

The Influence of Facilities, Infrastructure, and Work Environment on Kindergarten Teacher Performance in Jambi

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Abstract: *This study aims to analyze the influence of infrastructure facilities and work environment on the performance of kindergarten teachers in Jelutung District, Jambi City. The research used a quantitative descriptive approach with a survey method. The research sample amounted to 49 kindergarten teachers who were selected through purposive sampling techniques. Data were collected using a closed questionnaire that had been tested for validity and reliability. Data analysis was carried out through Confirmatory Factor Analysis (CFA) and multiple linear regression with the help of SPSS 25. The results of the descriptive analysis showed that infrastructure facilities and work environment were in the "good" category, while teachers' performance was in the "high" category. The results of the regression test showed that infrastructure facilities and work environment had a significant effect, both partially and simultaneously, on teacher performance. Adequate infrastructure supported the effectiveness of early childhood learning, while a conducive work environment increases teacher comfort, motivation, and professionalism. These findings confirm that improving the quality of educational facilities and creating a positive work environment are strategic factors in improving the performance of kindergarten teachers. This research is expected to be the basis for PAUD managers and policymakers in designing school development programs and improving the quality of early childhood education.*

Keywords: *Infrastructure, Work Environment, Teacher Performance, Kindergarten, Early Childhood Education*

Introduction

At its core, education is a deliberate effort to achieve specific, established goals while simultaneously fostering personal development. Education aims to assist the younger generation in developing all facets of their personal potential—encompassing spirituality, morality, sociality, emotional sensibility, and rationality. Quality education correlates positively with the quality of human resources. This aligns with Yusutria's view that low-quality education results in low-quality human resources, whereas higher levels of education lead to higher-quality human resources".¹

¹ European Commission, "Pengaruh Sarana Prasarana Dan Lingkungan Kerja Terhadap Kinerja Guru Di Madrasah Aliyah Asy-Syifa Balikpapan" 4, no. 1 (2016): 1.

Fundamentally, various factors influence educational success, including teachers, students, facilities and infrastructure, the educational environment, and the curriculum. Among these factors, the teacher holds a crucial position in the school's learning process; without disregarding other supporting elements, the teacher—as an active agent of education—is a decisive factor in the success of education itself.²

Early Childhood Education (PAUD) is the educational stage children undergo before entering primary school. It encompasses developmental guidance for children aged 0 to 6—a "golden age" for shaping a child's personality and character. This form of education involves a learning process designed to introduce meaningful fundamental concepts through real-life experiences, enabling children to engage in activities and explore their curiosity. Furthermore, it positions the teacher as a companion, guide, and facilitator for the child.³

Law No. 20 of 2003, Chapter II, Article 3, affirms that National Education functions to develop capabilities and shape the character and civilization of the nation; it aims to develop the potential and abilities of learners so that they become individuals who possess faith and piety toward God Almighty, noble character, and good health, and who are knowledgeable, competent, creative, and independent, as well as democratic and responsible citizens.⁴ To fulfill its function, the school—as an educational institution—plays a vital role in producing highly competent human resources. Schools are expected to contribute positively to the development and enhancement of human resources. Therefore, producing high-quality human resources requires teachers and educational personnel who possess the necessary expertise—across various types and levels—to meet the demands of different development sectors, including educational development at all levels.⁵

Regarding teacher performance in conducting teaching and learning activities, the duties of a teacher—as stipulated in Article 20 of Law No. 14 of 2005 concerning Teachers and Lecturers—include planning instruction,

² Anggi Angrainy, Happy Fitria, and Yessi Fitiani, "Pengaruh Sarana Prasarana Dan Lingkungan Kerja Terhadap Kinerja Guru," *Journal of Education Research* 1, no. 2 (2020): 154, <https://doi.org/10.37985/joe.v1i2.15>.

³ Muhammad Mabsyud, Mashur Razak, and Harlindah Harniati Arfan, "Pengaruh Sarana Prasarana Lingkungan Kerja Dan Peran Orang Tua Terhadap Kinerja Guru PAUD SE" 2, no. 4 (2023): 3–19.

⁴ RI DPR, "UU Nomor 20 Tahun 2003," 2016.

⁵ Aline Regeleonic, "Ini Inovasi Untuk Meningkatkan Kinerja Guru" (Kementerian Pendidikan dan Kebudayaan, 2015), <https://www.kemdikbud.go.id/main/blog/2015/08/ini-inovasi-untuk-meningkatkan-kinerja-guru4537-4537-4537>.

implementing a high-quality learning process, and assessing and evaluating student learning outcomes.⁶

According to Chamundeswari, *"The teacher's job is therefore to show what to study, to challenge the students by setting high standards and to criticize in order to spur to further achievement, to help surmount blind spots and evaluate each student's progress in terms of valid objectives"*. Teacher performance refers to the condition reflecting an individual's ability to carry out their duties at school, as well as the actions demonstrated by the teacher while conducting instructional activities.

Yasemin and Tenzin expressed a similar sentiment, noting that "teachers' knowledge may be over-estimated based on their performance on one-step problems." Consequently, teacher performance during instruction is a primary factor in achieving educational goals, as teachers serve as the spearhead of the education system. The quality of teacher performance directly impacts student achievement in school. The researcher conducted preliminary observations by interviewing the principals of seven kindergartens in Jelutung District to gain insight into teacher performance. These kindergartens included TK Pelangi Nusantara, TK Istiqomah, TK Islam Al-Muslimat, TK Islam Al-Mahyra, TK Tunas Mulya, TK Tunas Muda, and TK Negeri Pembina 5.

Interview results indicated that, overall, teacher performance was quite good, evidenced by teaching discipline, preparedness regarding learning materials, and the ability to guide children both individually and in groups. All principals noted that teachers with more experience tended to be more effective in delivering material and managing children, whereas newly joined teachers still required time to adapt and develop their competencies. Furthermore, teacher performance was influenced by abilities in classroom management, communication with parents, and the evaluation of child development. Although overall teacher performance was at an adequate level, issues remained—such as disparities in experience, variations in material preparedness, and limitations in classroom management and parent communication skills—highlighting the need for training and professional development to enhance the effectiveness and consistency of teacher performance.

Various factors determine improvements in teacher performance; one such factor is the availability of facilities and infrastructure to support the execution of teachers' duties and functions. School facilities and infrastructure greatly facilitate a teacher's work. Barnawi stated that teachers provided with complete and adequate facilities and infrastructure demonstrate better performance than those lacking such resources. Therefore, schools need to provide facilities that foster the development of students' sensibilities, intellect, and physical well-being—such as mosques, libraries, and

⁶ "Undang-Undang Dan Peraturan Pemerintah RI Tentang Pendidikan" (Jakarta: Direktorat Jenderal Pendidikan Islam, Departemen Agama RI, 2005).

laboratories. ...internet, and sports facilities (futsal, badminton, and basketball). Facilities serve as the means or tools for learning, ensuring that education proceeds effectively.

The theory underpinning the assessment of teacher performance quality—attributed to T.R. Mitchell and reiterated by the Directorate of Educational Personnel—posits that performance is a function of both motivation and ability. Teachers are the spearhead of educational success and play a pivotal role in achieving educational goals, which in turn reflect the quality of education itself.⁷

In carrying out their duties and obligations, teachers are subject to the influence of both internal and external factors that impact their performance. Since performance reflects an organization's success, measuring workforce characteristics is considered essential. Teacher performance is the primary determinant of the quality of instruction; consequently, enhancing teacher performance quality must be a central focus in policy formulation. Performance quality is shaped by a complex array of factors and serves as an indicator of the success or failure of professional guidance and development within the role.⁸

The work environment encompasses the physical, social, and psychological conditions surrounding the workplace that can influence the performance and productivity of the workforce. A positive work environment not only affects teachers' well-being but also directly impacts the quality of education and student development. However, in practice, conditions often fall short of school expectations; a poor work environment affects individual teachers, thereby hindering the optimal fulfillment of their educational responsibilities. These issues range from physical aspects—such as workspace comfort and school facilities—to psychological factors, such as unpleasant interpersonal dynamics among teachers or between teachers and leadership, all of which are believed to influence a teacher's performance.

A preliminary survey was conducted involving 90 kindergarten teachers in the Jelutung District to assess the work environment based on indicators such as the work atmosphere, relationships with colleagues, and the availability of work facilities. The survey results regarding teacher assessments of the work environment in Jelutung District kindergartens indicate that the schools receiving the highest ratings across the indicators of work atmosphere, colleague relationships, and work facilities—achieving a "Very Good" rating—were TK Dian Harapan Jambi, TK Karunia Global School, and Golden Kids. Conversely, schools receiving the lowest ratings—falling into the "Fair" category—were TK Islam Al-Mahyra, TK Islam Muslimat, TK Istiqommah, TK Pelangi Nusantara, TK Negeri Pembina 5, TK

⁷ Barnawi and Mohammad Arifin, *Kinerja Guru Profesional* (Yogyakarta: Ar-Ruzz Media, 2012).

⁸ Jamil Suprihatiningrum, *Guru Profesional: Pedoman Kinerja, Kualifikasi, Dan Kompetensi Guru* (Jogjakarta: Ar-Ruzz Media, 2013).

Tunas Muda, and TK Tunas Mulya. This situation reveals a variation in work environment quality across schools, a matter of potential concern given that a less-than-conducive work environment can impact teacher performance during the instructional process. Overall, the aspect of work facilities remains a significant weakness compared to the other indicators, as it most frequently fell into the "Fair" category. Such disparities in work environment quality across schools could potentially hinder teachers' comfort, effectiveness, and motivation in performing their duties optimally. A 2018 study by Melly Damayanti, titled **The Influence of School Facilities and Work Environment on the Performance of Public Junior High School Teachers in Kalidoni District**, demonstrated that school facilities and the work environment—when considered together—have a significant influence on the performance of public junior high school teachers in the area. Furthermore, work environment conditions—such as classroom comfort, interpersonal relationships among teachers, and support from the school principal—were identified as crucial factors influencing teachers' morale and productivity.

A 2018 study by Melly Damayanti, titled **The Influence of School Facilities and Work Environment on the Performance of Public Junior High School Teachers in Kalidoni District**, demonstrated a significant combined effect of school facilities and the work environment on teacher performance in that area. Furthermore, work environment conditions—such as classroom comfort, interpersonal relationships among teachers, and support from the school principal—were identified as crucial factors influencing teachers' morale and productivity. Similarly, a 2024 study by Mustain Hasan, titled **The Influence of Facilities and Work Environment on Teacher Performance at Madrasah Aliyah Asy-Syifa Balikpapan**, showed a significant combined impact of facilities and the work environment on teacher performance at that institution.

Although numerous studies have examined the factors affecting teacher performance, most have focused on primary and secondary education levels (elementary, junior high, and senior high schools). Research regarding teacher performance at the early childhood education level—specifically in kindergartens—remains relatively limited. This is despite the fact that kindergarten teachers play a vital role in shaping the foundation of a child's cognitive, social, and emotional development.

Moreover, existing studies have largely concentrated on aspects such as pedagogical competence and work motivation, while the influence of facilities and the work environment on kindergarten teacher performance has not been comprehensively explored. Yet, the physical and non-physical conditions of the work environment—including the availability of supporting facilities—are critical determinants of instructional effectiveness in early childhood education, a setting that relies heavily on engaging learning media and a safe, comfortable environment.

Method

This study employed a quantitative descriptive approach using a survey method, with analysis techniques comprising instrument development based on the Structural Equation Modeling (SEM) measurement model and multiple linear regression. Soesana et al. note that the measurement model—or factor analysis—is used to test the validity and reliability of items (manifest variables) representing indicators or latent variables. Specifically, a first-order multi-factor Confirmatory Factor Analysis (CFA) model is utilized. Subsequently, multiple linear regression is employed to determine the direction and magnitude of the influence on the dependent variable.⁹

This study employed a purposive sampling technique. Purposive sampling is a method in which the researcher selects subjects based on specific criteria aligned with the research objectives, rather than through random probability. The sample was selected based on the criterion of Islamic kindergartens located in Jelutung District. The study involved a total of 49 kindergarten teachers from Jelutung District, Jambi City.

Data collection for this study was conducted using questionnaires. A questionnaire is a data collection method involving the administration of a set of written questions for respondents to answer. The study utilized closed-ended and indirect questionnaires, meaning respondents selected answers from pre-existing options. This technique was used to gather data on Facilities and Infrastructure (X1) and the Work Environment (X2)—factors influencing Teacher Performance (Y) in Jambi City—via indirect questionnaires completed by the teachers. The questionnaires were developed based on variable indicators and underwent validity testing prior to distribution.

This study employed quantitative data. According to Sugiyono, the quantitative research method is grounded in the philosophy of positivism and is used to study specific populations or samples; it involves data collection using research instruments and quantitative data analysis, with the aim of testing established hypotheses.

The data used in this study were obtained through observation, questionnaires, and documentation. The analysis technique employed in this study was multiple linear regression analysis, utilizing SPSS 25 software. The data analysis procedures are outlined as follows: Research instrument testing was conducted using validity and reliability tests, as described below:

Validity testing is used to determine whether a questionnaire is valid. A questionnaire is considered valid if its questions effectively measure the intended construct. An indicator is deemed valid if the calculated *r*-value exceeds the *r*-table value, indicating that the research instrument or

⁹ Imam Ghozali, *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 25* (Semarang: Badan Penerbit Universitas Diponegoro, 2018).

questionnaire is valid. The r-table value can be determined by consulting the product-moment r-value table.¹⁰

Reliability indicates that an instrument is sufficiently trustworthy for use in data collection because it is sound. Reliability refers to the degree of dependability of something. In this study, following the validity testing of the questionnaire components, a reliability test was conducted to determine the accuracy of the components used. Data reliability was assessed using Cronbach's alpha coefficients with the aid of SPSS 25 software for Windows. A variable is considered reliable if it yields a Cronbach's alpha value greater than 0.70. The closer the alpha value is to 1, the more reliable the data is considered to be.¹¹

The coefficient of determination represents the extent of the influence exerted by the independent variable(s) on the dependent variable. It is useful for predicting and assessing the magnitude of the simultaneous contribution of the independent variable(s) (X) to the dependent variable (Y). The value of the coefficient of determination ranges from 0 to 1 ($0 < R^2 < 1$); a low R^2 value indicates that the independent variable(s) have very limited explanatory power regarding the dependent variable.

$$KD = R^2 \times 100\%$$

Note:

KD = Coefficient of determination

R^2 = Multiple correlation value

100% = Percentage contribution

Descriptive analysis was conducted to construct frequency distribution tables in order to determine whether the obtained scores for the variables under study fell into the categories of very high, high, moderately high, low, or very low. Scores were categorized based on their position within a defined scale range. The following formula was used to determine the scale range:

- Determining the Scale Range

$$Rs = n \frac{m-1}{m}$$

Where :

Rs = Scale range

n = Number of sample

m = Number of item response alternatives

$$Rs = 49 \frac{5-1}{5}$$

$$Rs = 49 \frac{4}{5}$$

$$Rs = 39,2$$

¹⁰ Ghozali, *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 25*.

¹¹ Ghozali.

- Determining the Score Range
 - Lowest score = 49 x lowest score
 - = 49 x 1
 - = 49
 - Highest score = 49 x highest score
 - = 49 x 5
 - = 245

Since the scale used in this study is a 1–5 Likert scale, the classification categories for the variables are shown in the table below:

Interval	Criteria		
	Facilities	Environment Work	Teacher Performance
49-88,2	Very Bad	Very Bad	Very Low
88,3-127,4	Bad	Bad	Low
127,5-166,6	Fairly Good	Fairly Good	Fair
166,7-205,8	Good	Good	High
205,9-245	Very Good	Very Good	Very High

Table 1. Variable Classification Range
(Source : Sugiyono, 2019)¹²

Multiple regression analysis is used to determine the influence of the independent variables – namely facilities and infrastructure (X1) and the work environment (X2) – on the dependent variable, teacher performance (Y). Multiple linear regression is intended to test the effect of two or more independent variables on a dependent variable. The analysis in this study was conducted using SPSS 25 software. This model assumes a linear relationship between the dependent variable and each of its predictors. The equation model used is:¹³

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$$

Where:

Y = Teacher Performance

a = Constant

β_1 - β_2 = Regression Coefficients

X1 = Facilities and Infrastructure

X2 = Work Environment

e = Error

¹² Sugiyono, *Metode Penelitian Kuantitatif Kualitatif Dan R&D*.

¹³ Ghozali, *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 25*.

Next, regression assumption testing is conducted using the normality test, heteroscedasticity test, multicollinearity test, and autocorrelation test, as follows:¹⁴

a. Normality Test

The normality test aims to determine whether the disturbance variables or residuals in a regression model follow a normal distribution. A good regression model is one in which the data distribution is normal or approximately normal. This testing can be conducted through graphical and statistical analyses. In this study, the One-Sample Kolmogorov-Smirnov (K-S) test is used to assess normality. The decision-making criterion for the K-S test is that if the significance value (or probability value) is greater than 0.05 (or 5%), the data are considered normally distributed.

b. Heteroscedasticity Test

The heteroscedasticity test aims to determine whether there is a difference in residual variance across observations in a regression model. If the variance of the residuals remains constant across observations, the condition is known as homoscedasticity; conversely, if a difference exists, heteroscedasticity is said to be present. A good regression model should exhibit homoscedasticity (i.e., the absence of heteroscedasticity). To detect the presence or absence of heteroscedasticity, one can examine a scatter plot based on the following principles:

- 1) If a pattern exists – such as data points forming a wavy, widening, or narrowing shape – then heteroscedasticity is present.
- 2) If there is no distinct pattern – such as points being scattered above and below the zero line on the Y-axis – then heteroscedasticity is not present.

c. Multicollinearity test

The multicollinearity test aims to determine whether there is a correlation between independent variables in the regression model. If a correlation exists between independent variables, then multicollinearity is present in the model. Ideally, the data should be free from multicollinearity issues. One method for detecting multicollinearity is by examining the VIF and tolerance values. If the VIF value is less than 10 and the tolerance value is greater than 0.1, it can be concluded that there is no multicollinearity problem. The formula is:

$$VIF = \frac{1}{(1 - R_j^2)} J$$

¹⁴ Ghozali.

Description::

- VIF : VIF value
J : Sample size
 R_j^2 : Coefficient of determination

The F-test is used to determine the significance of the simultaneous effect of independent variables on the dependent variable. This test involved comparing the significance value against the alpha (α) level of 5% (0.05). In this study, the researcher utilized SPSS 25 software. Conclusions were drawn based on the following criteria:

- 1) Determine F_{count} according to output result of regression analysis
- 2) A significance level (α) of 0.05 or 5% is used to test whether the hypothesis proposed in this study is accepted or rejected.
- 3) Testing criteria

If the calculated value $F_{\text{count}} < F_{\text{table}}$ and value $\text{sig} > 0,05$ then H_0 is accepted and H_a is rejected; thus, there is no significant simultaneous effect of the independent variables on the dependent variable.

If $F_{\text{count}} > F_{\text{table}}$, and value $\text{sig} < 0,05$ so H_0 is rejected, H_a is accepted, thus, there is a significant simultaneous effect of the independent variables on the dependent variable.

Subsequently, the t-test was conducted using the t-table. This test was performed to measure the partial influence of the independent variable on the dependent variable at a significance level of 5% (0.05). In this study, the researcher used SPSS 25 software to calculate the t-statistic (t-count) and the t-table to determine the critical t-value (t-table) based on the degrees of freedom (df) and the significance level (5%). Conclusions were drawn by comparing the significance value with α (5%) according to the following criteria:

- 1) If $t_{\text{count}} < t_{\text{table}}$ and value $\text{sig} > 0,05$ so H_0 is accepted and H_a is rejected, so that there is no significant partial effect of the independent variable on the dependent variable.
- 2) If $t_{\text{count}} > t_{\text{table}}$ and value $\text{sig} < 0,05$ so H_0 is rejected and H_a is accepted, thus indicating a significant partial effect of the independent variable on the dependent variable.

Statistical Hypotheses

H_{a1} : There is a significant influence of facilities and infrastructure on teacher performance in kindergartens across Jambi City.

H_{01} : There is no significant influence of facilities and infrastructure on teacher performance in kindergartens across Jambi City.

H_{a2} : There is a significant influence of the work environment on teacher performance in kindergartens across Jambi City.

H_{02} : There is no significant influence of the work environment on teacher performance in kindergartens across Jambi City.

Research Plan and Timeline

This research would be conducted at kindergartens in the Jelutung District of Jambi from August to October 2025.

Instrument Development

The research instrument employed was a questionnaire designed to measure dimensions or indicators derived from the conceptual and operational definitions of each research variable. Establishing the quality of the instrument involves assessing validity and reliability. Item validity was determined based on content or construct validity and criterion validity through empirical testing using Aiken's method and the following formula:¹⁵

$$V = \frac{\sum n_i [i - I_o]}{N(c - 1)}$$

Where:

V = Content validity index

n = Number of scale points from rater assessments

i = The i-th scale point (i = 1, 2, 3, 4, 5)

I_o = Lowest scale point

N = Number of raters

c = Number of scale points

Results And Analysis

Educational facilities and infrastructure encompass all the tools and equipment used directly in the school's educational process.¹⁶ Adequate facilities and infrastructure can create a comfortable and effective learning environment while boosting the enthusiasm of both teachers and students for teaching and learning.¹⁷ As an integral part of the overall learning activities within an educational institution, these facilities and infrastructure play a vital role in achieving learning objectives in accordance with the institution's curriculum. To ensure that the provision of facilities and infrastructure is fit for purpose and utilized effectively and efficiently, a precise needs analysis is required during the planning stage.¹⁸

The t-test results regarding the impact of facilities and infrastructure (X_1) on teacher performance (Y) show a significance value of 0.000. This value is lower than the 0.05 probability threshold, indicating that facilities and infrastructure have a significant influence on teacher performance. Based on the regression coefficient ($B = 0.682$), it can be concluded that every one-unit increase in facilities and infrastructure leads to a 0.682-unit increase in teacher

¹⁵ Soesana, *Metodologi Penelitian Kuantitatif*.

¹⁶ Said Ashlan and Akhmaluddin, *Manajemen Kinerja Guru Melalui Kompetensi, Komitmen Dan Motivasi* (Makassar: Yayasan Barcode, 2021).

¹⁷ Daryanto, *Administrasi Pendidikan* (Yogyakarta: Gava Media, 2016).

¹⁸ Irin Tatang M., *Pengertian Sarana Dan Prasarana Pendidikan* (Jakarta: PT. Grafindo Persada, 2011).

performance. This demonstrates that high-quality school facilities—such as adequate classrooms, learning aids, and other supporting amenities—are crucial for boosting teacher motivation and performance. Adequate facilities enable teachers to conduct learning activities more effectively and foster an environment conducive to their professional development. Therefore, improving facilities and infrastructure can enhance the quality of teacher performance, which in turn impacts the quality of education received by students.

These findings align with the frequency distribution of respondents' answers regarding the "Facilities and Infrastructure" variable (Table 4.2), where the total score of 2,682—with a mean of 178.8—falls into the "Good" category. This indicates that teachers generally perceive the condition of their school's facilities and infrastructure as sufficiently supportive of teaching and learning activities. A closer examination reveals that the item with the highest score (197) is statement number 15: "Simple traditional and educational play equipment is available." This highlights the availability of diverse educational play equipment as a key factor supporting teacher performance. Such equipment enables teachers to create an enjoyable learning atmosphere suited to the characteristics of early childhood learners, thereby fostering a more effective and interactive learning process. This demonstrates that comprehensive and safe facilities—particularly educational play equipment—contribute directly to enhancing teachers' creativity and instructional performance.

Conversely, the item with the lowest score was statement number 5—"The available storybooks meet the children's needs"—which received a score of 152 and fell into the "Fairly Good" category. This situation indicates that the availability of children's reading materials still requires improvement. A lack of variety in storybooks and literacy media suited to the children's age can limit teachers in developing story-based learning activities, which are crucial in early childhood education. The link between the t-test results and the frequency distribution reinforces the conclusion that facilities and infrastructure play a vital role in determining teacher performance. When physical facilities—such as classrooms, play equipment, and learning media—are adequately available, teachers can conduct teaching and learning activities more optimally, effectively, and creatively. Conversely, deficiencies in specific areas, such as children's reading materials, can limit the variety of teaching strategies employed.

Conceptually, these findings align with the theory proposed by Tijow and Sembiring, which posits that educational facilities and infrastructure are instrumental components significantly influencing the quality of the learning process and teacher performance. Teachers working in environments supported by comprehensive facilities tend to exhibit higher work motivation and deliver superior performance. Thus, this study confirms that improving the quality of facilities and infrastructure in Islamic kindergartens in Jelutung

District – particularly regarding learning media and instructional materials – will directly enhance teachers' performance in designing, implementing, and evaluating early childhood learning activities.

These findings align with research conducted by Nursiwati and Rahmawati¹⁹ at the junior high school level. Their study demonstrated that facilities and infrastructure significantly influence teacher performance; essentially, the more comprehensive and high-quality the school facilities, the better the teachers perform. The researchers explained that a learning environment supported by adequate facilities—such as comfortable classrooms, complete instructional tools, and other supporting amenities—enhances teacher effectiveness and work motivation, ultimately leading to improved graduate quality. Furthermore, Nursiwati and Rahmawati found that facilities and infrastructure do not influence graduate quality directly but rather through the mediating role of teacher performance. This supports the conclusion that high-quality facilities act as a driver for improved teacher performance—not merely in physical terms, but also by fostering a sense of comfort, professionalism, and productivity. In other words, teachers serve as the link between the quality of school facilities and student learning outcomes.

In research by Marliya, Fitria and Nurkhalis²⁰ who found that infrastructure had a significant effect on teacher performance in State Middle Schools in West Prabumulih District. The researcher stated that adequate school facilities provide comfort and convenience for teachers in carrying out the teaching and learning process, accelerate adaptation to learning technology, and increase work discipline and professional motivation. This shows that the quality of infrastructure has a direct contribution to teacher effectiveness in carrying out pedagogical and managerial functions.

According to Nurdin et al., the work environment is defined as everything surrounding the employee—the place where they work—that influences them and allows them to feel safe and comfortable while performing and completing their tasks.²¹ Meanwhile, Nakpodia defines the work environment as the totality of conditions under which a person or group of persons works or performs their duties. According to Sedarmayati, the work environment encompasses the tools, equipment, and materials

¹⁹ Nursiwati and Rahmawati, "Pengaruh Sarana Dan Prasarana Terhadap Kinerja Guru Serta Dampaknya Pada Mutu Lulusan Pada SMP Negeri Se Kecamatan Bandar Laksamana," *Jurnal Menara Ekonomi* 10, no. 2 (2024): 20–32.

²⁰ Marliya, H Fitria, and Nurkhalis, "Pengaruh Sarana Prasarana Dan Lingkungan Kerja Terhadap Kinerja Guru Di SMP Negeri Se Kecamatan Prabumulih Barat," *Journal of Education Research* 1, no. 3 (2020): 206–12.

²¹ M Ali Nurdin, Erislan, and Soehatman Ramli, *Manajemen Kinerja Karyawan (Kedisiplinan Kerja, Keselamatan Kerja Dan Kesehatan Kerja Serta Lingkungan Kerja)* (Makassar: Mitra Ilmu, 2023).

encountered; the surrounding environment where a person works; and the work methods and arrangements, whether for an individual or a group.²²

The t-test results regarding the impact of the work environment (X2) on teacher performance (Y) show a significance value of 0.011. This value is lower than the probability threshold of 0.05, indicating that the work environment has a significant influence on teacher performance. Based on the regression coefficient ($B = 0.505$), it can be concluded that a one-unit improvement in the work environment leads to a 0.505-unit increase in teacher performance. These results indicate a positive relationship, meaning that every one-unit increase in the work environment variable results in a 0.505-unit increase in teacher performance. Thus, the more conducive the work environment perceived by teachers, the more optimal their performance and productivity become.

These findings illustrate that teacher performance is not solely determined by individual ability and pedagogical competence but is also significantly influenced by the external conditions of the workplace. A favorable work environment serves as a fundamental basis for teachers to deliver optimal performance. Comfortable physical conditions, a harmonious social atmosphere, and strong organizational support can foster a sense of security, enhance job satisfaction, and ultimately strengthen teachers' professional commitment to their duties. The distribution of respondent answers regarding the work environment variable yielded an average score of 182.6—falling within the "Good" category—indicating that the majority of teachers are satisfied with existing school working conditions. The highest-scoring item (205) corresponded to the statement: "Available work facilities optimally support teachers in their duties." This suggests that teachers perceive physical work environment aspects—such as the availability of teaching aids, instructional media, and administrative support facilities—as adequate. This situation directly contributes to improved work efficiency, as the availability of such facilities enables teachers to manage teaching and learning activities more effectively.

Conversely, the item with the lowest score (171) corresponds to the statement: "The work environment is often noisy or not conducive to learning activities." Although still rated as "Good," this result indicates that non-physical environmental comfort factors—such as noise levels, workspace tranquility, and the overall school atmosphere—require further attention. Minor disturbances, such as noise or a disorganized environment, can diminish concentration and induce psychological fatigue, thereby affecting teachers' instructional performance. Thus, these frequency data reinforce the t-test findings, confirming the vital role the work environment plays in teacher performance. This implies that improvements to physical facilities

²² Damayanti Melly, "Pengaruh Sarana Prasarana Sekolah Dan Lingkungan Kerja Terhadap Kinerja Guru Smp Negeri Di Kecamatan Kalidoni," 2018.

must be complemented by efforts to foster a social and psychological work climate that is calming and supportive of teacher collaboration.

Theoretically, these results align with Kustiana's view²³ that the work environment encompasses everything surrounding an employee that can influence the performance of assigned tasks. A favorable work environment fosters work enthusiasm and boosts productivity. In an educational context, teachers working in a supportive environment will demonstrate greater motivation and commitment in fulfilling their professional responsibilities.

Furthermore, these results reinforce Hutabrat's view²⁴ distinguishing between motivating factors (determinants of intrinsic job satisfaction) and hygiene factors (determinants of extrinsic work comfort). A good work environment falls under the category of hygiene factors; if this need is not met, performance and motivation can decline. Conversely, when adequately provided, the work environment enhances job satisfaction and leads to improved teacher performance. A positive work environment—characterized by harmonious relationships among teachers, open communication, and support from the school principal—can boost the school's organizational effectiveness. Teachers working in a supportive climate tend to be more enthusiastic, possess a sense of belonging to the school, and demonstrate high levels of loyalty and creativity in their teaching.

The results of this study are consistent with the research conducted by Kariani Febrianti, Siti Nurmayanti, and I Nyoman Nugraha Ardana Putra, which demonstrated that the work environment has a positive and significant impact on teacher performance. They emphasized that a comfortable work environment fosters a sense of calm among teachers, enabling them to perform optimally. A physical work environment and a professional school management system are crucial factors in maintaining teacher satisfaction and performance. Thus, both Kariani's study and the present study confirm that the work environment is a key determinant of teacher performance in formal educational institutions.

Research by Sahlan Lubis²⁵ found that the work environment has a positive and significant impact on teacher performance, both individually and simultaneously. He explained that a comfortable work environment plays a major role in fostering the motivation, discipline, and enthusiasm teachers bring to their duties. Thus, this study reinforces and confirms Sahlan Lubis's findings that the work environment is a key determinant of teacher

²³ K Kustiana, *Mendidik Dengan Empati (Pendekatan Humanis Dalam Pengajaran)* (Jakarta: Bayfa Cendekia Indonesia, 2024).

²⁴ S B Hutabarat, *Kepemimpinan Kepala Sekolah Berbasis Keteladanan* (Medan: UMSU Press, 2024).

²⁵ S Lubis, "Pengaruh Lingkungan Kerja, Disiplin Kerja Dan Motivasi Kerja Terhadap Kinerja Guru Madrasah Aliyah Negeri 2 Model Medan," *Jurnal Edutech* 6, no. 1 (2020): 17–25.

performance across various educational levels, in both *madrasas* and general schools.

Teacher performance refers to the work outcomes achieved by a teacher in carrying out their professional duties, encompassing the planning, implementation, and evaluation of instruction.²⁶ According to Wibowo, teacher performance is the output produced by an individual in accordance with their role or tasks within the organization.²⁷ It manifests as concrete, observable, and measurable results—such as classroom management, the delivery of instructional material aligned with the syllabus, and the diligent administrative handling of student evaluations. Teachers are obligated to perform their duties regarding the execution of teaching and learning activities and to manage their relationships with students in accordance with the responsibilities assigned to them.²⁸

Based on the F-test results, a significance value of 0.000 (<0.05) was obtained. This indicates that facilities and the work environment, acting jointly, exert an influence on teacher performance. These results demonstrate that the combination of adequate facilities and a conducive work environment plays a crucial role in shaping and enhancing teacher performance in schools.

Theoretically, these results align with Azis's theory,²⁹ which asserts that employee performance is determined not only by ability and motivation but also by work environment support and available facilities. In an educational context, facilities and infrastructure constitute part of the instructional support system that enables teachers to conduct the teaching process effectively, while the work environment serves as a psychological stimulus influencing teachers' morale, discipline, and job satisfaction. Thus, the better the facilities and work environment conditions, the more optimal the teachers' performance.

An analysis of the frequency distribution of respondent answers regarding the teacher performance variable reveals that the majority of respondents rated the indicators of responsibility and punctuality in task completion highly, whereas the lowest scores were observed in the indicators of innovation and the use of modern teaching methods. This distribution pattern suggests that while teachers demonstrate commendable dedication in fulfilling their duties, their capacity for innovation and the effective utilization of existing facilities remains suboptimal. This indicates a gap between the availability of facilities and the ability to utilize them effectively.

In practical terms, these findings suggest that to enhance teacher performance, schools and local governments need to integrate facility

²⁶ E Mulyasa, *Menjadi Guru Profesional* (Bandung: Remaja Rosdakarya, 2016).

²⁷ Wibowo, *Manajemen Kinerja* (Jakarta: Rajawali Pers, 2016).

²⁸ Ashlan and Akhmaluddin, *Manajemen Kinerja Guru Melalui Kompetensi, Komitmen Dan Motivasi*.

²⁹ A Azis, *Konsep Kinerja Guru Dan Sumber Belajar DALAM Meraih Prestasi* (Jakarta: Guepedia, 2020).

improvement programs with initiatives to foster a supportive work environment. Examples include upgrading classroom infrastructure, providing digital teaching aids, and strengthening a collaborative work culture that encourages effective communication among teachers. Through such measures, aspects that previously received low scores—such as creativity and innovation in teaching—can be sustainably improved.

Conclusion

This study aims to analyze the influence of facilities and infrastructure and the work environment on the performance of Islamic kindergarten teachers in Jelutung District, involving 49 respondents. Based on the entire series of analyses conducted—ranging from variable description, instrument testing, and classical assumption testing to hypothesis testing—the following conclusions can be drawn. First, facilities and infrastructure (X1) were proven to have a positive and significant influence on teacher performance (Y) in Islamic kindergartens in Jelutung District. This is evidenced by a t-test significance value of 0.000 (which is less than 0.05) and a regression coefficient of 0.682. This means that for every one-unit increase in facilities and infrastructure, teacher performance increases by 0.682 units. In this study, the facilities and infrastructure variable was measured using indicators such as the availability of adequate classrooms, the completeness of learning aids, the availability of educational and traditional play equipment, and the availability of reading materials and children's literacy media. Overall, this variable obtained an average score of 178.8, falling into the "Good" category; this indicates that the condition of facilities in Jelutung District's Islamic kindergartens generally supports the implementation of teaching and learning activities. However, the indicator regarding the availability of storybooks suited to children's needs received the lowest score—falling into the "Fairly Good" category—suggesting that this aspect requires greater attention from the schools. These findings align with the theory proposed by Tijow and Sembiring, which states that facilities and infrastructure are instrumental components significantly influencing the quality of the learning process and teacher performance; the findings are further supported by research conducted by Nursiwati and Rahmawati, as well as Marliya, Fitria, and Nurkhalis, who observed similar results at different educational levels.

Secondly, the work environment (X2) was also proven to have a positive and significant influence on teacher performance (Y). This is evidenced by a t-test significance value of 0.011—which is less than 0.05—and a regression coefficient of 0.505. This means that for every one-unit increase in the work environment, teacher performance increases by 0.505 units. In this study, the work environment variable was measured using indicators such as physical workplace conditions, noise levels and the conduciveness of the learning environment, social relationships among colleagues, principal support, and the availability of facilities supporting teachers' duties. This

variable achieved an average score of 182.6, falling into the "Good" category, which reflects that the majority of teachers feel satisfied and comfortable with their work environment conditions. The indicator regarding facilities that optimally support teachers' duties emerged as the highest-scoring aspect (205, categorized as "Very Good"), whereas the environmental noise indicator was identified as an aspect requiring improvement. These findings align with Kustiana's view that a favorable work environment fosters work enthusiasm and boosts productivity; they are also consistent with research by Kariani Febrianti and Sahlan Lubis, which found that the work environment has a positive and significant impact on teacher performance across various educational settings.

Thirdly, facilities and infrastructure and the work environment were found to have a simultaneous, significant influence on the performance of Islamic kindergarten teachers in Jelutung District. This is demonstrated by the F-test results, showing a significance value of 0.000 (less than 0.05) and a calculated F-value of 57.465. In this study, the teacher performance variable was measured through indicators such as the ability to plan lessons, the ability to conduct teaching and learning activities, classroom management, the utilization of learning media and resources, mastery of subject matter, the use of appropriate language during instruction, and the ability to conduct evaluations and provide constructive feedback to students. The teacher performance variable achieved an average score of 181.6, falling into the "High" category, which indicates that teachers have effectively carried out their professional duties. However, the indicators for subject matter mastery and the utilization of evaluation results remain in the "Moderate" category, highlighting the need for training programs, Early Childhood Education (PAUD) curriculum workshops, and ongoing academic supervision. Consistent with Azis's theory, teacher performance is determined not only by individual ability but also by the availability of supporting facilities and the prevailing work environment conditions. Consequently, comprehensively enhancing teacher performance requires an integrated approach that combines the provision of adequate facilities and infrastructure with the cultivation of a work environment that is conducive, harmonious, and oriented toward the continuous professional development of teachers.

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