

THE EFFECTIVENESS OF FREE NUTRITIOUS MEAL PROGRAMS IN IMPROVING STUDENT MOTIVATION AND ACHIEVEMENT IN INDONESIA: A SOCIOLOGICAL PERSPECTIVE OF EDUCATION

Marzuki Azhari Sunni¹

¹ Universitas Nasional, Indonesia

E-mail: ¹⁾ marzukiazharisunni05@gmail.com

Abstract

The Free Nutritious Meal (MBG) Program is one of the strategic policies of the Indonesian government that aims to improve the quality of education through meeting the nutritional needs of students, especially from vulnerable socio-economic groups. This study aims to analyze the effectiveness of the Free Nutritious Meal Program (MBG) in increasing student motivation and achievement in Indonesia from the perspective of educational sociology. This study uses a mixed methods approach with a sequential explanatory design, which combines quantitative and qualitative methods sequentially. Quantitative data was collected through learning motivation questionnaires and documentation of students' academic scores before and after the implementation of MBG, while qualitative data was obtained through in-depth interviews, observations, and analysis of policy documents. The results of the study showed that the MBG Program had a positive and significant effect on increasing students' learning motivation, which was reflected in increased concentration, class participation, and study perseverance. In addition, this program also contributes to improving student learning achievement, although with varying impacts between educational units. From the perspective of the sociology of education, MBG functions as a form of state intervention in providing basic educational support that is able to reduce structural barriers due to socio-economic inequality. This program has been proven to have a redistributive function with a more significant impact on students from underprivileged families. However, the effectiveness of MBG is greatly influenced by the quality of program implementation and governance at the school level. This research emphasizes the importance of integrating education and social policies to realize a more equitable and sustainable education system.

Keywords: *Free Nutritious Meal Program, learning motivation, learning achievement, sociology of education, educational inequality*

1. INTRODUCTION

Education is a strategic instrument in human resource development and is one of the main pillars in efforts to reduce social inequality. Through education, the state is expected to be able to increase social mobility, expand life opportunities, and create a more just and competitive society. However, the quality and outcomes of education are not only determined by pedagogical factors in the classroom, such as curriculum, learning methods, or teacher competence. Studies have shown that students' social and economic conditions play a significant role in shaping students' learning experiences, motivation, and academic achievement. Thus, education cannot be understood as a completely neutral process, but rather as a social arena influenced by a broader structure of inequality (Soma, 2024).

One of the structural problems that the education system in Indonesia still faces is the inequality of access to proper nutrition, especially among students from low-income families. Malnutrition at school age has been shown to have an impact on physical health, cognitive development, concentration ability, and emotional stability of students. These conditions directly or indirectly affect learning motivation and academic achievement, so that it has the potential to widen the gap in educational outcomes between social groups. In the perspective of the sociology of education, nutritional inequality can be understood as a non-pedagogical factor that contributes to the reproduction of educational inequality, in which students from disadvantaged groups face structural barriers that are not experienced by students from better socio-economic backgrounds (Nurharjadmo, 2025).

In this context, the Indonesian government launched the Free Nutritious Meal Program (MBG) as a form of social intervention that aims to improve the nutritional status of students while supporting the learning process in schools. This program is designed to ensure the fulfillment of students' basic nutritional needs as an important prerequisite for educational success. MBG is not only interpreted as a health policy, but also as an education policy that is oriented towards increasing learning motivation, student attendance, and academic achievement. From the perspective of the sociology of education, the MBG Program can be understood as the state's effort to provide basic educational support or basic capital that allows students to participate more optimally in the formal education process (Yamin, 2025). Although normatively the MBG Program has a strategic goal and is in line with the agenda of equal distribution of education, the effectiveness of this program in increasing student motivation and achievement still requires a comprehensive empirical study. Most previous studies have tended to focus on aspects of nutritional fulfillment and its impact on children's health, while studies that specifically link free meal programs to social dimensions of education such as learning motivation, student participation, and academic achievement are still relatively limited. In addition, there is little research that places the MBG Program within the framework of the sociology of education, especially in analyzing the relationship between state intervention, the socio-economic conditions of students, and the reproductive process or reduction of educational inequality (Chamberlin, 2023).

The limitations of the study show that there is an important research gap to be filled, especially in the context of education policy in Indonesia. An analysis that integrates the perspective of the sociology of education is needed to understand more fully how social policies such as the MBG Program work within the structure of education, as well as the extent to which these policies are able to contribute to increased learning motivation, academic achievement, and equitable distribution of educational opportunities (Wang, 2020).

Based on this background, this study aims to analyze the effectiveness of the Free Nutritious Meal Program (MBG) in increasing student motivation and achievement in Indonesia from the perspective of educational sociology. This research is expected to make a theoretical contribution to the development of the study of the sociology of education, especially related to the role of social policy in overcoming educational inequality. In addition, practically, the results of this research are expected to be a basis for consideration for the formulation and strengthening of education and social policies that are more equitable, inclusive, and sustainable (Bayoumy, 2021).

2. IMPLEMENTATION METHOD

This study uses a mixed methods approach with a sequential explanatory design, which combines quantitative and qualitative methods sequentially. The quantitative approach is used as an initial stage to measure the effectiveness of the Free Nutritious Eating Program (MBG) in increasing student motivation and achievement in an objective and measurable manner. Furthermore, a qualitative approach is used to deepen and explain quantitative findings through an understanding of the social context, student experience, and the views of education actors on the implementation of the MBG program. This approach was chosen because it is considered to be able to provide a more comprehensive picture of the effectiveness of education policy from the perspective of the sociology of education (Nurasiah, Sumantri, Nurhasanah, & Casmana, 2022).

The research was carried out on a number of primary and secondary education units in Indonesia that have implemented the Free Nutritious Eating Program. The subjects of quantitative research are students who receive the MBG program, while the subjects of qualitative research include principals, teachers, program managers, and parents of students. The selection of locations and informants was carried out by purposive sampling, taking into account the sustainability of the program, regional representation, and variations in the socio-economic background of students in order to obtain rich data that is relevant to the research objectives.

Quantitative data collection was carried out through the dissemination of structured questionnaires to measure the level of student learning motivation, as well as the collection of documentation data in the form of academic grades as indicators of learning achievement before and after the implementation of the MBG Program. Meanwhile, qualitative data was collected through in-depth interviews with key informants, limited observations of program implementation in schools, and analysis of policy documents and MBG implementation reports. This combination of techniques is used to obtain data that complements each other and strengthens research findings. Quantitative data analysis was carried out using descriptive statistics to describe respondent characteristics and levels of learning motivation and student achievement. Furthermore, inferential statistics such as the paired sample t-test or linear regression analysis are used to test the influence of the MBG Program on student learning motivation and achievement. Qualitative data were analyzed using thematic analysis with the stages of data reduction, data presentation, and conclusion drawing as stated by Miles, Huberman, and Saldaña. The results of quantitative and qualitative analysis are then integrated to produce a complete interpretation.

The validity of quantitative data is guaranteed through the validity and reliability test of research instruments, while the validity of qualitative data is strengthened through source triangulation, triangulation techniques, and member checking. The analysis of research findings is then associated with theories of the sociology of education, especially the concepts of social inequality, state intervention, and equitable access to education. Thus, the effectiveness of the Free Nutritious Meal Program is not only assessed from statistical results, but is also understood as part of the state's structural efforts to improve the equity and quality of education in Indonesia.

3. RESULTS AND DISCUSSION

Results

Analysis of the Free Nutritious Meal Program on Student Learning Motivation

The results of the quantitative analysis showed that the Free Nutritious Meal Program (MBG) had a positive and significant influence on students' learning motivation. Measurement using the learning motivation questionnaire instrument showed an increase in the average score of student motivation after the implementation of the program compared to the condition before the program was implemented. The results of the paired sample t-test confirmed that the difference was statistically significant, indicating that nutritional fulfillment through the MBG Program significantly contributed to increasing students' learning motivation. Increased learning motivation is reflected in a number of key indicators, including increasing students' attention levels during the learning process, increasing perseverance in completing academic assignments, and increasing students' active participation in classroom activities. Observational findings showed that after the MBG program was implemented, the frequency of students showing symptoms of fatigue and decreased concentration in the initial class hours decreased. This condition indicates an improvement in students' physical readiness to participate in continuous learning activities (Wigfield, 2020).

These quantitative findings are strengthened by the results of qualitative analysis that show a change in student learning behavior in a more positive direction. Interviews with teachers and school administrators revealed that students showed a better level of mental readiness, characterized by increased enthusiasm for learning, responsiveness to learning materials, and consistency in completing assignments. From the perspective of the sociology of education, this finding confirms that the fulfillment of basic needs through social policies in the field of education serves as a structural prerequisite for the formation of learning motivation. Thus, the MBG Program can be understood not only as a health intervention, but as an educational policy instrument that contributes to strengthening learning motivation and reducing socio-economic barriers in the educational process.

Analysis of Free Nutritious Meal Program on Student Learning Achievement

In addition to having an impact on learning motivation, the results of the study show that the Free Nutritious Meal Program (MBG) also contributes significantly to improving student learning achievement. Analysis of academic score data obtained from school documentation showed an increase in average student scores in the period after the implementation of the program compared to the previous period. The increase in achievement appears to be more pronounced in subjects that require high levels of concentration, cognitive power, and analytical thinking skills, such as mathematics and language. These findings indicate that improving students' nutritional conditions has implications for increasing cognitive capacity that supports academic achievement (Garduño, 2021).

The results of inferential statistical analysis show that students' participation in the MBG Program has a significant influence on learning achievement. Although the amount of influence varies between educational units, influenced by differences in students' socio-economic conditions and the quality of program implementation, the trend of improving learning achievement in general shows a consistent pattern. These variations indicate that

the effectiveness of MBG is not uniform, but rather influenced by the institutional and managerial context of the school (Tan, 2021).

In addition, the findings of the study also show an increase in the level of student attendance at school after the MBG program is implemented. This increase in attendance contributes indirectly to learning achievement, as it allows students to follow the learning process more continuously and optimally. From a sociological perspective of education, these findings confirm that learning achievement is not solely a result of individual ability, but is also influenced by structural support and public policies that guarantee students' access to decent learning conditions. Thus, the MBG Program can be understood as an educational policy instrument that plays a role in improving students' academic achievement through the provision of basic resources that were previously uneven.

Results of Qualitative Findings on the Implementation of the Free Nutritious Eating Program

The results of in-depth interviews with principals, teachers, program managers, and parents of students show that the Free Nutritious Meal Program (MBG) is generally perceived as a policy that provides real benefits to students and families. The program is seen as not only helping to ease the economic burden of households, especially for low-income families, but also contributing to improving students' learning readiness. The informant said that after the MBG program was implemented, students showed increased enthusiasm to attend school, as well as showed more positive changes in learning behavior, such as increased attention in the classroom and involvement in learning activities. These findings indicate that MBG has a social impact that goes beyond the goal of fulfilling nutrition alone, by strengthening the relationship between social policy and the educational process at the school level (Halif, 2020).

However, qualitative findings also reveal a number of structural and managerial obstacles in the implementation of the MBG Program. Some schools face limited supporting facilities, such as inadequate food storage and distribution facilities, affecting the quality and timeliness of food delivery. In addition, there are variations in menu quality and nutritional value between schools that reflect differences in management capacity and resource support. The level of effectiveness of the program also depends heavily on the commitment and ability of school management to coordinate the implementation of MBG, including cooperation with food providers and supervision of implementation in the field (Yu, 2020).

In the perspective of education policy implementation, these findings show that the success of the MBG Program is not only determined by policy design at the national level, but also by institutional capacity and governance at the level of educational units. Unequal implementation conditions have the potential to result in variations in the impact of programs between schools, which in turn affects the achievement of educational equity goals. Therefore, strengthening institutional support and standardizing implementation are key factors in increasing the effectiveness and sustainability of the MBG Program as a social policy in the field of education.

Discussion

Free Nutritious Eating Program and Increased Learning Motivation in the Perspective of Educational Sociology

The findings of the study show that the Free Nutritious Meal Program (MBG) is effective in increasing students' motivation to learn, which can be understood as a result of meeting basic needs that have been functioning as structural obstacles in the educational process. In the perspective of the sociology of education, learning motivation is not seen solely as an individual attribute derived from personal interests or abilities, but rather as a social construct shaped by material conditions, the institutional environment, and the support of public policies. Socio-economic inequalities experienced by students from low-income families often limit their access to decent learning conditions, resulting in low motivation and educational participation. Therefore, policy interventions that target basic needs are a crucial factor in building sustainable learning motivation (Leenknecht, 2021).

In this context, the MBG Program acts as a form of state intervention that provides basic educational support for students, especially those from vulnerable socio-economic groups. The fulfillment of physiological needs through the provision of nutritious food in schools creates psychological prerequisites that allow students to be optimally involved in the learning process. This is in line with Maslow's hierarchy of needs that places physiological needs as the foundation for the emergence of higher needs, including the need for achievement and self-actualization through academic achievement. With the fulfillment of these basic needs, students have better mental readiness to develop intrinsic motivation in learning (Agricola, 2020).

Furthermore, from the perspective of the sociology of education, increasing learning motivation through the MBG Program also reflects the role of the state in reducing the gap in educational participation between social groups. This policy not only strengthens motivation to learn at the individual level, but also contributes to the creation of a more inclusive and equitable learning environment. Thus, the MBG Program can be understood as a social policy instrument that is able to correct structural inequities and expand student learning opportunities, while emphasizing that increased learning motivation is the result of the interaction between individual factors and structural support in the education system (Zou, 2021).

MBG Programme, Learning Achievement, and Education Equity

The increase in learning achievement found in this study shows that the Free Nutritious Meal Program (MBG) not only has an impact on affective aspects, such as motivation and learning attitudes, but also contributes significantly to students' academic achievement. Within the framework of the sociology of education, learning achievement is understood as the result of the interaction between a student's individual capacity and the social structures that provide or limit access to educational resources. Structural support, including the fulfillment of basic needs through public policies, is an important prerequisite for the creation of an effective and sustainable learning process (Peng, 2021).

The MBG program contributes to creating more equitable learning conditions by reducing socio-economic barriers that have affected student learning outcomes, especially for those from low-income families. Adequate nutrition fulfillment increases students' physical and cognitive readiness, allowing them to follow learning more consistently and optimally. The finding that the impact of the MBG Program is more significant on underprivileged student groups strengthens the redistributive function of this policy as an instrument for equitable distribution of education. In this context, MBG plays a role in

diverting state resources to the most needy groups, thereby reducing the gap in academic achievement between social groups (Sabah, 2020).

Furthermore, from the perspective of social justice in education, the MBG Program can be understood as the state's effort to correct structural inequities that tend to reproduce educational gaps. By creating more equal learning conditions, this policy not only improves individual learning achievement, but also strengthens the principle of equality of opportunity in the education system. Therefore, the increase in learning achievement produced by the MBG Program reflects the strategic role of social policy in supporting equitable distribution of education and more equitable human resource development.

Free Nutritious Eating as an Instrument to Reduce Educational Inequality

The results of this study show that the Free Nutritious Meal Program (MBG) has significant potential in reducing educational inequality between social groups. By providing relatively equal access to nutrition for all students, the program contributes to equalizing physical condition and learning readiness in the classroom, especially for students from low-income families. This equalization of initial conditions is important in the context of education, as differences in health and nutritional conditions are often latent factors that affect students' learning participation and academic achievement. The impact of MBG is not only felt at the individual level, but is also reflected in the social dynamics in the school environment, such as increased more equal learning interactions and reduced social stigma associated with students' economic backgrounds (Ommering, 2020).

From the perspective of social reproduction theory, the education system tends to reproduce social inequality if it is not accompanied by adequate structural interventions. Policies such as MBG can be understood as a corrective mechanism that aims to hinder the reproduction process of inequality by providing basic resources that were previously not evenly distributed. By intervening non-pedagogical factors that affect the learning process, MBG contributes to expanding learning opportunities for students from vulnerable socio-economic groups. These findings confirm that social justice-oriented education policies require a cross-sectoral approach that integrates the dimensions of education, health, and social welfare (Siqueira, 2020).

The results of this study show that the role of the state is crucial in creating a more inclusive and equitable education system. Through the MBG Program, the state not only functions as a provider of formal education services, but also as a responsible actor in ensuring social conditions that allow all students to participate optimally in the educational process. Thus, MBG can be positioned as a strategic policy instrument that not only improves the quality of learning, but also contributes to the agenda of education equity and the reduction of social inequality in the long term.

Implications of the Implementation of the MBG Program

Although the results of the study show that the Free Nutritious Meal Program (MBG) is effective in increasing student motivation and learning achievement, the success of this program is highly dependent on the quality of implementation at the education unit level. The consistency of food supply, the suitability of the nutritional content of the menu with the set standards, and the timeliness of distribution are crucial factors that determine the sustainability of the program's benefits. Inconsistencies in these aspects have the potential to

reduce the effectiveness of MBG and result in variations in impacts between schools, even though the policies implemented are national (Shao, 2024).

In addition to technical factors, managerial support and institutional capacity of schools play an important role in the successful implementation of the MBG Program. Schools with strong governance, good internal coordination, and adequate leadership support tend to be able to manage programs more effectively. On the other hand, limited human resources, infrastructure, and supervision mechanisms at the school level can be structural obstacles that affect the quality of program implementation. These findings show that the implementation of education policies cannot be separated from the institutional context in which they are implemented.

From a public policy perspective, the implications of these findings underscore the importance of strengthening the governance and monitoring system of the MBG Program in a sustainable manner. The government needs to ensure clear operational standards, systematic monitoring and evaluation mechanisms, and technical assistance for schools implementing the program. By strengthening the implementation aspect, the MBG Program not only has the potential to provide short-term benefits for students, but can also become a sustainable education policy and contribute significantly to improving the quality and equitable distribution of education in Indonesia.

4. CONCLUSION

Based on the results of the research and discussions that have been conducted, it can be concluded that the Free Nutritious Meal Program (MBG) has proven to be effective in increasing the learning motivation and academic achievement of students in Indonesia. This program has a significant positive impact on students' physical and psychological readiness to follow the learning process, which is reflected in increased concentration, class participation, and perseverance in learning. The increase in learning motivation further contributes to the gradual improvement of students' academic achievements. From the perspective of the sociology of education, the effectiveness of the MBG Program shows that state intervention through social policies has a strategic role in reducing structural barriers that affect the educational process. The MBG program serves as a provider of basic educational support that allows students from low socio-economic backgrounds to have more equal learning opportunities. Thus, MBG not only plays a role as a nutrition fulfillment policy, but also as an instrument for equitable distribution of education and the reduction of social inequality. In addition, the findings of this study show that the impact of the MBG Program is most felt by students from underprivileged families, who previously faced nutritional limitations and less conducive learning conditions. This confirms that MBG has a redistributive function in the education system, while strengthening the role of schools as an inclusive and equitable social space. However, the effectiveness of the program is still influenced by the quality of implementation at the school level, including consistency in food provision, nutritional quality, and managerial support.

REFERENCES

- Agricola, B. T. (2020). Impact of feedback request forms and verbal feedback on higher education students' feedback perception, self-efficacy, and motivation. *Assessment in Education Principles Policy and Practice*, 27(1), 6–25. <https://doi.org/10.1080/0969594X.2019.1688764>
- Bayoumy, H. M. M. (2021). Investigating relationship of perceived learning engagement, motivation, and academic performance among nursing students: A multisite study. *Advances in Medical Education and Practice*, 12, 351–369. <https://doi.org/10.2147/AMEP.S272745>
- Chamberlin, K. (2023). The impact of grades on student motivation. *Active Learning in Higher Education*, 24(2), 109–124. <https://doi.org/10.1177/1469787418819728>
- Garduño, H. A. S. (2021). Impact of virtual reality on student motivation in a high school science course. *Applied Sciences Switzerland*, 11(20). <https://doi.org/10.3390/app11209516>
- Halif, M. M. (2020). Moderating effects of student motivation on the relationship between learning styles and student engagement. *Asian Journal of University Education*, 16(2), 93–103. <https://doi.org/10.24191/AJUE.V16I2.10301>
- Leenknicht, M. (2021). Formative assessment as practice: the role of students' motivation. *Assessment and Evaluation in Higher Education*, 46(2), 236–255. <https://doi.org/10.1080/02602938.2020.1765228>
- Nurasiah, I., Sumantri, M. S., Nurhasanah, N., & Casmana, A. R. (2022). Cultural Values' Integration in Character Development in Elementary Schools: The Sukuraga as Learning Media. *Frontiers in Education*, 7(May). <https://doi.org/10.3389/educ.2022.849218>
- Nurharjadmo, W. (2025). Aspect-Based Sentiment Analysis of Public Responses to Free Nutritious Meal (MBG) Policy Implementation Using Deep Learning. *2025 International Electronics Symposium Ies 2025*, b11 863–868. <https://doi.org/10.1109/IES67184.2025.11161241>
- Ommering, B. W. C. (2020). Promoting positive perceptions of and motivation for research among undergraduate medical students to stimulate future research involvement: a grounded theory study. *BMC Medical Education*, 20(1), 204. <https://doi.org/10.1186/s12909-020-02112-6>
- Peng, R. (2021). The effect of Chinese EFL students' learning motivation on learning outcomes within a blended learning environment. *Australasian Journal of Educational Technology*, 37(6), 61–74. <https://doi.org/10.14742/ajet.6235>
- Sabah, N. M. (2020). Motivation factors and barriers to the continuous use of blended learning approach using Moodle: students' perceptions and individual differences. *Behaviour and Information Technology*, 39(8), 875–898. <https://doi.org/10.1080/0144929X.2019.1623323>
- Shao, Y. (2024). How peer relationships affect academic achievement among junior high school students: The chain mediating roles of learning motivation and learning engagement. *BMC Psychology*, 12(1). <https://doi.org/10.1186/s40359-024-01780-z>
- Siqueira, M. A. M. (2020). Relationship between metacognitive awareness and motivation to learn in medical students. *BMC Medical Education*, 20(1). <https://doi.org/10.1186/s12909-020-02318-8>

- Soma, R. I. (2024). Food preferences in Indonesian schoolchildren and the parents' perspectives on the upcoming nutritious free meal program. *E3s Web of Conferences*, Vol 577. <https://doi.org/10.1051/e3sconf/202457702004>
- Tan, C. (2021). The impact of COVID-19 on student motivation, community of inquiry and learning performance. *Asian Education and Development Studies*, 10(2), 308–321. <https://doi.org/10.1108/AEDS-05-2020-0084>
- Wang, M. T. (2020). The Role of Sociocultural Factors in Student Achievement Motivation: A Cross-Cultural Review. *Adolescent Research Review*, Vol 5, bll 435–450. <https://doi.org/10.1007/s40894-019-00124-y>
- Wigfield, A. (2020). 35 years of research on students' subjective task values and motivation: A look back and a look forward. *Advances in Motivation Science*, Vol 7, bll 161–198. <https://doi.org/10.1016/bs.adms.2019.05.002>
- Yamin, M. (2025). INTEGRATING NUTRITION AND COGNITIVE READINESS: IMPACT OF FREE NUTRITIOUS MEALS ON DEEP LEARNING AND THE SUSTAINABLE DEVELOPMENT GOALS IN PRIMARY SCHOOLS. *Journal of Engineering Science and Technology*, 20, 1–8. Opgehaal van <https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=105023422972&origin=inward>
- Yu, S. (2020). Investigating what feedback practices contribute to students' writing motivation and engagement in Chinese EFL context: A large scale study. *Assessing Writing*, 44. <https://doi.org/10.1016/j.asw.2020.100451>
- Zou, D. (2021). Digital game-based learning of information literacy: Effects of gameplay modes on university students' learning performance, motivation, self-efficacy and flow experiences. *Australasian Journal of Educational Technology*, 37(2), 152–170. <https://doi.org/10.14742/AJET.6682>