

Teacher Attitudes in Inclusive Primary Schools: How Do Teacher Engagement and Efficacy Have a Role?

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Abstract. Teachers are faced with obstacles in developing curricula, fulfilling a variety of student requirements, and working with Special requirements Students (SEN) in conventional schools when implementing inclusive education. The issues include inadequate parental support, inadequate facilities, teacher preparedness and competency, and unequal teacher-student ratios. Through teacher self-efficacy, this study seeks to assess how teacher involvement affects teachers' attitudes in inclusive primary schools in Padang City. The Engaged Teachers Scale for Special Educational Needs Teachers (ETS), Teacher Efficacy for Inclusive Practice (TEIP), and Multidimensional Attitudes towards Inclusive Educational Scale-Indonesian Version (MATIES-IV) are some of the research instruments. The approach combines path analysis and quantitative research with IBM SPSS and Rstudio. The study's findings highlight the function of teacher self-efficacy in inclusive primary schools as a complete mediator between attitudes and teacher engagement. It is anticipated that this study will offer an empirical contribution on the function of educators in maximizing the adoption of inclusive education in Padang City.

Keywords: Inclusive School; Special Needs Student; Teacher Attitudes, Teacher Self-efficacy; Teacher Engagement.

1 Introduction

Inclusive education is a concept in education that combines the learning of students with special needs with that of students their own age in regular schools [1]. The position of the teacher is faced with a number of new issues as inclusive education is implemented. According to [2] these challenges include how to work with special students in the classroom, develop the curriculum, assess student learning, meet every student's learning needs, and instill inclusion and tolerance in regular students, parents, and the community. Additional difficulties faced by inclusive schools include unequal teacher-to-student ratios, issues with teacher competency and readiness, a lack of learning resources for students with special needs, insufficient parental support, and limited infrastructure [3]. According to [4] in implementing inclusive education, teachers also confront major obstacles like a shortage of facilities and insufficient knowledge and skills. It

also inline with the result of research conducted by Tarnoto that teachers have a significant role in inclusive education [5].

The aforementioned scenarios will impact the way teachers perform. In fact, because they engage with students more in teaching and learning activities, instructors are a major contributor to the effectiveness of inclusive education, according to the findings of numerous prior studies [6]. Teachers should ideally give all pupils, especially those with special needs, their full rights as a major consideration. Teachers' attitudes, involvement, and self-efficacy in inclusive education contexts can be impacted by the numerous obstacles and limits associated with implementing inclusive education [7].

Teachers will play a part in the optimal implementation of inclusive education, together with other stakeholders. Instructors ought to participate in classroom activities and have faith in their ability to teach. It will assist them in improving student learning outcomes and fostering a more positive learning environment[8]. The attitude of teachers toward inclusive education is another factor that affects its performance [9]. In order to successfully implement inclusive education and meet the diverse needs of both regular students and students with special needs in inclusive classes, teachers have a catalyst role that allows them to maximize the implementation of inclusive education[10].

Nonetheless, a lot of educators at inclusive elementary schools still find it difficult to work with diverse classroom populations and special needs pupils. It may have an impact on educators' attitudes regarding their work, including demotivation and low self-efficacy. Teachers' attitudes about teaching are influenced by their level of teacher efficacy, according to a number of prior studies on the subject in primary school settings [11]. According to additional research, educators who have a high degree of self-efficacy would also be more willing to try out novel approaches in order to meet the demands of their pupils[12]. The many obstacles in inclusive education also have an impact on how engaged teachers are at work. According to earlier studies, a key factor in the development of a sense of accountability for the success of inclusive education for students with special needs is teacher engagement [13]. It also aligns with research done in 2021 by Mahasir, who looked at Padang City's primary inclusive school administration. According to this study, inclusive education management is currently in place but has to be improved [14].

The aforementioned issues have an effect on student welfare, educational quality, and the effectiveness of inclusive program implementation in schools. According to a study[15], educators who have low self-efficacy frequently exhibit negative attitudes toward their students and lack motivation. Thus, it is imperative to comprehend the ways in which teacher involvement might impact educators' views toward their work and sense of self-efficacy. Increasing teacher involvement through assistance, training, and better communication between educators and school administration are a few solutions[16]. According to Mahasir's research, it is also carried out in a number of inclusive elementary schools in Padang City. However, there are still a number of aspects of inclusive implementation that are subpar, including the degree to which teachers comprehend the application of inclusive education, the ignorance of education staff regarding inclusive education procedures, the lack of readiness among teachers for learning, and the dearth of special education background among teaching staff in inclusive schools. There are currently no studies on teacher engagement available [14].

Several earlier studies discovered that teacher self-efficacy acts as a mediator in the relationship between teacher attitudes and engagement. According to earlier studies, the relationship between job satisfaction and teacher engagement is mediated by teacher self-efficacy [17]. Additional studies further demonstrate that the association between teacher engagement and the propensity for teachers to burn out is mediated by teacher self-efficacy [18]. Nonetheless, prior studies have seldom ever examined the environment of inclusive primary schools. The links between these characteristics in regular or special school contexts are more frequently examined in the existing literature. Thus, in inclusive primary schools, this research can offer a fresh perspective on how teacher self-efficacy functions as a mediator between the impact of teacher involvement on teacher attitudes. Thus, the purpose of this study is to examine how teacher self-efficacy influences teacher engagement in addition to teacher attitudes in inclusive elementary schools in Padang City. Teachers at Padang City's Inclusive Primary School participated in this study.

2 Method

Since the researcher did not alter the research sample or the phenomenon that occurred, this study is quantitative in nature and has a non-experimental design, according to the data gathered [19]. This study was carried out in Padang City at an inclusive elementary school. Teachers that work at Padang City's inclusive elementary schools and are willing to participate in online study comprise the research population. South Padang, East Padang, West Padang, North Padang, Nanggalo, Koto Tengah, Kuranji, Pauh, Lubuk Begalung, Lubuk Kilangan, and Bungus Teluk Kabung are the locations of these elementary schools. Teachers at the Padang City Inclusive Elementary School who worked with students who had special needs made up the sample for this study. They were chosen based on their ability to meet the research objectives and their ability to be representative of the population. Three different sorts of variables make up the variables in this study: the independent variable is teacher involvement; the dependent variable is teacher attitudes toward inclusive education; and the mediating variable is teacher self-efficacy.

The Multidimensional Attitude toward Inclusive Education Scale (MATIES-VI), which was created by Mahat and modified by [9] is used in this study to examine teachers' attitudes toward inclusive education. The three components of attitude—cognitive, affective, and behavioral—are measured by this self-report questionnaire. The MATIES-IV instrument will process each measurement tool's dimension as a unidimensional score. This measurement device has eighteen components. In the meanwhile, Kurniawati, Rahmadani, and Febrian modified [13] Teacher Efficacy for Inclusive Practice (TEIP) to measure teacher efficacy. Next, the Engaged Teachers Scale for Special Educational Needs Teachers (ETS) in English was used to gauge teacher engagement adapted by [20]. This measuring instrument consists of 16 items.

Path analysis is the method utilized in this study to examine the function of mediating variables in the relationship between the independent and dependent variables. Using Lavaan 0.6-5, the researchers processed the data using IBM SPSS version 22 and Rstudio version 1.1.383 software. Descriptive statistics are used by researchers to describe study participants as demographic information. Subsequently, the investigator examined the validity of the measuring tool using CFA in the Rstudio application, after which she analyzed the item-total

score correlation and reliability in SPSS. The researcher tested the hypothesis regarding the influence of the Teacher Engagement variable on Teacher Attitudes in Inclusive Elementary Schools, the influence of Teacher Engagement on Teacher Self-Efficacy, and the influence of Teacher Self-Efficacy on Teacher Attitudes in Inclusive Elementary Schools using a regression analysis after validity and reliability were established. Next, the researchers used the Teacher Self-Efficacy variable in the Rstudio software to conduct a mediation test to examine the relationship between Teacher Engagement and Teacher Attitudes in Inclusive Elementary Schools using the Structural Equation Model (SEM) technique.

Do a preliminary investigation on the subject of the study first. Next, identify the research phenomenon and choose the subject of the study. Verify the research variables, the targeted research sample's characteristics, and the measurement tools that were employed. Subsequently, the researchers modified the tools used to measure the three variables. Readability assessments were administered following the adaption process to many inclusive primary school teachers who worked with students who fit the research criteria and had special needs. After that, proceed with testing the measuring device. After that, teachers at Padang City's inclusive schools who work with students who have special needs received the validated measurement tools. The UPTD Layanan Disabilitas Pendidikan Inklusif (LDPI) helped disseminate this information by giving information on a list of inclusive primary schools in Padang City as well as the school principals' and special assistant teachers' (GPK) contact information. The researcher created a g-form, which was used to distribute the research questionnaire online.

3 Results and Discussion

A total of 143 inclusive elementary school teachers provided data for the study; 104 of them were female and 39 were male. After then, the acquired data is processed. Based on calculations using descriptive statistics, the research variables are broadly described as follows:

Table 1. The Overview of Research Variables (N=143).

Variable	Minimum	Mean	Maximum	Mean	SD
Teacher attitudes	1		4	2.37	0.50
Teacher Self-efficacy	1		4	2.08	10.32
Teacher Engagement	1		4	2.41	0.64

With a response range of 1-4 on a Likert scale, the scores from these three measuring devices are divided into three categories: low (1-1.99), medium/adequate (2-3), and high (3.01-4). The mean of the 18 items in the teacher attitude variable appears to be 2.37. This demonstrates that instructors at inclusive schools generally have attitudes that fall into the appropriate range. The teacher self-efficacy variable, which has eighteen items, works similarly. Participants' teacher self-efficacy scores had a mean of 2.08 and varied from 1-4. This indicates that the individual likewise falls into the adequate category for parenting self-efficacy. In contrast, participants' degree of acceptance in the teacher involvement variable, which consists of 16 items, fell into the sufficient category with a mean score of 3.51, falling between 1-4.

A research model's indicator is considered fit if its Comparative Fit Index (CFI) is greater than 0.95, and it is still considered acceptable if it is greater than 0.90. The Root Mean Squared

Approximation Error (RMSEA) value is therefore less than 0.06 [21]. In contrast, [22] said that a model is considered fit if its RMSEA figure is less than 0.05 and that a model is still acceptable if its RMSEA value is between 0.05 and 0.08. Furthermore, if the Root Mean Square Residual (SRMR) indicator is less than 0.08, Hu and Bentler state that the model is regarded to be fit. They state that if a model satisfies two of the aforementioned indicators, it is considered fit. The outcomes of the research hypothesis model test are as follows:

Table 2. Teacher engagement with Teachers Attitude.

Variable	CFI	RMSEA	SRMR	Sig	B	β
Teacher attitude ~ teacher engagement	0.841	0.047	0.071	0.000*	0.298	0.306

Table 2 shows that teacher engagement has a positive and significant effect on teacher attitudes ($\beta=0.306$; $p<.05$). The regression coefficient figure is 0.298, this explains that a one unit change in teacher engagement can increase 0.298 units of teacher attitude. This means that the higher the teacher engagement, the better the teacher's attitude in inclusive schools. Thus, the first hypothesis can be accepted.

The second hypothesis is that there is an influence of parental acceptance on parenting self-efficacy in children with special needs. The following are the results of model testing on hypothesis 2:

Table 3. Teacher engagement with teacher self-efficacy.

Variable	CFI	RMSEA	SRMR	Sig	B	β
Teacher Self-efficacy ~ teacher engagement	0.774	0.051	0.079	0.000*	0.429	0.606

Table 3 shows that teacher engagement has a significant effect on teacher self-efficacy ($\beta=0.606$; $p<.05$). The regression coefficient figure is 0.429, this explains that a one unit change in teacher engagement can increase 0.429 units of teacher self-efficacy. This means that the higher the teacher engagement, the better the teacher self-efficacy. Thus, the second hypothesis can be accepted.

The third hypothesis in this research is that there is an influence of teacher self-efficacy on teacher attitudes in inclusive schools. The following are the test results on the model in hypothesis 3:

Table 4. Teacher self-efficacy with teacher attitude.

Variable	CFI	RMSEA	SRMR	Sig	B	β
Teacher attitude ~ teacher self-efficacy	0.791	0.054	0.076	0.000*	0.324	0.325

Table 4 shows that teacher self-efficacy positively and significantly influences teacher attitudes in inclusive schools ($\beta=0.325$; $p<.05$). The regression coefficient figure is 0.324, this explains that a one unit change in teacher self-efficacy can increase 0.324 units of teacher attitude. This means that the higher teacher self-efficacy, the better the teacher's attitude in inclusive schools. Thus, the third hypothesis can be accepted.

In order to address the primary study question, the Rstudio software employed a regression calculation technique based on the Structural Equation Model (SEM) to determine how teacher engagement affected teachers' views in inclusive elementary schools by looking at the teacher self-efficacy variable. Additionally, by treating teacher engagement as the independent variable, teacher self-efficacy as the mediator, and teacher attitude as the dependent variable, researchers conducted mediation tests. The mediation model's outcomes are as follows:

Table 5. Criteria for fit of the research mediation model.

Variable	CFI	RMSEA	SRMR	Sig
Teacher Engagement, Teacher Self-Efficacy, Teacher Attitude	0.713	0.041	0.072	0.000*

The model test findings can be further examined because the above hypothesis test results demonstrate that the mediation model for the three variables in this study satisfies the fit index criteria and can be deemed to be fit.

The results of the mediation test for the three variables in the research are listed in the following table:

Table 6. Mediation Test Results.

Variable	Teacher Self-Efficacy (M)			Teacher Attitude (Y)				
	B	β	Sig	B	β	Sig		
Direct effect								
Teacher Engagement (X)	a	0.360	0.423	0.000*	c'	0.128	0.106	0.168
Teacher Self-Efficacy (M)	-	-	-	-	b	0.224	0.132	0.017*
Indirect effect	ab	0.204	0.139	0.027*	-	-	-	-
Total effect	-	0.230	0.157	0.000*	-	-	-	-

The aforementioned results show that in inclusive primary schools, teachers' attitudes are strongly influenced by their level of self-efficacy, and teachers' self-efficacy is greatly impacted by the teacher engagement variable. The attitudes of teachers and their level of participation are not very correlated. The teacher self-efficacy variable has a significant role in the indirect association ($p < 0.05$) between teacher participation and attitudes. This suggests that teacher self-efficacy acts as a full mediator between attitudes and teacher involvement in inclusive primary schools. This enables the acceptance of hypothesis 4, which is the main goal of the study.

4 Discussion

Since the various student specializations and their impact on teacher self-efficacy were not examined in this study, it is hoped that future research will focus more intently on the factors pertaining to the different types of special needs of students with special needs. The study's mediation results indicate that, in inclusive primary schools, teacher involvement has a noteworthy impact on teachers' attitudes. One mediating variable that plays a major role in this relationship is teacher self-efficacy. This can be analyzed in more depth if the mediating variables are studied more specifically based on the dimensions or domains of teacher self-efficacy itself which include (efficacy to use inclusive instruction, efficacy in managing

behavior, and efficacy in collaboration). It is in line with the findings of Rahayu and Kurniawati (2019) that teachers' self-efficacy in collaboration toward inclusive education significantly influences the teacher's attitude in the affective aspects of attitudes. Put another way, this would imply that a primary school teacher's efficacy in collaborating with other educators in an inclusive classroom environment affects the attitudes the teacher has toward students with special needs.

Analyzing the impact of each component of teacher self-efficacy on teacher attitudes in inclusive schools is one way that mediator variables can be further investigated in order to understand their influence more precisely on teacher attitudes in inclusive schools. It will be possible to carry out psychological interventions in accordance with demands by determining which dimensions have the greatest influence through this per-dimensional analysis. To make it clearer which dimensions in the teacher attitude section contribute to the research findings, analysis can also be done on each dimension of teacher attitudes in inclusive primary schools.

In terms of data collection techniques, this study is still restricted to quantitative data obtained by questionnaires, some of which include responses that differ from demographic data regarding the particular circumstances faced by students. It is advised that observations and interviews be done as supplementary data for future research in order to gather more complete data. Teachers and significant people, including parents or student caretakers, may be the subjects of this supplementary assessment. in order to enable a more thorough analysis of the collected data.

Since teacher self-efficacy has a major impact on all aspects of the education and teaching process for students with special needs, including the attitude of the teacher during those processes, it is hoped that educators working in inclusive schools will be able to sustain and even increase it. Based on the study's findings, it seems that parent confidence in accompanying special needs students in inclusive schools is not solely dependent on teacher participation. Nonetheless, it also indicates that the teacher has the best possible relationship with pupils who have special needs in inclusive schools if the instructor has high self-confidence in his abilities.

5 Conclusions

Based on the hypothesis testing that has carried out, these are the conclusion:

1. Teacher engagement has a significant direct effect on teacher attitudes in inclusive schools;
2. Teacher engagement has a direct and significant effect on teacher self-efficacy;
3. Teacher self-efficacy has a direct and significant effect on teacher attitudes in inclusive schools;
4. Teacher self-efficacy as a mediator in the effect of teacher engagement on teacher attitudes in inclusive schools.

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