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# The Influence of Teacher Self-Efficacy in Teaching towards Teacher Attitude in Inclusive Preschool

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Abstract—Education is an essential right for all citizens without any exception, including for children with special needs. This policy is known as 'inclusive education'. This study aimed to examine the influence of teacher self-efficacy in teaching on their attitudes towards inclusive education. The research involved 201 teachers teaching in both inclusive public and private preschools in Jabodetabek and some on the island of Sumatra. Two instruments were used for data collection: Multidimensional Attitudes towards Inclusive Educational Scale - Indonesian Version (MATIES-IV) adapted by Sihombing (2014) and the teacher self-efficacy is measured using Teacher Efficacy for Inclusive Practice (TEIP) adapted by Kurniawati (2017). Research data was analyzed through Confirmatory Factor Analysis (CFA). Furthermore, descriptive statistics, mean and standard deviation, t-test, ANOVA and regression analysis were conducted using a step-by-step method. The results indicated that teacher self-efficacy in collaboration towards IE significantly influence the teacher's attitude in the affective aspects of attitudes.

Keywords—inclusive preschool; teachers' attitude; teacher self-efficacy.

# I. INTRODUCTION

[1] states that students with special needs, namely students who have difficulty in following the learning process because of physical, emotional, mental, social abnormalities, or have special intelligence and talent potential, have the opportunity to take part in regular school education. This policy is called Inclusive Education (IE). As a new system for education in Indonesia, the implementation of inclusive education is not easy. There are various challenges in the implementation. According to [2], one of the challenges in inclusive education comes from teachers who teach in schools. The success and quality of inclusive education cannot be separated from the role of teachers in supporting inclusive education. Factors that influence the success of inclusive education are the attitudes of teachers towards inclusive education [3].

Various studies agree that teachers are the critical factor in the successive of IEs because they interact and spend more time with regular students and students with Special Educational Needs (SENs) in the classroom [4]–[8]. The

teacher's position as a catalyst to make changes in the direction of education, so that his/her positive attitude towards IE becomes a prerequisite for the success of the IE. The teacher is responsible for meeting the needs of students in an increasingly diverse classroom with the application of IE [9]. [10] said that the most critical aspect of teachers is his/her attitude. It is because teachers' attitude towards self, work, students, and others, will affect productivity and acceptance or even rejection of the implementation of IE.

[11] defines teachers' attitude towards inclusive schools as a tendency to respond to cognitively, affectively, and conative to inclusive education. Furthermore, Mahat stated that attitudes consist of three dimensions, first cognitive dimensions, namely evaluation of individual opinions (sure/unsure) of something. The second dimension is affective, namely the emotional response (likes/dislikes) to an object. Finally, the behavioral dimension, that is, the tendency of behavior in the form of actions or responses that can be observed towards an object. According to [12], several factors influence teacher attitudes towards inclusive education, including demographic factors such as gender, age, teaching/training experience, and contact with individuals with special needs.

There is a correlation between age, sex and attitudes towards inclusive education. Leyser et al. [13] found that younger teachers had a more positive attitude than older teachers. However, in the reference that includes the research, it is not explained what the age limit is. Meanwhile, [14] found that gender is related to attitudes towards inclusive education. Male teachers were found to have a more positive view of inclusive education [14]. Teachers who have a positive attitude towards the integration of students with special needs are identified as having more training and teaching experience with students with special needs [13], This is also supported by [15] who found that the number of training influenced the attitude of classroom teachers towards inclusive education, especially specific training related to the needs of students who were taught. In other words, the more specific the training material received by the teacher related to



the needs of students, the more positive the teacher's attitude towards inclusive education [15].

In line with that, [16] found that classroom teachers or principals who had experience in teaching or interacting with children with special needs in elementary settings had a more positive attitude towards inclusive education than those who did not. This fact is inversely proportional to the general teaching experience that teachers have. [13] found that teachers with less experience had more positive attitudes compared to more experienced teachers. Another factor that also influences teachers' attitudes towards inclusive education is their previous experience in dealing with children with special needs. It was found that someone who previously had experience/contact with SENs had a more positive view of inclusion compared to people who did not have contact with SENs [17].

[18] stated that teacher attitudes towards inclusive education were also influenced by self-efficacy. Several previous studies regarding teacher efficacy in elementary school settings (SD) showed that teacher efficacy from a teacher will influence how teachers implement various teaching strategies and attitudes towards inclusive education [18] This is also supported by research conducted by [19] which states that teacher behavior in teaching in the classroom will be influenced by the efficacy of the teacher in question. This situation will have an impact on how the teacher perceives the effectiveness of the teaching activity does in class. Not only that, other studies conducted by Emmer and Hickman [20], show that teachers with high self-efficacy will be more open to trying new methods to find the needs of the students. So, it can be understood that when the teacher has high efficacy, the teacher will also have an impact on the success and achievement of students in the class.

[21] found that teacher self-efficacy in teaching was the best predictor of teacher attitudes towards inclusive education. In the context of the world of education, teacher self-efficacy relates to how much effort is given by the teacher in teaching and the persistence shown in facing challenging tasks [22]. Moreover, in line with the development of the concept of inclusive education, the concept of self-efficacy of teachers has also developed. Therefore, experts develop the concept of self-efficacy under the context of inclusive education [23]. According to [24] the teacher self-efficacy in inclusive education is a belief held by the teacher relating to one's ability to modify instructions to suit students' needs, prevent and control disruptive student behavior in the classroom, and work with colleagues or parents to be able to provide learning to all students. Self-efficacy of teachers in inclusive schools consists of three dimensions, namely, first, efficacy to use inclusive instruction, related to how the teacher sees his ability to use learning instructions; second, efficacy in collaboration, is related to the teacher's view of his/her ability to cooperate with parents, fellow teachers and experts; and finally, the efficacy in managing behavior is related to how the teacher sees his ability to deal with inappropriate student behavior [25]

This study aims to determine the effect of teachers self-efficacy on the attitudes of teachers in inclusive preschool. Education in early childhood (TK) has a vital role in the child's development process at the next stage. This stage is considered as the golden period for children to stimulate and develop the potential of children. Indonesian Ministry of National Education Regulation No. 58 of 2009 states that early childhood education is one form of education which focuses on laying the foundation of growth and five areas of child development, namely physical development (fine and gross motor coordination), moral and religious development, intelligence/cognitive, social-emotional, language and communication.

Meanwhile, [26] found that the problems of early childhood education teachers in Indonesia include the difficulty of early detection of children's conditions and also the difficulty in communicating with parents of students. Also, teachers do not understand how to handle students with special needs and the difficulties for students with special needs to continue to the next level of education. Further, [26] found that the teacher had a lack of self-efficacy to face the implementation of inclusive preschool. Research that discusses the relationship and influence of teacher attitudes and self-efficacy variables on inclusive preschool settings has not yet been done in Indonesia. So far research with similar variables has been carried out at the level of elementary and secondary education. Although there are studies in preschool settings, but these studies do not examine the two attitudes and self-efficacy variables of the teacher simultaneously. Previous studies in a preschool setting focused more on how the implementation of inclusive education at the level of early education is.

Based on the description of previous research findings regarding self-efficacy and teacher attitudes towards inclusive education, especially in preschool settings, this study hypothesizes that there is influence from teacher self-efficacy in teaching on the attitudes of teachers in inclusive preschool. Thus, with the various dynamics of the variables above, the researchers tried to look further at the influence of teacher self-efficacy in teaching on teacher attitudes in Inclusive Preschool.

Based on the explanation above, this study examines how teacher attitudes towards IE influence teacher self-efficacy conducted in preschool inclusive settings. The hypothesis of this study is:

- 1. There is a significant influence between teacher selfefficacy and teacher attitudes towards inclusive education for preschool teachers in inclusive schools.
- 2. There is a significant influence between each aspect of teacher self-efficacy (efficacy to use inclusive instruction, efficacy in managing behavior, and efficacy in collaboration) and each aspect of teacher attitudes towards inclusive education (cognitive, affective, and behavioral) for preschool teachers in inclusive schools



#### II. METHOD

# A. Respondents, Procedure, and Instrument

This study used a quantitative research method with 201 Inclusive Preschool teachers in Jakarta, Bogor, Depok, Tangerang, Bekasi and some on the island of Sumatra acting as participants. This city was chosen due to the feasibility of access to have respondents in this study. All respondents were gathered by purposive sampling. The respondents were asked to complete a questionnaire which contained an attitude scale toward inclusive education and teacher self-efficacy scale through google form and questionnaire booklets. This study took place for two months during February – April 2019.

The attitudes of preschool teachers toward IE were measured using a Multidimensional Attitudes questionnaire towards Inclusive Education Scale Indonesian Version (MATIES-IV) by [27] adapted from the same scale by [11]. The MATIES-IV questionnaire has good validity coefficient, between 0.26 - 0.80 and the reliability of the three components, with alpha values which are also good; cognitive ( $\alpha = 0.77$ ), affective ( $\alpha = 0.80$ ), behavior ( $\alpha = 0.81$ ). The scale measured the attitude towards IE, which consisted of three aspects: cognitive, affective, and behavior. This MATIES-IV questionnaire consists of 18 items representing the cognitive aspects (6 items), affective (6 items), and behavior (6 items). The scale used a six-point Likert type scale, ranged from 1 to 6 (1=strong disagreement and 6=strong agreement).

This study also uses the Teacher Efficacy for Inclusive Practice (TEIP) questionnaire to measure teacher self-efficacy in teaching in inclusive schools developed by Sharma et al. (2011) and has been adapted in Bahasa Version by Kurniawati, Rahmadani, and Febrian (2017). The TEIP questionnaire in this study has good validity coefficient and the reliability of the three components, with alpha values, are also useful namely efficacy to use inclusive instruction ( $\alpha =$ 0.912), efficacy in managing behavior ( $\alpha = 0.902$ ), and efficacy in collaboration ( $\alpha = 0.916$ ). This TEIP questionnaire consists of 18 items representing the efficacy to use inclusive instruction (7 items), efficacy in managing behavior (5 items), and efficacy in collaboration (6 items). This measuring instrument is in the form of self-report by using 4 Point Likert type scales starting from 1, which shows "Very Incompatible" to 4, which means "Very Appropriate".

Data were analyzed using multiple regression techniques to see the influence of teachers' self-efficacy in teaching towards teachers' attitudes in inclusive preschool. Results and Discussion.

# III. RESULT AND DISCUSSION

#### A. Result

TABLE I DEMOGRAPHIC DATA OF PARTICIPANTS

Demographics	N (n=201)		
Gender			
Male	28		
Female	173		
Education background			
High School	8		
Diploma	6		
Undergraduate	174		
Postgraduate	13		
Teaching experience in IE			
Less than a month	5		
1-12 months	39		
1-3 years	95		
3-5 years	41		
More than 5 years	21		
Training experience			
Yes	171		
No	30		

Descriptive methods of data demographics show that in this study, there are more female participants than male teachers. Most participants have a high educational level, and most of them had experienced with SENs trough teaching experience or interaction with SENs. Most of the participants have 1-3 years of experiences as an inclusive preschool teacher. Also, most participants have training experiences about inclusive education or SENs area.

TABLE.II TEACHER'S SELF-EFFICACY TOWARD TEACHER'S ATTITUDES

Variable	В	SE B	ß	P
Constant	49.948	3.802	-	0.000
Instruction	0.236	0.161	0.236	0.143
Man Beh	0.073	0.143	0.073	0.609
Collab	-0.309	0.130	-0.309	0.019

 $R^2 = 0.030 (p > 0.05), *p < 0.05$ 

The results of Table 2 show that teacher self-efficacy has a significant influence on teachers' attitude toward inclusive education in teacher's collaboration aspect (B= -0.039, p<0.05), of which in this case is the negative influence. Meanwhile, efficacy to use inclusive instruction (B=0.236, p>0.05) and efficacy in managing behavior (B=0.073, p>0.05) did not significantly influence the teachers' attitude toward inclusive preschool. The R (square) value of 30.0% indicates that the total proportion of the variance in teachers' attitudes can be explained by teacher self-efficacy in collaboration towards inclusive education, and this is a negative influence.



TABLE. III TEACHER'S SELF-EFFICACY TOWARD TEACHER'S COGNITIVE ATTITUDES

Variable	В	SE B	В	р
Constant	54.165	3.827	-	0.000
Instruction	0.204	0.162	0.204	0.210
Man Beh	-0.115	0.144	- 0.115	0.428
Collab	-0.172	0.131	0.172	0.191

 $R^2 = 0.016 (p > 0.05), *p < 0.05$ 

The results of Table 3 show that teacher's self-efficacy toward attitude in the cognitive aspect has no significant influence on teachers' attitude toward inclusive education, F (3,197) =1.097, p>0.05. All the component of teacher's self-efficacy (efficacy to use inclusive instruction, efficacy in collaboration and efficacy in managing behavior) are not significantly influencing teacher's cognitive attitude towards inclusive education in a preschool setting. The R (square) value of 16.0% indicates that teachers' self-efficacy can not explain the proportion of teacher's cognitive variance in teachers' attitudes toward inclusive education.

TABLE. IV TEACHER'S SELF-EFFICACY TOWARD TEACHER'S AFFECTIVE ATTITUDES

Variable	В	SE B	В	р
Constant	60.111	3.702	-	0.000
Instruction	0.175	0.157	0.175	0.266
Man Beh	0.080	0.140	0.080	0.566
Collab	0.457	0.127	0.457*	0.000

 $R^2 = 0.080 (p < 0.05), *p < 0.05$ 

The results of Table 4 show that teacher self-efficacy toward attitude has a significant effect on teacher self-efficacy. The aspects of teacher self-efficacy toward inclusive education that significantly influence teachers' attitude toward inclusive education in affective attitudes are teacher efficacy in collaboration (B = 0.457, p<0.05). Meanwhile, the aspect of teachers' efficacy to use inclusive instruction (b=0.175, p>0.05) and teacher efficacy in managing behavior (b=0.080, p>0.05) have no impact. The R (square) value of 80.0% shows that the proportion of affective attitude variance can be explained by teacher self-efficacy toward inclusive education, especially the teacher efficacy in collaboration.

TABLE.V TEACHER'S SELF-EFFICACY TOWARD TEACHER'S BEHAVIOR ATTITUDES

Variable	В	SE B	В	р
Constant	26.887	3.476	-	0.000
Instruction	0.076	0.147	0.076	0.606
Man Beh	0.205	0.131	0.205	0.120
Collab	0.182	0.119	0.182	0.129

 $R^2 = 0.189 (p > 0.05), *p < 0.05$ 

The results of Table 5 show that teacher's self-efficacy toward attitude in behavior aspect has no significant influence on teachers' attitude toward inclusive education, F (3,197)=15.27, p<0.05. All the component of a teacher's self-efficacy is not significantly influencing the teacher's attitude towards inclusive education in the preschool setting. The R (square) value of 18.9% indicates that teachers' efficacy can not explain

the proportion of teacher's behavior variance in teachers' attitudes toward inclusive education.

### A. Discussion

The results of this study indicate that self-efficacy in teachers does not produce a significant difference in scores on teacher attitudes in teaching in Inclusive Preschool in total components of the attitude. That is, there is no significant effect of teachers' self-efficacy on attitudes in teaching in Inclusive Preschool in total or in all attitude components. However, specifically, there are results of statistical calculations that show that teachers' self-efficacy in collaboration toward IE significantly influence the teacher's attitude in the affective aspects of attitudes. In other words, this would mean that efficacy in collaboration of the preschool teacher in the IE setting influences the attitudes that the preschool teacher gives to students with SENs. This finding is in line with the research conducted by Avramidis (2002), who conducted a study of the teachers' attitude towards inclusion. In this study, it was shown that the efficacy of teacher in collaboration has a significant influence on teachers' attitudes in the affective aspect. It means that the greater efficacy the teacher have in collaboration to accommodate the needs of students, the higher the positive attitudes the teacher gives to students in inclusive classes, especially in the affective aspect.

As is known, the affective aspect in the attitude variable according to [11] is the emotional response (likes/dislikes) to an object. This affective aspect shows that the teacher's response, which involves an emotional response from within oneself in looking at inclusive education, is shown through the response of likes or dislikes or happy or unhappy. It has become one of the aspects that have significantly contributed to the efficacy of teachers in teaching in inclusive education settings, including at the early age level of education, especially in the collaboration of teachers with other parties outside the school and institutions. It is estimated because early childhood requires monitoring and assistance from the people closest to them consistently and sustainably, including children with special needs.

The statement above is reinforced by the results of research conducted by [28] who found that teachers who reported a higher level of collaboration with colleagues also expressed a higher level of efficacy in general teaching and in enhancing students' social relations in comparison to teachers who reported a low level of collaboration with colleagues. Regression analyses in that research demonstrated the frequency of implementing collaboration with colleagues explained the most significant portion of the variance in teachers' sense of efficacy, while teachers' background variables accounted for only negligible amounts of variance in teachers' sense of efficacy [28].

Recently, the results of a study conducted by [29] regarding teacher efficacy and its relation to teachers' attitudes towards inclusive education, given the general agreement in the research that the most significant school-based predictor of student achievement is the quality of the teachers. Aaronson,



Barrow, & Sander, 2007; Harris & Sass, 2011 in [29], found that assumptions about the relationships between affective variables and effective, high-quality teaching must be tested rather than accepted without appropriate evidence. By combining observational and survey data, this study sought to test the hypothesis that affective variables attitude could predict teaching behaviors in inclusive classrooms as well as the teacher self-efficacy in teaching.

The absence of significant influence of teacher selfefficacy on attitudes of teacher variable in teaching as a whole or a component indicates that the teacher self-efficacy variable requires other variables to be able to consistently influence the attitudes of teachers in teaching at inclusive preschool. The variable may be a variable that not only increases teacher knowledge about children with special needs and inclusive education but also supports the implementation of inclusive teaching in schools, such as the perception variable of school support for inclusive teaching in schools. This variable has been shown to significantly influence teacher attitudes towards inclusive education where the higher the teacher's perception of the support provided by the school, the stronger their attitude towards inclusive education will be [6], [30]. Moreover, Tschannen-Moran and WoolfolkHoy, therefore, proposed that teacher efficacy should be studied within specific contexts and teaching tasks. Research by other scholars supports this recommendation as good advice insofar as it relates to efficacy for inclusive teaching: [31] found that teachers with high efficacy in typical classroom situations including children with moderate special needs, reported lower efficacy when asked about their efficacy for including students with higher levels of special needs.

The influence of the teacher efficacy in collaborating with other parties that are significant enough on the teacher's attitude in the affective component indicates the need for initiative and awareness from the teacher to maintain the existence of its efficacy through consistently building relationships or collaborating with other parties in handling children with special needs. It needs to be done so that child assistance can be carried out together with the closest parties to the child, such as parents, health workers, and therapists. The aim is to provide optimal assistance to children with special needs not only in school settings but also outside of school. This is in line with research on the handling of children with special needs conducted by [17] which states that mentoring children with special needs in early age will be more optimal if done not only by teachers at school or parents at home but also assisted by various parties such as doctors, therapists or other medical personnel, extended families and other parties who can help to optimize the development of children.

Nevertheless, this result can be a note for teachers and other practitioners that the teacher must still master the other components of self-efficacy (efficacy to use inclusive instruction and efficacy in managing behavior) in relation to teacher attitudes toward inclusive education, because these components of teacher attitudes remains relevant even though

this research as not proven significantly. Efficacy and positive teacher attitudes towards inclusive education will strengthen teacher intentions in implementing inclusive education. It is in line with the results of research conducted by [32] that shows another factor that has been investigated is the teacher efficacy for inclusive teaching. Although the research literature on teacher efficacy for inclusive teaching is relatively limited [32], studies have shown that efficacy for inclusive teaching and attitudes toward inclusion are positively related (Emam & Mohamed, 2011; Malinen et al., 2012; Savolainen, Engelbrecht, Nel, & Malinen, 2012; Weisel & Dror, 2006) in [32].

#### IV. CONCLUSION

This study shows that teacher efficacy towards IE significantly influence the teacher's attitudes in the affective aspects of attitudes. The results of this study indicate that teacher efficacy on collaboration is the aspect that must be considered and improved in the context of inclusive education in Indonesia. Besides, these aspects can be the basis for making training materials or interventions for preschool teachers in IE. To be able to produce quality, inclusive preschool, teachers' attitude that is positive towards inclusive education is needed. In this study, the influence of the interaction of teacher self-efficacy variables on the attitudes of teachers in inclusive preschool was seen.

From the results of this study, it was found that there was no positive effect of total teacher self-efficacy interactions in teaching on attitudes of teachers in Inclusive Preschool. However, the regression results indicate that the dimensions of teacher ability in collaboration with outside parties have a significant influence on teachers' attitudes, especially in the affective component. The results of this study can be useful to provide an overview of the conditions of teachers, including the attitudes and self-efficacy of teachers who can support the implementation of inclusive education in preschool inclusive. It can also be an evaluation for practitioners and policymakers to improve the quality of inclusive education at the preschool level. Besides, research on teachers who are teaching levels of early childhood is one of the contributions needed for the development of knowledge about education, especially in preschool inclusive.

This study has many limitations that can affect the results of the study. First, the participants in this study were mostly still concentrated in the Greater Jakarta area and only a small portion of the area on the island of Sumatra. It can cause less varied characteristics of participants in terms of cultural background. It can indirectly affect the answers given by participants. Also, there are less varied participants in terms of demographics. Both data collections were carried out online, and this led to less stringent control over the criteria of participants. The link to the questionnaire distributed to the teacher could be widespread and be filled by parties who do not meet the criteria. Also, an online filling could not be fully controlled by researchers.



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