Ishel
International Seminar on Humanity, Education, and Language
Universitas Negeri Jakarta | Online Conference |
Volume 1 , July 2025

THE INFLUENCE OF SCHOOL INFRASTRUCTURE ARRANGEMENT, SAFETY, AND COMFORT ON STUDENTS' MOTIVATION TO PARTICIPATE IN LEARNING: A STUDY OF JUNIOR HIGH SCHOOL INFRASTRUCTURE IN KABUPATEN CIANJUR

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ABSTRACT

A Study of junior high school access to education has an important indicator, namely the educational participation rate, which is used to measure the level of public engagement in the educational system each year. A prevailing issue is the persistently low average duration of study participation across various regions in Indonesia. This study focuses on junior high schools in Kabupaten Cianjur. The research aims to identify key variables that can contribute to enhancing students' motivation to participate in learning activities. The primary focus will be on the provision, arrangement, safety, and comfort of school infrastructure. Data will be collected through questionnaires distributed to teachers in several schools, as well as direct interviews with a number of junior high school principals in Kabupaten Cianjur. The findings will highlight important contributing factors to increased motivation. The results of this study may serve as valuable input and a foundation for future education policy decisions.

Keywords: Provision, arrangement, infrastructure, participation, motivation.

INTRODUCTION

Learning is defined as a relatively permanent change in potential habits resulting from reinforced practice (Kimble et al., 1974; Sullo, 2007). Experience or changes in behavior can result from repeated and reinforced practice. The World Bank Development Report (WDR) 2018 emphasizes the importance of achieving educational goals in various countries, which will contribute to the development and growth of these societies (World Bank, 2018). One important aspect is the construction of school infrastructure, which can increase motivation in the educational process for students (Barrett et al., 2019; Higgins, S., Hall, E., Wall, K., & Woolner, P., 2005). The theory of learning motivation explains the initiation, motivation, intensity, persistence, and quality of behavior driven by will (Wentzel & Miele, 2009; Gopalan et al., 2017). According to the "attribution" learning motivation theory, the underlying idea is that after something happens, the learner's subconscious produces a result (Cook, 2016). One action is to create a safe and healthy school environment for learning (Jackson & Andrews, 2000; Sojanah & Ferlinda, 2019; Anggraini et al., 2017; O. P. Wijaya & Bukhori, 2017; Supratno & Mochamad, 2021).

Referring to the current situation in Kabupaten Cianjur, there are several conditions, such as: The gross enrollment rate (GER) of students aged 7-18 in junior high school is

DOI: https://doi.org/10.21009/ishel.v1i1.56925

only 80.87% (BPS Kab Cianjur, 2023). Kabupaten Cianjur has an Education Quality Index (EQI) 2010-2020 that is categorized as low quality, below the national average of 0.667 and the provincial average of 0.647 (BPS Kab. Cianjur, 2023).The average number of years of schooling in Kabupaten Cianjur is lower than the projected average number of years of schooling (7 years versus 12 years, BPS Kab Cianjur, 2024). The main issue is how to increase student participation in school. The research focuses on junior high school students in Kabupaten Cianjur because, according to the data, participation in education ends at this level.

According to several studies from 2000 to 2024, the provision of school facilities and infrastructure contributes to increased student motivation as an extrinsic influence (Ullah, R., & Yasmeen, B., 2017; Stewart, P., 2021). The arrangement and provision of school facilities is closely related to learning conditions and student participation in school (Pintrich, 2003; Ullah & Yasmeen, 2017; Meece et al., 2006; Edwards, 2006; Supratno & Mochamad, 2021). Facilities and the physical environment of the school influence the motivation to learn (Salsabila et al., 2024; Agustin & Mu'is, 2023; Edwards, 2006; Sudarwo et al., 2018; Sojanah & Ferlinda, 2019; Anggraini et al., 2017; Lumapow et al., 2024). A good learning environment supports the desire to learn and provides motivation to study (O. P. Wijaya & Bukhori, 2017; Supratno & Mochamad, 2021). Learning facilities that are flexible and adapted to the age of students to adapt and do independent activities also strengthen students' learning motivation. Another study in Colorado examined the relationship between classroom facility layout and student productivity and showed an increase (Brooks & Weiler, 2018). The provision of good school facilities will provide significant support for improving the learning process of students (Manuputty et al., , 2023; Ikram & Kenayathulla, 2023; Firman & Ida Bagus Putu Arnyana, 2023; N. Q. Wijaya et al., 2023; Sari, I. P., Surahman, M., & Muhisom, M., 2022; Widiastuti, K., Susilo, M. J., & Nurfinaputri, H. S., 2020).

The issue of students in education in Kabupaten Cianjur is the main focus in searching for significant variables that can improve the above issue. How can the provision, arrangement, safety, and comfort of school facilities contribute to increased motivation and productivity in learning among secondary school students in Cianjur, West Java? The purpose of this study is to find the influence of the variables related to the provision and arrangement, comfort, and safety on students' learning motivation, as well as the arrangement of facilities and infrastructure on students' comfort and safety.

The research questions are (Meece, J. L., Anderman, E. M., & Anderman, L. H., 2006; Gopalan, V., Bakar, J. A. A., Zulkifli, A. N., Alwi, A., & Mat, R. C., 2017): Does the organization, security, and comfort of school facilities contribute to increased motivation and participation in learning among junior high school students in Kabupaten Cianjur? Is there a relationship between the implementation of the arrangement, security, and comfort of facilities at junior high schools in Kabupaten Cianjur?

The hypothesis proposed from the references is as follows: There is an effect of school infrastructure planning on increasing student motivation to participate in learning at junior high schools in Kabupaten Cianjur (Wijaya, N. Q. et al., 2023; Sari, I. P., Surahman, M., & Muhisom, M., 2022; Brooks & Weiler, 2018; Ruhyana & Aeni, 2019). There is an effect of school infrastructure safety on the motivation of junior high school students to participate in learning in Kabupaten Cianjur. (Nurhasanah, A., Pribadi, R. A., & Sukriah, S., 2022; Bakar, 2014). There is an effect of the comfort of school facilities on the increase in the motivation of students to participate in learning at junior high school in Kabupaten Cianjur. (Smajlović Orman, N., , Novalić, A., Popovac, M., & El-Sayed,

A., 2023; Oyeyoade & Araloyin, 2019; Lange, 2012; Cook & Cook, 2016; Hariyanto, Arafat, & Wardiah, 2021). There is an effect of the arrangement on the security of school facilities in junior high schools in Kabupaten Cianjur. (Amsalu, Atikilt, Taklual, & Tilahun, 2022; Netshitahame & Van Vollenhoven, 2002). 2002). There is an effect of the arrangement on the comfort of school facilities in junior high schools in Kabupaten Cianjur. (Puteh, M., Ibrahim, M. H., Adnan, M., & Che'Ahmad, C. N., 2012; Peter, T., 2021). There is an effect of security on the comfort of school facilities in junior high schools in Kabupaten Cianjur. (Mubita, 2021).

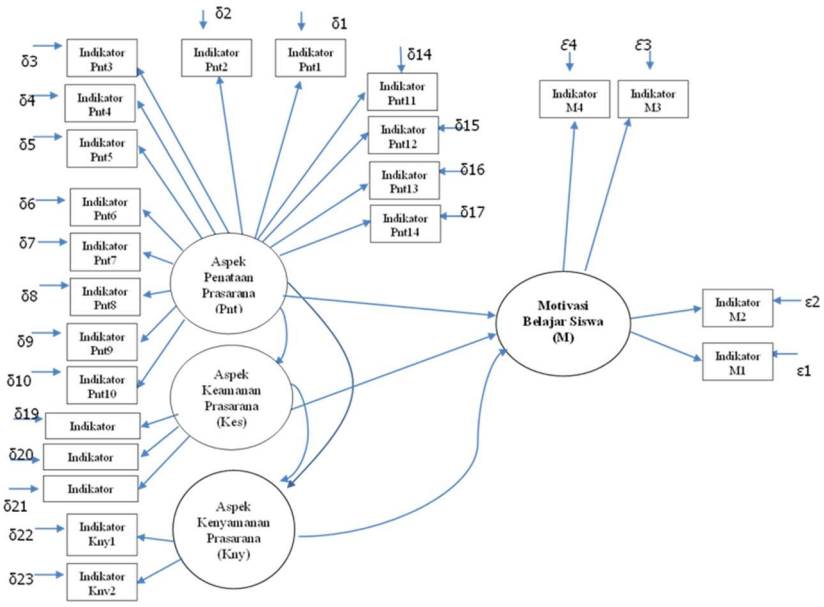
METHOD

This study was conducted with quantitative analysis through a questionnaire as primary data, with a sample of 163 middle school teachers from different schools in Kabupaten Cianjur who are directly involved in teaching students. The analysis will test the proposed model. A total of 130 junior high schools were the origin of the teachers who responded to the questionnaire in this study.The schools were 38% public and 62% private, out of a total of 407 schools in Kabupaten Cianjur under the coordination of the Ministry of Education, Culture, Research, and Technology.

The exogenous latent indicator variable is measured using a Likert scale, an ordinal scale that evaluates respondents' perceptions of management of facilities at their respective schools. The evaluation uses a scale from one to five, with the following ratings: Very poor to very good. The measurement of the endogenous latent indicator variable uses an interval scale from one (1) to five (5), which describes: No improvement from all students in the class to an increase of 75-100% of the number of students in the class. A reflective model test will be conducted to ensure the indicators accurately represent the latent variables.

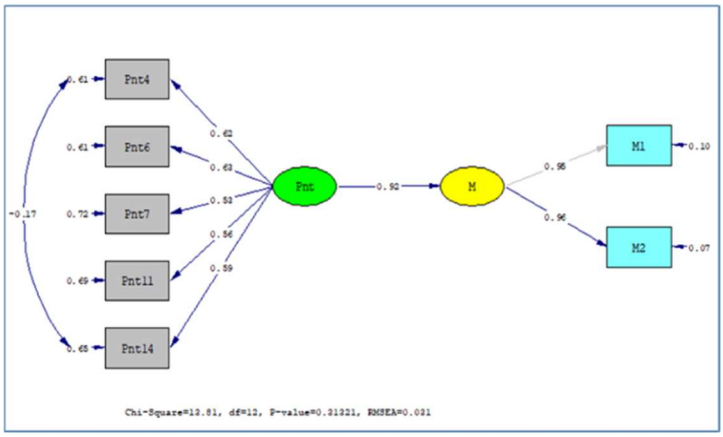
The model is a hypothesis of the initial relationship between the exogenous latent variable (X) and its explanatory indicators, as well as the endogenous latent variable (Y) and its indicators. In this study, a reflective model will be tested, with the following steps (Hisham, Achmad, 2021; Ghozali, Imam, 2008): Univariate normality test, multivariate normality test, validity and reliability test, and model fitness test. The types of data that will be used in this study are: Primary data through questionnaires, secondary data through literature studies and literature. Direct observation data through visits to school locations and interviews with several school principals. In this study, a reflective model test will be conducted, with the following steps: Normality Test: (Univariate Normality, Multivariate Normality), Indicator validity and reliability test (Convergent validity, Discriminant validity), Model Fit Test (Chi-Square, Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), Adjusted Goodness of Fit Index (AGFI) and Goodness of Fit Index (GFI).

DOI: https://doi.org/10.21009/ishel.v1i1.56925



RESULTS AND DISCUSSION

The testing process involves examining the sample data obtained and conducting the final stage of testing on the proposed model regarding the relationship between the Pnt variable as exogenous (X1) and the M variable as endogenous (Y). The resulting model is as follows:



The R-square value of the exogenous latent variable (X1) to the endogenous latent variable (Y) is 0.85, which is greater than 0.5. The standardized coefficient is 0.92, and the T-value is 2.63. This indicates that there is a strong relationship between the exogenous and endogenous latent variables. The following statement is given in response to the research question. There is a positive influence of infrastructure planning on the increase in motivation for learning participation among junior high school students in Kabupaten Cianjur. (X1 to Y). The exogenous latent variable X1 (Pnt), with an R-square value of 0.85, explains that this latent variable contributes to the endogenous latent variable Y (M). The results of the statistical test performed with SEM-Lisrel show that

some manifest/indicator variables of the latent variable X1 are significant for use in this study and can be used as indicators to explain the two constructs X1(Pnt) and Y(M).

There are also manifest variables/indicators that have been proven valid to explain the latent variable Y (M).

Indicator	Explanation	R-*Square*
Pnt4 (X1)	Complete learning facilities and equipment.	0.39
Pnt6 (X1)	Good building and interior design.	0.39
Pnt7 (X1)	The room is cool, well-lit, and has an open play area.	0.28
Pnt11 (X1)	The classroom is well-organized and attractive.	0.31
Pnt14 (X1)	Using the internet/technology in the classroom for the learning process at school.	0.35
M1 (Y)	Students in the class want to participate in various activities.	0.9
M2 (Y)	Students want to attend and actively participate in the courses offered.	0.93

Overall, the R-square value for the X1 (facility arrangement) latent exogenous variable is less than 0.5, indicating that this indicator variable provides weak support for the latent exogenous variable. The five indicators of action for facility management in schools are considered insufficient to support the finding of a strong relationship between the exogenous latent variable (facility management) and the endogenous latent variable (student participation motivation). The latent endogenous variable Y (learning participation motivation) has an R-square value greater than 0.5, indicating that the two indicators strongly explain Y.

In response to the research questions posed at the beginning of the study, the following conclusions can be drawn: The arrangement of facilities can influence junior high school students' motivation to participate in learning in Kabupaten Cianjur, Pacet District

Only one of the six hypotheses proposed was proven through model testing: the arrangement of school facilities influences the motivation to participate in learning among junior high school students in Kabupaten Cianjur. Hypotheses two through six were not proven to be significant. The findings provide an overview of the various possibilities that may occur: Other latent variables regarding school facilities were not included in the initial latent variable model. This variable may strongly impact student motivation to learn. Therefore, it is necessary to propose including this variable as a new latent variable and submit a new model for testing. Teacher respondents have different perceptions of the standardization and implementation of school facility planning. These perceptions may influence the results of the questionnaire, which is the primary data source.

The limitations of this study are as follows: Respondents have different understandings and perceptions of the quality of school facility management. These differences can lead to discrepancies in perceptions and conclusions based on the survey data, which weakens the primary data. These differences in perception and understanding can be caused by: Differences in cultural and social values formed by environmental and community conditions. Respondents who live in densely populated, heterogeneous, and open-minded communities will have different perceptions and understandings than those

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who live in less densely populated, homogeneous, and closed-minded communities (Xue & Li, 2022). Differences in the information received about policies and standards for arranging and maintaining school facilities (Barrett, P., Treves, A., Shmis, T., & Ambasz, D., 2019; Noddings, 2015). Another weakness in the collection of primary data could be the perception of student participation motivation on a Linkert scale. Failing to draw conclusions from the number of student participants through written school records could result in inaccurate data.

CONCLUSION AND DISCUSSION

The initial hypothesis proposed by the researcher is that school infrastructure can support student participation motivation at the junior high school level in Cianjur Regency. However, the findings in the field show that there is a significant influence of endogenous latent variables on increasing student participation in learning, especially at the junior high school level in Cianjur Regency. The results of the statistical model test of the indicators of the exogenous latent variables need to be re-examined because of their small contribution to the latent variable of infrastructure and facilities arrangement. The main conclusion from the description above is that the arrangement of school facilities affects the motivation of junior high school students in participating in learning in Cianjur Regency. Further research can be conducted with a new model that considers other variables besides the arrangement of school infrastructure, which can significantly affect student learning participation.

Various factors have caused junior secondary school infrastructure in Kabupaten Cianjur to be less than optimal. The most common problem is the limited budget allocation for both public and private schools. This limited budget allocation is the main cause of inadequate management of school facilities. Starting from land acquisition and construction to equipment procurement and maintenance depends on the availability of funds. Buildings that have been in use for several years often suffer significant damage that cannot be dealt with quickly (results of direct interviews with three school principals on April 30, 2025). Repairs await coordination with the local education office. Private school management foundations also have similar limitations in terms of budget allocations for school maintenance, repair and development. The management foundation adjusts the amount of the budget according to its financial management policies and conditions. A well-managed foundation will allocate its budget effectively and be able to meet school operational needs quickly. The role of school operators in standardizing, monitoring and structuring school infrastructure is needed to support the improvement of the learning process.

ACKNOWLEDGMENT

Thank you to everyone who helped with this research, especially the head of the Cianjur education department, the principals of SMPN 1 Cipanas, SMP Mardi Yuana Cipanas, and SMP PGRI Cipanas, and to all junior high school teachers in Kabupaten Cianjur who participated in filling out the questionnaire.

Very grateful to the supervisor from the University of Jakarta, who has provided guidance and direction in this research.

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