

# MEDIATING OF STRUCTURAL MANAGEMENT ON RESOURCE MANAGEMENT STRATEGIES OF SCHOOL PRINCIPAL AND TEACHER'S COOPERATION

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## ABSTRACT

The current study aimed to evaluate whether structural management mediate the relationship between resource management strategies of school principals and teachers' cooperation. In this study, the researcher selected the 200 elementary school teachers in Santo Tomas West District, Division of Davao del Norte as the respondents of the study. Stratified random sampling technique was utilized in the selection of the respondents. Non-experimental quantitative research design using descriptive-correlational method was employed. The data collected were subjected on the following statistical tools: Mean, Pearson Moment Product Correlation, and Structural Equation Model Through Mediation Analysis. Findings revealed that resource management strategies of school principals, teachers' cooperation, and structural management in Santo Tomas West District, Division of Davao del Norte were described as extensive. Further, correlation analysis demonstrated that there is a significant relationship among resource management strategies of school principals, teachers' cooperation, and structural management in Santo Tomas West District, Division of Davao del Norte. Evidently, Mediation Analysis proved that structural management partially mediated the relationship between resource management strategies of school principals and teachers' cooperation. In other words, structural management is a significant mediator on the relationship between resource management strategies of school principals and teachers' cooperation in Santo Tomas West District, Division of Davao del Norte.

## 1. INTRODUCTION

The role of school leadership, particularly the strategies employed by principals, has gained increased attention globally due to its significant impact on school effectiveness, teacher collaboration, and student outcomes. Effective management of resources and structures within schools is essential to creating environments where teachers can collaborate, share knowledge, and foster student achievement. However, many school leaders face challenges in optimizing their resource management strategies to promote collaboration among teachers, especially in contexts with limited resources or structural challenges. This study explores the relationship between the resource management strategies of school principals, structural management, and teachers' cooperation, focusing on how structural management mediates this relationship. The primary research question seeks to determine whether structural management significantly mediates the effect of resource management strategies on teachers' cooperation.

Globally, education systems face various issues that underscore the importance of effective school leadership and management. First, the global teacher shortage continues to challenge educational systems in both developed and developing countries. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), by 2030, the world will need an additional 69 million teachers to meet the global demand, especially in primary and secondary education (UNESCO, 2020). Second, the COVID-19 pandemic has exacerbated existing inequalities in education, particularly in resource allocation, and has forced school leaders to adopt new strategies to manage both human and material resources effectively (OECD, 2021). Lastly, teacher burnout has become a global issue, with educators facing increasing workloads, insufficient support, and the pressure to meet ever-changing educational standards (Ingersoll, 2019).

At the national level, the Philippines faces its own challenges in education. First, there is the issue of insufficient resources in many public schools, which hampers effective teaching and learning (Department of Education, 2020). Second, the disparity in educational quality between urban and rural schools remains a significant concern, with rural schools often lacking the resources and leadership capacity to foster teacher collaboration (Philippine Statistics Authority, 2021). Lastly, teacher attrition in the Philippines is rising, with many educators leaving the profession due to dissatisfaction with leadership, lack of professional development opportunities, and poor working conditions (Reyes, 2020).

At the local level, the Santo Tomas West District in Davao del Norte encounters specific issues that affect school leadership and teacher collaboration. First, many schools in this district face inadequate structural management, which impacts the ability of school principals to implement effective resource management strategies (Santos, 2021). Second, limited professional development opportunities for teachers and school leaders hinder the improvement of leadership practices and teacher cooperation (Villanueva, 2022). Lastly, the rural-urban divide in the district exacerbates

inequalities in resource distribution, creating additional challenges for school principals in managing resources effectively and fostering teacher collaboration (Nguyen, 2021).

This study contributes to the understanding of how structural management mediates the relationship between school principals' resource management strategies and teachers' cooperation. It aims to provide insights into how school leaders can leverage structural management to create collaborative environments that support professional growth and improve educational outcomes.

## 2. LITERATURE REVIEW

Effective school leadership, particularly in resource management, has a significant impact on various educational outcomes. This literature review explores existing research on resource management strategies of school principals, structural management, and teachers' cooperation, drawing from studies in ASEAN, European, African, and Australian contexts. The review also identifies gaps in the current literature and discusses how this study aims to fill those gaps.

**Resource Management Strategies of School Principals.** School principals play a critical role in managing both human and material resources, ensuring that teachers have the support and tools they need to succeed. Research from the ASEAN region, such as Nguyen et al. (2020), highlights the importance of effective resource allocation in Vietnamese schools. The study found that schools with principals who prioritize transparent and equitable resource distribution tend to have higher levels of teacher collaboration and satisfaction. Similarly, Harris et al. (2021) in Australia noted that principals who engage in strategic planning and resource management significantly improve teacher engagement and school performance.

In Europe, Gordon et al. (2022) explored resource management in UK schools, emphasizing the role of leadership in optimizing limited resources to foster collaboration among teachers. The study found that principals who effectively manage financial and material resources create a more supportive work environment for teachers. In contrast, Owoye and Yara (2019) in Africa pointed out that many schools in Nigeria struggle with resource shortages, making it difficult for principals to implement strategies that foster collaboration among teachers. They suggested that the success of resource management strategies depends on the availability of resources and the leadership skills of the principal.

**Structural Management in Schools.** Structural management refers to the organization and optimization of school resources, infrastructure, and systems to facilitate smooth operations and collaboration among staff. In the context of this study, structural management mediates the relationship between resource management strategies and teacher cooperation. Research from ASEAN countries, such as Rajan and Sugito (2021), has shown that effective structural management, including well-organized schedules, clear communication channels, and appropriate use of technology, enhances teachers' ability to collaborate and share knowledge.

In Europe, Kershner et al. (2019) found that structural management is key to creating collaborative work environments in schools. Their study on Danish schools emphasized the importance of flexible organizational structures that allow for professional learning communities and teacher cooperation. Similarly, in Australia, \*Grattan and Burke (2021)\* noted that structural management that incorporates teacher autonomy and shared leadership structures leads to better collaboration and improved student outcomes.

In African schools, Wamukuru et al. (2020) highlighted the challenges of implementing effective structural management due to limited resources and poor infrastructure. Despite these challenges, schools with strong leadership were able to implement basic structural improvements that facilitated greater teacher cooperation.

**Teachers' Cooperation.** Teacher cooperation is essential for the successful functioning of schools and is often influenced by the leadership practices of school principals. In ASEAN, a study by Phan et al. (2021) found that in Vietnamese schools, teacher collaboration was strongly correlated with principals' efforts to provide resources and professional development opportunities. European literature, such as the work of Kools and Stoll (2021), emphasizes the role of school leadership in creating collaborative cultures through distributed leadership models and shared decision-making processes.

In Australia, Hattie et al. (2020) argued that teacher cooperation is essential for improving student outcomes, and this cooperation is often fostered by principals who engage teachers in decision-making and provide them with the necessary resources. In African schools, Mokoena (2020) pointed out that teacher collaboration is often hindered by poor leadership and lack of resources, but in schools where principals prioritize collaboration, teachers are more likely to work together effectively.

**Gaps in Current Knowledge.** Despite extensive research on resource management strategies and teacher cooperation, several gaps exist in the literature. First, while many studies examine the relationship between resource management and teacher cooperation, few focus on the mediating role of structural management. This study aims to address this gap by exploring how structural management influences the relationship between school principals' resource management

strategies and teachers' cooperation. Additionally, most existing research is either region-specific or limited to specific educational contexts, such as urban or private schools, leaving gaps in understanding how these dynamics operate in rural and public school settings (Moller et al., 2021).

Furthermore, few studies provide a comprehensive analysis of how resource management strategies differ across regions, particularly between developed and developing countries. This study aims to fill this gap by drawing on diverse literature from ASEAN, European, African, and Australian contexts, providing a broader understanding of how resource management and structural factors influence teacher cooperation (Nguyen et al., 2020; Owoeye & Yara, 2019; Gordon et al., 2022).

### 3. METHODOLOGY

This study utilized a non-experimental quantitative research design with a descriptive-correlational approach to examine whether structural management mediates the relationship between resource management strategies of school principals and teachers' cooperation. The descriptive-correlational design was chosen because it allows for an examination of relationships between variables without manipulation, making it suitable for exploring the influence of structural management in an educational context.

**Research Design.** A descriptive-correlational design was employed to explore the relationships between resource management strategies, structural management, and teacher cooperation. This design was selected because it allows researchers to describe the current status of the variables while assessing potential correlations among them. Additionally, the use of \*\*structural equation modeling (SEM)\*\* through mediation analysis was incorporated to determine whether structural management mediates the relationship between resource management strategies and teachers' cooperation.

**Participants and Sampling.** The participants in this study included 200 elementary school teachers from the Santo Tomas West District, Division of Davao del Norte. The study utilized stratified random sampling to ensure a representative distribution of teachers from different schools within the district. This sampling method was selected because it reduces bias by ensuring that all schools, regardless of size or location, were proportionally represented in the sample.

**Data Collection Methods.** Data were collected using a validated survey questionnaire designed to assess three primary constructs: resource management strategies of school principals, structural management, and teachers' cooperation. The questionnaire was divided into three sections:

**Section A.** Focused on resource management strategies of school principals, including items related to budgeting, allocation of human and material resources, and prioritization of resources.

**Section B.** Measured structural management practices within the schools, such as the organization of schedules, communication structures, and support for collaborative work.

**Section C.** Assessed the level of teachers' cooperation, including collaboration in lesson planning, shared decision-making, and mutual support.

Each item was measured using a Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire was distributed electronically via Google Forms, ensuring efficient data collection given the ongoing COVID-19 precautions. The pilot study was conducted with a smaller sample of 20 teachers to test the reliability and validity of the instrument, which led to minor adjustments in wording and format.

### 4. DATA ANALYSIS PROCEDURES

The data collected from the questionnaires were analyzed using the following statistical techniques:

Mean and standard deviation were calculated to describe the extent of resource management strategies, structural management, and teachers' cooperation.

Pearson Product Moment Correlation was employed to assess the relationships between the variables (resource management strategies, structural management, and teachers' cooperation). This method is appropriate for measuring the strength and direction of the linear relationship between variables.

Structural Equation Modeling (SEM) with mediation analysis was conducted to test whether structural management mediates the relationship between resource management strategies and teachers' cooperation. SEM is well-suited for assessing complex relationships between variables, as it can account for direct and indirect effects.

Data were analyzed using SPSS for basic descriptive statistics and correlations, while AMOS software was used for structural equation modeling and mediation analysis. The results were interpreted using path coefficients, significance values, and goodness-of-fit indices such as the Chi-square, CFI (Comparative Fit Index), and RMSEA (Root Mean Square Error of Approximation) to ensure model adequacy.

Ethical Considerations. Ethical approval was obtained from the local educational board and the university ethics committee. Informed consent was obtained from all participants, ensuring that they understood the nature of the study, their role in it, and their right to withdraw at any time. Participant anonymity and data confidentiality were maintained throughout the study, with data securely stored in password-protected files.

## 5. RESULTS

The results of this study are based on the data collected from 200 elementary school teachers in the Santo Tomas West District, Division of Davao del Norte. The data analysis focused on understanding the relationship between resource management strategies of school principals, structural management, and teachers' cooperation.

**Descriptive Statistics.** The results of the descriptive analysis revealed the following:

**Resource Management Strategies:** The mean score for resource management strategies of school principals was 4.1 (SD = 0.75), indicating that resource management was generally rated as extensive.

**Structural Management:** The mean score for structural management practices was 4.0 (SD = 0.73), suggesting that structural management practices were also perceived as extensive.

**Teachers' Cooperation:** The mean score for teachers' cooperation was 4.2 (SD = 0.78), indicating a high level of collaboration and mutual support among teachers.

**Correlation Analysis.** The Pearson correlation analysis revealed significant relationships between the three primary variables:

There was a strong positive correlation between resource management strategies and teachers' cooperation ( $r = 0.72$ ,  $p < 0.01$ ).

A strong positive correlation was also observed between structural management and teachers' cooperation ( $r = 0.70$ ,  $p < 0.01$ ).

Similarly, there was a strong positive correlation between resource management strategies and structural management ( $r = 0.74$ ,  $p < 0.01$ ).

These findings indicate that both resource management strategies and structural management are positively associated with higher levels of teachers' cooperation.

### Structural Equation Modeling (SEM) and Mediation Analysis

The results of the SEM analysis showed a well-fitting model, with fit indices indicating a good fit (Chi-square = 2.45, CFI = 0.96, RMSEA = 0.05). The path coefficients indicated the following relationships:

**Resource Management Strategies → Structural Management:** Path coefficient  $\beta = 0.6$  ( $p < 0.01$ ), indicating a strong direct effect of resource management on structural management.

**Structural Management → Teachers' Cooperation:** Path coefficient  $\beta = 0.55$  ( $p < 0.01$ ), suggesting that structural management significantly affects teachers' cooperation.

**Resource Management Strategies → Teachers' Cooperation (Direct Effect):** Path coefficient  $\beta = 0.45$  ( $p < 0.01$ ), indicating a significant direct effect of resource management on teachers' cooperation.

## 6. DISCUSSION

The findings of this study indicate that structural management plays a significant mediating role in the relationship between resource management strategies of school principals and teachers' cooperation. The strong positive correlation between resource management strategies and teachers' cooperation, as well as the significant mediation effect of structural management, underscore the critical role of school leadership in promoting collaboration among teachers. These results align with previous research that emphasizes the importance of effective leadership in fostering a positive school environment conducive to teacher collaboration and professional growth (Harris & Jones, 2020; Nguyen et al., 2021).

The significant path coefficients between resource management strategies, structural management, and teachers' cooperation ( $\beta = 0.65$  and  $\beta = 0.55$ , respectively) suggest that when school principals allocate resources efficiently, organize schedules effectively, and establish clear communication channels, teachers are more likely to engage in cooperative practices. These findings are consistent with studies from various regions that highlight the importance of organizational structures in facilitating teacher collaboration (Grattan & Burke, 2021; Phan et al., 2021). Specifically, structural management serves as a bridge that enables teachers to interact and collaborate effectively, leading to enhanced professional outcomes.

The implications of this study are substantial for educational policy and practice. In the context of limited resources, particularly in rural areas like Santo Tomas West District, Division of Davao del Norte, school principals must not only



manage resources efficiently but also create organizational structures that support teacher collaboration. Structural management practices, such as shared decision-making processes, flexible scheduling, and clear communication protocols, can significantly enhance teachers' ability to work together and share knowledge (Kools & Stoll, 2021). In this regard, school principals must prioritize both resource and structural management to maximize the potential for teacher cooperation and, ultimately, improve student outcomes (Owoeye & Yara, 2019).

However, this study is not without limitations. First, the reliance on self-reported data from teachers may introduce biases, as participants may overestimate or underestimate their levels of cooperation or the effectiveness of school leadership (Denscombe, 2020). Second, the study was conducted in a specific geographic location, which limits the generalizability of the findings. Future research could benefit from expanding the study to other districts or regions, particularly urban settings, to determine whether the findings hold in different educational contexts (Moller et al., 2021). Additionally, while the study focuses on structural management as a mediator, other potential mediators, such as school culture or teacher autonomy, were not considered. Future research should explore these variables to develop a more comprehensive understanding of the factors influencing teacher cooperation.

## 7. CONCLUSION

The study concludes that structural management significantly mediates the relationship between resource management strategies of school principals and teachers' cooperation. The findings indicate that effective resource management, combined with well-structured organizational practices, enhances teacher collaboration. This research contributes to the growing body of literature on school leadership by highlighting the importance of both resource and structural management in promoting teacher cooperation, particularly in rural settings like Santo Tomas West District, Division of Davao del Norte. The results suggest that school leaders who prioritize structural management, including clear communication, organized schedules, and collaborative decision-making processes, can create an environment that fosters cooperation among teachers. These findings have important implications for educational leadership, as they highlight the need for school principals to adopt a holistic approach to management that addresses both resource allocation and organizational structure.

Future research should explore the long-term effects of structural management on teacher cooperation and investigate additional mediators, such as school culture or teacher autonomy, that may influence this relationship. Furthermore, expanding the scope of research to include urban districts or cross-regional comparisons could provide valuable insights into the contextual factors that affect the relationship between leadership practices and teacher cooperation.

## 8. RECOMMENDATIONS

**Department of Education:** The Department of Education should develop training programs for school principals that focus on both resource management and structural management practices. These programs should emphasize the importance of creating organizational structures that promote teacher collaboration, particularly in resource-limited settings.

**School Heads:** School heads should prioritize the development of structural management strategies, such as clear communication protocols, organized schedules, and shared decision-making processes. By creating a supportive and well-organized environment, school heads can enhance teachers' ability to collaborate and improve their professional practice.

**Teachers:** Teachers should actively engage in the collaborative opportunities provided by structural management practices. They should participate in decision-making processes, seek out opportunities for shared lesson planning, and contribute to the overall improvement of the school's organizational structure.

**Future Researchers:** Future researchers should explore other potential mediators, such as school culture, teacher autonomy, or leadership style, to better understand the dynamics between school leadership and teacher cooperation. Additionally, expanding the research to urban districts or conducting cross-regional comparisons would provide a more comprehensive understanding of the factors influencing teacher collaboration.

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