

The Implications of the Free Nutritious Meal Policy on the Learning Stamina of Grade VIII Junior High School Students in Banten Province

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Abstract: This study aims to analyze the implications of the Free Nutritious Meal (*Makan Bergizi Gratis*) Program policy on the learning stamina of Grade VIII junior high school students in Banten Province. The study employed a quantitative approach with a descriptive-evaluative method based on Dunn (2018) policy evaluation theory. The research population consisted of Grade VIII students and Indonesian/English language teachers from eight public junior high schools participating in the MBG Program in Banten Province. A purposive sampling technique was used, involving 235 students as the main respondents and 25 teachers as supporting informants. Data were collected through questionnaires, documentation, and literature review, and were analyzed using descriptive statistics, including frequencies, percentages, means, and correlation analysis among learning stamina indicators. The findings indicate that the MBG Program has positive implications for students' learning stamina, encompassing learning focus, learning concentration, learning motivation, and physical endurance. The physical endurance aspect obtained the highest mean score (mean = 2.94), followed by learning concentration (2.87), learning motivation (2.81), and learning focus (2.72). The correlation coefficients among the indicators ranged from 0.6 to 0.8, indicating positive relationships of moderate to strong strength. The significance test also revealed that the relationships among the learning stamina indicators were statistically significant at the 5% significance level ($t\text{-calculated} = 20.35 > t\text{-table} = 1.97$). However, the study also identified several implementation challenges, including irregular food distribution, limited menu variety, inconsistent food quality, and a high level of food waste in several schools. These findings suggest that the MBG Program has the potential to become a strategic instrument for improving both educational quality and student health, provided that it is supported by effective implementation governance.

Keywords: Free Nutritious Meal Program, learning stamina, learning focus, learning motivation, junior high school students.

1. Introduction

Improving the quality of human resources is one of the primary objectives of national education development. One of the factors influencing educational success is the health condition and nutritional status of students. Various studies have shown that adequate nutrition contributes to cognitive development, concentration, learning motivation, and students' academic performance. In this context, the Indonesian government initiated the Free Nutritious Meal Program (MBG) as a strategy to improve both students' health and educational outcomes. According to Slameto (2015, p. 54), physical health is one of the internal factors affecting students' learning success. A healthy physical condition enables students to participate more effectively in the learning process because the body possesses sufficient energy to engage in learning activities. Conversely, poor health conditions may cause students to become easily fatigued, sleepy, and less focused during classroom instruction.

In addition to physical health, learning stamina is also influenced by psychological factors, particularly learning motivation. Motivation serves as a driving force that helps students maintain enthusiasm, perseverance, and consistency throughout the learning process. Students with high learning motivation tend to be more resilient in facing academic challenges, possess greater curiosity, and are more active in seeking and understanding learning materials. Sardiman (2018, p. 73) states that motivation is an internal driving force that initiates learning activities, sustains learning continuity, and directs learning behavior. As stated by Sardiman, "Motivation is the driving force within students that initiates learning activities, ensures the continuity of learning activities, and provides direction for learning activities" (Sardiman, 2018, p. 73).

The relationship between food intake and learning stamina becomes increasingly evident through the importance of breakfast for school-aged children. Breakfast serves as the initial source of energy required by both the body and the brain before students engage in learning activities. When students do not receive adequate food intake in the morning, blood glucose levels decrease, resulting in reduced concentration and learning focus.

Glucose is the primary energy source for the brain to perform cognitive and memory functions. Furthermore, Murphy et al. (1998) explain that school breakfast programs have a positive relationship with students' psychosocial functioning and academic performance. Students who receive breakfast demonstrate better attention, concentration, and learning abilities compared to those who do not. As noted by Murphy et al., "Children who participated in the School Breakfast Program showed significant improvements in psychosocial functioning and academic performance" (Murphy, 1998, p. 899). During school-age and adolescence, nutritional needs become increasingly important due to rapid physical growth and cognitive development. Adequate nutritional intake contributes to improved health, physical fitness, and learning abilities, whereas malnutrition may lead to decreased concentration, lower physical endurance, and disruptions in the learning process. Therefore, nutritional science plays an important role in understanding the relationship between nutritional fulfillment and the enhancement of students' learning stamina. Khomsan (2012, p. 56) explains that nutritional problems among school-aged children can negatively affect concentration, physical fitness, and learning productivity. This finding indicates that nutritional quality is a crucial factor in determining students' readiness to participate in learning activities. Students experiencing nutritional deficiencies are more likely to feel tired, less enthusiastic, and have difficulty maintaining attention during lessons. Consequently, they tend to be less active in classroom activities and face challenges in understanding the learning materials presented by teachers. Thus, nutritional science is closely related to students' learning stamina.

Language learning is another essential aspect of education because language serves as the primary tool through which students understand information, communicate ideas, express emotions, and engage in social interactions. Through language learning, students develop listening, speaking, reading, and writing skills that form the foundation of communication and higher-order thinking skills. In the context of this study, strong learning stamina helps students participate in language learning more actively and attentively. The fulfillment of nutritional needs through the Free Nutritious Meal Program has the potential to enhance students' energy levels, concentration, and learning endurance, thereby supporting more effective language learning processes. Therefore, language learning requires optimal physical and mental readiness, attention, concentration, and motivation. Language learning is not merely a process of understanding words and sentences but also a process of developing students' thinking and communication skills. Consequently, the Free Nutritious Meal Program has strong relevance to improving students' learning stamina because it supports both their physical condition and learning capacity during school activities.

Banten Province is one of the regions implementing the MBG Program and is characterized by diverse socioeconomic conditions. Some areas continue to face economic limitations and challenges in meeting family nutritional needs. Therefore, the MBG Program is viewed as an important intervention to support students' readiness to learn. However, the implementation of the program still faces several challenges, including uneven food distribution, limited menu variety, delayed distribution, and high levels of food waste resulting from students' low acceptance of the provided meals. Grade VIII junior high school students are in the early adolescent stage, characterized by increased energy requirements, rapid cognitive development, and growing academic demands. These conditions make learning stamina a crucial factor in successful learning processes. Learning stamina encompasses not only physical endurance but also the ability to maintain focus, concentration, motivation, and persistence throughout learning activities. Therefore, this study aims to analyze the implications of the MBG policy on the learning stamina of Grade VIII junior high school students in Banten Province.

The novelty of this study lies in its focus on learning stamina among Grade VIII junior high school students as an outcome of the MBG policy implementation. Previous studies have primarily examined learning motivation or academic achievement, whereas research on learning stamina as an indicator of the effectiveness of educational and school health policies remains relatively limited.

2. Theoretical Framework

Free Nutritious Meal (MBG) Program is a public policy initiative designed to improve students' nutritional status and health as a foundation for enhancing educational quality. Adequate nutritional intake plays an important role in supporting physical growth, cognitive development, learning concentration, and academic performance. According to nutritional science, balanced nutrition provides the energy and essential nutrients required by the brain and body to perform learning activities effectively. Therefore, the provision of nutritious meals at school is expected to improve students' readiness and capacity to participate in learning processes.

From a policy perspective, MBG serves as an educational and health intervention aimed at addressing nutritional inequalities among students while supporting learning outcomes. The effectiveness of the program can be evaluated through its impact on students' physical and psychological readiness to learn.

Learning Stamina refers to students' ability to maintain physical and mental endurance during learning activities over a certain period. Learning stamina is not limited to physical strength but also includes

psychological aspects that support continuous engagement in learning. Students with good learning stamina are able to sustain attention, concentration, motivation, and active participation throughout classroom activities. Slameto (2015) explains that physical health significantly influences learning achievement because healthy students possess greater energy and readiness to participate in educational activities. Consequently, learning stamina can be viewed as an important indicator of students' learning readiness and educational success.

Motivation Theory Motivation is one of the key psychological factors influencing learning stamina. According to Sardiman (2018), motivation functions as an internal driving force that initiates, directs, and sustains learning activities. Students with high motivation tend to demonstrate greater persistence, enthusiasm, and resilience in completing academic tasks.

Within the context of this study, adequate nutritional intake may indirectly enhance learning stamina by improving students' physical condition and increasing their motivation to engage in learning activities.

Policy Evaluation Theory This study is grounded in Dunn (2018) policy evaluation theory, which views policy evaluation as a process of assessing the effectiveness and consequences of public policies. Policy evaluation focuses on determining whether policy objectives have been achieved and identifying the impacts generated by policy implementation.

Through this perspective, the MBG Program is evaluated based on its implications for students' learning stamina. The analysis examines whether the program contributes positively to students' ability to maintain focus, concentration, motivation, and physical endurance during learning activities.

3. Research Methods

This study employed a quantitative approach using a descriptive-evaluative method to obtain an empirical description of the implications of the Free Nutritious Meal Program (MBG) on students' learning stamina based on the perceptions of both students and teachers. Students were positioned as the primary subjects who directly benefited from the MBG Program, while teachers served as supporting informants who observed changes in students' behavior and learning stamina throughout the learning process. This approach enabled the study to gain a more comprehensive understanding of the program's effectiveness, as the data were derived not only from the perceptions of beneficiaries but were also strengthened by observations from teachers who interacted intensively with students in the school environment.

Conceptually, the study was grounded in the public policy evaluation theory developed by Dunn (2018), which defines evaluation as a systematic process for assessing the benefits, effectiveness, value, and consequences of a public policy. Within this framework, the success of a program is measured not only by the extent to which its implementation aligns with predetermined plans but also by its ability to achieve the intended outcomes. From a human resource development perspective, the MBG Program can be viewed as a long-term social investment aimed at improving the quality of future generations. Consequently, the significance of this study extends beyond the educational sector, encompassing efforts to improve public health and promote sustainable human resource development as a foundation for national progress.

The population of the study consisted of Grade VIII students and Indonesian/English language teachers from eight public junior high schools participating in the MBG Program, namely SMPN 3 Pagelaran, SMPN 1 Bojong, SMPN 2 Pulosari, SMPN 2 Menes, SMPN 1 Pandeglang, SMPN 1 Labuan, SMPN 2 Labuan, and SMPN 2 Warunggunung. The research was conducted over a four-month period, from February to May 2026. The research process included three stages: preparation (instrument development and administrative permits), implementation (questionnaire distribution and data collection), and completion (statistical data analysis and report preparation).

A purposive sampling technique was employed, considering respondents' direct involvement in the implementation of the program. The study involved 235 students as the primary respondents and 25 Indonesian/English language teachers as supporting respondents. Data were collected through questionnaires, documentation, and literature review. The research instrument utilized a five-point Likert scale measuring four indicators of learning stamina, namely learning focus, learning concentration, learning motivation, and physical endurance. The collected data were analyzed using descriptive statistical techniques, including frequencies, percentages, mean scores, and category-based interpretation of the assessment results.

4. Research Results

Questionnaire data were collected from 235 Grade VIII students across eight public junior high schools included in the study sample. Each respondent completed items measuring four key indicators of learning stamina after the implementation of the Free Nutritious Meal Program (MBG), namely learning focus, learning concentration, learning motivation, and physical endurance during language learning activities. Responses were measured using a five-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neutral/fair, 4 = agree, and 5 =

strongly agree). For each respondent, both total and average scores were calculated. The overall recapitulation of student responses showed total scores of 639 for learning focus, 675 for learning concentration, 660 for learning motivation, and 692 for physical endurance, with a combined total score of 2,666 and an overall mean of 666.5. These findings generally indicate a moderate-to-high level of learning stamina among students following the implementation of the program.

Teacher questionnaires were used to capture teachers' professional observations regarding changes in students' learning stamina after the implementation of the Free Nutritious Meal Program. The indicators employed were equivalent to those used in the student questionnaire—learning focus, concentration, motivation, and physical endurance during language learning—but were formulated as observational statements from the teachers' perspective. A total of 25 teachers participated as respondents. The recapitulated teacher data revealed total scores of 73 for learning focus, 73 for concentration, 77 for motivation, and 75 for physical endurance, with an overall total score of 298 and an average score of 74.5. The mean scores for each indicator ranged from 2 to 4, indicating that teachers generally perceived students' learning stamina after the program to be at a fair-to-good level.

Based on the collected data, the relationships among the dimensions of learning stamina were categorized as moderate to strong. Conceptually, the correlation coefficients among the indicators can be described as follows: (1) the relationship between learning focus and concentration was moderate to strong ($r \approx 0.7$); (2) the relationship between learning focus and motivation also demonstrated a strong positive tendency ($r \approx 0.7$); (3) the relationship between learning focus and physical endurance was moderate to strong ($r \approx 0.6-0.7$); (4) concentration and motivation showed a strong correlation, indicating that students who are able to concentrate well tend to possess higher learning motivation; (5) concentration and physical endurance displayed a positive relationship, suggesting that good physical condition supports the ability to maintain concentration; and (6) motivation and physical endurance demonstrated a relatively strong correlation, indicating that the better students' physical endurance, the higher their motivation to participate in learning activities. Overall, the correlation coefficients among the learning stamina indicators ranged from approximately 0.6 to 0.8, which can conventionally be classified as moderate to strong relationships. This finding suggests that improvements in one aspect of learning stamina (e.g., physical endurance) tend to be accompanied by improvements in other aspects (e.g., motivation or concentration). Consequently, the four indicators are interrelated and collectively form a coherent construct of learning stamina.

Furthermore, the correlation between motivation and physical endurance was found to be statistically significant. Since the calculated t-value was substantially higher than the critical t-value ($20.35 > 1.97$), the correlation between motivation and physical endurance was significant at the 5% significance level. Therefore, all relationships among the learning stamina indicators can be considered statistically significant. These results indicate that the relationships among the dimensions of learning stamina are not coincidental but are consistent with theoretically expected patterns. The MBG Program, by improving students' physical condition, contributes to enhanced focus, concentration, and learning motivation, while these four indicators mutually reinforce one another. Thus, both empirically and statistically, learning stamina can be regarded as a multidimensional construct whose dimensions are interconnected, and the MBG Program contributes to strengthening all of these dimensions.

Students' Learning Stamina after the Implementation of the MBG Program

The findings indicate that the MBG Program has positive implications for students' learning stamina. The average scores for all indicators were categorized as having a "positive impact." Physical endurance obtained the highest mean score (mean = 2.94), followed by learning concentration (2.87), learning motivation (2.81), and learning focus (2.72). These findings suggest that the most tangible benefit of the MBG Program is the improvement of students' physical condition during learning activities.

Teacher observations further support these findings, showing that students were better prepared to participate in learning activities, more active during classroom instruction, and less likely to exhibit symptoms of fatigue throughout the school day.

Implications of the MBG Program for Learning Focus

The MBG Program contributed to improving students' ability to focus on learning materials. Students reported that after receiving nutritious meals, they were better able to follow teachers' explanations and experienced fewer distractions during lessons. Teachers also observed improved student readiness to engage in learning activities from the beginning of class. Theoretically, this condition can be explained by the role of energy intake and nutrients in maintaining brain function and metabolic stability, both of which support attention and information-processing processes. Consequently, the MBG Program contributes to creating a more conducive and productive learning environment. These findings are supported by Adolphus et al. (2015), who

reported that breakfast and adequate nutritional intake influence behavior, memory, attention, and academic performance among children and adolescents. Adequate nutrition provides the brain with the energy required for optimal cognitive functioning, enabling students to sustain learning focus for longer periods.

Implications of the MBG Program for Learning Concentration

Learning concentration was the second indicator demonstrating substantial improvement. Students reported that they were better able to understand learning materials, follow teachers' instructions, and maintain attention until the end of lessons. Teachers also reported a decrease in the frequency of students becoming sleepy or losing focus during classroom instruction.

These findings reinforce the notion that adequate energy intake enhances students' mental capacity to process academic information continuously. This result is consistent with Afriadi (2025, p. 41), who found that nutritional status significantly affects students' concentration and academic achievement. The better the nutritional status of students, the better their ability to receive, understand, and retain learning materials. This suggests that adequate nutritional fulfillment contributes to improved brain function and cognitive performance, thereby facilitating more effective learning processes.

Implications of the MBG Program for Learning Motivation

The results also indicate that the MBG Program enhanced students' learning motivation. Most respondents reported greater enthusiasm for attending classes, increased willingness to come to school, and more active participation in classroom activities after receiving free nutritious meals.

From an educational psychology perspective, this increase in motivation can be explained through the fulfillment of students' basic needs. When physiological needs are adequately met, students possess a greater capacity to develop intrinsic motivation for learning. These findings are consistent with Syafitra's (2023, p. 66) study, which concluded that breakfast habits and nutritional status are associated with schoolchildren's academic achievement. This finding suggests that fulfilling energy requirements in the morning plays an important role in maintaining students' concentration and enthusiasm for learning.

Implications of the MBG Program for Physical Endurance

Physical endurance was the indicator with the highest achievement. Students reported experiencing hunger, dizziness, weakness, and fatigue less frequently during learning activities. Teachers also observed a decline in the number of students complaining of hunger or being unable to participate in lessons until the end of the school day.

These findings indicate that the MBG Program functions not only as a food assistance initiative but also as a mechanism for improving educational quality through the enhancement of students' physical stamina. Good physical endurance enables students to maintain focus, concentration, and learning motivation throughout relatively long learning sessions. This finding is in line with the study conducted by Puspa et al. (2025), which found a significant relationship between nutritional fulfillment, cognitive development, and improvements in students' learning concentration.

Policy Implications

Although the MBG Program has generated positive outcomes, the study identified several implementation challenges, including irregular food distribution, limited menu variety, inconsistent food quality, and high levels of food waste in several schools. These findings indicate that policy effectiveness is determined not only by the substance of the program itself but also by the quality of implementation, institutional coordination, resource availability, and monitoring systems.

From the perspective of public policy implementation, these findings support George C. Edward III's implementation theory, which emphasizes the importance of communication, resources, implementers' disposition, and bureaucratic structure in determining the success of public policies. Overall, the five research questions were successfully addressed. The findings demonstrate that the Free Nutritious Meal Program has positive implications for the learning stamina of Grade VIII junior high school students in Banten Province from both student and teacher perspectives, although the magnitude of its impact varies across dimensions and remains influenced by factors beyond the program itself.

5. Conclusion

This study demonstrates that the Free Nutritious Meal Program (MBG) policy has positive implications for the learning stamina of Grade VIII junior high school students in Banten Province. These positive effects are reflected in improvements in learning focus, learning concentration, learning motivation, and particularly students' physical endurance during the learning process. The MBG Program helps reduce hunger, fatigue, and drowsiness, thereby enabling students to participate in learning activities with greater readiness and effectiveness.

The findings indicate that the most evident outcome of the MBG Program is the improvement of students' physical condition and energy levels during classroom learning. Students tend to be better prepared to engage in learning activities, more capable of maintaining attention in class, and less likely to experience fatigue during school hours. These results reinforce previous studies that have highlighted the close relationship between adequate nutritional intake, learning performance, cognitive functioning, and students' engagement in academic activities.

Furthermore, this study concludes that all dimensions of learning stamina—namely learning focus, concentration, motivation, and physical endurance—are positively and significantly related, with relationships ranging from moderate to strong. The correlation coefficients among the indicators, ranging from 0.6 to 0.8, suggest that learning stamina is a multidimensional and integrated construct in which improvement in one dimension tends to be accompanied by improvement in the others. Moreover, the significance test revealed that these relationships did not occur by chance, as indicated by the calculated t-value, which was substantially higher than the critical t-value ($20.35 > 1.97$) at the 5% significance level. These findings indicate that the Free Nutritious Meal Program contributes not only to improving students' physical condition but also to strengthening their ability to focus, concentrate, and remain motivated in learning. Therefore, the MBG Program can be viewed as an educational intervention based on the fulfillment of basic needs that has the potential to support the comprehensive enhancement of students' learning stamina.

Nevertheless, the study also found that the success of the MBG Program cannot be separated from the quality of its implementation. Several challenges remain, including irregular food distribution, limited menu variety, inconsistent food quality, and differences in students' acceptance of the meals provided. These findings indicate that policy effectiveness is determined not only by the substance of the program itself but also by institutional capacity, resource availability, the quality of interagency coordination, and the effectiveness of monitoring and evaluation systems.

From the perspective of public policy implementation, a policy such as the MBG Program, which is conceptually designed to improve students' health and educational quality, may not achieve optimal outcomes without effective implementation mechanisms. In other words, program success depends not only on the amount of budget allocated but also on the quality of policy governance at the operational level.

Therefore, strengthening the distribution system, increasing menu diversity, improving food quality control, and implementing continuous monitoring and evaluation are necessary to ensure that the benefits of the program can be realized more effectively. Strategically, the MBG Program has the potential to become an important instrument for supporting improvements in education, public health, and human resource development in Indonesia.

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