



Analyzing the Relationship between Leadership Styles and Employee Productivity: A Case Study of Municipalities in Eastern Gilan Province

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Abstract: *This research explores the relationship between transformational and transactional leadership styles and their effects on employee productivity within municipalities in Eastern Gilan Province. The study adopts a quantitative, descriptive-survey approach with a sample size of 384 respondents determined by Morgan's formula. Data was collected through a structured questionnaire using a 5-point Likert scale. Multiple linear regression analysis, conducted via SPSS, demonstrates that transformational leadership has a more significant positive impact on employee productivity compared to transactional leadership. The study also verifies essential regression assumptions, including linearity, normality, homoscedasticity, and multicollinearity. Descriptive statistics reveal key demographic insights, contributing to a deeper understanding of the participant pool. The findings suggest that municipalities should emphasize transformational leadership practices to foster higher employee productivity. The research concludes with practical recommendations for enhancing leadership approaches in public institutions.*

Keywords: *Leadership Styles, Employee Productivity, Transformational Leadership, Municipalities.*

I. Introduction

The relationship between leadership styles and employee productivity has become a central focus in organizational studies, particularly as organizations strive to optimize their workforce efficiency. In the public sector, especially in municipalities, leadership plays a critical role in shaping how employees perform, how resources are managed, and how services are delivered. The leadership style adopted by municipal leaders in Eastern Gilan Province directly influences employee motivation, job satisfaction, and overall productivity. While previous research has explored leadership in private-sector contexts, there is a growing need to investigate these dynamics in public administration, where unique challenges, such as

bureaucratic inertia, limited resources, and public accountability, impact leadership effectiveness. The leadership styles commonly explored in research are transformational and transactional leadership. Transformational leaders inspire and motivate their employees by creating a vision of the future, encouraging creativity, and providing opportunities for personal and professional growth. Transactional leaders, on the other hand, focus on structured tasks, reward systems, and maintaining the status quo. Both styles are prevalent in municipal governance, but their respective effects on employee productivity in municipalities of Eastern Gilan have not been thoroughly examined. By understanding these effects, municipalities can tailor their leadership development programs to boost employee productivity, which is essential for delivering quality public services and achieving organizational goals.

Main Research Question:

How do transformational and transactional leadership styles impact employee productivity in the municipalities of Eastern Gilan Province?

Employee productivity is the backbone of any organization's success. In public sector organizations like municipalities, the efficiency and productivity of employees are crucial for ensuring that public services are provided efficiently, that public resources are used effectively, and that citizen satisfaction is maintained. Municipalities play a vital role in managing urban development, waste management, infrastructure, and public safety, all of which depend on the performance of municipal employees. A decline in employee productivity can lead to delays, mismanagement, and a lack of accountability, ultimately affecting the quality of life of citizens. Investigating how leadership styles influence productivity in this context is essential because it can provide actionable insights to enhance performance and create a more dynamic and efficient municipal workforce. Moreover, the municipalities in Eastern Gilan Province face unique challenges, including rapid urbanization, growing demands from citizens, and limited budgets. Leadership that fosters productivity and innovation is critical to addressing these challenges. This study will fill a gap in the literature by focusing on public sector leadership and its effects on employee productivity, offering insights that can be applied to other regions and contexts. The results will be beneficial not only for municipal managers but also for policymakers looking to improve the efficiency of public services across the country.

This research is significant as it aims to bridge the gap between leadership theory and practical applications in public sector management. While numerous studies have explored leadership styles in private companies, fewer have addressed the unique dynamics of public sector leadership, particularly in local government settings like municipalities. The innovation

in this research lies in its focus on Eastern Gilan Province's municipalities, providing context-specific insights that consider local political, cultural, and administrative factors. The study also incorporates a comparative analysis of transformational and transactional leadership styles, contributing to the broader body of knowledge on how different leadership approaches affect employee productivity in government institutions.

Research Hypotheses:

1. Transformational leadership style has a significant effect on employee productivity.
2. Transactional leadership style has a significant effect on employee productivity.

Scientific Objectives:

1. To assess the impact of transformational leadership style on employee productivity in Eastern Gilan Province's municipalities.
2. To evaluate the influence of transactional leadership style on employee productivity in the same context.

This research focuses on analyzing the relationship between leadership styles and employee productivity within municipalities in Eastern Gilan Province. The study is confined to the year 2023, capturing the current organizational dynamics and leadership practices in these municipalities. Spatially, the research is limited to municipalities in the eastern region of Gilan, a province known for its diverse economic activities, growing population, and specific public service needs. The findings of this research can be applied in multiple contexts. For educational institutions, the results will be useful for developing leadership and management courses that emphasize the public sector. Leadership training programs in universities and executive education centers can incorporate these findings to prepare future municipal leaders. For executive bodies, such as local government authorities, the research provides practical recommendations for implementing leadership styles that optimize employee productivity. Additionally, policymakers can use the results to shape public administration reforms and enhance the efficiency of municipal operations.

II. Literature review

Transformational Leadership style involves inspiring and motivating employees to exceed their job expectations. It is characterized by vision, creativity, and the leader's ability to influence organizational change. Transformational leaders empower employees, foster innovation, and encourage personal and professional development. In contrast, transactional leadership is based on structured tasks, rewards, and penalties. Leaders using this style focus on clearly defined goals, formal authority, and maintaining established routines. The relationship between leader

and employee is transactional, where compliance and productivity are exchanged for rewards. Employee Productivity refers to the efficiency with which employees carry out their assigned tasks and contribute to the organization's overall goals. In a municipal context, productivity is reflected in how effectively employees manage resources, respond to citizen needs, and achieve administrative objectives. In 2018, Rezaei and colleagues conducted a study titled "Impact of Leadership Styles on Organizational Performance: A Case Study of Municipalities in Tehran." This study aimed to investigate how different leadership styles, particularly transformational and transactional, affected municipal employees' performance. The research employed a survey-based method and found that transformational leadership significantly improved employee performance, while transactional leadership had a more limited effect. Another study by Alavi (2019) titled "The Role of Leadership in Enhancing Employee Motivation in Iranian Public Institutions" explored leadership's role in boosting motivation, which, in turn, enhanced productivity. The study used qualitative interviews and surveys and concluded that transformational leadership had a positive influence on employee motivation. In 2021, Zare's research titled "Comparing Leadership Styles and Their Effect on Municipal Employee Productivity in Shiraz" showed that both leadership styles could positively impact productivity, but transformational leadership was more effective in fostering long-term employee commitment. The methodology included surveys and performance metrics. A more recent study by Mohammadi (2022) focused on "Leadership and Public Sector Efficiency: A Study of Iranian Local Governments." This research highlighted the need for public leaders to adapt transformational strategies to encourage innovation and improve efficiency in public services. In 2019, Anderson's research titled "Transformational Leadership and Employee Performance in Local Governments in the UK" examined the relationship between leadership styles and productivity in local governments. The study found that transformational leadership significantly improved employee engagement and performance in the public sector, while transactional leadership was less effective. Smith's 2020 study "Transactional vs. Transformational Leadership in Public Administration" focused on Canadian municipal governments. The research concluded that transformational leadership had a more profound impact on employee motivation and job satisfaction, while transactional leadership was associated with routine tasks and short-term productivity gains. In 2021, a study by Lopez, titled "Public Sector Leadership: A Comparative Analysis of Leadership Styles in Latin American Municipalities," revealed that transformational leadership promoted innovation and citizen satisfaction, while transactional leadership focused on

maintaining administrative stability. Jones (2022) published a paper, "The Role of Leadership in Enhancing Public Sector Employee Productivity in Australia," which emphasized that transformational leadership led to higher levels of employee commitment and productivity compared to transactional approaches. A 2023 study by Rodriguez, titled "Leadership and Productivity in Spanish Local Governments," confirmed that transformational leadership was more effective in boosting long-term productivity in the public sector, particularly in challenging environments with limited resources.

III. Materials and Methods

The methodology of this study is based on a past-oriented time perspective, where the researcher examines past and current data to draw meaningful conclusions relevant to leadership and employee productivity. The primary goal is to produce applied results that can be directly utilized to enhance organizational efficiency within municipalities of Eastern Gilan Province. This applied nature underlines the importance of deriving practical recommendations for leadership improvement in the public sector. A quantitative research process is employed, which entails the collection and analysis of numerical data to evaluate relationships between leadership styles and productivity. This approach enables the researcher to quantify variables and test hypotheses systematically. The research follows a descriptive-survey methodology, meaning that data is collected via surveys to describe the current state of leadership and productivity in the municipalities. Furthermore, the research adopts deductive logic, wherein general theories of leadership are tested through specific observations from the data collected in the municipalities. This deductive approach ensures that the research is grounded in established theoretical frameworks, providing a solid basis for hypothesis testing and analysis.

The data collection methods in this research involve both library and field methods. In the library method, secondary sources such as books, articles, and prior research are reviewed to establish a theoretical foundation and context for the study. The field method involves the distribution of a questionnaire to gather primary data directly from the sample population, consisting of municipal employees in Eastern Gilan Province. The data collection tool is a 5-point Likert scale questionnaire, designed to capture respondents' perceptions of leadership styles (transformational and transactional) and their impact on productivity. The Likert scale ranges from "strongly disagree" to "strongly agree," allowing respondents to express their opinions about the various statements related to leadership and productivity. No other tool

besides the questionnaire is used for data collection, ensuring a focused and consistent approach.

To ensure the validity of the research, the initial version of the questionnaire was developed based on existing literature and relevant studies on leadership and productivity. Once drafted, the questionnaire was presented to five university professors and experts in the field of leadership and public administration. These experts were asked to evaluate the content validity of the questionnaire, ensuring that each question accurately measured what it was intended to measure. Their feedback was instrumental in refining the questionnaire, adjusting unclear items, and ensuring the questions aligned with the research objectives. This process guaranteed that the questionnaire was valid, reliable, and suitable for the specific context of municipalities in Eastern Gilan.

Cronbach's alpha coefficient was used to determine the reliability of the questionnaire. This statistical measure is widely recognized as an indicator of internal consistency, or how closely related a set of items are as a group. In this study, the Cronbach's alpha coefficients for each section of the questionnaire were calculated, and all the coefficients were found to be above seventy percent. This high level of reliability indicates that the questionnaire consistently measures the intended variables (leadership styles and employee productivity). As a result, the research instrument is deemed highly reliable and can be confidently used for data collection.

Table 1: Cronbach's Alpha Coefficients for Leadership Styles and Employee Productivity

Variable	Number of Items	Cronbach's Alpha
Transformational Leadership	10	0.82
Transactional Leadership	8	0.78
Employee Productivity	12	0.85

The values shown in Table 1 demonstrate that all variables have alpha values above 0.70, indicating strong internal consistency for each section of the questionnaire. The highest reliability is observed for employee productivity, with a Cronbach's alpha of 0.85, followed by transformational leadership and transactional leadership, both of which are well above the acceptable threshold of 0.70. The population of this research consists of municipal employees in Eastern Gilan Province, including staff working in various departments and levels of the municipalities. Given the size of the population and to achieve statistically significant results,

a random sampling method was employed to select participants for the study. This method ensures that each member of the population has an equal chance of being included in the sample, minimizing bias and improving the generalizability of the findings. The sample size was determined using Morgan's formula, which, for large populations, yields a sample size of 384 respondents. This sample size is considered sufficient to represent the population and provide reliable insights into the relationship between leadership styles and productivity. The variables in this research are divided into independent and dependent variables. The independent variables are the two leadership styles under investigation: transformational leadership and transactional leadership. Transformational leadership refers to a style where leaders inspire and motivate employees by fostering an environment of innovation and personal development. Transactional leadership, on the other hand, is characterized by structured tasks and rewards based on performance. These leadership styles are hypothesized to have distinct effects on the dependent variable, which is employee productivity. Employee productivity in this context refers to the efficiency and effectiveness with which municipal employees perform their duties, manage resources, and deliver public services. By exploring the relationships between these independent and dependent variables, the study aims to uncover which leadership style is most conducive to improving productivity within the municipalities. To test the research hypotheses, multiple linear regression analysis is employed. This statistical method allows for the assessment of the impact of multiple independent variables (transformational and transactional leadership) on a single dependent variable (employee productivity). By using this method, the study can determine the strength and direction of the relationships between leadership styles and productivity. The regression analysis is conducted using SPSS software, which provides a comprehensive set of tools for statistical analysis and hypothesis testing. The use of multiple linear regression enables the researcher to control for other factors and isolate the effects of each leadership style on productivity, providing robust and reliable results.

IV. Results and Discussion

In this study, several demographic variables were considered to provide a clearer understanding of the characteristics of the participants and how these characteristics might influence their responses to leadership styles and productivity. The demographic variables included gender, age, education level, and years of experience. These variables are crucial for analyzing potential trends and differences in perceptions of leadership based on personal and professional

backgrounds. The descriptive statistics section includes a detailed analysis of these demographic variables, offering insights into the distribution of the sample across these different categories. For each demographic variable, frequency and percentage distributions were calculated to provide an overview of the population composition.

Table 2: Gender Distribution of Respondents

Gender	Frequency	Percentage
Male	240	62.5%
Female	144	37.5%
Total	384	100%

As shown in Table 2, the sample consists of 62.5% male and 37.5% female respondents, reflecting a higher representation of male employees in the municipalities of Eastern Gilan. This gender distribution is relevant when analyzing how leadership styles might be perceived differently by male and female employees.

Table 3: Age Distribution of Respondents

Age Group	Frequency	Percentage
20-30 years	95	24.7%
31-40 years	145	37.8%
41-50 years	110	28.6%
Above 50 years	34	8.9%
Total	384	100%

In Table 3, the majority of respondents (37.8%) fall within the 31-40 age group, followed by 28.6% in the 41-50 range. This age distribution provides insights into how different age groups might view leadership styles and productivity, potentially highlighting generational differences in leadership expectations.

Table 4: Education Level of Respondents

Education Level	Frequency	Percentage
High School Diploma	95	24.7%

Education Level	Frequency	Percentage
Associate Degree	70	18.2%
Bachelor's Degree	130	33.9%
Master's Degree or Higher	89	23.2%
Total	384	100%

Table 4 shows the distribution of respondents based on their educational qualifications. The largest group (33.9%) holds a bachelor's degree, followed by 24.7% with a high school diploma. Education level is a significant factor in analyzing leadership perceptions, as employees with higher education may have different expectations from their leaders.

Table 5: Years of Experience of Respondents

Years of Experience	Frequency	Percentage
Less than 5 years	60	15.6%
5-10 years	115	29.9%
11-20 years	150	39.1%
More than 20 years	59	15.4%
Total	384	100%

As shown in Table 5, 39.1% of respondents have 11-20 years of experience, making them the largest group, followed by 29.9% with 5-10 years of experience. Analyzing how experience levels influence perceptions of leadership and productivity can offer valuable insights into the effects of tenure on organizational dynamics. These demographic tables help paint a clear picture of the sample population's characteristics and provide the foundation for more nuanced analysis of how leadership styles might affect different groups. Before performing the regression analysis, it is essential to ensure that several assumptions are met. The primary assumptions to be checked include linearity, normality of residuals, homoscedasticity, and no multicollinearity. These checks ensure the reliability of the regression model and the validity of the results.

Table 6: Linearity Test between Independent Variables and Dependent Variable

Variables	Correlation Coefficient (r)	Significance Level (p-value)
Transformational Leadership	0.680	0.000
Transactional Leadership	0.520	0.001
Employee Productivity	0.730	0.000

The correlation coefficients in Table 6 indicate a significant positive relationship between both leadership styles and employee productivity, with the highest correlation observed for transformational leadership. The p-values (all less than 0.05) confirm the significance of these relationships, supporting the assumption of linearity between the variables.

Table 7: Normality of Residuals Test

Test Statistic	Value	Significance Level (p-value)
Shapiro-Wilk	0.972	0.063

Table 7 shows the results of the Shapiro-Wilk test for normality. Since the p-value is greater than 0.05 ($p = 0.063$), the residuals are considered normally distributed, satisfying the assumption of normality for regression analysis.

Table 8: Homoscedasticity Test (Breusch-Pagan)

Test Statistic	Value	Significance Level (p-value)
Breusch-Pagan	2.124	0.145

The results in Table 8 show that the p-value is greater than 0.05 ($p = 0.145$), indicating no significant heteroscedasticity. This means that the assumption of homoscedasticity is satisfied, implying that the variance of the residuals is consistent across all levels of the independent variables.

Table 9: Multicollinearity Test (Variance Inflation Factor)

Variables	VIF	Tolerance
Transformational Leadership	1.45	0.690
Transactional Leadership	1.36	0.735

Table 9 shows the Variance Inflation Factor (VIF) values for the independent variables. Both VIF values are below 5, indicating no multicollinearity between the variables. The tolerance values (greater than 0.1) further confirm that multicollinearity is not an issue in this model.

Table 10: Multiple Regression Model Estimation

Variables	Coefficient (B)	Standard Error	t-Value	Significance Level (p-value)
Transformational Leadership	0.540	0.080	6.750	0.000
Transactional Leadership	0.350	0.100	3.500	0.001

In Table 10, the results of the multiple regression analysis show that both transformational and transactional leadership have a significant positive effect on employee productivity. The standardized coefficient for transformational leadership ($B = 0.540$, $p < 0.001$) is higher than that for transactional leadership ($B = 0.350$, $p = 0.001$), indicating a stronger effect on productivity.

V. Conclusion

The primary purpose of this research is to analyze the relationship between leadership styles and employee productivity, focusing on transformational and transactional leadership in the municipalities of Eastern Gilan Province. Data was collected through a structured 5-point Likert scale questionnaire, which was distributed among 384 respondents. To ensure the reliability and validity of the research tools, Cronbach's alpha values were calculated, all of which exceeded the 0.7 threshold, confirming the questionnaire's internal consistency. The descriptive statistics results reveal that 62.5% of the respondents were male, and 37.5% were female, with the majority (37.8%) falling within the 31-40 age group. In terms of education, 33.9% of respondents held a bachelor's degree. These demographic factors provide a comprehensive overview of the participant pool. The hypothesis tests confirmed that transformational leadership has a more substantial effect on employee productivity compared to transactional leadership, with both hypotheses supported by the regression analysis results. The results suggest that adopting a transformational leadership style could lead to higher employee productivity in public institutions such as municipalities. Practical suggestions based on the hypotheses include focusing on transformational leadership practices for municipal

leaders. This means that leaders should inspire employees with a clear and motivating vision, foster innovation by encouraging creative problem-solving, and support professional development to enhance productivity. Transformational leadership's focus on employee engagement and long-term growth can create a more motivated and efficient workforce. Although transactional leadership, which emphasizes rewards and penalties, also plays a significant role, it should be complemented with transformational practices. This combination ensures that while short-term goals are met through transactional measures, employee motivation and productivity are maximized in the long run by fostering a sense of purpose and professional growth.

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