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Educational Policy Evaluation: How Educational Assistance Affects PISA through School Resources, Teacher Learning, and Student Well-Being

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Abstract: Educational Policy Evaluation: How Educational Assistance Affects PISA through School Resources, Teacher Learning, and Student Well-Being. Objectives: This research aims to determine the effect of educational assistance policies provided by the government on school resources, teacher learning, and Student Well-Being conditions on PISA achievements. The simultaneous influence of school resources, Student Well-Being, and teacher learning on PISA. As well as the influence of educational assistance policies on PISA itself and through moderating school resource variables, Student Well-Being, and teacher learning. **Methods:** This type of research uses an explanatory type with a quantitative approach. Regency/city locations include Ponorogo, Tuban, Tulungagung, Banyuwangi, Surabaya City, and Malang City. This research took a population of high school and vocational school students in East Java Province with a sample size of 560 students with sampling using stratified random sampling, area proportional random sampling, and quota random sampling techniques. The data analysis used is SEM (Structural Equation Modeling). **Findings:** Education aid policies have a direct influence on school resources, teacher learning, student well-being, and PISA performance. Student well-being and teacher learning have a direct effect on PISA performance but school resources do not have a direct effect on PISA performance. The results of the indirect effect calculation show that the education aid policy has no effect on PISA through school resources and student well-being, but has an indirect effect through student well-being. The results of simultaneous direct and indirect calculations of educational assistance policies, school resources, teacher learning, and student well-being have an influence on PISA achievement. **Conclusion**: The educational assistance policies provided affect school resources, teacher learning performance and student well-being. School resources do not influence PISA performance, and school and learning resources do not directly influence PISA performance.

Keywords: education assistance; school resources; teacher learning; student well-being; PISA.

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INTRODUCTION

Educational evaluation is defined as a means of assessing the quality of education, educational evaluation refers to the activities of teaching, assessing, and evaluating various educational components at each grade level, grade level, and type of education (Indonesia 2003). Evaluation functions as (a) a means of system improvement; (b) accountability to government and society; (c) determining the follow-up to development results (Pramana et al., 2003). Not all public policy programs can be achieved, therefore policy

evaluation needs to be carried out (Situmorang 2016). The policy evaluation method can be carried out using 4 techniques, namely single program after only, single program before-after, comparative after only, and comparative before-after (Maulana and Nugroho 2019). Countries that wish to raise levels of educational attainment and increase incomes must advance policies that reduce educational costs and provide financial assistance (Villareal 2018). Educational assistance policies at the primary and secondary education levels are directed towards the Smart Indonesia Program (PIP), and School Operational Assistance (BOS). The budget policy is directed at improving quality and increasing PISA scores.

The total education budget from 2016 to 2021 continues to increase. The success of educational quality is determined by one of the PISA indicators. PISA or Program for International Student Assessment is an international study in the field of education organized by the OECD. Since 2000, when Indonesia first joined PISA, Indonesia has continued to be at the bottom of the PISA ranking. The decline in PISA Indonesia is due to the orientation of education policy in Indonesia still on unified management of the education system. The orientation of education policy needs to aim at liberating teachers in teaching, especially developing students according to their true human nature (Oebaidillah 2019).

Increasing PISA achievements can be maximized by increasing school resources, teacher learning, and Student Well-Being. Appropriate educational assistance can help schools improve facilities and improve the quality of education provided, thereby positively influencing school resources (Steele, Vignoles, and Jenkins 2007). Educational assistance policies and teacher learning are very closely related because educational assistance can influence factors that influence teacher performance, such as welfare, motivation, and professionalism (Liebowitz 2021). Educational assistance policies can influence students' welfare conditions by helping them overcome financial limitations and access better education (Kim et al. 2021).

Evaluation of policy impacts can be carried out after the policy has been implemented for a relatively long time (Rusdiana 2015). Research to evaluate policies would be more appropriate to use quantitative methods (Dunn, 1994). With the policy of educational assistance increasing in number every year, it is not able to improve PISA achievements significantly. Therefore, this research evaluates educational assistance policies on PISA achievements through school resources, teacher learning, and Student Well-Being.

This research aims to determine the effect of educational assistance policies provided by the government on school resources, teacher learning, and Student Well-Being conditions on PISA achievements. Apart from that, the general aim of this research is to determine the influence of educational assistance policies on PISA through teacher learning, the influence of educational assistance policies on PISA through Student Well-Being, and the influence of educational assistance policies on PISA through school resources. The simultaneous influence of school resources, Student Well-Being, and teacher learning on PISA. As well as the influence of educational assistance policies on PISA itself and through moderating school resource variables, Student Well-Being, and teacher learning.

Evaluation of Education Policy

Policy evaluation functions as a primary and secondary policy instrument, providing information regarding the effectiveness and efficiency of state activities. Evaluation can be used to initiate measures, improve implementation, monitor progress, and reduce subsidies (Knoepfel et al. 2007). Evaluation is a systematic process for assessing the value, effectiveness, or quality of something. Evaluation involves collecting and analyzing data to make informed judgments or decisions regarding the

subject being evaluated. Evaluation can be applied to various fields and contexts, including education. It can be concluded that educational evaluation is the process of assessing and assessing the effectiveness and efficiency of educational programs, policies, and practices. Evaluation involves collecting and analyzing data to determine whether educational goals and objectives are being met and to identify areas for improvement (Stufflebeam, Madaus, and Kellaghan, 2002).

The Education Assistance Policy is a government program implemented to provide financial assistance to people who need it to finance their education. The goal is to help reduce the financial burden on families and increase community educational participation. The term scholarship is a concept that is still contested. Unequal educational opportunities for children from different social backgrounds are a major determinant of educational assistance. Equity through policies aimed at equal educational outcomes (Lergetporer, Werner, and Woessmann, 2020). The debate relates to the social and political context to allocate aid to educational institutions considering the use of finances that manage academic institutions (David, Halpin, and Troyna, 1995). Education policy has received much attention, in part because it can reduce inequality without distorting economic efficiency (Lergetporer et al, 2020). Policy changes in education can impact the distribution of government spending, and simulations can be used to assess their impact on equity (Mingat, Tan, and Sosale, 2003).

School Resources

Everything used to provide education is called an educational resource. This includes the community, teaching staff, funds, facilities and, infrastructure (Indonesia, 2003b). Education staff are professional staff who participate in the implementation of education in support units. Teachers are professional staff who are qualified as teachers, lecturers, counselors, tutors, lecturers, tutors, instructors, facilitators, and other special names who are responsible for the growth and development of their students including physical and spiritual aspects. Meanwhile, educational staff are professional staff who are qualified as teachers, lecturers, counselors, tutors, tutors, and instructors (Nuraeni, 2019; Wijaya, Hidayat, and Rafida, 2019). One of the resources is funds. Therefore, to help achieve educational goals, it must be managed effectively and efficiently. Effectiveness is usually defined as the achievement of organizational goals by the costs incurred. On the other hand, educational efficiency is related to optimizing educational resources by optimizing them (Arwildayanto, Nina, and Warni, 2017). The facilities and infrastructure referred to here are facilities and infrastructure in the educational context. In the educational context, these facilities and infrastructure are used both for general use in the educational process and specifically for learning (Ananda and Banurea, 2017; Ikhfan, 2016; Syahril, 2018).

Teacher Learning

Teacher performance is very important in achieving quality education goals. This is in line with Fastrup & Samuels' statement that improving and maintaining teacher quality is an important component if we want to achieve the educational goals that have been set (Madjid, 2018). Furthermore, McKinsey & Co. believes that the quality of teachers determines the quality of the education system, whereas if the quality of teachers is low then the quality of the education system will not be able to overcome it (Madjid, 2018). Therefore, we can conclude that to achieve optimal educational results, effective learning provided by qualified teachers is needed.

Teachers have a very important role in helping students to learn and develop optimally. Teacher performance is the result of hard work in quality and quantity achieved by teachers in

carrying out their duties by their responsibilities as teaching staff. Teacher performance can improve the quality of learning, motivate students, and improve student academic achievement (Lailatussaadah, 2015). Apart from that, the success of a teacher is determined by a person's work and abilities in that field. Therefore, teachers must strive to create and change their school environment in appropriate ways to achieve optimal results. Because teacher performance will increase the level of Indonesian human resources, the next generation will have the intelligence and ability to face future challenges (Lailatussaadah, 2015). Teacher learning related to PISA includes, among other things, adaptive instruction, teacher enthusiasm, teacher-directed instruction, teacher feedback, stimulation of teacher reading engagement, and teacher support (Govorova, Benítez, and Muñiz, 2020b).

Student well-being

Student well-being is a multidimensional concept that emerges when individuals interact with other people, with their environment, and with the conditions and situations in which their lives take place (including through and in the context of 'education') (Muhammad and Rosiana, 2017). Student well-being, defined as a student's overall development and quality of life, is increasingly integrated into education policy (OECD, 2017). A student's happiness at school is one of the factors that determines how effective quality education can be felt by all individuals who participate in it. Prosperity arises from cooperation and comprehensive mutual support between the educational elements of a school (Ramdani and Prakoso, 2019). Student well-being is a student's subjective assessment of how well their school meets their basic needs.

The analytical framework for student well-being describes constructs according to five domains: (1) cognitive well-being, which includes variables related to students' knowledge and ability to solve everyday problems; (2) psychological well-being, which includes students' perceptions of their own lives, their engagement with school, and their plans; (3) physical well-being, which refers to students' health and their habits related to exercise and eating; (4) social well-being, which evaluates how students perceive their relationships inside and outside school; and (5) material well-being, referring to the resources available to meet students' needs (Borgonovi, 2016; Govorova *et al*, 2020b).

PISA

The OECD launched PISA in 1997 to assess 15-year-old students' abilities in reading, mathematics, and science and their ability to apply school lessons to the real world. PISA is implemented once every three years. PISA is an ongoing program that can provide helpful perspectives in the creation and implementation of education policies as well as monitor trends in the acquisition of knowledge and skills in different countries and different demographic subgroups within each country. Policymakers can use PISA test results to determine the skills and knowledge of students in their country in comparison with students in other countries; set policy targets based on results from other education systems; and learn from other successful practices and policies. This international benchmark is even more relevant now that every country has signed the Education Agenda in the Sustainable Development Goals (SDGs). This agenda was set by the United Nations in 2015 and aims to ensure that every child and young person has basic skills in mathematics and reading (Kemendikbud, 2019a).

The triennial PISA assessments not only assess students' ability to restate what they know, but also assess how well they can expand their understanding and apply what they know in new situations, both inside and outside school. PISA's ongoing program collects useful data to monitor

trends in student knowledge and skills across various demographic groups in each country (Kemendikbud, 2019a). One of the main reasons why Indonesia participated in PISA 2018 was to gain a further understanding of student performance in Indonesia compared to international standards and other countries facing similar problems. PISA can help Indonesia understand the characteristics of the population as a whole, which will help make policies that are more targeted and effective (Cresswell, 2016).

The three main variables that influence students' basic literacy skills are classroom discipline climate, students' enjoyment of reading, and reading metacognitive strategies, according to PISA 2018 data analysis (Nur'aini *et al,* 2021). Students who enjoy reading, receive appropriate reading metacognition strategies from teachers, and learn in a disciplined classroom environment tend to have better PISA scores. Therefore, the variables in this research to represent PISA are students' enjoyment of reading, metacognitive reading strategies, and a disciplined classroom climate. The pleasure of reading refers to reading that we do of our own free will anticipating the satisfaction we will get from the act of reading. The pleasure of reading is a form of play that allows us to experience other worlds and roles in the imagination (Clark and Rumbold, 2006). The atmosphere in the classroom is an important variable in the learning process at school. Intuitively, it seems reasonable that a classroom discipline climate can impact student learning outcomes because students will learn less, and make less progress if there is substantial disruption to the learning environment (Jenkins and Ueno, 2016). Metacognition refers to two aspects, namely students' self-awareness of a knowledge base where information is stored about how, when, and where to use various cognitive strategies and their self-awareness and access to strategies that guide learning (e.g. monitoring level of difficulty, feeling of knowing). Metacognitive strategies are strategies that require students to think about their thinking as they engage in academic tasks (Çubukçu, 2008).

METHOD

Participants

The sample is part of the number and characteristics of the population (Sugiyono, 2012). The population in this study were high school students of the same level in East Java with a population of 319,893 students (Kemendikbud, 2023). The population in this study consisted of high school and vocational school students from 38 districts/cities in East Java Province. The research population was selected by several districts/cities based on geographic location to represent the population.

West : Ponorogo, Tuban
South : Tulungagung
East : Banyuwangi
North : Surabaya
Middle : Malang City

PISA measurements are carried out by differentiating the characteristics of urban and rural areas. The areas that represent urban areas are Malang City and Surabaya City. Meanwhile, the region that represents rural areas is Kab. Banyuwangi, Kab. Tulungagung, Kab. Ponorogo and Kab. Tuban. The number of high school students is 522,330 while vocational school students are 761,019.

The respondent description is a process of describing respondents based on education level, city/district of school origin, class, school status, whether the respondent is a PIP (Smart Indonesia Program) recipient or not, and gender. In this study, 560 respondents were obtained for further processing. Based on the research conducted, the description of the respondent's identity can be described as follows:

Table 2. Respondents' education level

Education Level	Frequency	Percent
Senior High School	340	60.7%
Vocational School	220	39.3%
Total	560	100.0%

Based on table 2, shows that the respondents who came from high school students were 340 students (60.7%) and those who came from vocational school students were 220 students (39.3%).

Table 3. Respondent's school origin

The origin of the school	Frequency	Percent
Surabaya City	206	36.8%
Malang City	93	16.6%
Banyuwangi Regency	84	15.0%
Tulungagung Regency	67	12.0%
Tuban Regency	64	11.4%
Ponorogo Regency	46	8.2%
Total	560	100.0%

Based on table 3, shows that the respondents came from Surabaya City as many as 206 students (36.8%), Malang City as many as 93 students (16.6%), Banyuwangi Regency as many as 84 students (15.0%), Tulungagung Regency as many as 67 students. (12.0%), Tuban Regency has as many as 64 students (11.4%), and Ponorogo Regency has as many as 46 students (8.2%).

Table 4. Respondent class

Class	Frequency	Percent
Grade 10	109	19.5%
Grade 11	229	40.9%
Grade 12	222	39.6%
Total	560	100.0%

Based on table 4, shows that the respondents came from class 10 as many as 109 students (19.5%), class 11 as many as 229 students (40.9%), and class 12 as many as 222 students (39.6%).

Table 5. Respondent's school status

School Status	Frequency	Percent
Public school	506	90.4%
Private school	54	9.6%
Total	560	100.0%

Based on table 5, shows that 506 students came from state schools (90.4%) and 54 students came from private schools (9.6%).

Table 6. PIP Recipients

PIP Recipients	Frequency	Percent
Yes	117	20.9%
No	443	79.1%
Total	560	100.0%

Based on table 6, shows that the respondents who received the Smart Indonesia Program (PIP) were 117 students (20.9%) and those who were not recipients of the Smart Indonesia Program (PIP) were 443 students (79.1%).

Table 7. Gender of respondents

Gender	Frequency	Percent
Man	225	40.2%
Woman	335	59.8%
Total	560	100.0%

Based on table 7, shows that 225 students (40.2%) were male respondents and 335 students (59.8%) were female.

Research Design and Procedures

The research carried out is part of the type of explanatory research with a quantitative

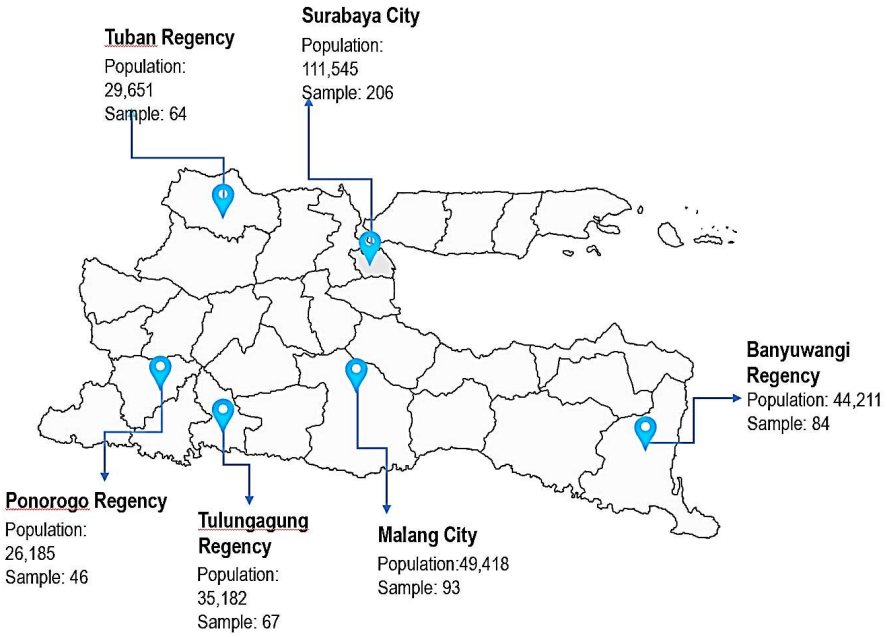


Figure 1. Population and sample distribution

approach. Explanatory research aims to explain the relationship between two or more symptoms or variables (Silalahi, 2010). This research uses explanatory research because the researcher wants to know the influence between educational assistance policy variables, school resources, teacher performance, Student well-being, and their influence on PISA achievements. This research contains exogenous variables, namely education assistance policy (X), moderator variables, namely school resources (Y1), teacher learning (Y2), and Student well-being (Y3) as well as endogenous variables, namely PISA achievements. To explain the direct, indirect, and simultaneous relationships between the research variables of educational assistance policy, school resources, teacher learning, Student well-being, and PISA achievement, SEM analysis was used.

The sampling technique used in this research is area-proportional random sampling (Hadi, 2000). This is because it takes into account the characteristics of rural and urban areas in the population area. The data collection technique uses a questionnaire. The measurement scale in this study uses a Likert scale.

The framework shows the relationship between variables in the research. The framework shows the position of variables as endogenous, exogenous, or mediator variables. Apart from that, the research hypothesis is also determined from the relationship between the variables in the research.

Direct Influence:

H1: Education Assistance Policy Influences Resources School Power

H2: Education Assistance Policy Influences Teacher Learning Performance

H3: Education Assistance Policy influences Student well-being

H4: School Resources Influence PISA Achievements

H5: Teacher learning influences PISA achievements

H6: Student well-being influences PISA achievements

H7: Education Assistance Policy Influences PISA Achievement

H8: School Resources, Teacher Learning, and Student well-being simultaneously

influence PISA Achievements

Indirect Influence:

H9: Education Assistance Policy influences PISA through School Resources

H10: Education Assistance Policy influences PISA through Teacher Learning

H11: Education Assistance Policy influences PISA through Student well-being

H12: Education Assistance Policy influences PISA through School Resources, Teacher Learning, and Student well-being

Instrument

This study uses a questionnaire. A questionnaire is an efficient data collection technique if the researcher knows what is required and how to measure the requested variables. A questionnaire is a set of written questions for respondents to record their answers (Silalahi, 2009). The measurement scale in this study uses the Likert scale. The Likert scale is mainly used to measure a person's attitude, opinion, or perception. Scoring on this scale starts from 1 (one) to 5 (five) with answer criteria.

This questionnaire is compiled based on five variables, namely: 1) evaluation of educational assistance policies with the sub-variable summative review of school operational assistance education policies and the sub-variable summative evaluation of the Smart Indonesia program assistance policy (Rusdiana 2015; Herlina et al. 2018; Permendikbud, 2020). The Summative Evaluation sub-variable of the School Operational Fund Assistance Policy has 5 indicators that measure the use of school operational fund assistance with a total of 16 questions, the Summative Evaluation sub-variable of the Smart Indonesia Program Assistance Policy has 2 indicators that measure the adequacy of the Smart Indonesia program fund with a total of 6 questions. 2) school resource variables with sub-variables of financial resources, human resources, and facilities and infrastructure resources (Ananda and Banurea 2017; Arwildayanto et al. 2017; Indonesia 2003; Wijaya et al. 2019). The financial resources sub-variable has 4 indicators that measure the use of finance with a total of 12 questions, the human resources sub-variable has 2 indicators that measure the adequacy of educators with a total of 6 questions, the facilities and infrastructure sub-variable has 2 indicators that measure the quality of facilities and infrastructure with a total of 6 questions. 3) teacher learning variables with sub-variables of reading stimulation, teacher enjoyment of teaching, teacher support, learning adaptation, teacher feedback, and directed learning (Govorova, Benítez, and Muñiz, 2020a). The reading stimulation sub-variable has 2 indicators that measure the teacher's ability to stimulate reading with a total of 6 questions. The teacher's pleasure in teaching sub-variable has 2 indicators that measure the teacher's happiness in teaching with a total of 6 questions. The teacher support sub-variable has 2 indicators that measure the teacher's concern and support in teaching with a total of 6 questions. The learning adaptation sub-variable has 2 indicators that measure the teacher's ability to adapt with a total of 6 questions. The teacher feedback sub-variable has 2 indicators that measure providing feedback to students with a total of 6 questions. The directed learning sub-variable has 2 indicators that measure the teacher's ability in directed learning with a total of 6 questions. 4) Student welfare variable with sub-variables of cognitive dimensions, psychological dimensions, physical dimensions, social dimensions, and material dimensions (Borgonovi and Pal 2016; Govorova et al. 2020b). The cognitive dimension sub-variable has 2 indicators that measure students' skills and self-confidence with a total of 6 questions. The psychological dimension sub-variable has 2 indicators that measure students' emotions and motivation with a total of 6 questions. The physical

dimension sub-variable has 2 indicators that measure students' activities and eating patterns with a total of 6 questions. The social dimension sub-variable has 2 indicators that measure students' social life outside and inside school with a total of 6 questions. The material dimension sub-variable has 2 indicators that measure students' family material abilities with a total of 6 questions. 5) PISA variables with sub-variables of reading pleasure, classroom discipline climate, and metacognitive strategies in reading (Clark and Rumbold, 2006; Çubukçu, 2008; Jenkins and Ueno, 2016; Nur'aini et al. 2021). The sub-variable of reading pleasure has 3 indicators that measure students' feelings, awareness, and quantity in reading with a total of 9 questions. The sub-variable of classroom discipline climate has 3 indicators that measure discipline, and relationships between teachers and students with a total of 10 questions. The sub-variable of metacognition strategies in reading has 2 indicators that measure students' level of self-awareness of the importance of reading with a total of 6 questions. Explanations regarding variables, sub-variables, and indicators can be seen in Table 1.

Validity test using the Corrected Item-Total Correlation method and "r" Table obtained from SPSS 21 processing. A statement is said to be valid if the Corrected Item-Total Correlation (r count) is greater than the r Table. In addition, the instrument is said to be valid if the significant value is less than alpha (0.05). The process of distributing the questionnaire for the validity test was carried out by distributing the questionnaire to schools through teachers at the school. The validity test was carried out on 62 students with the calculation of r Table being Df = N-2. The r-count value of 62 students is 0.250. Based on the results of the instrument test on 62 students, it was found that all instrument items were valid with all r counts above the r Table and a significance value of less than 0.05. reliability test A construct is said to be reliable if it provides Cronbach Alpha> 0.6 (Ghozali, 2013). Cronbach's Alpha Based on Standardized Items value is 0.986. Thus, it can be concluded that the questionnaire is reliable because 0.986 > 0.60.

Table 8. Operational definition of variables

Variable	Sub Variable	Indicator
Evaluation of Education Assistance Policies (Rusdiana, 2015; Kemendikbudristek, 2022; Permendikbud,2020)	Summative Evaluation of School Operational Fund Assistance Policies	Acceptance of new students
		Quality of educators and educational staff
		Implementation of learning
		Quality of facilities and infrastructure
		Instructional Media
	Summative Evaluation of Smart Indonesia Program Assistance Policy	Adequate school equipment
		Adequate school fees
School Resources (UU 20/2003; Wijaya et al, 2019; Arwildayanto et al, 2017; Ananda and Banurea, 2017)	Financial Resources	Financing facilities and infrastructure
		Financing learning activities
		Financing health development
		Financial support for school activities
	Human Resources	Educator resources
		Educational personnel resources
	Facilities and Infrastructure Resources	School facility resources
		School infrastructure resources

Teacher Learning (Govorova, Benítez, and Muñiz, 2020)	Reading Stimulation	Teacher motivational abilities
		Creation of a conducive learning environment by teachers
	Teachers' Enjoyment of Teaching	The teacher's sense of happiness in teaching
		Teacher satisfaction in teaching
	Teacher Support	Teacher concern and appreciation
		Teachers' social relations with students
	Learning Adaptation	Teacher adaptation in learning strategies
		Teacher adaptation in teaching methods
	Teacher Feedback	Teacher feedback to students
		Student feedback to the teacher
	Directed Learning	Providing directed instructions
		Learning assessment
Student Well-Being (Borgonovi and Pal, 2016; Govorova et al, 2020)	Cognitive dimension	Student's specific skills in the subject
		Student confidence in the subject
	Psychological dimension	Students' goals and emotions in learning
		Student motivation for achievement
	Physical dimensions	Student physical activity
		Healthy eating patterns of students
	Social dimension	Social life of students at school
		Students' social life outside school
	Material dimensions	Family material resources
		School material support
PISA (Nur'aini et al, 2021; Clark and Rumbold, 2006; Jenkins and Ueno, 2016; Çubukçu, 2008)	The Joy of Reading	Feelings of pleasure in reading
		Awareness of the benefits of reading
		Quantity and frequency of reading
	Class Disciplinary Climate	Building discipline in the classroom
		Positive relationship between teacher and student
		Building group dynamics in the classroom
	Metacognitive Strategies in Reading	Self-awareness of a knowledge base
		Self-awareness develops learning strategies

Data Analysis

The steps for data analysis using SEM (Structural Equation Modeling) using AMOS are as follows (Ferdinand 2014): First, develop an SEM model, namely searching for or developing a model that has a strong theoretical justification. Second, develop a flow diagram (Path Diagram). This stage consists of a Measurement Model (Confirmatory Factor Analysis/CFA) on all variables and the development of a Structural Model consisting of one exogenous variable (educational assistance policy), and four endogenous variables (school resources, teacher learning, Student well-being, PISA). School resources, teacher learning, and Student well-being in the structural model above act as mediating or intervening variables because they have antecedents (variables that precede) and consequences (variables that follow). Third, convert the path diagram into an equation. This step consists of the Structural Equation and Measurement Model.

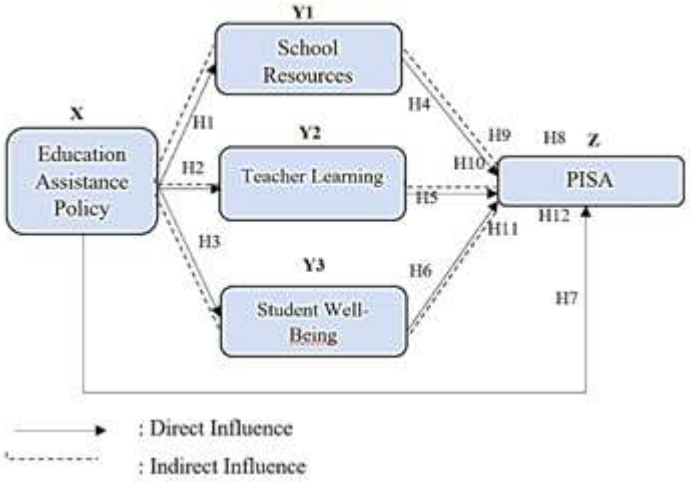


Figure 2. Structural equation and measurement model

Fourth, assess the model identification problem. Model identification is used to evaluate model accuracy (miss specified model). If the model is correct, you can get estimated parameters from the relationship between variables in SEM (Widarjono 2020). If the model cannot be identified, then unique values of the model coefficients cannot be determined. Fifth, Determine Model Estimates. After knowing whether the model identification is correct or overidentified, the next step is to estimate the parameter values in the model and carry out estimates to get the parameter values in such a way that the covariance matrix taken from the model is as close as possible or similar to the overall covariance matrix of the observed variables. Sixth, Evaluation of Goodness Fit Index Criteria. This step consists of determining the SEM assumptions (Asymptotic, normality test, interval). Test the feasibility of the model to interpret the results of confirmatory factor analysis.

No.	Criteria	*Cut off Value*
1	$\chi 2$ *(Chi Square)*	≤ 5 good fit
2	RMSEA	≤ 0.08 good fit ≤ 0.05 close fit 0.05 ≤ 0,08 marginal fit
3	TLI atau NNFI	≥ 0.90 good fit 0.80 < TLI < 0,90 marginal fit
4	IFI	≥ 0.90 good fit 0.80 < IFI <0.90 marginal fit
5	CFI	≥ 0.90 good fit 0.80 < CFI < 0.90 marginal fit
6	PNFI	0.6 < 0.9 good fit

Seventh, Model Respecification. If the SEM model is not feasible based on the feasibility test, it is necessary to redefine the model. Eighth, model interpretation. The relationship between variables in the SEM model is a causal relationship or cause as is the relationship in regression analysis. Data analysis using Amos version 22 (Haryono 2016; Junaidi 2021; Widarjono 2020).

■ RESULT AND DISCUSSION

Educational assistance policies issued by the government to schools and students can improve the quality of education implementation. Educational assistance provided to schools, teachers, and students can increase school resources, improve teacher learning, and improve Student Well-Being. By increasing school resources, teacher learning and Student Well-

Being can improve PISA achievement. In addition, one of the objectives of the policy is to increase PISA achievements. With the amount of assistance continuing to increase, the PISA rate tends not to experience a significant increase. Therefore, it is necessary to evaluate the education assistance policy for recipients and the use of these policies. The recipients and users of the policy are schools, educators teachers, and students. The results of the analysis using the Structural Equation Model (SEM) resulted in the following analysis and discussion.

This research has 3 variables, namely the independent variable, the intermediate variable, and the dependent variable. The independent variable is education assistance policy, the intermediate variables are school resources, teacher learning, and Student Well-Being. The dependent variable is PISA achievement. Data were analyzed using AMOS 22 with Structural Equation Model (SEM) analysis techniques with stages of theory-based model development, flow diagram development, path diagram conversion into equations, assessing model identification problems, determining model estimates, evaluating goodness fit index criteria, model respecification, interpretation model and hypothesis testing. The results of the data analysis are as follows:

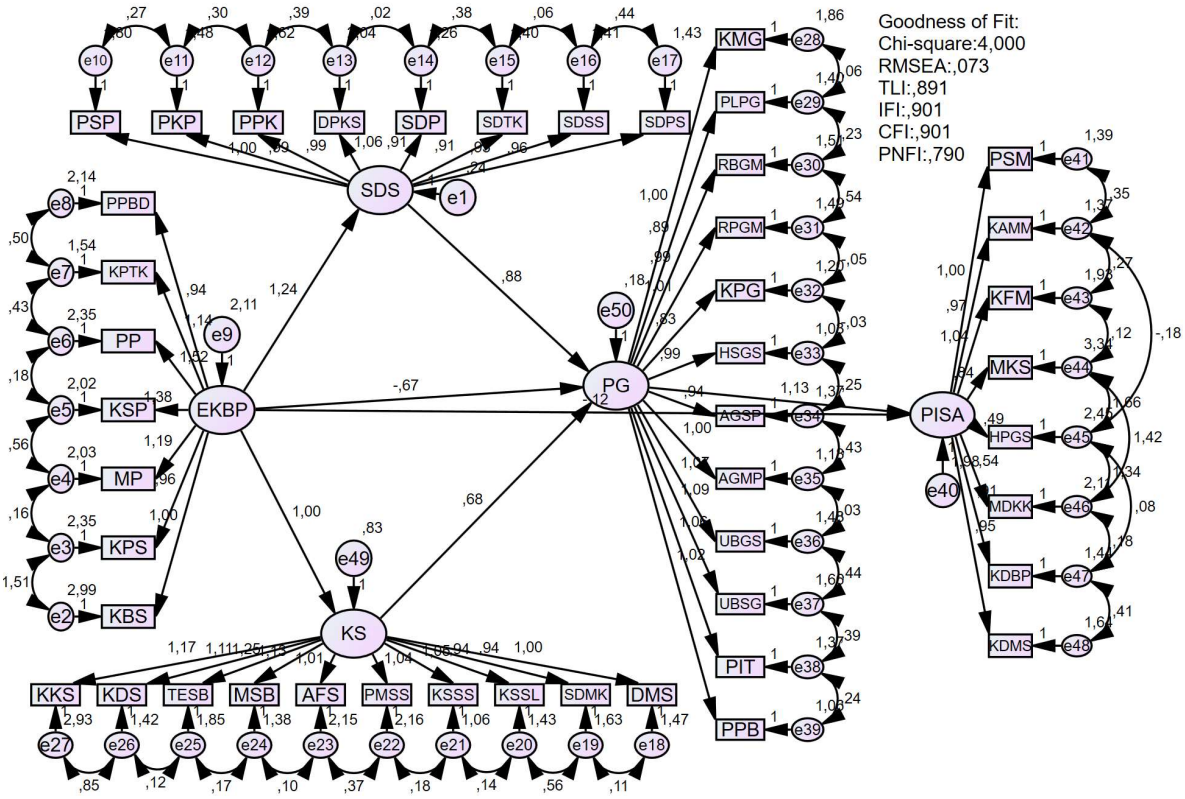


Figure 3. SEM analysis results

Structural Data Evaluation

This study uses the assumption that normality in SEM analysis is not too critical if the number of observation data is more than 100 pieces (Haryono 2016). This can also be explained by using the Central Limit Theorem which states that the distribution of the number of data greater than 30, will be close to the

Normal distribution (Masrukhin 2015; Savitri et al. 2021). Because the number of data entries in this study is 560 observations, it can be assumed that the data is normally distributed. The Likert scale score can be considered interval or continuous. In addition, the score of the interval scale calculation was in the same order as the Likert scale score, which showed that there was no difference in the order (Santoso 2014).

Items are declared to meet reliability if the construct reliability (CR) value e" 0.7 and AVE e" 0.5. The results of the calculation show that the variables of the evaluation of education assistance policies have a construct reliability value of 0.94, school resources have a value of 0.97, teacher learning has a value of 0.98, Student Well-Being has a value of 0.98 and PISA has a value of 0.96. The construct reliability value of the five variables is greater than the cut-off value of 0.7, so the indicators have good internal consistency. Then the results of the AVE calculation showed that the evaluation variable of education assistance policy had a value of 0.708, school resources had a value of 0.799, teacher learning had a value of 0.841, Student Well-Being had a value of 0.801 and PISA had a value of 0.771. Since the five variables obtained an AVE value of >0.50, the variance extracted from the indicators was greater for the formation of latent variables.

Measurement Evaluation

According to some model due diligence, a model is considered feasible if at least one of the model's due diligence methods is met. Indeed, the confirmatory analysis model will be much better if the model feasibility test can meet more than one model feasibility criterion (Widarjono 2020). Based on the results of the Goodness of Fit test, Chi-Square, RMSEA, TLI, IFI, CFI, and PNFI showed a good fit. This indicates that the model is feasible and meets the SEM criteria.

Table 8. Goodness of fit results

Goodness of Fit	Model Results	Information
$\chi 2$ *(Chi Square)*	4.000	Good Fit
RMSEA	0.073	Good Fit
TLI atau NNFI	0.891	Good Fit
IFI	0.901	Good Fit
CFI	0.901	Good Fit
PNFI	0.790	Good-Fit

Discussion

The Influence of Educational Aid Policies on School Resources, Teacher Learning, Student Well-Being and PISA Achievement

The direct influence of calculating the direct effect of educational assistance on school resources, educational assistance on teacher learning performance, educational assistance on Student Well-Being, school resources on PISA achievements, teacher learning performance sources on PISA achievements, Student Well-Being on PISA achievements and educational assistance on PISA achievements. Decision-making has a direct influence if the p-value is <0.05, then H0 is accepted or there is a direct influence, if the p-value is >0.05, then H0 is rejected or there is no direct influence.

There is a direct influence of educational aid on school resources. Hypothesis zero in this study states H0: There is a direct influence of education assistance policies on school resources. The results of the calculation show that if the p-value of education assistance (EKBP) on school resources (SDS) is less than 0.05, then H0 is accepted, which means that there is a direct influence of education assistance (EKBP) on school resources (SDS). Additional resources have a positive impact on math and science achievement. From a policy perspective, this shows that schools with better funding, and schools with lower student-teacher ratios, have

Table 9. Direct influence test results

Direct Hypothesis	Estimate	S.E	C.R	P	Information
There is a Direct Influence of Educational Assistance (EKBP) on School Resources (SDS)	1.180	.090	13.159	**	Positive Significant Influence
There is a Direct Influence of Educational Assistance (EKBP) on Teacher Learning Performance (PG)	.988	.078	12.747	**	Positive Significant Influence
There is a direct influence of Educational Assistance (EKBP) on Student Well-Being (KS)	1.145	.086	13.329	**	Positive Significant Influence
There is a Direct Influence of School Resources (SDS) on PISA Achievement	.275	.183	1.504	.133	Insignificant Influence
There is a Direct Influence of Teacher Learning Performance Sources (PG) on PISA Achievement	.218	.105	2.064	.039	Positive Significant Influence
There is a Direct Influence of Student Well-Being (KS) on PISA Achievement	.962	.077	12.505	***	Positive Significant Influence

higher student achievement than schools with lower levels of resources (Steele et al. 2007).

There is a direct influence of educational assistance on teachers' learning performance. The null hypothesis in this study states H0: There is a direct influence of the teacher's learning performance education assistance policy. The calculation results show that if the p-value of educational assistance (EKBP) on teacher learning performance (PG) is less than 0.05, then H0 is accepted, which means that there is a direct influence of educational assistance (EKBP) on teacher learning performance (PG). Considering the strong relationship between teacher quality and student achievement and learning (Barnes 2021). Educational assistance or scholarships can improve teachers' knowledge and skills in developing talents and developing professionalism in teacher learning (Pan, Wiens, and Moyal 2023).

There is a direct influence of educational aid on Student Well-Being. The null hypothesis in this study states H0: There is a direct influence of educational aid policies on Student Well-Being. The calculation results show that if the p-value of educational assistance (EKBP) on Student Well-Being (KS) is less than 0.05, then H0 is accepted, which means that there is a direct influence of educational assistance (EKBP) on Student Well-Being (KS). The results of this policy have a positive influence on the overall psychological and emotional well-being of disadvantaged children (Kim et al. 2021). Students who come from socioeconomically disadvantaged families often have inadequate academic skills due to less supportive learning conditions in their home environment, so they can fall behind at the next level of education (Kim et al. 2021).

There is no direct influence of school resources on PISA achievement. The null hypothesis in this study states H0: There is a direct influence of school resources on PISA achievement. The results of the calculation showed that the p-value of school resources (SDS) on PISA achievement was 0.133 which means more than 0.05 then H0 was rejected

which means there was no direct influence of school resources (SDS) on PISA achievement. Lack of material resources and the negative impact of the relationship with student performance. Linear hierarchical models of reading and math test scores show a significant negative association between material resource constraints rather than human resource constraints (Trinidad 2020). Shows that in high-achieving education systems, resources tend to be distributed more evenly to socioeconomically disadvantaged schools (OECD 2016).

There is a direct influence of the source of teacher learning performance on PISA achievement. The null hypothesis in this study states H0: There is a direct influence of teacher learning on PISA achievement. The results of the calculation show that if the p-value of the source of teacher learning performance (PG) on the achievement of PISA is less than 0.05, then H0 is accepted, which means that there is a direct influence of the source of teacher learning performance (PG) on the achievement of PISA. PISA results also show a positive relationship between increased school responsibility to choose teachers and improved student performance in science, reading, and mathematics (OECD 2018). Teachers will provide more support to underperforming students and put more pressure on them to excel (OECD 2005).

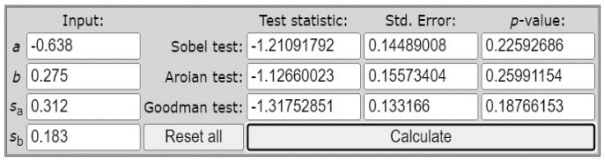
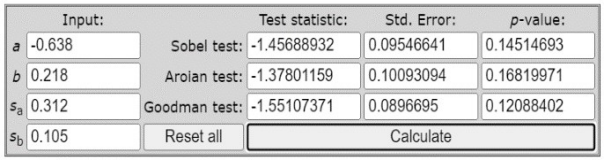
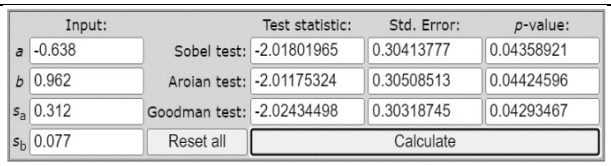
There is a direct influence on Student Well-Being on PISA achievement. Hypothesis zero in this study states H0: There is a direct influence of Student Well-Being on PISA achievement. The results of the calculation show that if the p-value of Student Well-Being (KS) on PISA achievement is less than 0.05, then H0 is accepted, which means that there is a direct influence of Student Well-Being (KS) on PISA achievement. The results of the study show that Student Well-Being has a significant effect on PISA (Govorova et al. 2020a, 2020b). Improving discipline, limiting bullying, and test-related anxiety may have a positive impact on students' life satisfaction, but the results suggest that individual and family factors, which are typically outside of educational policy, play a much more important role in PISA (Jakubowski and Gajderowicz 2020).

There is a direct influence of educational aid on PISA achievement. The zero hypothesis in this study states H0: There is a direct influence of education assistance policies on PISA achievement. The results of the calculation show that if the p-value of Education Assistance (EKBP) on PISA achievement is less than 0.05, then H0 is accepted, which means that there is a direct influence of education assistance (EKBP) on PISA achievement. PISA also shows differences in the focus of education budgets among participating countries. From a policy perspective, this shows that schools with better funding, and schools with lower student-teacher ratios, have higher student achievement in ceteris paribus than schools with lower levels of resources (Steele et al. 2007). Unequal educational opportunities for children from different social backgrounds are a major determining factor of educational assistance. Equity through policies aimed at equality of educational outcomes (Lergetporer et al. 2020).

How Much School Resources, Teacher Learning, Student Well-Being Affect PISA Achievement

The indirect influence calculates the indirect influence of the Education Assistance Policy on PISA through school resources, the education assistance policy on PISA through teacher learning performance, and the education assistance policy on PISA through Student Well-Being. Calculating the indirect influence uses the Sobel formula. The results of the indirect influence test calculation are seen in Table 10. Decision making is if the value is > of 1.96 or the p-value < 0.05 then H0 is rejected, if vice versa then H0 is accepted.

Table 10. Indirect influence test results

Indirect hypothesis	Output	Information
There is an indirect influence of the Education Assistance Policy (EKBP) on PISA through School Resources (SDS)		Insignificant Influence (SDS does not significantly play a mediating role in the influence of EKBP on PISA)
There is an Indirect Influence of the Education Assistance Policy (EKBP) on PISA through Teacher Learning Performance (PG)		Insignificant Influence (PG does not significantly play a mediating role in the influence of EKBP on PISA)
There is an indirect influence of the Education Assistance Policy (EKBP) on PISA through Student Well-Being (KS)		Significant negative influence (significant KS plays a mediating role in the influence of EKBP on PISA)

Educational aid policies do not affect PISA through school resources. The null hypothesis in this study states H0: There is an indirect influence of the Education Assistance Policy (EKBP) on PISA through School Resources (SDS). The calculation results show that if the test score of -1.21091792 < from 1.96 or the p-value of 0.22592686 > from 0.05 then H0 is rejected, which means that the education assistance policy (EKBP) does not affect PISA through school resources (SDS). From a policy perspective, it is shown that schools with better funding, and schools with lower student-teacher ratios, have higher student achievement than schools with lower levels of resources (Steele et al. 2007). However, ineffective and efficient use of school resources will not improve students' academic achievement (Tahira, Kiani, and Dahar 2016).

Education assistance policies do not affect PISA through teacher learning performance. Hypothesis zero in this study states H0: There is an indirect influence of the Education Assistance Policy (EKBP) on PISA through Teacher Learning Performance (PG). The calculation results show that if the test score is -1.45688932 < from 1.96 or the p-value is 0.14514693 > from 0.05, then H0 is rejected, which means that the education assistance policy (EKBP) does not affect PISA through teacher learning performance (PG). Teacher-related policies include the process of "recruitment, assignment, compensation, evaluation, promotion, and retention" (OECD 2018). The country's policy framework treats evaluation as accountability and skills development (Liebowitz 2021). Teacher injustice, teacher behavior, and lack of education staff hurt PISA. Therefore, policymakers must focus especially on policies that increase equity and improve teacher competence (Kalkan, Altun, and Atar 2020).

Educational aid policies affect PISA through Student Well-Being. Hypothesis zero in this study states H0: There is an indirect influence of the Education Assistance Policy (EKBP) on PISA through Student Well-Being (KS). The calculation results show that if the test score is -

2.01801965 > from 1.96 or the p-value is 0.04358921< from 0.05 then H0 is accepted, which means that the education assistance policy (EKBP) affects PISA through Student Well-Being (KS). Educational aid policies can affect the condition of Student Well-being by helping them to overcome financial limitations and gain better access to education. Educational assistance can be in the form of scholarships, tuition assistance, or other education financing programs. The results of the study show that Student Well-Being has a significant effect on PISA (Govorova et al. 2020b). The results of this policy have a positive influence on the overall psychological and emotional well-being of disadvantaged children (Kim et al. 2021).

The simultaneous effect on the SEM model was reviewed through Goodness of Fit (GoF). The goodness of Fit is obtained from the square root of the average communalities index multiplied by the root of the average value of R-Square. The GoF value ranges from 0 to 1 with interpretations of 0-0.25 (small GoF), 0.25-0.36 (moderate GoF), and >0.36 (large GoF). The results of the calculation can be seen in Table 8.

The 8th hypothesis states that there is a direct simultaneous influence of school resources, teacher learning, and Student Well-Being on PISA Achievement. Given that SEM analysis is a combination of regression and path analysis, SEM simultaneous testing is sufficient with GOF as a substitute for F-test in regression and path analysis. If the results of the GOF test in the SEM have fitted, then automatically (implicitly) the simultaneous/structural model has fitted. Thus, SEM analysis does not require hypothesis testing together or simultaneously with the F test because it has been replaced by the GOF test. In the test results, the model has met the RMSEA assumption which means it has passed the GOF assumption. Therefore, H0 is accepted and there is a direct simultaneous influence of school resources, teacher learning, and Student Well-Being on PISA Achievement.

There is a direct simultaneous influence of school resources, teacher learning, and Student Well-Being on PISA achievement. The null hypothesis in this study states H0: There is a direct simultaneous influence of school resources, teacher learning, and Student Well-Being on PISA Achievement. The calculation results show that the model has met the RMSEA assumption, which means it has passed the GOF assumption. Therefore, H0 is accepted and there is a direct simultaneous influence of school resources, teacher learning, and Student Well-Being on PISA Achievement. The results of the study show that Student Well-Being has a significant effect on PISA (Govorova et al. 2020b). PISA results also show a positive relationship between increased school responsibility to choose teachers and improved student performance in science, reading, and mathematics (OECD 2018). Student achievement is better with the number of resources that schools have, PISA achievement gap can be exacerbated due to differences in school resources between schools (Minseok and Lee 2022).

Meanwhile, the 12th hypothesis states that there is an indirect influence of education assistance policies on PISA through school resources, teacher learning, and Student Well-Being. Given that SEM analysis is a combination of regression and path analysis, SEM simultaneous testing is sufficient with GOF as a substitute for F-test in regression and path analysis. If the results of the GOF test in the SEM have fitted, then automatically (implicitly) the simultaneous/structural model has fitted. Thus, SEM analysis does not require hypothesis testing together or simultaneously with the F test because it has been replaced by the GOF test. In the test results, the model has met the RMSEA assumption which means it has passed the GOF assumption. Therefore, H0 is accepted and there is an indirect influence of education assistance policies on PISA through school resources, teacher learning, and Student Well-Being.

There is an indirect influence of education assistance policies on PISA through school resources, teacher learning, and Student Well-Being. The zero hypothesis in this study states H0: There is an indirect influence of education assistance policies on PISA through school resources, teacher learning, and Student Well-Being. The calculation results show that the model has met the RMSEA assumption, which means it has passed the GOF assumption. Therefore, H0 is accepted and there is an indirect influence of educational assistance policies on PISA through school resources, teacher learning, and Student Well-Being. Educational aid programs and scholarships are positively correlated with the achievement of reading and math scores. Involvement in scholarship programs has additional effects beyond building assets, but it also has the potential to improve children's math and reading scores (Elliott et al. 2019). The relationship between education assistance policies and PISA achievement can be seen from factors that affect PISA outcomes, such as the structural characteristics of the school system, the socioeconomic status of students, the socioeconomic composition of the school, school resources, the school/teaching process, and the school climate/learning environment (OECD 2005).

■ CONCLUSION

The researcher made conclusions based on the exposure of the results and analysis of the data obtained after the data collection process. Based on the results of the research and discussion that have been described in the previous chapter, there are several conclusions: (1) There is a direct influence of educational assistance on school resources; (2) There is a direct influence of educational assistance on teachers' learning performance; (3) There is a direct influence of educational assistance on Student Well-Being; (4) There is no direct influence of school resources on PISA achievement; (5) There is a direct influence of the source of teacher learning performance on PISA achievement; (6) There is a direct influence on Student Well-Being on PISA achievement; (7) There is a direct influence of educational assistance on PISA achievement; (8) There is a direct simultaneous influence of school resources, teacher learning and Student Well-Being on PISA Achievement; (9) Educational assistance policies have no effect on PISA through school resources; (10) Educational assistance policies have no effect on PISA through teacher learning performance; (11) Educational assistance policies affect PISA through Student Well-Being; (12) There is an indirect influence of education assistance policies on PISA through school resources, teacher learning and Student Well-Being.

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