The Effect of Teachers' Self-Efficacy on Inclusive Education Services for Special Needs Children in Inclusive Schools

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Abstract: This study aims to understand the Effect of Teachers' Self-Efficacy on Inclusive Education Services for Special Needs Children in Inclusive Schools. The variables studied were Class Teachers' Self-Efficacy as an independent variable (X) and teacher attitudes toward inclusive education services as a dependent variable (Y). The method used is quantitative research, with cluster sampling technique. This research will involve 12 inclusive elementary schools representing the western, eastern, northern, southern and central parts of Surabaya. Participants of this study were teachers from inclusive public elementary school in Surabaya (N = 125). The instrument used to measure teacher efficacy is Teacher Inclusive Practice Efficacy for (TEIP), Multidimensional Attitudestoward Inclusive Education Scale (MATIES) was used to measure teacher attitudes toward inclusive education service. Processing methods of data analysis in hypothesis testing using regression analysis. The data analysis processing method in hypothesis testing uses regression analysis to test relationships between the independent variable (teacher self-efficacy) and the dependent variable (Special Needs Children service attitudes at school). There is a role of teacher efficacy on teacher attitudes towards inclusive education services. The results of the research show that there is an influence between Class Teacher Self-Efficacy on Special Education Services in Inclusive Schools as indicated by the t-count > t-table (4.016 > 1.657) and by the probability value (p $<\alpha$; 0.000 < 0.05), with an influence contribution of 0.16

Keywords: teacher, self-eficacy, inclusive education

INTRODUCTION

Education is the right of every Indonesian citizen. As this has been regulated in Law No. 20 of 2003 concerning the National Education System CHAPTER IV Part One Article 5 Paragraph 1. This shows that education does not discriminate between social and economic status, gender, ethnicity, religion, race and is no exception for citizens with special needs. For citizens with special

needs it is also mentioned in Law No. 20 of 2003 CHAPTER IV Part One Article 5 Paragraph 2. Inclusive education is an education delivery system that provides opportunities for all students who have disabilities and have potential intelligence and/or special talents to participate in education or learning in an educational environment together with students in general (Regulation of the Minister of National Education of the Republic of Indonesia Number 70 of 2009 article 1). These educational services are expected to increase interaction between students in general and students with special needs, realize equal rights for Special Needs Children, and overcome various forms of discriminatory treatment of Special Needs Children so that they can be more openly accepted by society.

In Indonesia, as of 2021, there are already 17,134 inclusive schools that have been established (Directorate of Primary Schools, Ministry of Education and Culture). The increasing number of inclusive primary schools does not guarantee an increase in quality, as the implementation of inclusive education is not easy. Various preparations must be made so that its implementation can run according to the appropriate mechanism. Based on research conducted by Tarnoto (2016) and Muzdalifah (2017), the problems often experienced by regular teachers are a lack of competence in handling special needs children, a lack of understanding of special needs children, educational backgrounds that are not suitable, a lack of patience in handling special needs children, a lack of knowledge about classroom management in inclusive schools, an imbalance ratio of special needs students and teachers, and other obstacles in implementing inclusive education in primary schools.

Without a positive attitude towards special needs children, it is impossible for them to receive appropriate education (Unesco Bangkok, 2023). Although special needs children are often more difficult to handle than regular children and may trigger negative emotions in teachers, it is hoped that these challenges will not lead to negative attitudes towards inclusive education services that involve special needs children learning in regular classrooms.

If teachers are not confident in their ability to handle conditions in the classroom, it cannot be denied that the students' learning process in inclusive schools will not be served optimally. Similarly, Bandura (1977) also said that self-efficacy is important for teachers who teach in inclusive classes to develop. Teacher self-efficacy, as mentioned by Bandura, can influence how teachers organize the implementation of teaching in the classroom.

Teachers with high self-efficacy are more likely to take initiative, try innovative approaches, and are better prepared to adapt their teaching methods according to the needs of inclusive students because they play a role in organizing teaching implementation in the classroom (Loreman, Sharma & Forlin, 2013). Teachers who have a high level of self-efficacy tend to be more confident in handling various conditions in inclusive classrooms. Teachers will be better able to overcome challenges and manage the diversity of students with various needs.

Self-efficacy is the belief that one can master a situation and produce various positive outcomes (King, 2012). According to King, self-efficacy helps people in unsatisfying situations by

encouraging them to believe that they can be strong. A teacher needs to have high self-efficacy because it greatly affects the quality of student learning (Santrock, 2007). In other words, in the teaching and learning process, a teacher must be confident in their abilities first to provide quality learning for their students.

Based on what the author has discussed about the self-efficacy of teachers that plays a role in the attitude of teachers towards inclusive education, the author conduct research on the influence of the self-efficacy of class teachers on services for children with disabilities in inclusive schools.

METHODS

Design and Procedures

The research on the Effect of Class Teachers' Self-Efficacy on Inclusive Education Services for Special Needs Children in Inclusive Schools will analyze the relationship between teacher efficacy and inclusive education services for children with disabilities. Therefore, the researcher will use a quantitative research method. This method is chosen because it can be used to examine and analyze the relationship between teacher self-efficacy and the education services provided to children with special needs.

According to Creswell (2012), the quantitative survey research method is a research procedure that aims to collect data from a group or the entire population of humans to explain attitudes, opinions, behavior, or characteristics of those human beings. Data in this type of research is collected quantitatively, and it can come in the form of questionnaires and interviews. The data obtained is analyzed statistically to show the trend of responses given by the target population about the phenomenon being discussed.

The advantage of quantitative methods is that measurement results will help to observe the fundamental relationship between empirical observers and quantitative data results (Sugiyono, 2007: 31). The framework of quantitative research is logical with the aim of verifying hypotheses to test the truth of statements factually (Priadana and Sunarsi, 202).

Population and Sample

The population of this research consists of class teachers and subject teachers in public inclusive elementary schools in Surabaya city. The sampling technique used in this research is probability sampling, specifically cluster sampling. Cluster sampling is used because Surabaya city is a vast area, and the clusters are chosen based on representative samples from each district in Surabaya city. This research will involve 12 inclusive public elementary schools representing the western, eastern, northern, southern, and central parts of Surabaya city. The research subjects consist of 3 representative schools from West Surabaya, 3 representative schools from South Surabaya, 2 representative schools from East Surabaya, 2 representative schools from Central Surabaya, and 2 representative schools from North Surabaya. The selection of the number of schools is based on

considerations of the number distribution data of inclusive schools in Surabaya. Due to the large number of research subjects, a quantitative method is considered to be the most effective way to collect complete data within an efficient time frame.

Data collection procedures

One step in the quantitative research procedure is to develop research instruments and test them (Priadana and Sunarsi, 2021). In this research, the researcher adapts an instrument that has been previously used and does not go through the stage of instrument development and testing because the instrument used has been tested in previous studies.

Data collection in this research is conducted using a questionnaire as an instrument. The distribution of questionnaires is carried out by directly approaching the selected schools for the research sample. In this research, two instruments are used: the Multidimensional Attitude toward Inclusive Education Scale (MATIES) research instrument developed by Mahat (2008) and the Teacher Efficacy for Inclusive Practice (TEIP) designed by Sharma, Loreman & Forlin (2011).

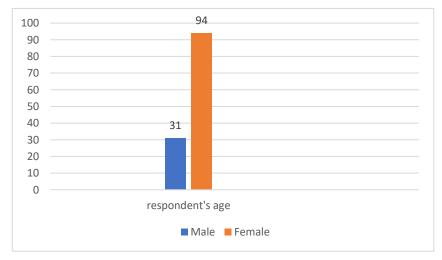
The research questionnaire contains 36 questions consisting of 18 questions on the MATIES scale and 18 questions on the TEIP scale. The questions in this questionnaire are intended to obtain data related to the efficacy of class teachers towards the services for special needs children in inclusive schools.

Data analysis technique

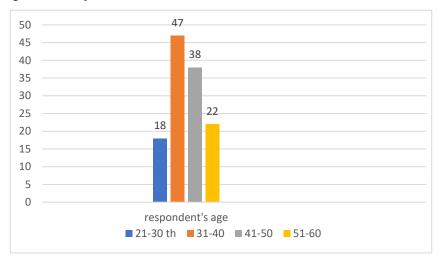
The data processing and analysis are conducted using statistical formulas with the following steps: data tabulation, categorization of teacher attitudes towards inclusive education scores, categorization of teacher self-efficacy scores, product-moment correlation test, and linear regression analysis with one predictor.

RESULTS

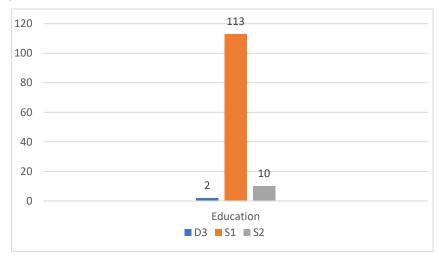
Based on the description of the research subjects, it is known that the respondents in this study were predominantly female, with a total of 94 research subjects (75.2%), while male subjects accounted for 31 research subjects (25.5%).



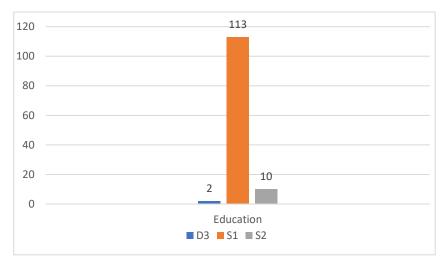
Then based on age, the research subjects were predominantly teachers in the age range of 31-40 years, with a total of 47 people (37.6%), followed by subjects in the age range of 41-50 years, with a total of 38 people (30.4%), 22 people in the age range of 51-60 years (17.6%), and 18 people in the age range of 21-30 years (14.4%).



Meanwhile, the description of the subjects based on their highest education level shows that the research subjects are predominantly teachers with a Bachelor's degree (S-1), totaling 113 people (90.4%). There is 2 person (1.6%) with a Diploma 3 (D-3) degree, and 10 people (8%) with a Master's degree (S-2).



The categorization calculation of attitude scores towards inclusive education shows that 59 subjects (84.29%) have a positive attitude towards inclusive education, while the subjects with a negative attitude towards inclusive education are fewer, totaling 11 people (15.71%).



Meanwhile, based on the categorization calculation of teacher efficacy scores, it is found that subjects with high self-efficacy dominate, totaling 118 people (94.4%), while those with low self-efficacy are only 7 people (8.0%). It can be said that the research respondents are dominated by teachers who have a positive attitude towards inclusive education and most of them also have high self-efficacy.

The product moment correlation indicates a correlation value of 0.340 between the teacher efficacy variable and the teacher's attitude towards inclusive education service. The significance value (p) is 0.000. Here are the results of the *product moment* correlation calculation:

Correlations

		Efikasi	SikapLayanan
Efikasi	Pearson Correlation	1	.340**
	Sig. (2-tailed)		.000
	N	125	125
SikapLayanan	Pearson Correlation	.340**	1
	Sig. (2-tailed)	.000	
	N	125	125

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Based on the above image, the value of sig. (2-tailed) is 0.000, which is smaller than 0.05 according to the rules. This means that there is a positive and significant correlation between the self-efficacy of the class teacher and the teacher's attitude towards education services for students with disabilities in Surabaya's Inclusive schools.

The constant value for the teacher efficacy variable and the teacher's attitude towards inclusive education services is 39.632, and the regression coefficient is 0.418. Here are the results of the regression analysis coefficient calculation:

Coefficients^a

		Unstandardize	d Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	39.632	7.666		5.170	.000
	SikapLayanan	.418	.104	.340	4.016	.000

a. Dependent Variable: Efikasi

Based on the data above, the regression equation can be determined as follows:

$$Y = a + bX Y = 39.632 + 0.418X.$$

The teacher's attitude towards inclusive education = 36.655 + 0.510 Teacher Efficacy.

Based on the equation, it can be inferred that if the teacher's attitude towards inclusive education (Y) increases by one unit, then the teacher efficacy variable (X) will also increase by 0.418. Additionally, the direction of the influence is positive, meaning that the changes in the teacher's attitude towards inclusive education are directly proportional to changes in the teacher efficacy variable. It can be concluded that if the teacher's efficacy is high, then their attitude towards inclusive education will also be positive.

The Anova test shows a p=0.000, which is smaller than the $\alpha=0.05$. Based on the testing criteria, Ha is accepted and Ho is rejected if the p-value is less than 0.05, while Ha is rejected and Ho is accepted if the p-value is greater than 0.05. The following is the result of the Anova test for regression analysis:

ANOVA ^a						
		Sum of				
Model		Squares	df	Mean Square	F	Sig.
1	Regression	489.406	1	489.406	16.125	.000 ^b
	Residual	3733.106	123	30.355		
	Total	4222.512	124			

a. Dependent Variable: Efikasi

b. Predictors: (Constant), SikapLayanan

Based on the table above, it can be concluded that Ha (alternative hypothesis) is accepted, and Ho (null hypothesis) is rejected, meaning that there is a role of teacher efficacy in the teacher's attitude towards inclusive education services.

The contribution of the teacher efficacy variable to the teacher's attitude towards inclusive education (*Adjusted R Square*) is 0.116 (16%). This means that teacher efficacy affects the teacher's attitude towards inclusive education services by 16%. The calculation result can be seen in the following table:

Model Summary					
			Adjusted R	Std. Error of	
Model	R	R Square	Square	the Estimate	
1	.340a	.116	.109	5.50912	

a. Predictors: (Constant), SikapLayanan

The results of regression analysis indicate that there is an influence of teacher efficacy on the teacher's attitude towards inclusive education services. In this study, teacher efficacy contributes to the teacher's attitude towards inclusive education services by 16%.

DISCUSSION

In this research, teachers' self-efficacy contributes to 16% of the influence on teachers' attitudes towards inclusive education. This study is in line with research conducted by Vaz, et all, (2015) which states that one of the predictors of teachers' attitudes towards inclusive education is teachers' self-efficacy in teaching. The factor of teachers' self-efficacy in this study contributes to 16% of the influence on teachers' attitudes towards inclusive education, meaning that 84% is influenced by other factors. The current research findings also confirm that teachers' self-efficacy can be considered a multidimensional concept. This finding is consistent with the results of several other studies (Chan, 2008a, 2008b; Klassen et al., 2009; Skaalvik & Skaalvik, 2007; Tschannen-Moran & Woolfolk Hoy, 2001). Teachers' beliefs or self-efficacy in education are one of the factors that influence inclusive education services. This is in line with other studies that state that teachers' self-efficacy significantly contributes to teachers' attitudes towards inclusive education (Dewi,et all, 2020).

Based on the results of statistical analysis, it is known that the direction of the relationship between variables shows a positive direction, and the results of categorizing teachers' self-efficacy show that more teachers with high self-efficacy are dominated by respondents who have a positive attitude towards inclusive education. This indicates that teachers' self-efficacy is one of the factors that can predict teachers' attitudes towards inclusive education services. The results of this study show that as many as 113 people (90.4%) have a positive attitude towards inclusive education, while 12 people (9.6%) have a negative attitude towards inclusive education. This indicates that more teachers have a

positive attitude towards inclusive education, meaning that teachers will show more accepting behavior towards inclusive education (Sharma, Loreman & Forlin, 2011).

Furthermore, based on the results of categorizing teachers' self-efficacy, it can be seen that there are 118 respondents (94.4%), who belong to the category of high self-efficacy, while there are 7 respondents (8.0%) in the low self-efficacy category. This indicates that more teachers have high self-efficacy in implementing inclusive education. In other words, the majority of teachers feel confident in their ability to use inclusive teaching strategies effectively, feel confident in working with parents, other professionals, and colleagues, and feel confident in preventing and managing disruptive student behavior in the classroom. According to Gibson & Dembo (1984), teachers who have high self-efficacy will be able to use better teaching strategies (Gibson & Dembo, 1984).

This study adds a new element to most previous studies on teachers' self-efficacy because the data was collected by an instrument that measures efficacy towards inclusive education services. Although teachers working in inclusive and less inclusive environments require similar competencies, successful implementation of inclusive education may require a special emphasis on certain sub-areas of teachers' self-efficacy. This study is in line with inclusive education literature and some previous studies (e.g. Savolainen, Engelbrecth, Nel, & Malinen, 2011) in suggesting that collaboration may have a special interest in making attitudes towards inclusion more desirable. Teachers' efficacy has an impact on job engagement, as mentioned, the higher the self-efficacy, the higher the job engagement. Similarly, the lower the self-efficacy, the lower the job engagement (Tanurezal & Tumanggor, 2020). Thus, teacher efficacy not only has a positive impact on educational services in inclusive schools but also has an impact on the school organization. Teachers with high job engagement certainly have high responsibility towards the school institution. This will not only have an impact on students but will also have an impact on the progress of the school institution.

Improving teacher efficacy is one of the important things that needs to be done in preparing for and implementing inclusive education services. There are four aspects that can enhance teachers' self-efficacy in the implementation of inclusive education, namely: 1) School culture, 2) Teacher behavior/attitude, 3) Teacher competency, 4) Participation and collaboration. Cooperation between teachers and all stakeholders, including the community, can continuously build teacher self-efficacy (Minsih, Faufik & Tadzkiroh. 2021). The research results showing that teacher efficacy has a positive impact on inclusive services in schools can be used as the basis for implementing improvements in the four aspects that drive teacher efficacy, such as fostering a disability-friendly school culture, conducting socialization efforts to improve teachers' disability-friendly attitudes, providing inclusive training for teachers, and participating in inclusion-related events held locally and nationally. Thus, it is hoped that inclusive education services can continue to evolve, supported by an increasing teacher efficacy towards inclusive education services.

CONCLUSION

The role of teacher self-efficacy in Services for Children with Special Needs in Inclusive Schools is important because teacher confidence in their own abilities will have an impact on teaching, education and student development. By having self-efficacy, teachers can play a good role as mentors who accompany every activity carried out by students, and act as facilitators, namely teachers can monitor student development according to their abilities. With the confidence that the teacher has regarding his abilities, he can organize and carry out the actions necessary to complete the tasks, and the teacher is even confident that he can succeed through challenges or even difficult tasks.

Based on the results of the research "The Effect of Class Teachers' Self-Efficacy on Inclusive Education Services for Special Needs Children in Inclusive Schools" conducted on 12 State Elementary Schools in Surabaya, East Java, it is known that class teachers' self-efficacy in SDN in Surabaya affects teachers' attitudes towards inclusive education services by 16%. The conclusion of this research is that teachers in inclusive elementary schools have challenges and problems in overcoming student differences. This can be solved by having high self-efficacy.

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