



E-ISSN: 3108-4192

APSSHS

Academic Publications of Social Sciences and Humanities Studies

2023, Volume 3, Page No: 173-185

Available online at: <https://apsshs.com/>

Asian Journal of Individual and Organizational Behavior

The Role of Budget Participation and Leadership Style in Managerial Performance: The Mediating Effect of Organizational Commitment

Ahmad Faiz bin Hassan¹, Siti Nurhaliza binti Ahmad^{1*}, Daniel Lim¹, Grace Tan¹

1. Accounting Department, Universiti Sains Malaysia, Penang, Malaysia.

Abstract

This research examines how budget participation and leadership style influence managerial performance, considering organizational commitment as a potential mediator. Employing a quantitative approach, the study surveyed the entire population of 42 employees from the Public Works and Public Housing Office and the Tax Service Office in Wonogiri Regency, Indonesia, resulting in a saturated sample. Data were analyzed using path analysis and the coefficient of determination. Results reveal that while budget participation has a positive but statistically non-significant impact on managerial performance, leadership style exerts a significant and positive effect. Organizational commitment shows a positive yet non-significant relationship with managerial performance and does not mediate the effects of budget participation or leadership style. Among the variables studied, leadership style emerges as the most influential factor in shaping managerial performance within these public sector institutions.

Keywords: Managerial performance, Leadership style, Budget participation, Organizational commitment, Public sector

How to cite this article: Faiz bin Hassan A, Nurhaliza binti Ahmad S, Lim D, Tan G. The Role of Budget Participation and Leadership Style in Managerial Performance: The Mediating Effect of Organizational Commitment. Asian J Indiv Organ Behav. 2023;3:173-85. <https://doi.org/10.51847/A8PBKhpogy>

Received: 19 August 2023; **Revised:** 06 November 2023; **Accepted:** 12 November 2023

Corresponding author: Siti Nurhaliza binti Ahmad

E-mail ✉ siti.nurhaliza.kl@gmail.com

Introduction

Organizational success is often reflected in its performance, which serves as a manifestation of the organization's vision and mission. Performance is considered a key outcome of organizational behavior [1] and represents the results of employees' work executed with skill, dedication, and experience [2]. In this context, managers play a critical role in ensuring organizational objectives are achieved effectively. Contingency theory posits that leadership influences outcomes based on situational factors, highlighting how different contexts can shape managerial performance. Previous studies suggest that uncertainty can affect managerial performance through mechanisms such as organizational commitment.

In Wonogiri Regency, Indonesia, the Department of Public Works and Public Housing Office and the Tax Service Office serve as case studies due to observable gaps in managerial performance. Challenges identified include insufficient communication between operational officers and management regarding budgeting processes, limited resources, and infrequent performance evaluations. Consequently, annual performance assessments have not fully adhered to regulations, including the Regulation of the Head of the State Civil Service Agency No. 01 of 2013 and Government Regulation No. 46 of 2011. Assessing managerial performance is critical to ensure that public service organizations execute their functions efficiently and effectively, supporting organizational goals and resource allocation [3].

Budget participation is one factor that can influence managerial performance. It involves engaging subordinate managers in the budgeting process to align resources with organizational needs, foster coordination, and facilitate communication between management levels. Active participation in budgeting enables managers to contribute ideas, enhance creativity, and improve



© 2023 The Author(s).

Copyright CC BY-NC-SA 4.0

accountability, ultimately supporting performance targets [4, 5]. Budgeting serves as a critical managerial tool for allocating limited resources, guiding financial planning, and promoting management efficiency. Research shows that budget participation not only enhances the accuracy of budgeting but also improves overall organizational effectiveness and public service delivery [6, 7]. Through active involvement in budgeting, both superior and subordinate managers can coordinate efforts to achieve agreed-upon targets, thereby fostering better performance outcomes.

Despite extensive research, empirical findings regarding the impact of budget participation on managerial performance remain inconsistent. Several studies, such as those by Indarto and Ayu [4], Putri and Adiguna [8], Abata [9], Moheri and Arifah [10], Tarigan and Devie [11], Manica and Hanny [12], Ermawati [3], and Sari and Abdullah [7], report a positive and significant influence of budget participation on managerial performance. Conversely, Syahputra [13], Yulianingsih [14], and Anderson [15] found no significant impact, while Suharman [16] and Noor and Othman [17] even identified a negative relationship. This disparity highlights a research gap and underscores the need to explore additional factors that may influence managerial performance, such as leadership style.

Budgets are most effective when managers possess strong predictive capabilities and can integrate participation factors with appropriate leadership approaches. Leadership style, reflecting how managers direct and interact with subordinates, significantly affects organizational performance. Effective leadership aligns employees' efforts with organizational goals and ensures task execution supports overall objectives [8]. According to contingency theory, other variables, such as organizational commitment, can act as mediators or moderators in the relationship between leadership, budget participation, and performance [6, 18].

Organizational commitment represents employees' dedication to the organization's values and goals. Employees with high organizational commitment are more likely to contribute fully, prioritizing organizational objectives over personal interests, whereas low commitment can diminish performance, even when involved in budgeting processes. As a mediator, organizational commitment is expected to enhance the effectiveness of budget participation by motivating employees to achieve the set goals. Committed employees create conducive work environments that support efficient and effective organizational operations. Prior research confirms that organizational commitment positively and significantly influences managerial performance [18].

Based on this background, the present study adopts the title: "The Impact of Budget Participation and Leadership Style on Managerial Performance with Organizational Commitment as an Intervening Variable: A Study at the Public Works and Public Housing Office and Tax Service Office of Wonogiri Regency, Indonesia."

Literature Review and Hypotheses Development

Managers have a social responsibility to achieve organizational objectives. Effective managerial performance encourages the attainment of organizational goals and reflects the ability to fulfill assigned duties [1, 2]. Performance encompasses both individual and group behaviors, evaluated based on the quality and quantity of work relative to assigned responsibilities.

Managerial performance specifically refers to the ability of managers to accomplish organizational goals, aligned with the organization's vision and mission. It can also be assessed through the completion of management functions, including planning, staffing, coordinating, and monitoring activities [19].

Previous research demonstrates mixed evidence regarding the influence of budget participation on managerial performance. Positive correlations were reported by Indarto and Ayu [4], Putri and Adiguna [8], Abata [9], Moheri and Arifah [10], Tarigan and Devie [11], Manica and Hanny [12], Ermawati [3], and Sari and Abdullah [7]. In contrast, Syahputra [13], Jannah and Rahayu [18], Anderson [15], Elwisa [20], and Yulianingsih [14] found no significant relationship, while Suharman [16] and Noor and Othman [17] noted a negative effect. The inconsistencies in these findings indicate the need for further investigation to clarify the relationship between budget participation and managerial performance.

This study builds upon Melek Eker's [21] research, which examined the impact of budget participation on managerial performance via organizational commitment in the context of Turkey's top 500 firms. The present research extends Eker's study by incorporating leadership style as an additional independent variable and focusing on public service offices in Wonogiri Regency, Indonesia. Accordingly, five hypotheses were formulated based on prior theory and empirical evidence. As suggested by Sugiyono [22], hypotheses serve as temporary assumptions to be empirically tested.

Influence of budget participation on managerial performance

Budgets are essential management tools that guide planning and monitoring activities to ensure that organizational goals are met efficiently and effectively. When subordinates are involved in the budgeting process, it allows them to contribute insights, demonstrate commitment, and support the accuracy of the budget, ultimately facilitating improved managerial outcomes [4]. Participation in budgeting is not only a procedural necessity but also serves as a mechanism for showing respect to subordinates and enhancing their engagement. Empirical research has consistently suggested that higher levels of budgetary involvement are associated with better managerial performance [7, 8, 10, 21]. These studies indicate that managers who

actively participate in budgeting tend to make more informed decisions and achieve organizational objectives more effectively. Based on these findings, the following hypothesis is proposed:

H1: Active participation in budgeting positively influences managerial performance at the Public Works and Public Housing Office and Tax Service Office of Wonogiri Regency, Indonesia.

Role of leadership style in enhancing managerial performance

Leadership style plays a crucial role in guiding, motivating, and aligning employees' efforts toward the achievement of organizational goals. Effective leaders provide direction, foster commitment, and act as role models, ensuring that organizational vision and strategies are clearly communicated [23]. Several studies have highlighted the significant impact of leadership style on managerial performance, showing that managers with supportive, transformational, or participative leadership approaches achieve higher performance outcomes [7, 24]. Leadership style influences how subordinates carry out tasks, coordinate activities, and contribute to goal attainment, making it a critical determinant of performance. Hence, the second hypothesis is formulated:

H2: Leadership style has a significant positive effect on managerial performance at the Public Works and Public Housing Office and Tax Service Office of Wonogiri Regency, Indonesia.

Organizational commitment and its effect on managerial performance

Organizational commitment reflects the degree to which employees identify with and are dedicated to the goals and values of their organization [25]. Highly committed employees are more likely to exert effort, maintain consistency in performance, and support organizational objectives [24, 26]. Prior research has demonstrated that organizational commitment strengthens managerial performance by fostering loyalty, responsibility, and proactive engagement in work activities [12, 18, 27]. In essence, employees' emotional and psychological attachment to their organization translates into higher efficiency and effectiveness in achieving managerial goals. Based on this evidence, the third hypothesis is proposed:

H3: Organizational commitment positively influences managerial performance at the Public Works and Public Housing Office and Tax Service Office of Wonogiri Regency, Indonesia.

Organizational commitment as a mediator in the relationship between budget participation and managerial performance

Managerial performance is determined not only by structural tools such as budgeting but also by employees' engagement and dedication to organizational objectives [19]. Involving subordinate managers in budget preparation serves as a mechanism for fostering a sense of ownership and responsibility, which is an expression of organizational commitment [4]. This commitment enhances the accuracy of budget planning and increases the likelihood of achieving organizational goals. Several studies have found that organizational commitment partially mediates the effect of budget participation on managerial performance, indicating that involvement alone is not sufficient; the commitment and engagement of employees are critical for realizing improved outcomes [18, 27, 28]. Accordingly, the fourth hypothesis is formulated:

H4: Organizational commitment mediates the positive effect of budget participation on managerial performance at the Public Works and Public Housing Office and Tax Service Office of Wonogiri Regency, Indonesia.

Influence of leadership style on managerial performance through organizational commitment

Achieving high managerial performance requires not only effective leadership but also strong employee engagement and commitment. Organizational commitment reflects the extent to which employees feel attached, involved, and dedicated to their organization, which enables them to carry out tasks efficiently and professionally [25]. Leaders play a pivotal role in cultivating this commitment by guiding employees toward accomplishing the organization's vision and mission. Without such commitment, even strong leadership may not translate into optimal performance outcomes.

Managerial performance, defined as the effectiveness with which managers achieve organizational objectives, is closely linked to leadership practices. Leaders who provide clear direction, motivate employees, and foster a supportive work environment contribute to higher performance levels [20, 29]. Prior research has highlighted that organizational commitment serves as a mediating mechanism in this relationship, suggesting that leadership enhances performance largely by strengthening employees' commitment to organizational goals [20, 29]. Based on this theoretical and empirical foundation, the following hypothesis is proposed:

H5: Organizational commitment mediates the positive effect of leadership style on managerial performance at the Public Works and Public Housing Office and Tax Service Office of Wonogiri Regency, Indonesia.

Research model and methodology

This study investigates the relationships among budget participation, leadership style, and managerial performance, with organizational commitment functioning as an intervening variable. The conceptual model of this research is illustrated in

Figure 1, showing both the direct effects of budget participation and leadership style on managerial performance, as well as the indirect effects mediated through organizational commitment.

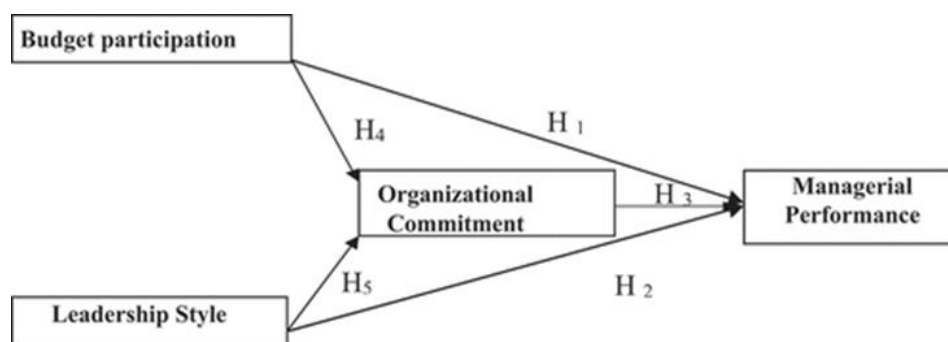


Figure 1. Research model

The focus of this study was the Wonogiri Regency in Indonesia, specifically targeting employees at the Public Works and Public Housing Office and the Tax Service Office. This research employed a quantitative exploratory design to test hypotheses and analyze the relationships between the study variables. Data were collected using a survey, which served to gather primary data directly from respondents. According to Sugiyono [22], primary data are obtained firsthand from the source. In this study, respondents consisted of employees who provided their perceptions on budget participation, leadership style, organizational commitment, and managerial performance.

Sampling followed the principle that if a population is small (fewer than 100), a census of the entire population is preferable [30]. Therefore, all 42 employees were included as participants, making the sample identical to the population. Data were collected using a structured questionnaire, which, as Sugiyono [22] notes, is an effective tool for obtaining responses on specific statements. Similarly, Arikunto [30] emphasizes that questionnaires allow researchers to capture information about respondents' knowledge, perceptions, and experiences.

To analyze the data, path analysis was employed. This method is suitable for examining complex models involving multiple variables and potential causal relationships, allowing researchers to compare different models and assess the strength and significance of paths between variables. Path analysis assumes linear, additive, and causal relationships among the variables. Regression analysis was used within this framework to determine the significance and direction of the effects among independent and dependent variables. The study applied a Likert scale to measure respondents' attitudes, perceptions, and opinions, with scores ranging from 1 (strongly disagree) to 5 (strongly agree).

Variable Operational Definitions

Managerial Performance (Y2): Managerial performance refers to the effectiveness of management activities, encompassing planning, budgeting, administration, reporting, accountability, supervision, and overall coordination. This variable was measured using a structured questionnaire adapted from Mahoney [31] and Syakieb *et al.* [24]. The indicators included planning, investigation, coordination, evaluation, staffing, negotiation, supervision, and representation.

Budget Participation (X1): Budget participation reflects the involvement of managers and their teams in the budgeting process, including setting goals, preparing budgets, and monitoring activities. An interval scale was used to assess participation levels. Indicators adapted from Hidayadi [32] included: 1) involvement in budget preparation, 2) influence on budget formulation, 3) participation in goal setting and budgeting, 4) opportunities for subordinates in budgeting, 5) control over budget targets, and 6) frequency of providing suggestions or opinions.

Leadership Style (X2): Leadership style refers to the approach and behavior of leaders in guiding and influencing employees, particularly within the Public Works and Public Housing Office. The study modified the Hersey & Blanchard model as cited in Hakim *et al.* (2021), with indicators including: 1) directive style, 2) consultative style, 3) participative style, and 4) delegation style.

Organizational Commitment (X3/Y1): Organizational commitment represents employees' emotional attachment, involvement, and loyalty to the organization. Indicators were adapted from Hakim [33] and included: 1) sense of belonging, 2) emotional attachment, 3) perceived meaning, 4) identification as part of the organization, 5) active contribution to organizational goals, 6) viewing the organization as a "second home," and 7) engagement in organizational success.

Results and Discussion

This section presents a descriptive analysis of the respondents based on the data collected from all 42 participants via the administered questionnaires. The classification of respondents is outlined as follows:

Age distribution of respondents

Table A1 in the appendix summarizes respondents' age distribution. Employees aged 20–39 years accounted for 19 participants (45.23%), those aged 40–49 years totaled 9 (21.42%), and respondents over 50 years comprised 14 individuals (33.35%). The results indicate that the majority of respondents were in the 20–39 age range.

Gender distribution of respondents

Respondent gender is presented in Table A2 in the appendix. Male employees numbered 19 (45.23%), while females accounted for 23 (54.77%). These findings suggest that female respondents were slightly more predominant in the sample.

Marital status of respondents

Based on marital status (Table A3, appendix), 27 respondents (64.29%) were married, whereas 15 (35.71%) were unmarried. This indicates that married employees formed the majority of respondents.

Educational background of respondents

Table A4 in the appendix shows the distribution of respondents according to educational level. Among the respondents, 11 (26.20%) had completed high school, 5 (11.90%) held a Diploma III, 17 (40.48%) had an undergraduate degree (S1), and 9 (21.41%) possessed a master's degree. The results highlight that the most common educational level among respondents was an undergraduate degree (S1).

Length of service

Respondents' years of service are summarized in Table A5 in the appendix. Employees with 0–10 years of service totaled 17 (40.48%), those with 10–15 years of service were 6 (14.29%), 15–20 years totaled 5 (11.90%), and those with more than 20 years of service numbered 14 (33.33%). These results indicate that employees with 0–10 years of experience were the most represented group.

Instrument testing: Validity and reliability

The validity of the six items for the budget participation variable (X1) was confirmed, as detailed in Table A6 in the appendix. The highest validity scores were observed for items 4, 2, and 3, indicating that these statements were the strongest indicators of budget participation behavior.

For the leadership style variable (X2), all 35 questionnaire items were valid, as shown in Table A7 in the appendix. The highest validity scores were obtained for items 17, 6, and 7, demonstrating that these items were the most influential in capturing leadership style behavior.

Similarly, the organizational commitment variable (X3) included seven statements, all of which were valid (see Table 1 in the appendix). This confirms that the questionnaire items effectively measured respondents' attachment and involvement with the organization.

Table 1. Correlation of organizational commitment statement items (X3)

Items	Correlation	Status
P1	0.507	Valid
P2	0.478	Valid
P3	0.779	Valid
P4	0.851	Valid
P5	0.856	Valid
P6	0.748	Valid
P7	0.716	Valid

The validity analysis for the organizational commitment variable revealed that the highest scores were observed in statements 5, 4, and 3. This indicates that these items were the most representative indicators of organizational commitment behavior. For the managerial performance variable (Y), all eight statements included in the questionnaire were found to be valid, as detailed in Table 2.

Table 2. Correlation of managerial performance statement items (Y)

Items	Correlation	Status
P1	0.463	Valid
P2	0.392	Valid
P3	0.721	Valid
P4	0.513	Valid
P5	0.451	Valid
P6	0.331	Valid

P7	0.724	Valid
P8	0.378	Valid

The validity test for the managerial performance variable showed the highest scores for statements 7, 3, and 4, indicating that these items were the most significant indicators representing managerial performance behavior.

In addition, the reliability of the questionnaire was assessed to determine the consistency of each variable or construct. In this study, reliability testing was conducted using Cronbach's Alpha. According to Nunnally, Han, and Cao [34], a variable is considered reliable if its Cronbach's Alpha (α) value exceeds 0.60. The results of the reliability analysis, presented in **Tables 3 and 4**, indicate that all variables in the study are reliable, as their Cronbach's Alpha values surpass the minimum threshold of 0.60.

Table 3. Reliability Test Results

Items	Alpha Cronbach	Description
Budget Participation (X_1)	0.889	Reliable
Leadership Style (X_2)	0.931	Reliable
Organizational Commitment (X_3)	0.888	Reliable
Managerial Performance (Y)	0.780	Reliable

Table 4. Equation 1 path analysis results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	11.645	3.967		2.935	.006
1 JMLPPA	.194	.217	.182	.891	.378
JMLGK	.113	.030	.541	3.781	.001
JMLKO	.063	.223	.063	.280	.781

Path Equation Results

Path analysis is an advanced form of regression analysis used to examine causal relationships among predetermined variables, aiming to determine the significance and strength of the effects between independent and dependent variables simultaneously. Equation I: $Y = \beta_1 Y_1 + \beta_2 X_1 + \beta_3 X_2 + e$ Equation I: $X_3 = \beta_4 X_1 + \beta_5 X_2 + e$

Results of path analysis for equation 1

Obtained the equation:

$$Y_2 = 0.182 X_1 + 0.541 X_2 + 0.063 Y_1 + e_1 \text{Sig} (0.378) (0.001)^{**} (0.781)$$

Description: Y_2 = Managerial performance X_1 = Budget participation X_2 = Leadership style Y_1 = Organizational commitment e_1 = Residual ** = 5% significance level

The regression coefficient for budget participation was 0.186, indicating that in the absence of leadership style and organizational commitment, managerial performance would increase by 0.186 units. The regression coefficient for leadership style was -0.541 , suggesting that when budget participation and organizational commitment are not considered, managerial performance increases by 0.541 units. Similarly, the regression coefficient for organizational commitment was 0.063, showing that without the influence of budget participation and leadership style, managerial performance would increase by 0.063 units.

Results of path analysis for equation 2

Obtained the equation:

$$Y_1 = 0.703 X_1 + 0.278 X_2 + e_2 \text{Sig} (0.000)^{**} (0.004)^{**} Y_2 = \text{Managerial performance} X_1 = \text{Budget participation} X_2 = \text{Leadership style} Y_1 = \text{Organizational commitment} e_1 = \text{Residual}^{**} = 5\% \text{ significance level}$$

The regression coefficient for budget participation was 0.703, implying that in the absence of leadership style, organizational commitment would increase by a constant plus 0.703. Meanwhile, the regression coefficient for leadership style was 0.278, indicating that when budget participation is not considered, organizational commitment would increase by a constant plus 0.278.

Hypothesis Test

T-test

The partial effect of each independent variable on the dependent variable was examined using the t-test. In this study, the significance of the regression coefficient was determined through the p-value. If the p-value is ≤ 0.05 , the independent variable is considered to have a significant partial effect on the dependent variable. All calculations were performed using SPSS.

Effect of budget participation on managerial performance

The regression analysis indicated that the t-value for budget participation was 0.891, with a significance level of 0.378 (> 0.05). This suggests that budget participation had a positive but statistically insignificant effect on managerial performance; hence, Hypothesis 1 was not supported.

Effect of leadership style on managerial performance

The results revealed that leadership style had a t-value of 3.781, with a significance level of 0.001 (< 0.05). This indicates a positive and significant influence of leadership style on managerial performance, supporting Hypothesis 2.

Effect of organizational commitment on managerial performance

The t-value for organizational commitment was 0.280, with a significance level of 0.781 (> 0.05), suggesting a positive but nonsignificant effect on managerial performance. Consequently, Hypothesis 3 was not supported.

Effect of budget participation on organizational commitment

Regression results showed that budget participation had a t-value of 7.668, with a significance level of 0.000 (< 0.05), indicating a significant positive effect on organizational commitment.

Effect of leadership style on organizational commitment

The analysis revealed a t-value of 3.036 for leadership style, with a significance level of 0.004 (< 0.05), suggesting that leadership style significantly influenced organizational commitment.

Sobel Test

To examine the mediating role of organizational commitment between the independent and dependent variables, the Sobel test was applied using the appropriate formula.

$$Sab = \sqrt{b^2 s_a^2 + a^2 s_b^2 + s^2 s_b^2}$$

The significance test used the following formula: $\text{calculate} = \frac{ab}{sab}$. A mediating effect occurs when the value of the t-count exceeds that of the t.

Budget participation on managerial performance mediated by organizational commitment

Based on **Tables 5, 6, and 7**, the mediating effect of organizational commitment on the relationship between budget participation and managerial performance was determined as follows.

$$Sab = \sqrt{b^2 s_a^2 + a^2 s_b^2 + s_a^2 s_b^2}$$

$$Sab = \sqrt{(0,754)^2 (0,223)^2 + (0,063)^2 (0,098)^2 + (0,223)^2 (0,098)^2}$$

$$Sab = \sqrt{0,5685 \times 0,0497 + 0,0040 \times 0,0096 + 0,0497 \times 0,0096}$$

$$Sab = \sqrt{0,028272 + 0,000038 + 0,00478}$$

$$Sab = \sqrt{0,028787}$$

Table 5. Equation 2 path analysis results

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.513	2.787		1.260	.215
JMLPPA	.754	.098	.703	7.668	.000
JMLGK	.059	.019	.278	3.036	.004

a. Dependent Variable: JMLKO

Table 6. T-test coefficient

Model	t-count	Sig.
1 (Constant)	2.935	.006
JMLPPA	.891	.378
JMLGK	3.781	.001
JMLKO	.280	.781

Table 7. T-test coefficient analysis

Model	T	Sig.
-------	---	------

1	(Constant)	1.260	.215
	JMLPPA	7.668	.000
	JMLGK	3.036	.004

$Sab = 0.169669$

$$Lookingfort - count: = \frac{ab}{Sab}$$

$$t_{hit} = \frac{0.063 \times 0.754}{0.169669} = \frac{0.047502}{0.169669} = 0.279969$$

The magnitude of t-table of 42 data with $df = 39$ obtained t-table = 2.023.

$t\text{-count} = 0.279969 < t\text{-table} (2.023)$

It can be concluded that budget participation did not exert a mediating effect on managerial performance. Consequently, Hypothesis 4, which proposed that organizational commitment mediates the positive relationship between budget participation and managerial performance, was not supported.

Effect of budget participation on managerial performance mediated by organizational commitment

Based on the analyses presented in **Tables 6, 7, and 8**, the mediated effect of budget participation on managerial performance through organizational commitment was assessed as follows.

$$Sab = \sqrt{b^2 s_a^2 + a^2 s_b^2 + s_a^2 s_b^2}$$

$$Sab = \sqrt{(0.059)^2 (0.223)^2 + (0.063)^2 (0.019)^2 + (0.223)^2 (0.019)^2}$$

$$Sab = \sqrt{0.0035 \times 0.0497 + 0.0040 \times 0.0004 + 0.0497 \times 0.0004}$$

$$Sab = \sqrt{0.000173 + 0.000001 + 0.000018}$$

$$Sab = \sqrt{0.000192}$$

Table 8. First equation F-test results

	Model	F	Sig.
1	Regression	10.777	.000 ^b
	Residual		
	Total		

$Sab = 0.013874$

The magnitude of t-count is sought as follows:

$$t\text{-count} = \frac{0.063 \times 0.059}{0.013874} = \frac{0.003717}{0.013874} = 0.267909$$

Thus, $t\text{-count} = 0.267909 < t\text{-table} (2.023)$

It was concluded that leadership style had no mediating effect on managerial performance. The fifth hypothesis, which proposed that leadership style positively influences managerial performance through organizational commitment, was not supported (**Tables 9-11**).

Table 9. The second equation F-test results

	Model	F	Sig.
1	Regression	49.885	.000 ^b
	Residual		
	Total		

a. Dependent Variable: JKO

b. Predictors: (Constant), JMLGK, JPPA

Table 10. The results of the coefficient of determination of equation 1

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.678 ^a	.460	.417	2.72189

a. Predictors: (Constant), JKO, JMLGK, JPPA

b. Dependent Variable: JKIN

Source: Data processed, 2021

Table 11. The results of the coefficient of determination of equation 2

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.848 ^a	.719	.705	1.95082

a. Predictors: (Constant), JMLGK, JPPA

b. Dependent Variable: JKO

Source: Data processed, 2021

*F-test**First equation F-Test results*

The results of the simultaneous F-test for the first equation showed an F-value of 10.777 with a significance level of $0.000 < 0.05$. This means that, collectively, the independent variables had a significant effect on managerial performance.

Second equation F-Test results

The F-test for the second equation produced an F-value of 49.885 with a significance level of $0.000 < 0.05$. Therefore, it can be concluded that the independent variables—budget participation and leadership style—together had a significant effect on organizational commitment.

*Determination test (R²)**Coefficient of determination (Equation 1)*

$$e1^2 = 1 - R1^2 = 1 - 0.460 = 0.540$$

$$e1 = 0.7348$$

Coefficient of determination (Equation 2)

$$e2^2 = 1 - R2^2 = 1 - 0.719 = 0.281$$

$$e2 = 0.5301$$

Total coefficient of determination

From equations 1 and 2, the total coefficient of determination (R² total) was calculated as follows:

$$R2 \text{ total} = 1 - (e1^2 \times e2^2) = 1 - (0.540 \times 0.281) = 1 - 0.1517 = 0.8483$$

Therefore, R² total = 0.8483, meaning that managerial performance could be explained by budget participation, leadership style, and organizational commitment by 84.83%. The remaining 15.17% is influenced by other factors outside the model, such as communication, discipline, and other variables.

Path Analysis

Based on the results of various tests, the following summary can be made:

Direct effect

In this study, the direct effect refers to the influence of one independent variable on the dependent variable without the involvement of other variables.

1. Budget Participation on Managerial Performance

2. According to **Tables 12 and 13**, budget participation had a positive but insignificant effect on managerial performance, with a path coefficient of 0.182 and a significance level of 0.352.

Table 12. Results of path analysis recapitulation

No.	Relationship Direction	Regression	
		Beta	Sig
1	Budget Participation → Managerial Performance	0.186	0.352
2	Leadership Style → Managerial Performance	0.541	0.000
3	Organizational Commitment → Managerial Performance	0.063	0.903
4	Budget Participation → Organizational Commitment	0.703	0.000
5	Leadership Style → Organizational Commitment	0.278	0.004

Table 13. Results of direct, indirect, and total effects

No.	Between Variables	Direct Influence	Indirect influence	Total Influence
1	Budget Participation → Performance	0.186		
2	Leadership Style → Performance	0.541		
4	Budget Participation → Organizational Commitment → Performance		$0.703 \times 0.063 = 0.019$	$0.182 + 0.019 = 0.205$
5	Leadership Style → Organizational Commitment → Performance		$0.278 \times 0.063 = 0.008$	$0.541 + 0.008 = 0.602$

1. Leadership Style and Managerial Performance

2. As presented in **Tables 12 and 13**, leadership style had a strong and significant positive influence on managerial performance, with a path coefficient of 0.541 and a significance value of 0.000.

Indirect influence

1. Budget Participation → Organizational Commitment → Managerial Performance

2. According to **Table 13**, budget participation had a significant effect on organizational commitment. While organizational commitment did influence managerial performance, the relationship was not statistically significant. The indirect coefficient for this relationship was 0.019.

3. Leadership Style → Organizational Commitment → Managerial Performance

4. **Table 13** reveals that leadership style had a clear positive and significant effect on organizational commitment. In turn, organizational commitment contributed positively to improving managerial performance, with an indirect coefficient value of 0.008.

Total effect

1. Based on **Table 13**, the overall effect of budget participation on managerial performance through organizational commitment was 0.205.

2. Meanwhile, the total combined effect of leadership style on managerial performance through organizational commitment reached 0.602 (**Figure 2**).

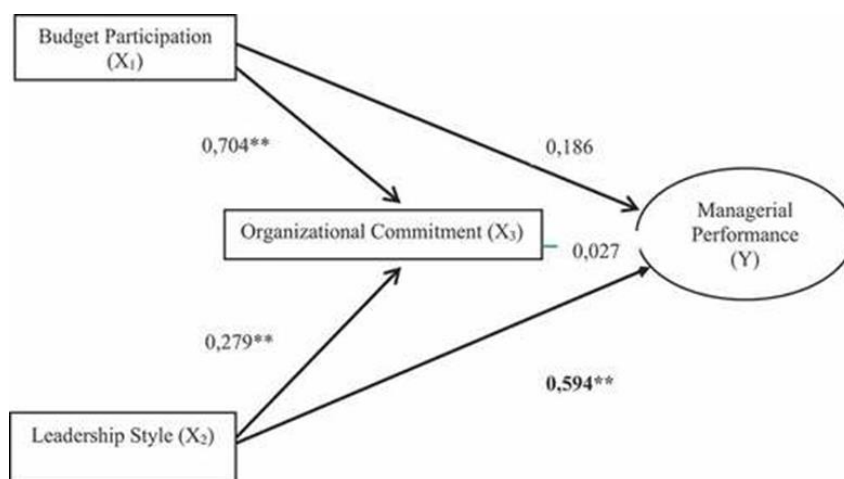


Figure 2. Path analysis results

Summary of path analysis results

The path analysis results indicate that leadership style had a significant positive effect on managerial performance, while budget participation and organizational commitment had no significant direct or indirect influence. Leadership style also showed a positive indirect effect through organizational commitment, but the mediating impact remained minimal. Overall, managerial performance was largely explained by leadership behavior rather than budget participation or organizational commitment.

Discussion

Budget participation and managerial performance

The analysis showed that the direct effect of budget participation on managerial performance was 0.182, but it was not statistically significant ($p = 0.352 > 0.05$). This suggests that although budget participation existed, it did not meaningfully improve performance.

One possible reason is that subordinate managers, who should be actively involved in achieving the jointly set budget goals, did not take that responsibility seriously. In the Public Works and Public Housing Office and the Tax Service Office of Wonogiri Regency, the budgeting process appeared to be treated as a routine formality rather than a performance-driven activity. Unlike private organizations, where budgeting is closely tied to productivity and performance, the public offices showed limited motivation or enforcement toward achieving set targets.

These findings align with earlier studies by Syahputra [13], Yulianingsih [14], and Andison [15], which also found no significant relationship between budget participation and managerial performance. However, they contradict the results of

Indarto and Ayu [4], Putri and Adiguna [8], Abata [9], Moheri and Arifah [10], Tarigan and Devie [11], Manica and Hanny [12], Ermawati [3], and Sari and Abdullah [7], who reported a positive influence. Similarly, this study does not support the negative association found by Suharman [16] and Noor and Othman [17].

In summary, budget participation did not effectively enhance managerial performance. To strengthen its impact, leaders should maintain and improve participatory budgeting behavior by:

- a. Continuing to give subordinates opportunities to participate in the budget-setting process.
- b. Encouraging collaboration between leaders and staff during budget formulation.
- c. Involving subordinates in setting and achieving budget targets to increase ownership and responsibility.

Leadership style and managerial performance

The findings revealed that leadership style had a significant positive influence on managerial performance, with a path coefficient of 0.541 and $p = 0.000$. This indicates that a supportive and structured leadership approach contributes substantially to improving performance in the Department of Public Housing and Settlement and Housing in Wonogiri Regency.

These results are consistent with the studies of Sari and Abdullah [7] and Elwisa [20], which also concluded that leadership style significantly improves managerial outcomes.

Because leadership style was found to be an effective factor, it is important to maintain and strengthen leadership behavior that supports managerial performance. This can be achieved by focusing on key behavioral indicators reflected in statement items 17, 6, and 7:

- a. Encouraging subordinates to take responsibility for their work and handle challenges independently.
- b. Ensuring that supervisors plan clear and firm steps for monitoring and evaluating performance.
- c. Maintaining active oversight of subordinates' tasks to ensure progress and accountability.

Organizational commitment and managerial performance

The results indicated that organizational commitment had a weak and insignificant effect on managerial performance, with a coefficient of 0.063 and $p = 0.903 (\geq 0.05)$. This suggests that employees' commitment to their organization did not directly lead to better performance.

This lack of significance may stem from employees' perception of commitment as a mere duty rather than a motivational factor. Many respondents were young (aged 20–39 years) and had limited work experience (0–10 years). As a result, their emotional attachment to the organization was still developing.

These findings differ from studies by Jannah and Rahayu [18], Manica and Hanny [12], Sari and Abdullah [7], Giusti *et al.* [27], Hartini (2018), Syakieb *et al.* [24], and Gamayuni [26], all of which found a significant link between organizational commitment and performance.

Given the current results, organizational commitment appears ineffective in boosting performance. To maintain and strengthen positive commitment behaviors, leaders should focus on key indicators (statement items 5, 4, and 3) by:

- a. Supporting employee participation in overcoming obstacles related to budget implementation.
- b. Reinforcing the sense of purpose and contribution employees feel when involved in budgeting.
- c. Sustaining employee engagement in achieving jointly set budget goals.

Budget participation and managerial performance mediated by organizational commitment

The findings showed that budget participation had a significant and positive effect on organizational commitment, with a coefficient of 0.278 and a p -value of 0.004, which is below the 0.05 threshold. However, the relationship between organizational commitment and managerial performance was weak and statistically insignificant, with a coefficient of 0.063 and a p -value of 0.781.

The indirect impact of budget participation on managerial performance through organizational commitment was 0.018, which is smaller than the direct effect of 0.182. The Sobel test results, where the t -count value (0.279) was lower than the t -table value (2.023), confirmed that organizational commitment did not play a mediating role.

This suggests that while involving employees in budgeting processes increases their sense of commitment, that commitment does not necessarily lead to improved performance. Employees may see commitment as part of their job expectations rather than a personal drive to contribute to organizational success. Their sense of belonging is not strong enough to influence performance outcomes.

These findings contradict the results of previous studies conducted by Indarto and Ayu [4], Kholidah and Murtini [28], Jannah and Rahayu [18], and Giusti *et al.* [27], which found a significant mediating role for organizational commitment. Therefore, the fourth hypothesis, which stated that budget participation improves managerial performance through organizational commitment, was rejected.

Leadership style and managerial performance mediated by organizational commitment

The results indicated that leadership style had a strong and significant influence on organizational commitment, with a coefficient of 0.703 and a p-value of 0.000. However, the influence of organizational commitment on managerial performance remained weak and insignificant, with a coefficient of 0.063 and a p-value of 0.781.

The indirect effect of leadership style on managerial performance through organizational commitment was 0.044, which was smaller than the direct effect of 0.541. The Sobel test further showed that the t-count was below the t-table value, confirming that organizational commitment did not serve as a mediator in this relationship.

This means that even though good leadership strengthens employees' commitment, such commitment did not translate into better managerial performance. The existing level of commitment appears to be more formal than emotional—employees may follow their leaders' directions but lack deep motivation to perform beyond expectations. Consequently, despite strong leadership, the absence of a genuine emotional bond with the organization limited the improvement of managerial outcomes.

Conclusion and Recommendations

The analysis concluded that budget participation positively influenced managerial performance, but the effect was not statistically significant. Involving employees in budgeting alone was not enough to raise performance levels. Leadership style, on the other hand, showed a clear and significant positive relationship with managerial performance, indicating that effective leadership directly enhances performance outcomes.

Organizational commitment, although positive, had no significant impact on performance and did not mediate the relationship between budget participation and managerial performance. It also failed to mediate the link between leadership style and managerial performance.

Overall, these findings imply that while participation and leadership matter, organizational commitment in this context is not yet strong enough to bridge their impact on performance. Future research should consider a broader range of factors—such as motivation, communication, and work environment—that may better explain variations in managerial performance across public institutions.

Acknowledgments: None

Conflict of interest: None

Financial support: None

Ethics statement: None

References

1. Gibson JL, Ivancevich JM, Donnelly JH, Jr., Konopaske R. Organizations: Behavior, structure, processes. New York: McGraw-Hill; 2012.
2. Hasibuan S, Malayu P. Human resource management. Jakarta: PT Bumi Aksara; 2015.
3. Ermawati N. Effect of budget participation on managerial performance with work motivation as moderating variable: A case study of local government agencies in Pati Regency. Indonesian Journal of Accounting. 2017;6(2):141-56.
4. Indarto, Ayu SD. The influence of participation in budgeting on company managerial performance through budget adequacy, organizational commitment, commitment to budget objectives, and job-relevant information. Scientific Studies Series. 2011;14(1):1-44.
5. WiseGeek. Clear answers for common questions. 2012.
6. Brownell P. The role of accounting data in performance evaluation, budgetary participation, and organizational effectiveness. Journal of Accounting Research. 1982;20(1):12.
7. Sari A, Abdullah. The influence of participation in budgeting, job satisfaction, job relevant information, and work motivation on the managerial performance of the public prosecutor's office in the Aceh region. Journal of Master's Accounting. 2017:20-31.
8. Putri, Adiguna. Effect of budget participation, organizational commitment, and leadership style on managerial performance. Esensi. 2014;4(3):137-60.
9. Abata MA. Participative budgeting and managerial performance in the Nigerian food products sector. Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics. 2014;1(3):2311-62.
10. Moheri, Arifah. Effect of budget participation on managerial performance. EKOBIS. 2015;16(1):86-93.
11. Tarigan D, Devie. The influence of budgeting participation on managerial performance in service companies: Evidence from Indonesia. Journal of Accounting and Finance. 2015;15(8):95-105.

12. Manica, Hanny. Effect of budget participation on managerial performance through job satisfaction, commitment to budget goals, and job relevant information. *Journal of Administrative Sciences*. 2016;8(1):77-92.
13. Syahputra Z. Budget participation on managerial performance: Related factors influencing government employees (study of Indonesian local government). *Journal of Economics and Sustainable Development*. 2014;5(21).
14. Yulianingsih Y. The effect of budget participation on managerial performance with motivation and organizational culture as moderating variables: Universitas Muhammadiyah Surakarta; 2017.
15. Andison YA. Budget participation, job satisfaction, and managerial performance: A study on the pempek family business in Palembang city. *Journal of Business and Management*. 2017;7(1):73-125.
16. Suharman H. The influence of corporate social performance, budget emphasis, and participative budget on job-related tension. *World Journal of Social Sciences*. 2012;2(7):48-63.
17. Noor IHBM, Othman R. Budgetary participation: How it affects performance and commitment. *Accounting, Business and the Public Interest*. 2012;1:53-73.
18. Jannah, Rahayu. The influence of budgetary participation on local government agency managerial performance with clarity of budget goals, commitment to budget goals, distributive justice, and internal control as intervening variables. *Journal of Regional Development and Financial Perspectives*. 2015;3(2).
19. Giri M, Wiguna DB. Effect of budgetary participation on managerial performance through distributive justice, procedural fairness, and commitment to budget goals as mediating variables: Universitas Udayana; 2014.
20. Elwisa J. Effect of budget participation, work motivation, work environment, and compensation on managerial performance in local government agencies in Bintan Regency: Universitas Maritim Raja Ali Haji; 2017.
21. Eker M. The impact of budget participation on managerial performance via organizational commitment: A study on the top 500 firms in Turkey. *Ankara Üniversitesi SBF Dergisi*. 2009;64(4):118-36.
22. Sugiyono. Qualitative quantitative research methods and R&D. Bandung: Alfabeta; 2013.
23. Robbins SP, Judge TA. *Organizational behavior*. Jakarta: Salemba Empat; 2019.
24. Syakieb A, Mohd Saudi MH, Rini S, Adison A. Effect of participative budgeting, organizational commitment, and work motivation on managerial performance: Survey of motor vehicle dealers in Bandung. *International Journal of Engineering and Technology*. 2018;7(4.34):240-4.
25. Andre M, Hermanto A. The effect of organizational commitment and organizational culture on employee performance Pt. Citra Mandiri Cemerlang Prima. *Krisnadwipayana Business Management Journal*. 2021;9(2).
26. Gamayuni RR. The effects of budgetary participation, budgetary slack, authority delegation, and organizational commitment on managerial performance in local government in Lampung, Indonesia. *Journal of Administrative and Business Studies*. 2019;5(6):330-8.
27. Giusti G, Kustono AS, Effendi R. Effect of budget participation on managerial performance with organizational commitment and motivation as intervening variables. *E-Journal of Business, Economics and Accounting*. 2018;2:121-38.
28. Kholidah L, Murtini H. Budget participation in managerial performance: Organizational commitment and task information as mediators. *Accounting Analysis Journal*. 2014;3(2).
29. Fabio H, Puspitawati. Effect of leadership style, work motivation on organizational commitment with implications for employee performance. *Journal of Business Management and Application*. 2016;2(1):91-104.
30. Arikunto S. *Research procedure: A practical approach*. Jakarta: Rineka Cipta; 2014.
31. Mahoney T. *Development of managerial performance: A research approach*. Cincinnati, OH: South-Western Publishing Co.; 1963.
32. Hidrayadi R. The effect of decentralization, budget participation, organizational commitment, and work motivation on performance of SKPD managerial Pekanbaru city. *JOM Economics*. 2015;2(2):15.
33. Hakim A. Effect of organizational culture, organizational commitment on performance: Study in the hospital of South Konawe district of Southeast Sulawesi. *International Journal of Engineering Sciences*. 2015;4(5):33-41.
34. Hu L, Bentler PM. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Struct Equ Model*. 1999;6(1):1-55.