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## AN EVALUATION OF THE SCHOOL OPERATIONAL ASSISTANCE (BOS) POLICY AND ITS EFFECT ON TEACHER PERFORMANCE IN INDONESIA

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### ABSTRACT

This study examines the correlation between student's perceptions of teacher's performance and schools' receipt of operational assistance funds (BOS) in Indonesia. It employs the Student Evaluation of Teaching (SET) method, combining both quantitative and qualitative approaches. Data were collected in two provinces with disparate levels of economic development. This study supports H1, indicating a significant (though small) correlation between schools' receipt of operational assistance funds and teachers' perceived performance. Interestingly, regression analysis found that a Rp 1 million increase in school operational assistance funds reduced perceived performance by 0.01; in other words, the more assistance received by schools, the lower the teachers' performance. Qualitative findings indicate that this phenomenon may be attributed to the program's rigid administration system, which curtails innovation (including in matters of teacher performance) and delays in budget disbursement. The results of this study are helpful for the government in redesigning BOS funds to be more effective in encouraging teacher performance as street-level bureaucrats who provide direct education services in schools.

**Keywords:** Education Funding, School Operational Assistance (BOS) Funds, Teacher Performance, Student Evaluation of Teaching (SET)

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## INTRODUCTION

In recent decades, countries around the world have significantly increased their allocation of funds for education. According to Szirmai (2005), the percentage of funding allocated for education in developing countries began rivaling the portion of the budget allocated for education in more developed countries (Roser & Ospina, 2016). Nevertheless, the amount of assistance received by individual students in developing countries was significantly lower. Analysis by UNESCO indicated that in 2010, developed countries budgeted an average of 6721 U\$ PPP dollars per elementary school student; developing countries, conversely, provided only 115 U\$ PPP dollars per student (UNESCO, 2014). Meanwhile, Roser & Ospina (2016) indicate that households in developed countries tend to emphasize saving for tertiary education, while in developing countries, families tend to budget more for primary education. Recognizing the high cost of education, governments have sought to alleviate the issue by accordingly providing aid.

Many studies have investigated the effectiveness of education funding. For example, research conducted by Sauer (2016) found that, in forty years (from 1970 to 2010), the South Korean government used increased funding to successfully double its population's average years of schooling (from six to twelve years). Another study found that, in the United States, the use of financial incentives to improve student performance, institutional dynamics, and school organizations have minimally affected teacher performance, as measured through students' test results (Springer et al., 2012; Springer et al., 2013; Ladd & Goertz, 2015). However, other studies have found that education funding has significant long-term effects, affecting students' future employment and wages (Chetty, Hilger, Saez, Schanzenbach, & Yagan, 2011), as well as their non-cognitive abilities (Dee & West, 2011).

Education funding has a significant, though small, influence on students' performance (Adebayo, Ntokozo, & Grace, 2020; Gigliotti & Sorensen, 2018), school performance (Pugh, Mangan, & Gray, 2011), human capital (Dissou, Didic, & Yakautsava, 2016), and economic growth (Atems & Liu, 2020; Blankenau, Simpson, & Tomljanovich, 2007). Consequently, governments around the world have increased their spending in the area to maximize their competitiveness. Indonesia also has consistently allocated twenty percent of its national budget for education since it initiated political reform in 1998; previously, funding for education had never exceeded 10 percent of the national budget.

The School Operational Assistance (BOS) program is vital in Indonesia's education funding. The central government implemented in 2005 to facilitate students' studies at the primary and secondary levels. Initially, it was limited solely to students from poor households; since 2009, however, funds have been made available to all students, no matter their socio-economic background. Although the BOS program is not the only one designed to assist students, it is however, the largest.

In the beginning, the BOS program allocated the amount of money made available to students has increased. For example, elementary schools received Rp 580,000 per student in assistance in 2014; this increased to Rp 800,000 per student per annum in 2015. Meanwhile, schools received Rp 710,000.00 for each student at the junior high school level in 2014; this increased to Rp 1,000,000 per student per annum in 2015. Schools receive budgets through the accounts of the local governments.

The BOS program intends to subsidize non-personnel-related expenses referring to the Decree of the Minister of Education and Culture No. 1 of 2018 (the Technical Guidelines for School Operational Assistance). The objective of regulation is also to prevent elementary and junior high school students from being required to cover schools' operational expenses. Consequently, the school may not allocate to teachers' wages or salaries. Instead, the budget may include improving teachers' professional competencies, developing curricula and syllabi, purchasing teaching aids, and facilitation of learning process.



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Many studies have noted problems of BOS implementation at the school level (Suharyo, 2006; Karding, 2008; Mulyadi, 2011; World Bank, 2015; Widyaningsih, 2017). One common question is whether school operational assistance provided through the BOS program affects teacher performance during students' nine years of compulsory education (i.e., elementary school and junior high school). Under Indonesian policy, "basic education covers the first nine years of schooling. Both public and private schools can deliver education services. Because this level of education is compulsory for all Indonesian citizens, the government is obliged to provide it without the users, especially those from low-income families, paying for it. The objective is for all children to successfully finish the first six years of primary education and then finish the three years of junior secondary education" (Asian Development Bank, 2013).

Traditionally, studies of education spending tend to focus on per-pupil expenditures, classroom sizes, and student achievements. However, (Bastian, Henry, & Thompson, 2013) recommend a teacher-oriented approach, arguing that teachers add value to the learning process. Teacher-associated expenditures have also increased student literacy and numeracy (Cobb-Clark & Jha, 2016). Furthermore, it correlates with increased education spending that must coincide with increased teacher salaries (Nose, 2017). Data from the Ministry of Finance shows that approximately 60 percent of education spending is for teachers' wages and allowances (Purbaya, 2019).

This study focuses on teachers, as the street-level bureaucrats that provide education services directly to students. Building on the arguments of Bastian, Henry, & Thompson (2013), this study investigates the BOS program's influence on teacher performance, as perceived by students at the primary and junior secondary level. This study employs the Student Evaluation of Teaching (SET) method. However, unlike Bastian, Henry, & Thompson (2013), this study does not consider teachers' wages, as BOS funds may not subsidize them. In addition, it considers several control variables: location (in Java, outside Java), level of schooling (junior high school, elementary school), and status (rural, urban). The results of this study are essential for understanding the extent to which Indonesia's education policy affects teacher performance during the nine years of compulsory education.

A few studies explore the link between education funding and teacher performance, including those by Marchand & Weber (2020); Nuryana, Nurcahyati, Rahman, Setiawan, Fadillah (2020); Rahim (2019); Levy (2019); Knight (2019); Arwildayanto & Rosadi (2019); Basson & Mestry (2019); and Rivera Rodas (2019). This study's innovation lies in several factors. First, previous studies have focused on the indirect effects of education funding on teacher performance. In contrast, this study focuses on the direct impact of education funding on teachers' performance (as the main actors in the learning process). Second, unlike earlier studies, this article uses the SET method to evaluate teacher performance. It acknowledges the importance of understanding students' perceptions and recognizes that they are often ignored and positioned as objects who simply accept their schools' decisions. Third, this study does not only consider the responses of students from poor households, but students from all backgrounds, as all Indonesians are entitled to benefit from BOS funds during their nine years of compulsory education. Fourth, this study employs a modified approach to SET, seeking not to evaluate individual instructors but rather teachers' overall performance.

## **THEORETICAL FRAMEWORK**

Student Evaluation of Teaching (SET), also known as student rating, is commonly used to evaluate the effectiveness of the learning process (Jones, Gaffney, & Jones, 2014). SET asks students to rate their instructors and lessons and departs from assuming that students learn more from teachers with higher ratings (Uttl, White, & Gonzalez, 2017). It deals with multiple aspects of teachers' performance, including (but not limited to) knowledge, clarity, organization, enthusiasm, fairness, and contribution to the learning process. (Spooren, Brockx, & Mortelmans, 2013) argue that SET has several benefits: a) it provides a cheap and comfortable means of evaluating the learning process; b) it offers a means of ensuring accountability; c) it enables students to provide feedback regarding the learning process; and d) it allows students to convey their experiences and perceptions of their instructors and their classroom activities (Wachtel, 1998).



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According to Marsh and Roche (1997), when used in appropriate conditions, SET is a) multidimensional; b) reliable and stable; c) capable of evaluating instructors, rather than materials; d) reflective of various indicators of effective classroom learning; e) relatively uninfluenced by variables that could potentially cause bias (i.e., classroom size, workload, student interest); and f) helpful in improving teacher performance when used in conjunction with a consultation. Formatively, SET employs student feedback to facilitate teachers' efforts to professionally improve the quality of the learning process (Arthur, 2009). In summary, SET seeks to accurately describe what occurs within the classroom and what is expected to occur (Edström, 2008).

Several scholars have identified biases within SET's results. For instance, Kreitzer and Sweet-Cushman (2021) identified two SET biases: measurement and equity biases. Even though they are not part of instruction, factors influencing the assessment results may lead to measurement bias. Equity bias, meanwhile, is associated with the characteristics of the instructors themselves: their gender, race, ethnicity, accent, sexual orientation, etc. Others have questioned the validity of SET's results. For example, a review by Uttl, White, & Gonzalez (2017) concluded that SET is uncorrelated with student learning. Esarey and Valdes (2020) argue that even careful application of SET can return significant errors. Nevertheless, most studies have maintained that SET remains a beneficial and valid approach (Alsmadi, 2005; Balam & Shannon, 2010; Coffey & Gibbs, 2001; Marsh, 2007). Similarly, Nargundkar and Shrikhande (2012) argue that SET remains a good approach even though it was proposed over twenty years ago.

The researchers affirm that education funding, including the BOS program in Indonesia, correlates with teachers' performance. A literature review has yet to identify any previous studies investigating the correlation between the BOS program and teachers' performance. It proposes two hypotheses:

H1: School operational assistance funds influence teacher performance.

Ho: School operational assistance funds do not influence teacher performance.

## METHODS

### *Design*

This study employs a sequential explanatory design and a mixed-methods approach, beginning with quantitative research before continuing with qualitative research (Creswell & Creswell, 2018). The purpose of quantitative research is to test the hypothesis, while qualitative research is to validate statistical analysis results. A hierarchical linear regression approach was used during the quantitative phase, with predictors being processed alternatively (Field, 2018). The objective of hierarchical regression is to ascertain whether a control variable affects the research model. In Model 1, the independent variable (school operational assistance) affects teacher performance (a dependent variable). Model 2 introduces three further control variables: location (in Java, outside Java), level of schooling (junior high school, elementary school), and territory (rural, urban). These variables were treated as dummy variables, being assigned a value of 0 or 1.

One week after the researcher processed statistical analysis, we conducted in-depth interviews to validate the results. Qualitative research teams went to selected schools based on results obtained in the preliminary survey. They formulated closed-ended and open-ended questions that were relevant to the research. These questions provided the team with the necessary guidance when seeking an in-depth understanding of the results.

### *Sample*

After five stages of purposive sampling, the researchers selected 600 students from 30 schools. During the first stage, the researchers set Central Java and East Nusa Tenggara provinces as samples, using them to represent the experiences of students in Java and outside Java. In 2018, East Nusa Tenggara scored 64.39 on the human



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development index. Central Java ranked far higher, receiving a score of 71.12 (slightly below the national average). Similarly, literacy rates in both provinces are lower than the national average (37.32); in 2019, Central Java had a literacy rate of 33.30, while East Nusa Tenggara had a literacy rate of 29.83 (Puslitjakdikbud, 2019).

The researchers selected several regencies and cities as samples during the second stage, distinguishing between rural and urban experiences. Klaten Regency and Karanganyar Regency represented central Java as rural representatives. Meanwhile, urban central Java was represented by Semarang City. In East Nusa Tenggara, rural experiences were described by Northern Central Timor, while Kupang City represented urban experiences. During the third stage, the researchers selected specific districts to represent the chosen municipalities. Finally, three state elementary schools and three junior high schools were selected during the fourth stage, based on their accreditation and number of students.

Finally, during the fifth stage, twenty students were selected randomly, provided they met several criteria. For example, respondents had to be Grade 5 or 6 students at the primary level, while at the junior secondary level, respondents had to be Grade 8 or 9 students. The research team also considered gender quota, and all students selected were involved in classroom administration. Overall, 300 elementary students and 300 junior high students were selected, representing 15 elementary schools and 15 junior high schools in five municipalities in Central Java and East Nusa Tenggara.

## ***Measurement***

This research adopts four indicators of teacher performance from previous studies: clarity when conveying materials (Cohen, 2005; Marks, 2000; Mortelmans & Spooren, 2009); ability to maintain student interest (Mortelmans & Spooren, 2009; Shevlin, Banyard, Davies, & Griffiths, 2000); use of easy-to-understand materials (Toland & De Ayala, 2005); and use of multimedia approaches (Keeley, Smith, & Buskist, 2006). Question items focused not on individual instructors but rather on overall teacher performance to minimize bias (i.e., "How many teachers convey material clearly?"). Answers followed a four-point Likert scale, ranging from "none" (lowest) to "all" (highest). The aggregate of respondents' scores for the four indicators was regression analysis; respondents' scores ranged from 4 to 16. Meanwhile, the researchers used the amount received by schools during the 2018 fiscal year for the BOS funds variable.

## ***Data Collection***

Data collected for this study used a Computer-Assisted Personal Interviewing (CAPI) survey, conducted in 2019 to investigate schools' use of operational assistance during the 2018 fiscal year. Enumerators traveled to schools to complete the survey and transmitted the results to the central office for data management. This data management enabled the researchers to manage data while simultaneously providing feedback to enumerators, allowing them to address errors in the field.

## **RESULTS**

### ***Descriptive Statistics***

Respondents consisted of students from thirty selected schools (Table 1), eighteen in Central Java, and twelve in East Nusa Tenggara (60 percent and 40 percent, respectively). With disparate levels of socio-economic development, these selected provinces are to represent conditions in Java and outside Java. Of the thirty schools, fifteen were at the primary level, and fifteen were at the junior secondary level (50 percent each). Twenty schools (66.7 percent) were urban, while ten (33.3 percent) were rural.



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Table 1  
*Description of Schools*

	Number	Percentage
<b>Location</b>		
Java	18	60
Outside Java	12	40
<b>Level</b>		
Junior secondary	15	50
Primary	15	50
<b>Territory</b>		
Urban	20	66.7
Rural	10	33.3

Source: data primer

The data analysis (presented in Table 2) found that elementary school teachers received an average SET score of 11.87, higher than junior high school teachers (11.28). Overall, teachers received a mean SET score of 11.57, with a minimum score of 10.05 and a maximum of 13.45. The standard deviation, thus, was 0.76.

Elementary schools received an average of Rp 211.36 million in operational assistance, while junior high schools received an average of Rp 699.53 million. Overall, schools at both levels received a mean of Rp 211.36 million in active aid, with a minimum of Rp 76.8 million and a maximum of Rp 928 million. The standard deviation, thus, was Rp 306.13 million.

Table 2  
*Descriptive Statistics*

	Mean	Min	Max	Std. Deviation	N
<b>SET score (primary)</b>	11.87	10.25	13.45	0.70	15
<b>SET score (j. secondary)</b>	11.28	10.05	13.00	0.73	15
<b>SET score (total)</b>	11.57	10.05	13.45	0.76	30
<b>BOS funds (primary)</b>	211.36	76.80	399.20	102.68	15
<b>BOS funds (j. secondary)</b>	699.53	131.00	928.00	236.46	15
<b>BOS funds (total)</b>	455.44	76.80	928.00	306.13	30

Note: \*BOS funds in millions of rupiah

Source: primary data

### **Assumption Test**

As an initial stage, researchers need to ensure that the model meets the evaluation of classical assumptions. First, the Shapiro-Wilk normality test resulted in a significance  $>.05$ . The conclusion is the dependent variable is normally distributed and meets the classical assumptions. Second, the normality test is carried out by paying attention to the residual value in the Normal P-P plot. The result is that the residual plot shows points approaching the diagonal line. The conclusion is that the model meets the criteria for a normal distribution. Third, the model must meet the assumption of homoscedasticity, which describes the same error term situation among all values of the independent variables. The scatterplot results show that the points are evenly distributed below and above 0 (zero). The conclusion is to meet the assumption of homoscedasticity.

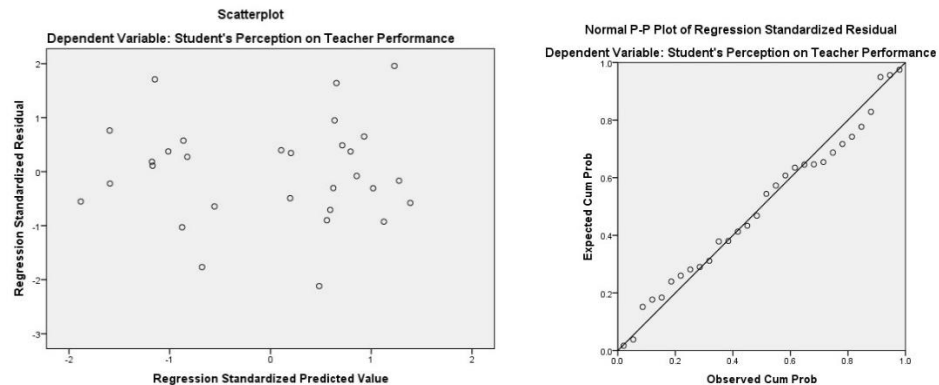


Figure 1. Classic Assumption Test  
Source: primary data

**Regression Analysis**

The model in this study fulfills the normality and homoscedasticity criteria. Regression analysis of Model 1 found that SET scores have a negative and significant correlation with BOS funds, following the formula:

$$Y = 12.116 + (-.001 * BOS\ funds)$$

As such, per every million increase in X resulted in a 0.01 decrease in Y, with a significance of  $p < .05$ . In this equation,  $R^2$  returned a value of .474; in other words, 47.4 percent of the variation in Variable Y could be attributed to Variable X (Table 3).

In Model 2, the researchers added the control variables *In Java – Outside Java*, *Level of Schooling*, and *Urban-Rural*, producing the formula:

$$Y = 12.015 + (-.001 * BOS\ funds) + (-.090 * Java - Outside\ Java) + (-.448 * Level\ of\ Schooling) + (.285 * Urban - Rural)$$

In Model 2,  $R^2$  returned a value of .505, indicating that 50.5 percent of the variation in Variable Y could be attributed to Variable X (Table 3). Model 2 had an  $R^2$  value 6.54 percent higher than Model 1 (47.4 percent). However, these control variables did not show any significance at  $> .05$ , indicating that the control variables did not influence the link between Variable Y and Variable X (be they location within/without Java, level of schooling, or rural/urban area).  $H_0$ , i.e., that receipt of BOS funds is not significantly correlated with teacher performance, was thus rejected. Meanwhile,  $H_1$ — BOS influence teacher performance—was supported.

Table 3  
*Results of regression analysis, Model 1 and Model 2*

	Model 1			Model 2		
	Coefficient	Std. Error	Sig.	Coefficient	Std. Error	Sig.
<b>BOS funds</b>	-.001	.000	.008	-.001	.001	.113
<b>Java–outside Java</b>				-.090	.270	.742
<b>Level of schooling</b>				-.025	.448	.956
<b>Urban-Rural</b>				.283	.285	.331
<b>Constant</b>	12.116	.228	.000	12.015	.308	.000
<b>R-squared</b>	.474			.505		

Source: primary data



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The findings of this study indicate that teacher performance has a significant, though small, negative correlation with BOS receipt. Regression analysis further suggests that every Rp 1 million increase in school operational assistance reduces teacher performance by 0.01; in other words, the more BOS received by schools, the lower teachers' performance.

## **Case Study Analysis**

The statistical analysis above leads to two important conclusions: first, there is a significant (but small) correlation between schools' receipt of operational assistance and teachers' performance. Second, regression analysis shows that schools' receipt of BOS and teachers' performance are negatively correlated; in other words, the more money received by a school through the BOS program, the poorer the performance of its teachers. These conclusions are interesting for further exploration, based on observations and in-depth interviews with the administrators and teachers at selected schools.

These interviews further supported the conclusion that schools' receipt of BOS correlates with teachers' performance. More or less, 70% of informants recognized this correlation, who acknowledged that BOS provides teachers with the necessary support during the teaching process. BOS funds can be used to improve teachers' competencies (through training and technical guidance), facilitate schools' operations, and acquire materials (sports equipment, books, etc.).

The second finding, meanwhile, is associated with several factors. The system used to administer funds received through the BOS program is very complex. Furthermore, fund disbursements are often delayed, and when this occurs, schools must search for other funding sources. As the amount received increases, it becomes increasingly difficult to secure loans and other stop-gap measures, which deleteriously affects teachers' performance. Furthermore, because BOS is not for teachers' salaries, many teachers have perceived the BOS program as doing little more than adding to their burden.

## **Case 1: BOS Administration at a Junior Secondary School in East Nusa Tenggara**

This junior secondary school shares the same socio-economic characteristics as underdeveloped areas, though located in an urban area. All of this school's operations are from the BOS program; the local government does not require students' families to cover the cost of operations. As a result, the school has relatively few students; likewise, the staff is limited, and the job status of many of the teachers are contract teachers. Furthermore, the school is dilapidated, requiring significant maintenance and renovations to meet national standards. As a result, the school obtains an accredited 'B.'

Owing to the school's dependence on BOS funds, activities cannot continue without assistance. Likewise, facilities cannot be maintained or acquired. As the principal explained:

*"BOS funds are important... they truly help us with the learning activities at school. If we didn't have operational assistance, where would we get what our school needs? Because our school's budget is only from the BOS program" (interview with principal, a junior high school in District TTU, East Nusa Tenggara)*

Although the amount available for such activities is limited, teachers also use BOS funds for capacity-building, such as attending workshops, thereby improving their teaching methods and their ability to prepare curricula.

At the same time, however, the school has experienced many obstacles in using BOS funds. When sudden expenses occur, or prices/specifications change, the school cannot readily use BOS funds. On one occasion, delaying BOS disbursement was for almost three months. To ensure the school's continued survival, the principal had to borrow





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money from the school committee and local stores. Food and drink, meanwhile, were obtained from the school grounds. Other essential activities, such as student guidance and teacher competency development, had no funding and thus could not be continued.

Such conditions, as narrated above, are experienced by many schools in the two provinces surveyed. Almost all schools rely on BOS funds for their everyday operations, and the limited funds available for teachers' professional development must be distributed amongst all staff. Qualitative data, thus, confirms that BOS receipt significantly correlated with teacher performance. However, it also shows that BOS has a limited effect on teacher performance due to the limited funding and complicated administrative system. Teachers also feel they are ignored during allocating funds, as available policies do not emphasize the need to improve teachers' professional capacity and competencies.

## ***Case 2: Managing BOS Funds at an Elementary School in Semarang, Central Java***

This elementary school, located within the capital of Central Java province, has the most students of the schools surveyed in Central Java. However, its urban location has not ensured that the school has adequate facilities. Indeed, it is in a residential area that provides little space for expansion. Nevertheless, teachers are sufficiently numerous and supplemented by several honorary staff. As such, despite its limitations, the school has received an 'A' accreditation.

In an interview, the principal admitted that the school requires the assistance provided by the BOS program. However, significant problems emerge when delays occur (often up to three months) and regulations change. During such delays, the principal must borrow supplies from nearby shops or acquire them through mutual trust. Money may also be borrowed from teacher associations or come from the principal's own pockets. As one teacher explained:

*How can the school overcome such issues? It must be paid by the treasurer first. Last year, the school borrowed money from the teachers' funds for professional groups, end-of-term examinations, and for copying try-out questions. There mustn't be any delays in using the money, because that would throw our trimonthly budget into chaos (interview with the teacher in charge of managing BOS funds, an elementary school in Semarang)*

This qualitative data supports the negative correlation identified by regression analysis: the greater the BOS funds received by schools, the lower teachers' performance. Delays in the disbursement of BOS funds require schools to seek loans. When schools have more students, they must seek larger loans. This delay creates more significant burdens for schools and thus has a detrimental effect on teachers' performance. Teachers and principals become preoccupied with finding money and worry that they will not repay the loan.

Furthermore, due to the complicated reporting system, principals and teachers must bear the dual burden of teaching and administering program funds; this further reduces teacher performance. The principal, however, did not acknowledge this situation explicitly. Instead, when asked whether BOS funds could improve teacher performance, he answered hesitatingly: "Yes... maybe it can."

This doubt and hesitation may be attributed to the prohibition against using funds to increase teachers' income. One teacher stated that her husband had forbidden her from doing BOS-associated work at home; her family perceived the program as not improving their welfare but disrupting their household harmony.



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## DISCUSSION

The Indonesian government believed it would be more efficient when designing its BOS program, as funds allocation is per student. The greater the number of students at a school, the greater the amount of assistance provided. This assistance would positively affect the teachers' performance, i.e., those directly involved in teaching students. However, this study's quantitative and qualitative findings show that increased education funding does not necessarily have a positive correlation with teacher performance. Instead, budget and performance have a significant correlation, albeit a small one.

Interviews identified several factors contributing to the negative correlation between schools' receipt of assistance and teachers' performance. Of particular note, informants mentioned the complicated administration system, the lack of funds for teacher welfare, and inflexibility in budgeting.

So long as the financial, administrative system remains unchanged, this situation will remain unchanged. Educators complained about the program's rigid and inflexible financial administration system at all of the schools surveyed, which seemingly prioritizes adherence to standard operating procedures over the issues experienced by schools, teachers, and students during the learning process. In addition, schools had little authority to allocate funds, as they were required to follow strictly regulated procedures, and the program does not cover many items.

This study shows that, at a certain point, increased education funding ultimately undermines its own goals and reduces teacher performance. Further exacerbating this situation, funds disbursement is often delayed by several months. In addition, the beginning of the fiscal year (used for reporting) does not coincide with the beginning of the academic year. Interviews showed that schools were required to seek alternative strategies to overcome these issues and ensure continued operations (such as seeking loans). Consequently, the greater the amount of money received from the government through the BOS, the greater the burdens and risks of schools and teachers.

Furthermore, as BOS is not for improving teacher welfare, educators tend to view the program negatively. Here, these issues explain the negative correlation between the amount of BOS funds received and teacher performance. The greater the amount of assistance received, the lower the incentive for teachers—as the street-level bureaucrats who provide education services to students—to administer the program.

Schools' heavy burden is amplified by their inability to budget for their own particular needs or create innovative approaches that do not follow government-set procedures. Many activities can improve teachers' competencies and provide them with the necessary knowledge, skills, and technologies; such activities, however, are not covered by the standard operating procedures used by the BOS program. Ultimately, government assistance through the BOS program has little effect on teachers' professional development. What little money is available is insufficient to improve teachers' skills, thereby minimizing the impact of BOS funds on educators' performance. Ultimately, increased funding does not enable schools to adapt dynamically to change but provides only a stop-gap measure to ensure continued operations.

The results of this research are similar to the study on the weak impact of education spending incentives to improve teacher performance in the USA, as revealed by Springer et al. (2012), Springer et al. (2013), Ladd & Goertz (2015). However, Bastian, Henry, & Thompson (2013) reminded that education spending is significant to improving teacher performance. Previous research has also shown a significant relationship between education spending and teacher performance (Marchand & Weber, 2020; Nuryana, Nurcahyati, Rahman, Setiawan, Fadillah, 2020; Rahim, 2019; Levy, 2019; Knight, 2019; Arwildayanto & Rosadi, 2019; Basson and Mestry, 2019; Rivera Rodas, 2019). This research also concludes a significant relationship between BOS funds and teacher performance, although the correlation is weak. In addition, the results of this research are different from the findings of the previous study. At a certain point, the amount of BOS funds allocated to schools can reduce teacher performance. The conclusion that a certain amount of BOS funds will reduce teacher performance is a novelty of this study compared to previous studies. This



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finding does require a more in-depth study with more robust methods.

Teacher performance will decline when a certain amount of BOS funds is in the administrative system that supports it. According to the results of this qualitative study, the administration system of BOS funds was very rigid and slow in disbursement, weak school innovation, and the unavailability of adequate incentives for teachers. The purpose of rigidity in Indonesia's financial administration is to avoid the budget's leakage. Therefore, all financial allocations must fully follow the central government's standard operating procedure (SOP). This tight SOP will make it easier for the center to control the implementation of BOS funds.

Meanwhile, delays in budget distribution result from a very hierarchical allocation system from the central, regional governments to schools. The absence of a special allocation of BOS funds for teachers also weakens teacher support in implementing BOS in schools. All of these obstacles affect the lack of program innovation in schools that BOS can fund. Schools tend to fully follow the SOP for BOS funds even though the allocation may not match the school's needs.

This research method is also different from previous research because it uses SET to assess teacher performance. The SET's weakness is that we have to understand how to fill in the SET to students, especially at the elementary level. However, SET has the advantage of directly and objectively assessing what students feel about their teacher's performance. Thus, this study provides a positive assessment of SET. This model is suitable for use in studies that want to explore students' perspectives on the teaching process in their schools.

Recognizing the ongoing difficulties with implementing the BOS program, as identified above, it is high time for the government to redesign the program's goals. Presently, education funding has focused on administrative matters, thereby supporting schools' everyday activities. The government should instead promote innovation and change in the future, thereby enabling schools to adapt to their rapidly and dynamically changing environments. At the same time, the government should reconsider using BOS funds to improve teacher welfare, thereby increasing its legitimacy amongst teachers and cultivating their support.

## CONCLUSION

This study has shown that education funding in Indonesia, provided to primary and junior secondary schools through the BOS program, has a significant (but small) effect on teacher performance. Interestingly, this study has also found a negative correlation between education funding and teacher performance; in other words, the greater the amount of BOS funds received by schools, the lower teachers' performance.

Three explanation factors contribute to two findings: the rigidity of the administration system, the program's inflexibility in its school-level implementation, and the prohibition against using funds to increase teacher welfare. As a result, teachers—the street-level bureaucrats responsible for teaching students—can not improve their competencies and performance. Further compounding the situation, the disbursement of funds is often delayed, and the problems caused by such delays are amplified by the expenses that must be covered. Meanwhile, as BOS funds cannot be used to improve teacher welfare, the program's legitimacy is limited in teachers' eyes. Together, these factors likely explain the negative correlation between education funding and teacher performance.

This study also suggests using SET to assess the learning process and teacher performance. Students' assessment of school performance can also use the SET. This SET method can adapt to the conditions of the school and its students for more effective results.



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