

Self-Efficacy As A Mediator Of Parental Involvement And Student Engagement In Senior High School Students

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ABSTRACT

The success of the educational process at the Senior High School (SMA) level is influenced by the level of student engagement in learning activities. In this context, parental involvement in a child's education is believed to play an important role in enhancing student engagement at school. This study aims to examine the indirect effect of parental involvement on student engagement among high school students, with self-efficacy as a mediating variable. The hypothesis of this study is that there is an indirect effect of parental involvement on student engagement with self-efficacy as a mediator. The study involved 407 students as research subjects. The sampling technique used was purposive sampling, with the criteria being high school (or equivalent) students from across Indonesia. Data were collected using the Student Engagement Scale, the Parental Involvement in Education Measure, and the General Self-Efficacy Scale (GSES). Data analysis was conducted using Jamovi software with the help of the medmod module. The results of the path analysis in the indirect effect column showed a p-value of 0.001 ($p < 0.050$), with a mediation effect of 21.5%. The type of mediation found in this study is partial mediation. It can therefore be concluded that self-efficacy mediates the relationship between parental involvement and student engagement among high school students. These findings contribute to social cognitive theory by highlighting self-efficacy as a psychological bridge between family context and school engagement, and suggest that school-family collaboration programs should prioritize strategies that strengthen students' self-efficacy

Keywords: High School Students, Mediation, Parental Involvement, Self-Efficacy, Student Engagement

Introduction

Education is one of the important components in the progress of a country. Indonesia itself has a high concern for the implementation of education. High school students are individuals who are in their teenage years and are undergoing biological, socio-emotional, and cognitive changes. If students at this stage do not receive sufficient guidance and attention, they may experience stress and be led to engage in behavior that violates environmental norms (Bariyah & Pierewan, 2017).

The various challenges experienced by high school students cause them to experience problems at school, including a lack of activity in asking questions and expressing opinions in class (Anggraini & Nora, 2024). Some students appear to lack enthusiasm in participating in learning activities. Students tend to be passive, sleepy, reluctant to engage in the learning process, often ask for permission to leave the classroom on the pretext of going to the toilet,

lack concentration, engage in conversations with friends, and do assignments from other subjects outside the scheduled time (Mariah et al., 2023).

From the data above, it can be concluded that the problems commonly experienced by high school students are that they are not fully engaged with school and do not get the maximum benefit from their presence at school. In line with the results of research by Widianingsih and Kusdiyati (2018), which showed that students at SMAN 1 Baleendah, Bandung Regency, had low levels of student engagement.

Student engagement is a student's active commitment to involving themselves in school activities (Fredricks et al., 2004). Student engagement has a significant influence on academic achievement, where the lower the level of student engagement, the lower the academic achievement of high school students (Sa'adah & Ariati, 2020). Meanwhile, according to Jamaluddin et al. (2022), students who are not involved or engaged in learning activities tend to be unmotivated in learning, indifferent, unable to concentrate, sleep, and even chat with friends during class hours.

The long-term impact of low student engagement will increase the risk of dropout among students (Appleton et al., 2008). Meanwhile, students who have good engagement can optimize their experience in maximizing learning outcomes and achievements at school and improve the school's image (Maharani & Utami, 2024). The level of engagement in students can be influenced by student factors and environmental factors (Syah, 2016). The role of parents is important in increasing student engagement at school (Syah, 2016). Self-efficacy can act as a mediator in the influence of parental involvement on student engagement. This statement is in line with the findings in the study conducted by Ulfah (2018), where self-efficacy contributed 51.05% in mediating the influence of parental involvement and student engagement. This is in line with the study by Martínez et al. (2024), which showed that self-efficacy was found to be an important mediator between the relationship between perceived social support and student engagement.

Social cognitive theory emphasizes the influence of the environment on personal characteristics and behavior. The environment provides responses or feedback to an individual's behavior (Bandura, 1997). Based on the issues in the field described above, this study examines whether parental involvement has an effect on student engagement among high school students, with self-efficacy as a mediating variable? The purpose of this study aims to examine the indirect effect of parental involvement on student engagement among senior high school students, with self-efficacy as a mediating variable based on Social Cognitive Theory.

Methods

This study consists of three variables, namely student engagement as the dependent variable, parental involvement as the independent variable, and self-efficacy as the mediating variable. Purposive sampling was selected to ensure that all participants were active senior high school students across Indonesia, which aligns with the study's focus on

this developmental stage. However, this non-probability sampling approach may limit generalizability; therefore, findings should be interpreted with caution and replicated using random sampling in future studies. The subjects in this study were 407 students, comprising 142 males and 265 females who were high school students aged 15-19 years old residing throughout Indonesia. The data collection method used in this study was a scale. This study used three scales, namely the Student Engagement Scale developed by Junianto et al. (2020), which was compiled based on aspects from Fredricks et al. (2004). This scale consists of 11 items, with a reliability coefficient of α 0.835.

Parental involvement in this study adopted the Parental Involvement In Education Measure scale, which was compiled based on aspects from Ceballo et al. (2014) and adapted by Freddy, Lestari, and Prihartanti (2021). This scale has 22 items. This test tool has a Cronbach's alpha value of 0.816. Selfefficacy in this study adopts the General Self-Efficacy Scale (GSES) created by Schwarzer and Jerusalem (1995) and adapted into Indonesian by Novrianto, et al. Extrovert-Introvert Personality Types and Depression Levels in Middle Adolescents in Yogyakarta 5 (2019). This scale has 10 items. The data analysis method used descriptive analysis and path analysis to determine the indirect effect between parental involvement (X) on student engagement (Y) mediated by self-efficacy (Z). The data were analyzed using the JAMOVI program.

Results

The results of the categorization of student engagement scores for the subjects are shown in Table 1 below:

Table 1. Categorization of Student Engagement

Kategori	Skor	N	Persentase
High	X > 40	365	89,7 %
Medium	26 < X	42	10,3 %
Low	X < 26	0	0 %
Total		407	100%

The categorization results from the Student Engagement Scale show that 89.7% (365 students) are in the high category, 10.3% (42 students) are in the medium category, and 0% (0 students) are in the low category. From this data, it can be concluded that of the 407 students in the study, 365 students are in the high category, while 42 students are in the medium category. The categorization results for the parental involvement variable among students can be seen in Table 2 below:

Table 2. Categorization of parental involvement

Kategori	Skor	N	Persentase
High	X > 81	403	99 %
Medium	51 < X	4	1 %
Low	X < 51	0	0 %
Total		407	100%

The categorization results from the Parental Involvement In Education Measure scale show that parental involvement in high school students is in the high category for 403 students or 99 %. The medium category of for 4 students or 1%, and there were no students in the low category. Therefore, it can be concluded that parental involvement among high school students is in the high category.

Table 3. Categorization of self-efficacy data

Kategori	Skor	N	Persentase	
High	X > 37	401	98,5 %	
Medium	23 < X	37	6	1,5 %
Low	X	23		0 %
	Total	407		100%

The categorization results from the General Self-Efficacy Scale (GSES) show that the self-efficacy of high school students is in the high category, with 401 students or 98.5%. There are 6 students or 1.5% in the medium category and none in the low category. Therefore, it can be concluded that the self-efficacy of high school students is in the high category.

Normality Test

The normality test is an analysis conducted to determine whether each variable has a normally distributed distribution. Based on the results of the normality test, the p-value for the student engagement variable was 0.082, the pvalue for the parental involvement variable was 0.063, and the p-value for the self-efficacy variable was 0.084. These data indicate that the scores for the student engagement, parental involvement, and self-efficacy variables are normal.

Linearity Test

A linearity test was conducted to determine whether the relationship between variables was linear or not. Based on the results of the linearity test between student engagement and parental involvement, a p-value of 0.001 ($p < 0.050$) was obtained. This indicates that the relationship between the variables of *student engagement* and *parental involvement* is linear. Based on the results of the linearity test between *student engagement* and self-efficacy, a p-value of 0.001 ($p < 0.050$). This indicates that the relationship between the variables of *student engagement* and self-efficacy is linear. Based on the results of the linearity test between *parental involvement* and self-efficacy, a p-value of 0.001 ($p < 0.050$) was obtained. This indicates that the relationship between the variables of *parental involvement* and self-efficacy is linear.

Hypothesis Testing

After the assumption test was carried out and fulfilled, the researcher then conducted a hypothesis test analyzed using path analysis (*medmod*) using the Jamovi application to test whether there was a mediating role between the two variables. Based on the path analysis results in the *indirect effect* column, a p-value of 0.001 ($p < 0.050$) was obtained. This indicates that there is a significant mediating role between the independent and dependent variables, where the self-efficacy variable acts as a mediator of the relationship between *parental involvement* and *student engagement*. Thus, the hypothesis proposed in this study is accepted. This means that *parental involvement* and *student engagement* are not only directly connected, but there is also a mediating role of the self-efficacy variable with a percentage of 21.5%.

Based on the path analysis results in the *direct effect* column, a p-value of 0.001 ($p < 0.050$) was obtained. This indicates that there is a significant direct relationship between the independent and dependent variables, where there is a direct relationship between *parental involvement* and *student engagement* with a percentage of 78.5%. Additional analysis was conducted by researchers to compare the estimated values when the variable student engagement was directly linked to parental involvement, and when student engagement was linked to parental involvement through the mediating role of self-efficacy.

Based on the results of the study, it was found that the *estimated* value of the relationship between *parental involvement* and self-efficacy was 0.186 with a p-value of 0.001 ($p < 0.050$), indicating a significant relationship. The estimated value of the relationship between self-efficacy and *student engagement* was 0.256 with a p-value of 0.001 ($p < 0.050$), indicating a significant relationship. Meanwhile, the estimated value of the relationship between *parental involvement* and *student engagement* is 0.173 with a p-value of 0.001 ($p < 0.050$), indicating a significant relationship. Therefore, it can be concluded that there is a mediating role, *partial mediation*, which occurs when the *parental involvement* variable has a significant relationship with the *student engagement* variable, but there is also a mediating role when the self-efficacy variable acts as a link between the two variables, thus having a significant relationship.

In addition, based on the results of the analysis of gender differences in the *student engagement* variable, $p = 0.621$ ($p > 0.050$) was obtained. This shows that there is no significant difference between males and females that affects the *student engagement* variable in students. In the *parental involvement* variable, $p = 0.300$ ($p > 0.050$) was obtained. This indicates that there is no significant difference between male and female students in terms of their influence on the variable of *parental involvement*. For the variable of self-efficacy, $p = 0.708$ ($p > 0.050$) was obtained. This finding indicates that there is no significant difference between male and female students influencing self-efficacy among students.

Based on the *Path Estimates* results, a value of $p = 0.001$ ($p < 0.050$) was obtained. This shows that there is a significant mediating role between the independent and dependent variables, where the self-efficacy variable acts as a mediator of the relationship

between *parental involvement* and *student engagement*. Thus, the hypothesis proposed in this study is accepted. This means that *parental involvement* and *student engagement* are not only directly connected, but there is also a mediating role of the self-efficacy variable with a percentage of 21.5%.

Where there is a relationship between variable Y and variable X, but there is also a relationship between variable Y and variable X mediated by variable M. In this study, it can be explained that there is a relationship between the *student engagement* variable and the *parental involvement* variable, but there is also a relationship between the *student engagement* variable and the *parental involvement* variable mediated by the self-efficacy variable.

The relationship between *student engagement* and *parental involvement* is often mediated by *the variable of self- efficacy* because parental involvement in education plays an important role in shaping students' beliefs about their abilities. Parental support, whether in the form of emotional support, academic monitoring, or providing realistic expectations, can increase *academic self- efficacy*, which is the belief that students are capable of completing academic tasks well. High self-efficacy then encourages students to be more active and persistent in the learning process, cognitively, affectively, and behaviorally. Research by Khoirunnisa and Purwandari (2023) shows that parental support significantly affects students' *academic self-efficacy* and learning engagement, and that *academic self-efficacy* significantly mediates this relationship. Similar findings were also found in research by Wang and Tambi (2024), which concluded that *academic self- efficacy* fully mediates the influence of parental expectations on student engagement in learning.

In everyday life at high school, the relationship between *student engagement* and *parental involvement* mediated by *self-efficacy* can be seen in how students comply with school rules and engage in learning activities. Students whose parents who are actively involved, such as diligently attending parent-teacher meetings, monitoring attendance, and paying attention to their children's discipline, tend to be more aware of the importance of following school rules, such as arriving on time, wearing uniforms neatly, or completing assignments on time. This parental involvement creates psychological support that strengthens students' self- efficacy, namely the belief that they are capable of performing their role as students well. When students' self- efficacy is established, compliance with school rules is no longer coercive, but arises from self-awareness and a sense of personal responsibility. This is demonstrated in research by Qudsyi et al. (2020), which states that parental support significantly increases self-efficacy, which in turn strengthens student involvement in school activities.

In addition, in the context of participation in school activities such as student council organizations, extracurricular activities, or class projects, students with high self-efficacy who receive support from their parents are more likely to take initiative and contribute actively. These students not only attend school but are also active in building a positive learning environment and adhering to school values. Conversely, students who receive less

involvement from their parents often feel less confident about participating in activities outside the classroom and are more likely to feel incapable or reluctant to face challenges.

In this study, the researcher will compare the estimate value when the *student engagement* variable is directly linked to *parental involvement*, and when *student engagement* is linked to *parental involvement* through the mediating role of self-efficacy. The estimate value of the relationship between the *parental involvement* variable and self-efficacy is 0.186 with a p-value of 0.001 ($p < 0.050$), indicating a significant relationship. The estimated value of the relationship between the self-efficacy variable and *student engagement* is 0.256 with a p-value of 0.001 ($p < 0.050$), indicating a significant relationship. Meanwhile, the estimated value of the relationship between the *parental involvement* variable and *student engagement* is 0.173 with a p-value of 0.001 ($p < 0.050$), indicating a significant relationship. Therefore, it can be concluded that there is a mediating role, *partial mediation*, which occurs when the *parental involvement* variable has a significant relationship with the *student engagement* variable, but there is also a mediating role when the self-efficacy variable acts as a link between the two variables, resulting in a significant relationship.

The researchers categorized the data on the three research scales, namely *student engagement*, *parental involvement*, and self-efficacy, to obtain in-depth information about the subjects. *Student engagement* among high school students was in the high category for 365 students or 89.7%. The medium category was for 42 students or 10.3%, and there were no students in the low category. Thus, it can be concluded that *student engagement* among high school students was in the high category. *Parental involvement* among high school students was in the high category for 403 students or 99%. The moderate category was for 4 students or 1%, and there was no low category. Thus, it can be concluded that *parental involvement* among high school students was in the high category. Meanwhile, self-efficacy among high school students was in the high category for 401 students or 98.5%. There are 6 students or 1.5% in the medium category and none in the low category. Thus, it can be concluded that the self-efficacy of high school students is in the high category.

Conclusion

Based on the results of This study concludes that parental involvement indirectly influences student engagement through self-efficacy. Strengthening students' self-efficacy—supported by constructive parental involvement—can enhance active participation in school. Future research should employ probability sampling and longitudinal designs to strengthen causal inference.

A suggestion for the research subjects is that one effort that can be made to increase *student engagement* is to strengthen students' self-efficacy and increase *parental involvement*, for example through more intense communication and closer relationships between students and parents at home.

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