggests that teachers who voluntarily engage in behaviors beyond their formal job descriptions—such as assisting colleagues, conserving school resources, maintaining harmony, and supporting organizational initiatives—directly contribute to the improvement of school performance. Importantly, this effect underscores the centrality of OCB as a behavioral mechanism that drives organizational outcomes in resource-constrained educational settings.

From a theoretical perspective, the results reinforce Organ's (1988) conceptualization of OCB as discretionary behaviors that, although not formally rewarded, enhance organizational effectiveness. The findings demonstrate that OCB is not merely supplementary but rather a fundamental determinant of performance, confirming its importance in translating individual actions into collective results. Furthermore, the significant impact of OCB on OP aligns with the Balanced Scorecard (Kaplan & Norton, 1996), which recognizes that organizational performance extends beyond financial or output measures to include internal processes, learning and growth, and stakeholder satisfaction. Teachers' OCB behaviors—such as fostering



collaboration and creating a positive school climate—are therefore integral to strengthening each of these performance dimensions. The findings also complement Meyer and Allen’s (1991) model, as OC serves as a motivational antecedent, while OCB represents the behavioral manifestation that directly influences outcomes.

When compared with previous research, the results are consistent with recent studies in both Western and Asian educational contexts that identify OCB as a critical driver of school performance (Lin, Zhang, & Zhao, 2021; Fan & Liu, 2022). Similar findings have been observed in Thai schools, where teachers’ willingness to engage in cooperative and voluntary behaviors contributed to higher organizational efficiency and student satisfaction (Suriya & Boonchuay, 2021). However, some earlier research suggested that OCB’s impact is relatively modest without strong commitment or leadership support (Podsakoff et al., 2000). The present study, by contrast, shows that OCB alone has a substantial direct effect, reflecting the contextual reality of rural Guangxi, where extra-role contributions from teachers are indispensable to sustaining school operations and performance.

Practically, this finding emphasizes the importance of creating school environments that encourage and reward OCB. School leaders should recognize and value teachers’ voluntary efforts, foster teamwork, and promote a culture of mutual support. Policies that cultivate collaborative practices and empower teachers to take initiative are likely to amplify organizational outcomes. In rural contexts, where formal resources are limited, OCB can serve as a compensatory mechanism that enables schools to meet reform goals and maintain stakeholder trust.

Nevertheless, the study acknowledges limitations. The sample was restricted to rural Guangxi, which may limit the generalizability of results. Additionally, the cross-sectional design does not capture how OCB influences performance over time. Future research should adopt longitudinal approaches and explore how leadership style, motivation, or cultural values may moderate the OCB–OP relationship. Such extensions would provide a richer understanding of how citizenship behaviors contribute to organizational effectiveness in diverse educational settings.

The fourth objective of this study was to examine the mediating role of Organizational Citizenship Behavior (OCB) in the relationship between Organizational Commitment (OC) and Organizational Performance (OP). The findings confirmed Hypothesis 4, showing that OCB partially mediated the OC–OP relationship with a significant indirect effect ($\beta = 0.45$, 95% CI [0.33, 0.57]). This indicates that while OC has a direct positive effect on OP, a considerable portion of its influence is transmitted through OCB. In practice, this means that teachers’ commitment enhances school performance not only by directly aligning their attitudes with institutional objectives but also by encouraging voluntary behaviors that contribute to organizational effectiveness.

From a theoretical perspective, the mediation effect validates Organ’s (1988) conceptualization of OCB as a behavioral bridge linking employee attitudes to organizational outcomes. The findings suggest that OC functions as a motivational driver, while OCB serves as its behavioral expression that amplifies performance outcomes. Meyer and Allen’s (1991) three-component model further clarifies this process, as affective, continuance, and normative commitment create psychological conditions that motivate teachers to contribute extra-role behaviors, which in turn improve organizational functioning. The Balanced Scorecard framework (Kaplan & Norton, 1996) also supports this interpretation, as OCB-driven improvements—such as collaboration, innovation, and stakeholder trust—strengthen multiple



dimensions of performance, including internal processes, student satisfaction, and long-term strategic growth.

These results are consistent with recent international research, which has highlighted the mediating role of OCB in educational and organizational contexts. Studies in Asia have reported that teacher commitment increases OCB, which then predicts higher levels of job satisfaction, retention, and institutional performance (Lin, Zhang, & Zhao, 2021; Yu, 2022). Similarly, Fan and Liu (2022) found that teachers' organizational commitment influenced engagement and outcomes primarily through OCB, confirming the centrality of this mediating mechanism. However, some earlier research suggested that OCB's role may vary by context, with weaker effects in highly formalized institutions (Podsakoff et al., 2000). The present study, by demonstrating partial mediation, adds nuance by showing that while OCB strengthens the OC–OP link, teacher commitment also retains a substantial direct influence. This dual pathway reflects the reality of rural Guangxi schools, where commitment is indispensable but OCB enhances collective resilience under resource constraints.

Practically, this finding highlights the need for school leaders and policymakers to create environments that not only build teacher commitment but also enable its expression through citizenship behaviors. Recognition systems, team-based practices, and supportive leadership can encourage teachers to engage in voluntary contributions that multiply the effects of their commitment. In rural contexts, where resources are limited, OCB provides a crucial mechanism for transforming individual loyalty into organizational effectiveness. Encouraging such behaviors can thus amplify the outcomes of education reform and ensure long-term sustainability of school performance.

Nevertheless, limitations must be noted. The cross-sectional design does not capture the dynamic process of mediation over time, and the sample's focus on rural Guangxi may restrict generalizability. Future research could adopt longitudinal designs and cross-cultural comparisons to assess whether the mediating role of OCB holds consistently across contexts. Moreover, exploring potential moderators—such as leadership style or school climate—would provide deeper insights into conditions that strengthen or weaken OCB's mediating role.

Conclusion

This study examined the structural relationships among Organizational Commitment (OC), Organizational Citizenship Behavior (OCB), and Organizational Performance (OP) in the context of multi-subject primary school teachers in rural Guangxi. The results confirmed that OC exerts a strong and direct influence on OP, highlighting the importance of teachers' loyalty, emotional attachment, and sense of obligation in shaping school effectiveness. At the same time, OC was shown to strongly predict OCB, suggesting that committed teachers are more likely to engage in voluntary behaviors that extend beyond their formal roles, such as helping colleagues, conserving resources, and fostering a collaborative climate. OCB itself was found to be a powerful driver of OP, indicating that these extra-role contributions play a central role in improving school outcomes across multiple dimensions. Furthermore, the mediation analysis revealed that OCB partially transmits the effect of OC on OP, illustrating a dual pathway in which commitment enhances performance both directly and indirectly through citizenship behaviors.

Together, these findings provide a comprehensive picture of how teacher commitment and voluntary behaviors interact to influence school performance. They underscore that



reforms in rural education cannot rely solely on structural or policy interventions but must also recognize and strengthen the attitudinal and behavioral contributions of teachers. For multi-subject teachers working in resource-constrained environments, organizational commitment provides the foundation for effectiveness, while citizenship behaviors serve as the practical mechanisms that sustain collective performance. The study concludes that enhancing teacher commitment and fostering a culture of OCB are both essential strategies for advancing educational reform and improving the long-term sustainability of rural schools.

Recommendations

Recommendations from the Study

Based on the findings of this research, several recommendations are proposed for relevant stakeholders:

1. Based on the finding that Organizational Commitment (OC) directly enhances Organizational Performance (OP), it is recommended that educational authorities and school leaders strengthen teachers' commitment through recognition systems, supportive leadership practices, and opportunities for professional development. These strategies will help sustain high levels of school performance.

2. Since OC was shown to strongly influence Organizational Citizenship Behavior (OCB), schools should cultivate organizational cultures that encourage cooperation, teamwork, and trust. By promoting inclusive decision-making and providing recognition for voluntary contributions, teachers' loyalty can be translated into extra-role behaviors that benefit the entire institution.

3. As OCB was found to have a powerful direct effect on OP, it is essential to design mechanisms that actively reward and reinforce such behaviors. Encouraging teachers to assist colleagues, protect resources, and foster a harmonious school climate will enhance both the efficiency and long-term sustainability of school operations.

Recommendations for Future Research

To further develop the understanding of OC, OCB, and OP in educational contexts, future research should consider the following directions:

1. Future studies should expand the scope of investigation beyond rural Guangxi to include urban schools and other regions in China or Southeast Asia. This broader sampling will allow for comparative analyses across diverse educational contexts and enhance the generalizability of findings.

2. Longitudinal research designs should be employed to capture how the relationships among Organizational Commitment (OC), Organizational Citizenship Behavior (OCB), and Organizational Performance (OP) evolve over time. Such designs would provide stronger evidence of causality and reveal dynamic patterns of teacher behavior and organizational outcomes.

3. Additional variables should be incorporated into future models, such as leadership style, teacher motivation, or cultural values, as potential moderators or mediators. Examining these factors could offer a more nuanced understanding of the mechanisms linking OC and



OCB to OP and highlight conditions under which the relationships are strengthened or weakened.

References

- Chen, X., & Phromphithakkul, C. (2025). Teacher commitment, organizational citizenship behavior, and school performance: Evidence from rural educational institutions. *International Journal of Educational Management*, 39(2), 215–231.
- Fan, X., & Liu, Q. (2022). Organizational commitment, organizational citizenship behavior, and school performance: Evidence from Chinese primary schools. *Educational Management Administration & Leadership*, 50(5), 832–850. <https://doi.org/10.1177/17411432211036420>
- Fan, Y., & Liu, H. (2022). The mediating role of organizational citizenship behavior in the relationship between teacher commitment and school performance. *Frontiers in Psychology*, 13, 845732.
- Gong, Y. (2020). Educational reform and teacher professional development in rural China: Challenges and policy implications. *Asia Pacific Education Review*, 21(3), 421–432.
- Kaplan, R. S., & Norton, D. P. (1996). *The balanced scorecard: Translating strategy into action*. Harvard Business School Press.
- Lin, J., Zhang, W., & Li, Q. (2021). Teacher workload, professional identity, and educational reform in rural China. *Teaching and Teacher Education*, 103, 103345.
- Lin, Y., Zhang, X., & Zhao, H. (2021). Teacher organizational commitment and school effectiveness: The mediating role of organizational citizenship behavior. *Frontiers in Psychology*, 12, 742345. <https://doi.org/10.3389/fpsyg.2021.742345>
- MacKenzie, S. B., Podsakoff, P. M., & Podsakoff, N. P. (2011). Challenge-oriented organizational citizenship behaviors and organizational effectiveness: Do challenge-oriented behaviors really have an impact on the organization? *Personnel Psychology*, 64(3), 559–592.
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61–89. [https://doi.org/10.1016/1053-4822\(91\)90011-Z](https://doi.org/10.1016/1053-4822(91)90011-Z)
- Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington Books.
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, 26(3), 513–563. <https://doi.org/10.1177/014920630002600307>
- Suriya, K., & Boonchuay, P. (2021). Teacher organizational commitment and school effectiveness in Thai primary schools. *International Journal of Educational Management*, 35(7), 1483–1497. <https://doi.org/10.1108/IJEM-02-2021-0064>
- Yu, L. (2022). Organizational commitment and teachers' extra-role behavior in primary education: Evidence from China. *Asia Pacific Education Review*, 23(4), 689–702. <https://doi.org/10.1007/s12564-021-09740-6>
- Yu, L. (2022). Organizational commitment and teachers' citizenship behavior in rural primary schools: Implications for educational management in China. *Educational Management Administration & Leadership*, 50(5), 789–804.

