

The Influence of Parents' Economic Conditions on the Cognitive Thinking Ability of Social Studies Students at SMP Negeri 19 Kupang City

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KEYWORDS

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ABSTRACT

This study aims to examine the influence of parents' economic conditions on students' cognitive abilities in Social Studies (IPS) at SMP Negeri 19 Kota Kupang. The research uses a quantitative approach with a linear regression method. A total of 56 students from a population of 126 eighth-grade students were selected using proportional random sampling. Data were collected through observation, tests, and questionnaires, and analyzed using linear regression and t-tests. The results show a significant influence of parents' economic conditions on students' cognitive abilities, with a significance value of $0.002 < 0.05$. Parents' economic conditions contribute 44% to the variation in students' cognitive performance. These findings indicate that better parental economic conditions correlate with higher student cognitive abilities.

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Introduction

In an educational institution, learning achievement is an important indicator for measuring the success of the learning process (Badawy et al., 2018; Nastasić et al., 2019; Shavelson et al., 2018). Learning achievement can be observed through student learning outcomes, which reflect students' cognitive abilities. The level of student achievement is influenced by various factors beyond the learning process itself. These influencing factors can be categorized into external and internal factors. According to Slameto (2014), external factors originate from outside the individual, including family economic conditions, school, and community, while internal factors come from within the individual, such as physical and mental health, attitude, intelligence, talent, interest, motivation, and learning habits. One of the external factors is the economic condition of the parents. Bahar (in Jericho, 2007) stated that, in general, children from families with middle to upper economic conditions receive more direction and guidance from their parents. This differs from children with low economic backgrounds, as they tend to receive less guidance and direction because their parents are often preoccupied with fulfilling daily necessities.

Education is a fundamental pillar of human development, yet socioeconomic disparities continue to create significant gaps in learning outcomes worldwide. According to UNESCO (2020), over 258 million children and adolescents lack access to schooling, while those from low-income families face additional barriers such as inadequate learning resources and limited parental support. This global issue is particularly severe in developing regions, where economic instability

further exacerbates educational inequalities. For instance, the World Bank (2018) reports that children from the poorest households are up to five times less likely to complete secondary education compared to their wealthier peers. These disparities underscore the critical role that family economic conditions play in shaping educational trajectories, making it essential to examine how financial constraints impact cognitive development among school-aged children.

In Indonesia, the intersection of poverty and education remains a pressing challenge. Data from the Central Bureau of Statistics (BPS, 2023) reveals that nearly 25% of families in East Nusa Tenggara, where Kupang City is located, live below the provincial poverty line, earning less than IDR 500,000 per month. This economic strain directly impacts children's access to learning tools such as textbooks, digital devices, and private tutoring—resources that are essential for academic success. A study by Ahmad and Khan (2016) corroborates this, showing that parental income significantly predicts children's cognitive performance in similarly low-income contexts. These findings highlight the urgency of addressing economic barriers to ensure equitable learning opportunities for all students, especially in marginalized communities.

The specific issue under investigation—the influence of parents' economic conditions on students' cognitive abilities—has been explored in various contexts but remains understudied in urban Indonesian junior high schools. Previous research by Sirin (2005) and Duncan and Brooks-Gunn (1997) established a strong correlation between socioeconomic status (SES) and academic achievement in Western settings. However, cultural and structural differences limit the generalizability of these findings to the Indonesian context. For example, a study by Vellymalay (2012) in Malaysia found that parental involvement mediates the SES-achievement link, suggesting that economic factors alone do not determine learning outcomes. However, similar studies in Indonesia, particularly in Kupang, are limited, leaving a gap in understanding how these dynamics manifest in this specific socioeconomic and cultural environment.

Despite the growing body of research on SES and education, few studies have focused on the cognitive dimensions of Social Studies (*Ilmu Pengetahuan Sosial* or *IPS*) learning, which emphasizes critical thinking and analytical skills. A Scopus-indexed study by Hanushek (2016) emphasized that cognitive abilities are stronger predictors of long-term economic success than rote memorization, yet most SES-related research in Indonesia tends to prioritize STEM subjects. This research gap is notable because *IPS*, covering subjects such as history, geography, and civics, plays a fundamental role in fostering informed citizenship and national identity. By focusing specifically on *IPS* students at *SMP Negeri 19 Kupang*, this research offers new insights into how economic disparities influence higher-order thinking skills in non-STEM disciplines.

The urgency of this research is heightened by recent policy reforms in Indonesia's education system, which emphasize 21st-century skills such as critical thinking and problem-solving. However, if foundational inequities are not addressed, these goals may remain unattainable for economically disadvantaged students. For example, a 2023 report by the Indonesian Ministry of Education revealed that only 40% of public schools in East Nusa Tenggara meet basic infrastructure standards, disproportionately affecting low-income students. This research responds to such urgency by identifying actionable strategies—such as targeted resource allocation or parental support programs—to mitigate economic barriers and enhance cognitive outcomes. Without such interventions, the cycle of poverty and educational underachievement may continue, thereby undermining national development objectives.

This study introduces novelty by exploring the interplay between economic conditions and cognitive abilities using a multidimensional lens. Unlike previous studies that treat SES as a monolithic variable, this research disaggregates key indicators—such as parental income,

occupation, education level, and access to learning facilities—to identify which factors most significantly influence *IPS* student performance. Additionally, it adopts a mixed-methods approach by combining quantitative regression analysis with qualitative data from student questionnaires to capture nuanced experiences often overlooked in strictly statistical studies. This dual perspective enhances understanding of how economic limitations manifest into specific learning challenges, offering a more holistic view of the issue.

The primary purpose of this research is to quantify the impact of parents' economic conditions on the cognitive abilities of *IPS* students at *SMP Negeri 19 Kupang*, while also exploring mediating factors such as parental involvement and resource availability. In doing so, the study aims to provide empirical evidence to support localized policy interventions. For instance, if findings reveal that access to learning facilities (e.g., laptops or textbooks) is the strongest predictor of cognitive performance, policymakers could prioritize subsidizing these resources for low-income families. This targeted approach ensures that interventions are both pragmatic and scalable, addressing root causes rather than mere consequences of educational inequality.

This research contributes to the wider academic discussion by bridging global *SES* theories with localized Indonesian realities. While international studies often present macro-level trends, this study delivers micro-level insights into how economic disparities play out within a specific urban school. It also enriches the scarce body of literature on *IPS* education, illustrating that cognitive development in humanities subjects is equally susceptible to socioeconomic influences. Practically, the findings may serve as a benchmark for similar studies conducted in other regions of Indonesia, supporting a more comprehensive understanding of the *SES*-achievement link in diverse contexts.

The objectives of this study are threefold: (1) to measure the strength of the relationship between parents' economic conditions and the cognitive abilities of *IPS* students; (2) to identify which economic indicators (e.g., income, education level) most strongly predict cognitive performance; and (3) to propose evidence-based recommendations for schools and policymakers to address these disparities. By fulfilling these objectives, the study not only advances theoretical knowledge but also outlines a framework for actionable change. For example, if parental education emerges as a key variable, community-based adult literacy programs could be introduced to create generational benefits for families.

The benefits of this research extend beyond academia. Educators can leverage the findings to design targeted programs such as after-school tutoring or resource-lending initiatives for students from economically disadvantaged families. Policymakers can use the empirical data to advocate for increased investment in low-income educational sectors, while parents—especially those from marginalized backgrounds—can gain insight into how they can best support their children's education despite limited means. Ultimately, this study aligns with the United Nations' Sustainable Development Goal 4 (*Quality Education*) by tackling the systemic barriers that hinder equal access to cognitive development opportunities, thereby contributing to a more inclusive and just education system.

Based on observations conducted at *SMP Negeri 19 Kupang City*, data was obtained on the main occupations of Grade VIII students' parents. Among the 126 students, 105 students (84%) had parents working as farmers, fishermen, laborers, and handymen, with monthly incomes ranging from Rp.500,000 to Rp.1,000,000. Given such circumstances, the economic condition of these students' families is categorized as lower to middle class. This undoubtedly influences the fulfillment of learning facilities such as supplementary books, laptops or computers, printers, and other educational tools. The inadequacy of these learning resources directly impacts students'

cognitive abilities, as reflected in their academic performance. Based on the results of the odd semester *MID* exam for Grade VIII students, only 46% (58 students) met the *minimum completeness criterion* of 75, while the remaining students fell short and had to undergo remedial programs. The formulation of the problem in this study is: *Is there an influence of parents' economic condition on the cognitive ability of Social Studies students at SMP Negeri 19 Kupang City?* The goal of this study is to determine the influence of parents' economic conditions on the cognitive ability of *IPS* students at *SMP Negeri 19 Kupang City*.

Materials and Methods

Research Design

This research was conducted at *SMPN 19 Kupang City* over the course of one month, from October to November 2024. It falls under a quantitative regression study aiming to examine the influence between independent and dependent variables. The independent variable in this study is the economic condition of the parents, while the dependent variable is the cognitive ability in *Ilmu Pengetahuan Sosial (IPS)*. The hypothesis of this study posits that there is a significant influence of parents' economic conditions on the cognitive abilities of *IPS* students at *SMPN 19 Kupang City*.

Population and Sample

The population in this study consists of all Grade VIII students at *SMPN 19 Kupang City*, totaling 126 individuals. Based on the Slovin formula, a sample size of 56 students was determined. The sampling technique used is *proportional random sampling*, where samples were selected by drawing lots.

Data Collection Techniques and Instrument Development

The data collection techniques employed in this study include observation, tests, and questionnaires. Instrument development was conducted through validity testing using the *product moment correlation* formula, while reliability testing was carried out using the *Alpha Cronbach* technique.

Data Analysis Techniques

The data analysis technique used in this study is multiple linear regression analysis, applying the formula from Sugiyono:

$$Y = a + bX + e$$

Hypothesis testing was conducted using a *partial test (t-test)*, based on the principle of decision-making: if the probability value is > 0.05 , the hypothesis is accepted; conversely, if the probability value is < 0.05 , the hypothesis is rejected.

Results and Discussions

The results of this study show that there is a significant influence between the variable of parents' economic condition and the cognitive abilities of *Ilmu Pengetahuan Sosial (IPS)* students at *SMPN 19 Kupang City*. This conclusion is drawn from the *p-value* obtained through analysis, which is 0.002—smaller than the significance level of 0.05—indicating that the economic condition of parents has a statistically significant effect on students' cognitive abilities. This means that the better or higher the economic condition of the parents, the greater the cognitive ability of the students. Conversely, the lower the parents' economic condition, the lower the students' cognitive ability.

The coefficient of determination or effective contribution of the parents' economic condition variable is 44%, indicating that the economic condition of parents contributes 44% to the

improvement of the cognitive abilities of Grade VIII students at *SMPN 19 Kupang City*. This percentage suggests that while parental economic condition is a significant factor, it is not the sole determinant of students' cognitive abilities. This is attributed to the economic condition being an external factor—arising outside the student—which must be supported by internal factors. Internal factors, which refer to motivation and drive originating from within the student, are believed to play a greater role in enhancing cognitive ability, as self-driven learning tends to be conducted with responsibility and intrinsic commitment, rather than mere external pressure or compulsion.

The indicator components of the parents' economic condition variable include employment, income, education level, and ownership of learning-related facilities. Based on the analysis of the questionnaire responses, the highest and lowest percentages in this variable are found within the "facility ownership" indicator. The highest percentage is related to ownership of a complete school uniform, while the lowest pertains to the availability of a private vehicle for school transportation.

Facilities such as school uniforms with complete attributes are considered basic necessities that parents tend to prioritize. According to the analysis, the availability of full school uniforms recorded the highest percentage. This is not only due to school regulations that require proper uniforms, but also because parents typically feel responsible for their children's appearance at school. Moreover, school uniforms are long-term needs, allowing parents more time and flexibility to fulfill them. This contrasts with facilities such as private vehicles, which recorded the lowest ownership rates. Most students live relatively close to the school and therefore choose to walk or use public transportation, which costs around two thousand rupiah per trip. Furthermore, safety and security are important considerations for parents, especially since junior high school students are generally not permitted to operate motorized vehicles.

Based on the results of the questionnaire completed by students, it was found that the majority of Grade VIII students' parents at *SMPN 19 Kupang City* fall within the moderate or middle economic category (89%), while the remainder are classified as having high economic status. The economic profile shows that most fathers of the students work as farmers, fishermen, laborers, livestock breeders, vegetable vendors, and street hawkers, with only a small portion employed as civil servants or private sector workers. Meanwhile, most mothers are housewives without income, although some do work as teachers, mobile vegetable vendors, rice sellers, and farmers. Given these occupations, parental incomes vary; some earn in accordance with the regional minimum wage, while many others earn below it.

Parents with higher incomes generally do not face significant difficulty in meeting their children's educational needs. This stands in contrast to low-income parents, who often struggle to provide such support. This finding aligns with Suryabrata's (2024) view that parental support in children's learning activities at home has a strong influence on their success at school. Students from high-income households are typically provided with all necessary facilities and educational resources that contribute to cognitive development. Conversely, low-income parents encounter obstacles in meeting these needs.

The findings of this study are also consistent with the opinion of Soejiningsih (2017), who stated that sufficient parental income supports children's growth and development, as parents can

provide both primary and secondary needs. Similarly, Slameto (2010) explained that a family's economic condition is closely associated with student academic outcomes, as it directly relates to the ability to fulfill education-related necessities. These necessities include nutrition, clothing, healthcare, and learning tools such as transportation, a proper study space, desks and chairs, lighting, laptops or computers, printers, and textbooks. These needs can only be sufficiently met if parents have an adequate income.

The economic condition of parents that affects the cognitive ability of *IPS* students in Class VIII at *SMPN 19 Kupang City* is also influenced by the parents' educational background. Parents with higher education levels are more likely to secure decent jobs and stable incomes. Furthermore, such parents are better equipped to assist and guide students during the learning process at home. Parents with a higher economic status generally do not face serious pressures related to financial survival, and this relieves stress, allowing them to give more focused attention to their children's educational development.

Reflecting on expert opinions and the analysis presented in this study, it becomes evident that parental economic condition plays a crucial role in shaping students' cognitive abilities. Parents are not only responsible for providing emotional support but must also offer material and practical support by meeting their children's learning needs and educational facilities—something which is only possible when supported by a sound economic condition.

Conclusion

This study demonstrates a significant influence of parents' economic conditions on the cognitive abilities of *Ilmu Pengetahuan Sosial (IPS)* students at *SMP Negeri 19 Kupang City*, with a 44% contribution to the variation in cognitive performance. The findings align with existing literature, indicating that a higher economic status correlates with better access to learning facilities and greater parental support, thereby improving students' cognitive outcomes. However, the study also highlights that economic conditions alone are not the sole determinant of academic success, as internal factors such as motivation and self-awareness play a critical role in cognitive development.

Future studies should explore the interplay between external economic conditions and internal factors (e.g., motivation, learning habits) to provide a more comprehensive understanding of student cognitive growth. Furthermore, qualitative research could be employed to investigate how specific economic challenges—such as income instability—directly affect students' learning processes. Expanding the sample to include students from diverse socioeconomic backgrounds, or employing longitudinal research designs, would help to validate and generalize these findings to wider educational contexts.

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