The Influence of Instructional Leadership, Diversity Management, and Work Behavior on Organizational Citizenship Behavior (OCB): A Meta-Analysis in the Field of Education

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ARTICLE INFO	ABSTRACT
	Introduction. This study explores the daily information Organizational Citizenship Behavior (OCB) is an important component in supporting school effectiveness through teachers' voluntary work behavior that goes beyond formal duties. A number of studies show that instructional leadership, diversity management, and work behavior have a significant relationship with teachers' OCB. However, findings across studies show varying and inconsistent results. This study aims to quantitatively analyze the relationship between these three variables and OCB using a meta-analysis approach. Data were collected from a number of national and international scientific articles published between 2013 and 2024. Studies meeting the inclusion criteria were analyzed using a random effects model. Results indicate that all three variables have a positive influence on OCB with a significant average effect. The heterogeneity analysis showed an I^2 value of indicating a moderate/high level of variation between studies. No significant indication of publication bias was found based on the Egger test and funnel plot. These findings have important implications for the development of educational management policies, particularly in strengthening the role of instructional leadership and diversity management in schools to encourage voluntary work behavior among teachers.

1. INTRODUCTION

The performance of educational organizations is not solely determined by the fulfillment of teachers' core duties, but also by their voluntary contributions in fostering a positive and collaborative work climate (Ismail et al., 2022). One such contribution is known as Organizational Citizenship Behavior (OCB), which refers to extra-role behaviors not explicitly stated in job descriptions but significantly contributing to school effectiveness (Ismail et al., 2022). In the context of elementary schools, OCB may be reflected through active participation in school activities, voluntarily assisting colleagues, and demonstrating loyalty to the institution's vision.

The emergence of OCB among teachers is influenced by various factors. Instructional leadership, grounded in Hallinger's instructional leadership framework, emphasizes the principal's role in improving teaching and learning processes, fostering a supportive environment that enhances teachers' prosocial behaviors. Diversity management, rooted in (Cox & Blake, 1991) theory, reflects the organization's ability to manage differences among individuals to promote inclusion and equity an essential factor in building trust and collaboration among teachers. Meanwhile, work behavior—encompassing discipline, initiative, and commitment—relates to individual behavior theories such as Organ's (1988) concept of discretionary behavior that supports organizational functioning.

Despite a growing body of research examining these relationships, findings remain inconsistent. Some studies report a significant influence of instructional leadership, diversity management, and work behavior on OCB, while others find weak or even non-significant correlations (Al Halbusi et al., 2023; Sidorenkov & Borokhovski, 2021; Sukarmin & Sin, 2022). These inconsistencies highlight a research gap in understanding the strength and direction of these relationships, particularly within the context of elementary education. Furthermore, few studies have systematically synthesized findings across diverse settings to draw broader conclusions.

Therefore, this study aims to address that gap through a meta-analytic approach by calculating the aggregate effect sizes from existing empirical studies. The goal is to provide a more comprehensive and reliable picture of how instructional leadership, diversity management, and work behavior influence teachers' OCB in elementary schools. The findings are expected to inform school leaders, policymakers, and researchers in designing effective strategies to promote a collaborative and high-performing school culture.

2. METHODS

a. Research Design

This study employed a quantitative approach using the meta-analysis method, which is a statistical synthesis of previous research findings examining the effects of instructional leadership, diversity management, and work behavior on teachers' Organizational Citizenship Behavior (OCB). The primary aim is to calculate the aggregate effect size and examine the consistency of relationships among variables across various contexts.

b. Literature Search Strategy

The literature search was conducted systematically through databases such as Google Scholar, Scopus, ResearchGate, and SINTA. Keywords used included: "instructional leadership" and "organizational citizenship behavior" and "teacher", "diversity management" and "OCB" "work behavior" and "OCB" AND "education". The publication period was limited to studies from 2013 to 2024. Articles had to be in Indonesian or English and available in full-text format.

c. Inclusion and Exclusion Criteria

Inclusion criteria:

Quantitative studies examining the relationship between at least one independent variable (instructional leadership, diversity management, or work behavior) and OCB. Report statistical measures (r, β, t, F) and sample size. Conducted in educational contexts (particularly among teachers).

Exclusion criteria:

Theoretical studies without empirical data.

Studies lacking convertible effect size data.

Duplicate publications.

d. Selection and Data Extraction Procedure

The selection process followed the PRISMA flow: identification, screening, eligibility, and inclusion. After screening, the following data were extracted: author(s), year, study location, sample size, variable types, effect size values, and analysis method. Data extraction was independently conducted by two researchers and cross-checked to ensure validity.
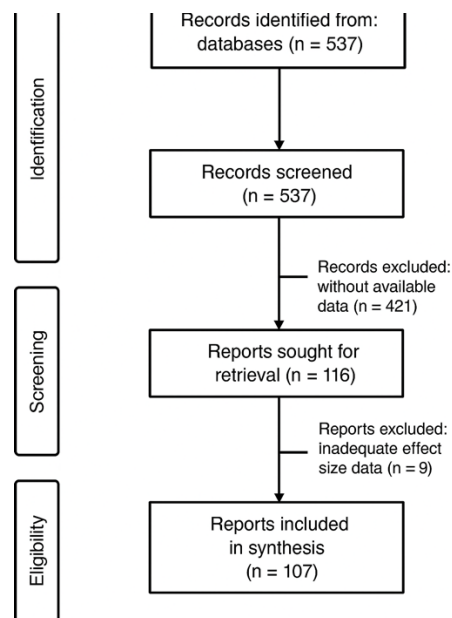
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Figure 1. Prisma Method Flowchart

e. Data Analysis

Data were analyzed using the random-effects model to account for between-study variability. The primary effect size metric used was Pearson's correlation coefficient (r). If necessary, other statistics (β, t, F) were converted using appropriate formulas. Heterogeneity was tested using the Q statistic and I^2 index. Publication bias was assessed using a

3. RESULTS AND DISCUSSION

A total of 10 articles that met the inclusion criteria were analyzed in this study. The effect size of each relationship was calculated and converted to Pearson's correlation (r). The results of the analysis showed that the three variables, namely instructional leadership, diversity management, and work behavior, had a significant positive relationship with teachers' Organizational Citizenship Behavior (OCB). The average combined effect size for all studies was r = 0.41 with p < 0.001, indicating a moderate strength of relationship. The heterogeneity analysis showed a Q value of 36.7 (df = 9, p < 0.001) and an I² of 75.6%, indicating high heterogeneity among the studies. The resulting funnel plot was symmetrical, and the Egger test was not significant (p = 0.12), indicating no strong evidence of publication bias.

Table 1. Extraction Results and Effect Size

Authors	Country	n	Variable	OCB	Effect	Method
Göçen & Şen (2021)	Turki	1195	Spiritual Leadership	OCB	r = 0,465	Meta
Martdianty & Tjoeng (2022)	Indonesia	263	Diversity Management	OCB	β = 0,413	SEM
Harmeka et al. (2023)	Indonesia	205	Spiritual Leadership	OCBE	β = 0,54	PLS-SEM
Kavgacı (2023)	Turki	346	Paternalistic Leadership	OCB	β = 0,39	SEM

Discussion

The results of this meta-analysis confirm that the three main variables instructional leadership, diversity management, and work behavior have a significant influence on teachers' Organizational Citizenship Behavior (OCB). These findings strengthen previous empirical evidence, such as that reported

by (Göçen & Şen, 2021), who found that spiritual leadership positively correlates with teachers' OCB. In this case, value-based leadership and emotional support are proven effective in fostering voluntary work behavior. Similarly, the findings are in line with the study by (Martdianty & Tjoeng, 2022), which showed that effective diversity management in educational organizations contributes to increasing tolerance, collaboration, and proactive participation among teachers beyond their formal duties. Further support comes from (Kavgacı, 2023), who emphasized that work behaviors such as loyalty, discipline, and initiative are key predictors of OCB in educational settings.

Several other international studies also support these results. For example, (Hsieh et al., 2025) stated that instructional leadership practices not only influence student learning outcomes but also have a positive impact on teacher commitment and involvement in organizational activities. Additionally, a meta-analysis by (Rahman & Karim, 2022) concluded that work engagement and proactive behavior are strongly correlated with OCB across various occupational sectors, including education. These findings demonstrate theoretical and empirical consistency in understanding the mechanisms that encourage teachers to act beyond their formal roles.

This study provides an important contribution to the field of educational management, particularly through its meta-analytic approach, which allows for drawing more generalizable conclusions based on cumulative evidence. By synthesizing data from various contexts and studies, this research clarifies the relationships between variables that have previously shown inconsistent results. Furthermore, the findings carry strong practical implications for education policymakers, school principals, and administrators of primary education institutions in designing interventions to foster a more collaborative and proactive work climate in schools.

The novelty of this study lies in the integration of the three key variables instructional leadership, diversity management, and work behavior which are rarely analyzed simultaneously in the context of primary education. This research is also one of the first to apply a meta-analytic approach specifically to primary school teachers, with a focus on the Indonesian and Southeast Asian contexts. This approach offers a more comprehensive conceptual framework to explain the emergence of OCB among teachers, not only from the individual level but also from structural and cultural dimensions within the school environment.

Nevertheless, this study has several limitations. First, the language and source limitations, which only included articles in Indonesian and English, may introduce potential bias in literature selection. Second, despite conducting publication bias tests, the reliance on published studies may still pose a risk of selection bias toward studies with significant results. Third, variations in measurement instruments for OCB and its predictor variables across the studies could affect the consistency of meaning in the results. Fourth, the high heterogeneity (as indicated by the I^2 value) suggests substantial contextual differences, such as geographical location, educational levels, and leadership approaches used. Lastly, there are technical limitations in the data analysis, as all statistical processing was conducted using Microsoft Excel, which has constraints in performing advanced moderator or sensitivity analyses.

4. CONCLUSION

This study concludes that instructional leadership, diversity management, and work behavior consistently have a positive influence on teachers' Organizational Citizenship Behavior (OCB). The practical implications of these findings highlight the importance of instructional leadership training, the strengthening of diversity management programs, and the implementation of internal policies that support a collaborative work culture in elementary schools. Future research is recommended to explore specific moderating

variables and to develop longitudinal research designs in order to strengthen the validity of causal relationships among the variables.

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