

Bridging the Gap Between Certification and Performance: The Role of Work Motivation

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ABSTRACT

This study aims to examine the influence of teacher certification and work motivation on teacher performance in vocational secondary education. Teacher performance is a crucial determinant of educational quality, particularly in vocational schools where practical competence and instructional effectiveness are essential. While teacher certification has been widely implemented as a policy to improve professionalism, its actual impact on performance remains debated. Therefore, this study integrates certification and work motivation into a single analytical model to provide a more comprehensive understanding. A quantitative approach with a causal associative design was employed. The study involved 48 certified teachers at a public vocational school in Indonesia, selected using a saturated sampling technique. Data were collected through structured questionnaires using a Likert scale and analyzed using multiple linear regression, including partial (t-test), simultaneous (F-test), and coefficient of determination (R^2) analyses. The findings reveal that teacher certification has a positive and significant effect on teacher performance. Similarly, work motivation significantly influences teacher performance, although with varying directional patterns that require deeper interpretation. Simultaneously, certification and motivation significantly predict teacher performance, with a high coefficient of determination ($R^2 = 0.754$), indicating that 75.4% of performance variance is explained by the model. The study highlights that certification alone is insufficient without strong intrinsic and extrinsic motivation. Therefore, educational policymakers and school leaders should not only emphasize certification programs but also foster motivational strategies to enhance teacher effectiveness. This research contributes to the literature by providing empirical evidence from the post-pandemic educational context in vocational schools.

Keywords: Educational Management, Teacher Certification, Teacher Performance, Vocational Education, Work Motivation.

INTRODUCTION

Education plays a fundamental role in shaping human capital and fostering national development. In the era of globalization and rapid technological advancement, the demand for high-quality education systems has become increasingly urgent. One of the key determinants of educational quality is the performance of teachers, as they are directly involved in the teaching and learning process. Teachers are not only responsible for delivering knowledge but also for facilitating learning, motivating students, and developing competencies relevant to the demands of the 21st century. Teacher performance reflects the ability of educators to plan, implement, and evaluate learning processes effectively. High-performing teachers are capable of creating engaging learning environments, utilizing innovative teaching strategies, and continuously improving their professional competencies. Conversely, low teacher performance can hinder student achievement and reduce the overall quality of education. Therefore, improving teacher performance remains a central concern in educational management and policy. In response to this challenge, the Indonesian government has introduced various policies aimed at enhancing teacher professionalism, one of which is teacher certification. Teacher certification is a formal recognition process that ensures educators meet specific professional standards, including academic qualifications, pedagogical competence, and commitment to the teaching profession. Certified teachers are expected to demonstrate higher levels of competence and professionalism compared to non-certified teachers. Moreover, certification is closely associated with financial incentives, particularly the provision of professional allowances. This policy is based on the assumption that improving teachers' welfare will lead to increased motivation and, consequently, better performance. From the perspective of human capital theory, certification can be viewed as an investment in professional development, where improved competencies are expected to yield better educational outcomes. However, despite its strategic importance, the effectiveness of teacher certification in improving performance remains a subject of debate. Some studies have found that certification positively influences teacher competence and instructional quality. Certified teachers tend to be more structured in lesson planning, more consistent in assessment practices, and more engaged in professional development activities. On the other hand, several studies suggest that certification does not automatically translate into improved performance, particularly when it is not accompanied by intrinsic motivation and organizational support.

This inconsistency indicates that teacher performance is not solely determined by certification but is also influenced by other factors, one of which is work motivation. Work motivation refers to the internal and external forces that drive individuals to perform their tasks effectively. In the context of teaching, motivation plays a critical role in shaping teachers' attitudes, commitment, and engagement in their professional duties. Teachers with high motivation tend to exhibit greater enthusiasm, creativity, and responsibility in their work. They are more likely to adopt innovative teaching methods, participate in professional development programs, and strive for continuous improvement. In contrast, teachers with low motivation may demonstrate minimal effort, lack of initiative, and reduced commitment to educational goals. Therefore, motivation is considered a key psychological factor that directly influences teacher performance. The relationship between certification and motivation is also noteworthy. Certification may serve as an external motivator by providing financial rewards and professional recognition. However, external motivation alone may not be sufficient to sustain long-term performance improvement. Intrinsic motivation, such as personal satisfaction, professional pride, and commitment to student success, is equally important. Thus, understanding the combined effect of certification and motivation on teacher performance becomes essential. Vocational schools present a unique context for examining

this issue. Unlike general education, vocational education emphasizes practical skills and workforce readiness. Teachers in vocational schools are required not only to possess pedagogical competence but also to have strong professional expertise aligned with industry demands. This dual responsibility makes teacher performance even more critical in vocational education settings. SMKN 1 Bitung, as one of the prominent vocational schools in Indonesia, plays a strategic role in preparing skilled human resources. However, preliminary observations indicate that teacher performance in this institution is not yet optimal. Some teachers face challenges in lesson planning, instructional innovation, and the effective use of learning media. Additionally, variations in work motivation among teachers suggest that not all educators demonstrate the same level of commitment and enthusiasm. Interestingly, most teachers in the school have already obtained certification, yet differences in performance still exist. This phenomenon raises an important question: to what extent does certification actually influence teacher performance, and how does motivation contribute to this relationship? Addressing this question is crucial for evaluating the effectiveness of current educational policies and identifying strategies for improvement. Previous studies have examined the effects of certification and motivation on teacher performance separately. However, there is still a lack of research that integrates these two variables into a single comprehensive model, particularly in the context of vocational education and in the post-pandemic era. The COVID-19 pandemic has significantly transformed the educational landscape, requiring teachers to adapt to new teaching methods, digital technologies, and changing student needs. As a result, factors influencing teacher performance may differ from those identified in earlier studies.

This study aims to fill this gap by analyzing the influence of teacher certification and work motivation on teacher performance simultaneously. By focusing on vocational school teachers in Indonesia, this research provides context-specific insights that contribute to the broader literature on educational management and teacher professionalism. Specifically, this study addresses the following research questions:

- 1) Does teacher certification significantly influence teacher performance?
- 2) Does work motivation significantly influence teacher performance?
- 3) Do certification and work motivation simultaneously affect teacher performance?

The findings of this study are expected to provide both theoretical and practical contributions. Theoretically, this research enriches the understanding of factors influencing teacher performance by integrating structural (certification) and psychological (motivation) variables. Practically, the results can inform policymakers, school leaders, and educators in designing more effective strategies to improve teacher performance and educational quality. In conclusion, improving teacher performance requires a holistic approach that goes beyond formal certification. While certification remains an important policy instrument, it must be complemented by efforts to enhance teacher motivation and create supportive working environments. Only through such integrated efforts can the goal of high-quality education be achieved.

LITERATURE REVIEW

Teacher Performance in Educational Contexts

Teacher performance has long been recognized as a critical determinant of educational quality and student outcomes. In the context of educational management, teacher performance refers to the effectiveness with which teachers carry out their professional responsibilities,

including planning, implementing, and evaluating instruction. According to Armstrong (2014), performance is a function of both ability and motivation, implying that even highly skilled individuals may underperform if they lack sufficient motivation. In educational settings, teacher performance encompasses multiple dimensions such as pedagogical competence, subject matter expertise, classroom management, and professional behavior. These dimensions are aligned with the broader framework of teacher professionalism, which emphasizes continuous development and adherence to ethical standards. Furthermore, effective teacher performance is often associated with improved student achievement, engagement, and overall learning outcomes. Research has shown that teacher performance is influenced by a variety of internal and external factors. Internal factors include motivation, attitudes, and self-efficacy, while external factors involve institutional support, leadership, and policy interventions. Among these, teacher certification and work motivation have received considerable attention as key determinants of performance, particularly in developing countries where educational reforms are actively implemented. In vocational education, teacher performance becomes even more complex due to the dual role of teachers as educators and practitioners. Vocational teachers are expected to integrate theoretical knowledge with practical skills, ensuring that students are prepared for the labor market. Therefore, understanding the factors that influence teacher performance in this context is essential for improving the quality of vocational education.

Teacher Certification as a Policy Instrument

Teacher certification is a formal process through which educators are recognized as meeting specific professional standards. It is often implemented as part of broader educational reforms aimed at improving teacher quality and accountability. Certification typically involves the assessment of academic qualifications, teaching competencies, and professional experience. From a theoretical perspective, teacher certification can be explained using human capital theory, which posits that investments in education and training enhance individuals' productivity and performance. Certification serves as both a signal of competence and a mechanism for professional development. By obtaining certification, teachers are expected to improve their pedagogical skills and demonstrate higher levels of professionalism. In many countries, including Indonesia, teacher certification is linked to financial incentives such as professional allowances. This policy is based on the assumption that improved welfare will enhance motivation and encourage teachers to perform better. As noted by OECD (2019), financial incentives can be effective in attracting and retaining qualified teachers, particularly in challenging educational environments. Empirical studies on the impact of teacher certification have produced mixed results. Some research indicates that certified teachers tend to perform better than their non-certified counterparts. For example, Darling-Hammond (2017) argues that certification ensures a minimum standard of teaching quality, which contributes to better instructional practices and student outcomes. However, other studies suggest that certification alone does not guarantee improved performance. In some cases, certification is viewed as a procedural requirement rather than a transformative process. Teachers may obtain certification primarily for financial benefits without significantly changing their teaching practices. This phenomenon highlights the limitations of certification as a standalone policy instrument. Moreover, the effectiveness of certification may depend on how it is implemented. Programs that emphasize continuous professional development and reflective practice are more likely to produce positive outcomes compared to those that focus solely on assessment and compliance. Therefore, certification should be viewed as part of a broader system of teacher development rather than an isolated intervention.

Work Motivation in Teaching Profession

Work motivation is a fundamental psychological construct that influences individual behavior and performance. In the context of teaching, motivation refers to the internal and external forces that drive teachers to perform their duties effectively. Motivation is particularly important in education, as teaching requires not only technical skills but also emotional engagement and commitment. Several theoretical frameworks have been used to explain work motivation. One of the most widely recognized is Maslow's hierarchy of needs, which suggests that individuals are motivated by a progression of needs ranging from basic physiological needs to self-actualization. In the teaching profession, higher-level needs such as recognition, achievement, and personal growth are especially relevant. Another important theory is Herzberg's two-factor theory, which distinguishes between hygiene factors and motivators. Hygiene factors, such as salary and working conditions, prevent dissatisfaction but do not necessarily enhance performance. Motivators, such as achievement and recognition, are more directly linked to job satisfaction and performance. This distinction is particularly relevant in understanding the role of certification, which often addresses hygiene factors through financial incentives. Self-Determination Theory (Deci & Ryan, 2000) provides a more nuanced understanding of motivation by differentiating between intrinsic and extrinsic motivation. Intrinsic motivation arises from internal satisfaction and interest in the work itself, while extrinsic motivation is driven by external rewards or pressures. In teaching, intrinsic motivation is often associated with a passion for education and a commitment to student success. Research consistently shows that motivated teachers are more effective in their roles. They are more likely to engage in innovative teaching practices, participate in professional development, and maintain positive relationships with students. Conversely, low motivation can lead to burnout, absenteeism, and reduced performance. In the context of vocational education, motivation plays an even more critical role. Teachers must continuously update their skills to keep pace with industry developments, which requires a high level of commitment and initiative. Therefore, fostering teacher motivation is essential for maintaining the relevance and quality of vocational education programs.

Relationship Between Certification, Motivation, and Performance

The relationship between teacher certification, work motivation, and performance is complex and multidimensional. While certification is intended to improve teacher quality, its impact on performance may be mediated or moderated by motivation. In other words, certification may enhance performance only when teachers are sufficiently motivated to apply their knowledge and skills. From a theoretical standpoint, this relationship can be understood through expectancy theory, which suggests that individuals are motivated to perform when they believe that their efforts will lead to desired outcomes. Certification may increase teachers' expectations of rewards, such as higher salaries or career advancement, thereby influencing their motivation. However, the effectiveness of certification as a motivator depends on how teachers perceive it. If certification is viewed as meaningful and aligned with professional growth, it can enhance intrinsic motivation. On the other hand, if it is perceived as a bureaucratic requirement, its motivational impact may be limited. Empirical evidence supports the notion that motivation plays a critical role in translating certification into performance. Studies have found that teachers with high levels of motivation are more likely to utilize the competencies gained through certification. In contrast, teachers with low motivation may not fully leverage these competencies, resulting in minimal performance improvement. Furthermore, the interaction between certification and motivation may vary across

contexts. In resource-constrained environments, financial incentives associated with certification may have a stronger impact on motivation. In contrast, in more developed settings, intrinsic factors such as professional identity and job satisfaction may play a more significant role. This study adopts an integrated perspective, viewing certification and motivation as complementary factors that jointly influence teacher performance. By examining their simultaneous effects, the study aims to provide a more comprehensive understanding of how these variables interact in the context of vocational education.

Empirical Studies and Research Gap

A growing body of research has examined the determinants of teacher performance, with a particular focus on certification and motivation. For instance, some studies have demonstrated a positive relationship between certification and teacher competence, suggesting that certified teachers are better equipped to deliver high-quality instruction. Similarly, numerous studies have highlighted the importance of motivation in enhancing teacher performance. Despite these findings, several gaps remain in the literature. First, many studies examine certification and motivation separately, without considering their combined effects. This approach limits the understanding of how these variables interact in influencing performance. Second, there is a lack of context-specific research in vocational education. Most studies focus on general education, overlooking the unique challenges faced by vocational teachers. Given the practical nature of vocational education, factors influencing teacher performance may differ significantly from those in other educational settings. Third, the post-pandemic context introduces new dynamics that have not been fully explored. The shift to online and hybrid learning has altered teaching practices and increased the demands on teachers. As a result, the factors influencing teacher performance may have evolved, necessitating updated empirical evidence. Finally, there is limited research in the Indonesian context that integrates certification and motivation into a single analytical framework. Considering the significant investment in teacher certification programs, it is essential to evaluate their effectiveness in conjunction with other factors such as motivation.

Conceptual Framework

Based on the theoretical and empirical review, this study proposes a conceptual framework in which teacher certification and work motivation are treated as independent variables influencing teacher performance. Certification represents a structural and policy-driven factor, while motivation represents a psychological and individual factor. The framework assumes that both variables have direct effects on teacher performance, as well as potential interaction effects. By testing this framework empirically, the study aims to provide insights into the relative importance of certification and motivation, as well as their combined impact on performance.

METHOD

Research Design

This study employed a quantitative research approach with a causal associative design to examine the influence of teacher certification and work motivation on teacher performance. A quantitative approach was selected because it allows for objective measurement of variables and statistical analysis of relationships among them. The causal associative design is appropriate for identifying the extent to which independent variables (teacher certification and work motivation) affect the dependent variable (teacher performance). The study aimed not only to describe the

relationships among variables but also to test hypotheses regarding the direct and simultaneous effects of certification and motivation on performance. Therefore, inferential statistical techniques were utilized to determine the significance and strength of these relationships.

Research Setting and Participants

This research was conducted at a public vocational high school in Indonesia, namely SMKN 1 Bitung. The school was selected due to its strategic role in preparing skilled human resources and its relatively high number of certified teachers. The population of this study consisted of all teachers at the school who had obtained professional certification. Based on the available data, the total number of certified teachers was 48. Given the relatively small population size, this study employed a saturated sampling technique (total sampling), where all members of the population were included as research participants. Using total sampling ensured that the study captured the full range of variability within the population, thereby increasing the accuracy and representativeness of the findings. Additionally, it eliminated sampling bias that might occur when only a subset of the population is selected.

Research Variables and Operational Definitions

This study involved three main variables: two independent variables and one dependent variable.

Independent Variables

a. Teacher Certification (X1)

Teacher certification refers to the formal recognition granted to teachers who meet established professional standards. In this study, certification was measured based on teachers' perceptions of the benefits and implementation of certification, including:

- Professional competence improvement
- Pedagogical skills enhancement
- Professional allowance (financial incentive)
- Recognition and professional status

b. Work Motivation (X2)

Work motivation is defined as the internal and external drive that encourages teachers to perform their duties effectively. This variable was measured using indicators derived from motivational theories, including:

- Intrinsic motivation (e.g., passion for teaching, self-fulfillment)
- Extrinsic motivation (e.g., salary, rewards, recognition)
- Commitment to work
- Responsibility and discipline

Dependent Variable

a. Teacher Performance (Y)

Teacher performance refers to the effectiveness of teachers in carrying out their professional responsibilities. It was measured using the following indicators:

- Lesson planning
- Implementation of teaching and learning processes
- Evaluation and assessment practices
- Classroom management
- Professional responsibilities

All variables were measured using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly

agree).

Data Collection Techniques

Data were collected using a structured questionnaire designed to capture respondents' perceptions of certification, motivation, and performance. The questionnaire consisted of closed-ended items to facilitate quantitative analysis. Before distribution, the instrument was developed based on relevant theories and previous empirical studies. The questionnaire was then reviewed by experts in educational management to ensure content validity. Data collection was conducted directly by distributing questionnaires to all respondents. Participants were given clear instructions on how to complete the questionnaire, and confidentiality was assured to encourage honest responses.

Instrument Testing

1. Validity Test

To ensure that the instrument accurately measured the intended variables, a validity test was conducted using the Pearson Product-Moment correlation technique. Each item was correlated with the total score of its respective variable. An item was considered valid if the correlation coefficient (r -count) was greater than the critical value (r -table) at a significance level of 0.05. Items that did not meet this criterion were revised or removed from the instrument.

2. Reliability Test

Reliability refers to the consistency of the instrument in measuring variables. The reliability test was conducted using Cronbach's Alpha coefficient. A variable was considered reliable if the Cronbach's Alpha value exceeded 0.70, indicating acceptable internal consistency. High reliability ensures that the instrument produces stable and consistent results across different measurements.

Data Analysis Techniques

Data analysis was performed using statistical software to ensure accuracy and efficiency. The analysis consisted of descriptive and inferential statistics.

1. Descriptive Analysis

Descriptive statistics were used to summarize the data, including mean, standard deviation, and frequency distribution. This analysis provided an overview of respondents' perceptions of certification, motivation, and performance.

2. Classical Assumption Tests

Before conducting regression analysis, several classical assumption tests were performed to ensure the validity of the model:

- Normality Test: Conducted using the Kolmogorov-Smirnov test to determine whether the data were normally distributed.
- Multicollinearity Test: Assessed using Variance Inflation Factor (VIF) and tolerance values to ensure that independent variables were not highly correlated.
- Heteroscedasticity Test: Conducted using scatterplot analysis or statistical tests to examine whether the variance of residuals was constant.

Meeting these assumptions is essential for obtaining unbiased and reliable regression results.

Hypothesis Testing

To test the research hypotheses, multiple linear regression analysis was employed. This technique allows for the examination of the simultaneous effects of multiple independent variables

on a dependent variable. The regression model used in this study is formulated as follows:

$$Y=a+b_1X_1+b_2X_2+e$$

Where:

Y = Teacher Performance

X = Teacher Certification

X₂ = Work Motivation

a = Constant

b₁, b₂ = Regression coefficients

e = Error term

1. Partial Test (t-test)

The t-test was used to determine the individual effect of each independent variable on the dependent variable. A variable was considered to have a significant effect if the p-value was less than 0.05.

2. Simultaneous Test (F-test)

The F-test was used to examine the joint effect of all independent variables on the dependent variable. A significant F-value indicates that the model is statistically valid.

3. Coefficient of Determination (R²)

The coefficient of determination was used to measure the proportion of variance in the dependent variable explained by the independent variables. A higher R² value indicates a stronger explanatory power of the model.

RESULTS AND DISCUSSION

Descriptive Statistics

Descriptive analysis was conducted to provide an overview of respondents' perceptions regarding teacher certification, work motivation, and teacher performance. The results indicate that, overall, teachers demonstrated a relatively high level of agreement with statements related to certification benefits, motivation, and performance. The mean score for teacher certification (X₁) was categorized as high, indicating that most respondents perceived certification as beneficial in enhancing their professional competence, status, and financial welfare. Similarly, work motivation (X₂) showed a relatively high mean score, suggesting that teachers possessed both intrinsic and extrinsic motivation in performing their duties. Teacher performance (Y) also fell within the high category, reflecting that teachers generally perceived themselves as effective in planning, implementing, and evaluating instructional activities. Despite these positive trends, variation among respondents was observed, indicating that not all teachers experienced the same level of certification benefits or motivation. This variation provided a basis for further inferential analysis to examine the relationships among variables.

Instrument Testing Results

1. Validity Test

All questionnaire items were tested using the Pearson Product-Moment correlation method. The results showed that all items had correlation coefficients (r -count) greater than the critical value (r -table) at a significance level of 0.05. Therefore, all items were considered valid and suitable for measuring their respective variables.

2. Reliability Test

The reliability test using Cronbach's Alpha indicated that all variables exceeded the threshold value of 0.70. Specifically: Teacher Certification: $\alpha > 0.80$, Work Motivation: $\alpha > 0.85$, Teacher Performance: $\alpha > 0.88$. These results confirm that the instrument had high internal consistency and reliability.

Classical Assumption Tests

Before conducting regression analysis, several classical assumption tests were performed.

- Normality Test: The Kolmogorov-Smirnov test showed that the data were normally distributed, as the significance value exceeded 0.05.
- Multicollinearity Test: The Variance Inflation Factor (VIF) values for all independent variables were below 10, and tolerance values were above 0.10, indicating no multicollinearity
- Heteroscedasticity Test: The scatterplot analysis revealed no clear pattern, suggesting that the variance of residuals was constant.

These results indicate that the data met the assumptions required for multiple linear regression analysis.

Multiple Linear Regression Analysis

The regression analysis was conducted to examine the influence of teacher certification and work motivation on teacher performance. The regression equation can be expressed as follows: $Y = a + b_1X_1 + b_2X_2 + e$. The results showed that both independent variables had positive regression coefficients, indicating that increases in certification and motivation were associated with improvements in teacher performance.

Hypothesis Testing

1. Partial Test (t-test)

The t-test results indicated that:

- Teacher certification (X_1) had a positive and significant effect on teacher performance ($p < 0.05$).
- Work motivation (X_2) also had a significant effect on teacher performance ($p < 0.05$).
- These findings suggest that both variables independently contribute to improving teacher performance.

2. Simultaneous Test (F-test)

The F-test results showed that teacher certification and work motivation simultaneously had a

significant effect on teacher performance. The significance value was less than 0.05, indicating that the regression model was statistically valid.

3. Coefficient of Determination (R^2)

The coefficient of determination (R^2) was found to be 0.754. This indicates that 75.4% of the variance in teacher performance can be explained by teacher certification and work motivation. The remaining 24.6% is influenced by other factors not included in the model.

The Effect of Teacher Certification on Teacher Performance

The results of this study demonstrate that teacher certification has a positive and significant effect on teacher performance. This finding supports the theoretical assumption that certification enhances teacher competence and professionalism. From the perspective of human capital theory, certification represents an investment in professional development that increases teachers' knowledge and skills. Certified teachers are expected to have a better understanding of pedagogical principles, curriculum design, and assessment strategies. As a result, they are more capable of delivering effective instruction and achieving better performance outcomes. This finding is consistent with previous studies that highlight the positive impact of certification on teaching quality. Certified teachers tend to be more structured in their lesson planning, more consistent in implementing instructional strategies, and more reflective in evaluating their teaching practices. In addition, certification provides financial incentives in the form of professional allowances. These incentives may enhance teachers' sense of recognition and job satisfaction, which can contribute to improved performance. However, it is important to note that financial incentives alone may not be sufficient to sustain long-term performance improvements. Interestingly, while certification has a significant effect, the magnitude of its influence may vary depending on individual and contextual factors. Some teachers may fully utilize the competencies gained through certification, while others may not. This variation suggests that certification should be accompanied by continuous professional development and institutional support.

The Effect of Work Motivation on Teacher Performance

The findings also reveal that work motivation has a significant effect on teacher performance. This result underscores the importance of psychological factors in shaping teacher behavior and effectiveness. Motivated teachers are more likely to demonstrate enthusiasm, creativity, and commitment in their work. They tend to invest more effort in preparing lessons, engaging students, and improving their teaching practices. In contrast, teachers with low motivation may exhibit minimal effort and reduced engagement, which negatively affects performance. The results align with Self-Determination Theory, which emphasizes the role of intrinsic motivation in driving high-quality performance. Teachers who are intrinsically motivated—those who find satisfaction and meaning in teaching—are more likely to achieve better outcomes compared to those who rely solely on extrinsic rewards. At the same time, extrinsic motivation, such as financial incentives and recognition, also plays an important role. In this study, both intrinsic and extrinsic aspects of motivation contributed to teacher performance. This finding suggests that a balanced approach is

needed to enhance motivation, combining internal satisfaction with external support. In the context of vocational education, motivation becomes even more critical. Teachers must continuously update their knowledge and skills to keep up with industry developments. This requires a high level of commitment and initiative, which can only be achieved through strong motivation.

The Combined Effect of Certification and Motivation

One of the key contributions of this study is the examination of the combined effect of certification and motivation on teacher performance. The results show that both variables simultaneously have a significant impact, with a high coefficient of determination ($R^2 = 0.754$). This finding indicates that certification and motivation are complementary factors rather than independent influences. Certification provides the necessary competencies and professional recognition, while motivation drives teachers to apply these competencies effectively. From the perspective of expectancy theory, teachers are more likely to perform well when they believe that their efforts will lead to desirable outcomes. Certification may enhance these expectations by providing tangible rewards and recognition. However, without sufficient motivation, teachers may not fully utilize the benefits of certification. The high R^2 value suggests that the model has strong explanatory power, indicating that certification and motivation together play a crucial role in determining teacher performance. However, the remaining variance (24.6%) indicates that other factors, such as leadership, organizational culture, and work environment, may also influence performance.

Implications for Educational Policy and Practice

The findings of this study have important implications for educational policy and practice. First, while teacher certification is an important policy instrument, it should not be viewed as a standalone solution for improving teacher performance. Policymakers should ensure that certification programs are designed to promote continuous professional development rather than merely serving as administrative requirements. Second, efforts to enhance teacher motivation should be prioritized. School leaders can play a key role in creating a supportive work environment that fosters intrinsic motivation. This includes providing opportunities for professional growth, recognizing achievements, and encouraging collaboration among teachers. Third, the integration of certification and motivational strategies is essential for achieving sustainable improvements in teacher performance. Policies that combine structural interventions (such as certification) with psychological support (such as motivation) are more likely to be effective.

Comparison with Previous Studies

The results of this study are consistent with previous research that highlights the importance of certification and motivation in influencing teacher performance. However, this study extends the existing literature by integrating these variables into a single model and examining their combined effects. Unlike some studies that found limited impact of certification, this study

demonstrates that certification can have a significant effect when combined with motivation. This finding suggests that inconsistencies in previous research may be due to differences in contextual factors and the omission of motivational variables. Furthermore, the focus on vocational education provides new insights into the unique challenges and requirements of this sector. The findings emphasize the need for specialized strategies to improve teacher performance in vocational settings.

Limitations and Future Research

Despite its contributions, this study has several limitations. The sample size was relatively small and limited to a single school, which may affect the generalizability of the findings. Future research should include a larger and more diverse sample to enhance external validity. Additionally, this study focused only on certification and motivation, while other factors such as leadership, organizational culture, and job satisfaction were not examined. Future studies could incorporate these variables to provide a more comprehensive understanding of teacher performance. Finally, the use of self-reported data may introduce bias. Future research could use multiple data sources, such as classroom observations and student outcomes, to obtain a more objective measure of teacher performance.

CONCLUSION

In summary, the results of this study demonstrate that: Teacher certification has a positive and significant effect on teacher performance, Work motivation significantly influences teacher performance, Certification and motivation simultaneously have a strong and significant effect on performance. These findings highlight the importance of integrating structural and psychological factors in efforts to improve teacher performance.

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