

THE MEDIATING ROLE OF SELF-EFFICACY ON THE EFFECT OF PEER GROUP ON SELF-REGULATED LEARNING

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ABSTRACT

This study aims to determine the role of self-efficacy in mediating peer groups on self-regulated learning. The theory used is Social Cognitive Theory of Self-regulation. The population amounted to 358 students so that the sampling technique amounted to 189 accounting education students of Universitas Pendidikan Indonesia. Data collection using a questionnaire. Data analysis techniques using Structural Equation Modeling (SEM) with Smart PLS 3 because Smart PLS 3 can measure a small population. The results showed that peer group has a positive and significant influence on self-regulated learning, peer group has a positive and significant influence on self-efficacy, self-efficacy has a positive and insignificant effect on self-regulated learning, and self-efficacy does not mediate the effect of peer group on self-regulated learning. The benefit of these findings for society is the creation of individuals who are more independent, confident, and able to regulate their own learning. Students who have good self-regulated learning skills and high self-efficacy tend to be more able to face academic and professional challenges more effectively.

Keywords: *Peer group, self-efficacy, self-regulated learning*

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INTRODUCTION

Education is an important and main fundamental element for the life of a nation. Education plays a crucial role in improving the quality of human resources in order to compete in the global arena. Education is needed to improve the quality of individuals, especially for students as the future of the nation. If students have high individual quality, then the acceleration of the vision that a university wants to achieve will go hand in hand. Of course, to achieve good quality, students must have strong character education. This is in line with the Presidential Regulation of the Republic of Indonesia No. 87/2017 on strengthening character education.

In character education, according to Sobri et al. (2020), self-regulated learning is one of the important characters that is the goal in the learning process. Self-regulated learning is a vital aspect that must be realized in character education. This is due to the paradigm shift from "teacher centered" to "student centered". In lecture activities, lecturers are no longer the center of the learning process, but students are. Students are required to be active in learning activities. Currently, students are directed to learn independently so that they can explore their own abilities.

At the university level, self-regulated learning is very important and needs to be improved because it is the main goal in improving the quality of learning (Sumuer, 2018). Self-regulated learning in students can help them prepare for the future. Self-regulated learning is needed by students who will enter the world of work. By having an attitude of self-regulated learning, they can choose the material they want to learn, which helps students develop knowledge and improve understanding. The knowledge needed in students' control of various learning experiences allows them to take responsibility for themselves.

According to Balapumi et al. (2016), self-regulated learning is also influenced by various factors such as goals, values, belief in self-ability, metacognitive skills, previous learning experiences, learning environment which includes teaching staff, family, and peers, and learning habits. All these factors affect a person's level of self-regulated learning. Some previous studies show factors that influence self-regulated learning including Montroy et al. (2016) and Paska & Laka (2020) found that one of the factors that influence self-regulated learning is peer group. In addition, self-efficacy has a positive and significant impact on self-regulated learning (Amidah, 2022; Karmila & Raudhoh, 2021). Another study found that peer groups have a positive and significant relationship with self-efficacy (Macek & Jeek, 2007). Sihotang (2019) research found that self-efficacy can mediate the influence between peer groups on self-regulated learning. Many studies have shown that self-regulated learning can be influenced or at least supported by interactions with peers, and the level of individual self-confidence (self-efficacy). Although some of the above show that there is a positive and significant effect on self-regulated learning, however, studies that specifically explore how self-efficacy mediates peer groups on self-regulated learning are still relatively few. The purpose of this research is to identify the influence of peer groups on students' self-regulated learning. This research aims to analyze how peer groups influence students' self-efficacy, as well as measuring the influence of self-efficacy on students' self-regulated learning. In addition, this research also aims to assess the role of self-efficacy as a mediator in the relationship between peer groups and students' self-regulated learning.

Social cognitive theory of self-regulation used in this study. Albert Bandura (1986), who first introduced the concept of *social cognitive theory of self-regulation*, stated that "self-regulated learning is a way or strategy that individuals use to control the learning and teaching process by setting learning goals." Hartub et al., (1996) (in Desmita, 2009) state that the social relations of children and adolescents are centered on their friends as well as their families. Regarding this, it can be said

that peer groups cannot be separated from children, because after entering school, children are no longer only among their families, but also begin to know new people who may have something in common with them, be it age, behavior or maturity level. These peers also have a role in shaping motivation in students. Due to interactions with peers, students are more encouraged to carry out activities that are in accordance with their friendship environment or have the urge to be superior to their friends, one of which is encouraged to have self-regulated learning. Judging from this, it can be said that the peer group has a great influence in shaping student independence. Students with good peers will form good habits in children, and vice versa. This is in line with research conducted by Montroy et al. (2016) where good quality peers will increase self-regulated learning in children. The results of these findings are also in line with the research of Paska & Laka (2020), namely peer support has a positive impact on self-regulated learning of SMK Bhakti Luhur Malang students. These findings are supported by the research of Oktariani et al. (2020) and Rachmaningtyas & Khoirunnisa (2022) which explain that there is a positive correlation between peers and self-regulated learning. In addition, Saragih (2020) and Arista et al. (2022) prove that self-regulated learning is influenced by peers.

Interactions between students and their peer groups can influence each other even without prompting as adults do. "Peers can also influence each other's beliefs and behaviors" (Olasehinde & Olatoye, 2014). One of the roles of peers is to provide social support. Social support from peers is support received from peers in the form of both verbal and non-verbal assistance. According to Santrock (2007), peers are an important source of status, friendship and belonging in school situations. Peer groups are also learning communities where social roles and standards related to work and achievement are formed. Friendship becomes increasingly important in adolescence, and even popularity among peers is a strong motivation for most adolescents (Santrock, 2007). This is the way with research conducted by Macek & Jeek (2007), namely peer groups have a positive influence on the growth of self-efficacy.

In order to form self-regulated learning, one of the things that students need to have is the level of belief or self-efficacy. According to Bandura (1986) self-efficacy is the key to self-regulated learning. With a strong level of belief, children will choose aspirations and take appropriate actions (Zimmerman, 1989). They will be able to overcome difficulties and obstacles, and have a positive mindset. They will also be able to cope better with pressures and demands from their surroundings and have a lower susceptibility to depression. Therefore, having high efficacy can positively affect children's lives (Bandura, 1991). According to Balapumi et al. (2016) self-efficacy and self-regulated learning are interconnected and influence each other. This is in line with Amidah (2022) which concluded that there is a positive and significant correlation between self-efficacy and self-regulated learning. Karmila & Raudhoh (2021) in their research also stated that there is a strong positive effect of self-efficacy on student self-regulated learning. Through the development of self-

efficacy, students can confidently set benchmarks in completing important tasks, take responsibility for their own progress (Alghamdi et al., 2020), meet grade targets (Laili, 2021), dare to express opinions, and be firm in making decisions (Jariyah & Rochmawati, 2020). Self-efficacy is considered capable of generating interest in making a choice, in this case, setting oneself to be independent in learning (Masrotin & Wahjudi, 2021).

Adolescents gain significant socialization experiences through interactions with their peers, who are often the main focus of their social environment. Research shows that adolescents with higher levels of self-efficacy tend to have stronger and higher quality friendships. In fact, Land (1998) (in Macek & Jeek, 2007) found that the intensity of their friendships tends to increase as adolescents age, signaling that the relationships are not only of quality, but also have an impact on their personal development. Sihotang (2019) confirmed this through her research which concluded that self-efficacy plays an important role in mediating the influence of peer groups on self-regulated learning. Thus, the relationship between peer groups and self-regulated learning can be understood through the lens of self-efficacy, where individuals' beliefs in their abilities influence the extent to which they benefit from social interactions with peers in increasing self-regulated learning.

This study will investigate how self-efficacy mediates the effect of peer group on self-regulated learning. The framework of this research model is described in figure 1 below.

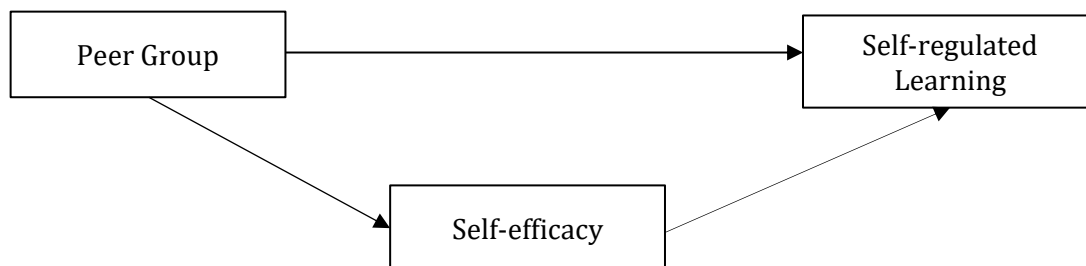


Figure 1
Proposed Research Model

RESEARCH METHOD

This research uses descriptive quantitative method. The author conducted this research on active and registered students at the Accounting Education Study Programme, Universitas Pendidikan Indonesia as the object. The total population is 358 students from 4 batches (2020, 2021, 2022, and 2023). In determining the number of research samples using probability sampling with simple random sampling technique. The sample in this study amounted to 189 students.

This study consists of 1 independent variable, 1 mediating variable, and the dependent variable. The distribution of questionnaires is closed, including the independent variable, namely the peer group Santosa (2006) which has 10

indicators including cooperation, emotional support, interaction intensity, competition, ambition, confidence, accepting opinions, solving problems, caring, helping others. The mediating variable used is self-efficacy Bandura (1998) which consists of 8 indicators including planning, confidence in achieving goals, perseverance, doubt, self-ability, ability to face tasks, responsibility, and level of difficulty. Then the dependent variable in this study is self-regulated learning Ali & Asrori (2017) which consists of 16 indicators including exchanging opinions, readiness, confidence, preparation, laziness level, focus, independence, initiative, lack of learning planning, level of understanding, level of creativity, passive, active, completing work, doing tasks, and dishonesty.

Data analysis in this study was carried out using Smart Partial Least Square (PLS) software version 3.00. Model evaluation in testing with PLS is carried out in two stages, namely the outer model and inner model. Outer model evaluation includes Loading Factor, Cross Loading, Fornell-Larcker Criterion, Average Variances Extracted, Cronbach's Alpha, and Composite Reliability tests. Meanwhile, the inner model evaluation in this study includes the R-Square (R^2) Test, f-square (f^2) Test, Q-Square (Q^2) Test, Goodness of Fit Test, and Path Coefficient Test.

RESULTS AND DISCUSSION

The profile of students who became respondents in terms of gender can be seen in table 1 below.

Table 1
Respondent Profile

| Gender | F | Percentage |
|--------|-----|------------|
| Male | 91 | 48,14% |
| Female | 98 | 51,86% |
| Total | 189 | 100% |

Source: Data Processed (2024)

The results of processing questionnaire data show that the characteristics of respondents based on gender. Respondents are female with a total of 98 people (51.86%), while the others are male (48.14%).

The SEM model that will be used in this study can be seen in Figure 2 below.

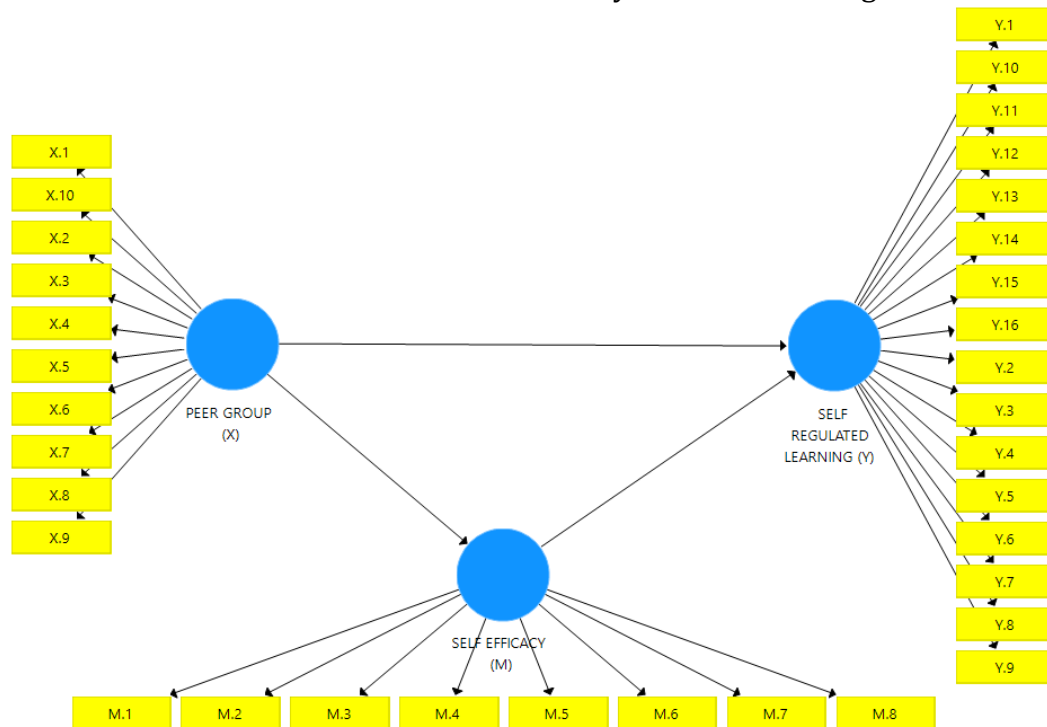


Figure 2.
SEM Model

Furthermore, validity and reliability tests are carried out to determine whether the variables used are valid and reliable. An indicator in the construct is considered to meet convergent validity which is categorized as good if the outer loading value is > 0.7 and the Average Variance Extracted (AVE) value is > 0.5 (Ghozali & Latan, 2014). After the outlier loadings test was carried out, there was one indicator on the invalid dependent variable of learning independence, namely the indicator of the level of understanding (Y.10). Thus 1 indicator is not used so that 34 of the total 35 items remain. Then the outer loadings test was carried out again without one invalid indicator to test whether the 35 items used were still valid or not. The following is a picture of the results of the outer loadings.

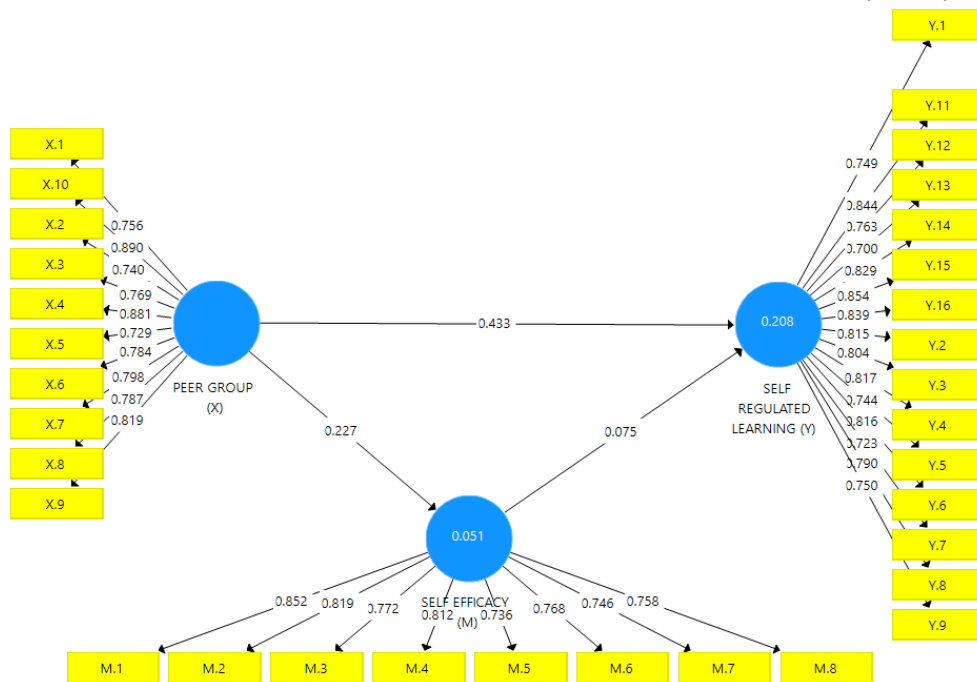


Figure 3.
Outer Model

Based on Figure 3, it can be seen that all indicators on each variable have a loading factor value of more than 0.7 so that they can be declared valid, so 34 indicators are declared to have met the requirements.

Furthermore, several adjustments were made to 34 indicators that had met the criteria for convergent validity, namely with an AVE value on all variables of more than 0.5. The following is table 2 of the Fornier Lacker results.

Table 2
Fornell-Lacker Results

| | Peer Group | Self-efficacy | Self-Regulated Learning |
|-------------------------|------------|---------------|-------------------------|
| Peer Group | 0,797 | | |
| Self-efficacy | 0,227 | 0,784 | |
| Self-regulated Learning | 0,450 | 0,173 | 0,791 |

Source: Data Processed (2024)

Based on table 2 of the Fornell-Lacker test results, all variables show a root AVE value greater than the relationship between constructs in the model. Therefore, all variables are considered to meet the Fornell-Lacker evaluation criteria. Reliability analysis test criteria with Cronbach's Alpha and composite reliability values above 0.60 which indicates that the variables in the study are reliable (Ghozali, 2016). The following table of reliability results is as follows.

Table 3.
Reliability Analysis Results

| | Cronbach's Alpha | Composite Reliability |
|-------------------------|-------------------------|------------------------------|
| Peer Group | 0,937 | 0,945 |
| Self-efficacy | 0,914 | 0,927 |
| Self-regulated learning | 0,957 | 0,961 |

Source: Data Processed (2024)

Based on table 3, it shows that the variables in this study have Cronbach's Alpha values greater than 0.60, namely peer group (0.937), self-efficacy (0.914) and self-regulated learning (0.957).

The R-Square calculation illustrates the relationship between latent variables and the theory evaluated by the dependent construct. If the higher the R-Square (R^2) value, the better the construct. According to Ghazali & Latan (2014) if the R-Square value is > 0.67 , it indicates that the model is strong or good, then if the R-Square value is $> 0.33 < 0.67$, it will be considered moderate or sufficient, but the research variables are reliable and suitable to be used as research variables. By using R-Square, Q-Square, and t-statistics for significance values, we can assess how well the model fits the existing data. if the R-Square value is $> 0.19 < 0.33$, it shows a weak model. The following R-Square results can be seen in the table.

Table 4.
R-Square Results

| | R-Square | Adjusted R-Square |
|------------------------|-----------------|--------------------------|
| Self-efficacy | 0,051 | 0,046 |
| Self Reguated Learning | 0,208 | 0,199 |

Source: Data Processed (2024)

Based on the results of the coefficient of determination analysis in table 4, it can be concluded that the R^2 value of the self-regulated learning construct is 0.208. This means that the percentage of self-regulated learning explained by other constructs is 20.8%. While the remaining 0.792 or 79.2% is explained by other variables outside the research model. So, the value of R^2 is considered a weak category because it has a value of $0.33 > 0.208 > 0.19$.

In the Goodness of Fit (GoF) test to measure and determine the accuracy of the overall structural model validation process. Based on the GOF test with the SRMR value criteria < 0.10 or 0.08 (Hu & Bentler, 1999) will be considered suitable for the research results. Normal Fit Index (NFI) produces a value between 0 and 1. The closer to 1 the better the model built.

Table 5.
Model Fit Results

| | Model Saturated |
|------|------------------------|
| SRMR | 0,103 |
| NFI | 0,636 |

Source: Data Processed (2024)

In the results of table 5, the results of the model fit test show that SRMR obtained a value of 0.103, it is concluded that the SRMR value does not meet the standard between observed correlations. In the NFI value, the value of 0.636 is close to 1, so it is declared to meet the NFI standard.

Hypothesis testing H_1 , H_2 , H_3 is done by looking at the path coefficient value. Hypothesis testing refers to the T-statistic value and P-values. If the T-statistic value > 1.96 or P-values < 0.05 , it is concluded that H_a is accepted. The following is table 6 of the path coefficient test results. The path coefficient value is shown in the following table:

Table 6.
Output Path Coefficient

| | Original Sample (O) | T Statistics (O / STDEV) | P Values | Description |
|---|------------------------|--------------------------------|-------------|-----------------|
| Peer Group → Self-regulated learning | 0,433 | 4,524 | 0,000 | Significant |
| Peer Group → Self-efficacy | 0,227 | 3,387 | 0,017 | Significant |
| Self-efficacy → Self-regulated learning | 0,075 | 0,609 | 0,543 | Not Significant |

Source: Data Processed (2024)

Table 6 shows the significance as well as hypothesis testing on the direct effect of research variables. The direct effect shown by the Path Coefficient is 2 (two) accepted hypotheses. The parameter coefficient of peer group variable on self-regulated learning is 0.433, which means that there is a positive relationship between the two variables. This means that the higher a person's peer group, the higher the level of self-regulated learning they have. In this context, peer group can refer to peers or people in the social environment who have influence on the individual. So, this result shows that positive peer group interaction can increase one's ability to self-regulated learning. Based on calculations using bootstrapping or resampling, the results of testing the peer group coefficient estimate on self-regulated learning with a T value of 4.524 and a p value of $0.000 < 0.05$ mean that there is a positive and significant effect of peer group on self-regulated learning. This is in line with research conducted by Arista et al. (2022); Paska & Laka (2020); Montroy et al. (2016); Oktariani et al. (2020); Rachmaningtyas & Khoirunnisa (2022); Saragih (2020) shows that there is an influence of peer groups on self-regulated learning. The findings of this study confirm the importance of peer groups in influencing self-regulated learning. Peer groups can provide the emotional and academic support that students need in developing self-regulated learning. Intense interaction with peers can help individuals learn from their peers' experiences and successful learning strategies. This allows individuals to not only acquire new skills but also to build confidence in their own learning abilities. In addition, support from peer groups can create a positive learning environment, which is crucial for the

development of self-regulated learning. When students feel supported and understood by their peers, students tend to be more motivated to take the initiative in learning and take responsibility for their learning process. This social support can also help students overcome learning obstacles and maintain focus and discipline in achieving their learning goals.

The parameter coefficient of the peer group variable on self-efficacy is 0.227, which means that there is a positive and significant effect of peer group on self-efficacy. This means that the higher the level of interaction or involvement of a person with a peer group, the higher the level of self-efficacy they have. In this context, peer groups can provide support, encouragement, and positive role models, which in turn increase a person's belief in their ability to achieve goals and overcome challenges. Based on calculations using bootstrapping or resampling, the results of testing the peer group coefficient estimate on self-efficacy with a calculated T value of 3.387 and the p value is $0.017 < 0.05$, which means that there is a positive and significant relationship directly peer group on self-efficacy. This finding is consistent with the results of previous research by Macek & Jeek (2007) which showed that peer groups have a positive influence on the growth of self-efficacy. This is also reinforced by research from Olasehinde & Olatoye (2014) that peers can influence each other's beliefs and behaviour. This finding reinforces that interaction with peer groups can increase student self-efficacy. Peer groups can provide significant emotional support, which plays an important role in increasing self-efficacy. When students feel supported by their peers, they are more likely to try new tasks and face challenges with higher self-efficacy. Encouragement from peer groups can reduce fear of failure and increase motivation to succeed. In addition, peer groups often serve as positive role models. Seeing peers succeed in a particular task can increase students' belief that they are also capable of achieving the same.

The parameter coefficient of the self-efficacy variable on self-regulated learning is 0.075, indicating an effect of 7.5% of self-efficacy on self-regulated learning. Then based on calculations using bootstrapping or resampling, the results of testing the coefficient estimate of self-efficacy on self-regulated learning with a calculated T value of 0.609 and its p value is 0.543. Based on these results, it can be said that self-efficacy has a positive and insignificant effect on student learning independence. This is in line with the findings of Anggraini & Tusyanah (2023) which states that self-efficacy has a positive and insignificant effect on the learning independence of UNNES 2022 Office Administration Education students. In contrast to the results of research from Amidah (2022) confirming that there is self-efficacy has a positive and significant correlation with learning independence. Although self-efficacy is often considered an important factor in motivating individuals to achieve goals and overcome obstacles, these results suggest that in this specific context, self-efficacy may not directly affect one's ability to self-regulate learning. Nevertheless, it is important to remember that these results only reflect the direct relationship between the two variables. There are still other factors that mediate or moderate

the relationship between self-efficacy and self-regulated learning that were not considered in this analysis.

Table 7 below displays the results of hypothesis 4 testing along with the path coefficient values.

Table 7.
Output Path Coefficient

| | Original Sample (O) | T Statistics (O / STDEV) | P Values | Description |
|---|------------------------|--------------------------------|-------------|--------------------|
| Peer Group → Self- efficacy → Self-regulated learning | 0,017 | 0,493 | 0,622 | Not Significant |

Source: Data Processed (2024)

The parameter coefficient of peer group variable on self-regulated learning through self-efficacy is 0.017, meaning that there is no significant direct effect of peer group on self-regulated learning through self-efficacy. Based on calculations using bootstrapping or resampling, the results of testing the coefficient estimate of peer group variables on self-regulated learning through self-efficacy with a calculated T-value of 0.493 and a P-value of 0.622. The result shows that there is no significant direct effect of peer group on self-regulated learning through self-efficacy. In other words, although there is a relationship between peer group and self-efficacy, there is not enough evidence to confirm that self-efficacy significantly mediates the relationship between peer group and self-regulated learning. The results of this study did not find previous research that was in line. So that the results of this study become a novelty from previous studies. In contrast to the research conducted by Sihotang (2019) stated that self-efficacy mediates the influence of peer groups on self-regulated learning.

The findings also provide important insights that other factors are more influential in enhancing self-regulated learning than self-efficacy when influenced by peer groups. This suggests the need to revisit other elements that may play a more dominant role, such as learning strategies, intrinsic motivation, or support from family and university environments. Although self-efficacy is an important factor in education, the results of this study suggest that self-efficacy may not always be an effective mediator between peer group and self-regulated learning. This could be due to the complexity of the relationship between these variables or there may be other stronger mediator variables. Several studies support this view by showing that there are various other factors that play a role in influencing self-regulated learning. For example, a study by Usher & Pajares (2008) suggested that intrinsic motivation has a more dominant role in directing self-regulated learning compared to self-efficacy. They found that people with high intrinsic motivation tend to have better self-regulated learning skills, regardless of their self-efficacy level. In addition, research by Zimmerman & Kitsantas (2005) showed that effective study strategies, such as time management and note-taking techniques, have a more

significant impact on self-regulated learning compared to self-efficacy. They emphasised the importance of explicitly teaching these strategies to enhance their ability to self-regulate learning. The study by Richardson et al. (2012) also found that support from family and university environment plays an important role in the development of self-regulated learning. They showed that students who received strong emotional and academic support from their families and educational institutions were more likely to develop strong self-regulated learning skills.

From the above studies, it can be concluded that although self-efficacy is an important factor in education, there are many other factors that may be more influential in improving self-regulated learning when influenced by peer groups. This finding emphasises the need for a more comprehensive approach in understanding and improving self-regulated learning, which involves various internal and external factors other than self-efficacy.

CONCLUSION

Based on the findings of the research results and hypothesis testing and discussion, the following conclusions can be drawn. (1) peer group has a positive and significant influence on self-regulated learning so that the more active students interact with peer groups, the better their ability to organize self-regulated learning. Based on this finding, it is suggested that students should actively participate in group activities and build a strong social network to support their learning. These steps will help improve students' self-regulated learning and support better academic achievement. (2) Peer group has a positive and significant influence on self-efficacy, i.e. the higher the level of interaction or involvement with peer group, the higher the level of self-efficacy. To increase self-efficacy, students are advised to be active in group and organizational activities, build a strong social network, take advantage of study groups according to their interests, and seek support from experienced colleagues. Study programs should facilitate study groups, implement mentoring programs, hold co-curricular activities such as group projects and workshops, and create an inclusive learning environment. These measures will help students become more confident and independent, and support a conducive academic environment. (3) Self-efficacy has a positive and insignificant effect on students' self-regulated learning. Students are advised to focus on increasing their confidence in their learning abilities and self-regulated learning. They can develop strategies to increase self-efficacy, such as setting realistic learning targets and seeking support from peers or mentors. For study programs, it is important to consider the aspect of self-efficacy development in the curriculum and provide the necessary support and resources for students to strengthen their confidence in regulating learning. (4) Self-efficacy does not mediate the effect of peer group on self-regulated learning. As a result, the findings of this study are innovative in comparison to past research. This could have important implications, such as suggesting that other factors may be more dominant in influencing the relationship between peer group and self-regulated learning, or that self-efficacy may not serve

as a significant mediator in the relationship. In addition, these results also highlight the importance of considering various factors and interactions between variables in understanding the complexity of the relationship between psychological factors such as peer group, self-efficacy, and self-regulated learning.

The implications of the findings of this research indicate that positive interactions with peer groups have a crucial role in increasing students' self-regulated learning and self-efficacy. To practically apply these findings, schools and universities need to encourage students' active participation in group activities and collaborative projects that facilitate interaction between students. Additionally, educational institutions must support students in building strong social networks with peers, teachers, and mentors through mentoring programs and social activities. Curriculum development is also important, with an emphasis on practical activities, clear goal setting, and self-evaluation to strengthen students' confidence in managing their own learning. Additional supports such as access to resources, academic tutoring, and counseling services also need to be ensured.

The benefit of these findings for society is the creation of individuals who are more independent, confident, and able to manage their learning effectively. Students who have good self-regulated learning skills and high self-efficacy will be better prepared to face academic and professional challenges, and contribute significantly in various fields, including economics, innovation and social development. Awareness of the importance of positive interactions with peer groups and developing self-efficacy will also help people understand the value of social support in achieving goals and achieving success. Thus, the results of this research not only provide insight into the world of education, but also have broad implications for the development of society as a whole.

REFERENCES

- Alghamdi, A., Karpinski, A. C., Lepp, A., & Barkley, J. (2020). Online and Face-to-face Classroom Multitasking and Academic Performance: Moderated Mediation with Self-Efficacy for Self-Regulated Learning and Gender. *Computers in Human Behavior*, 102, 214–222. <https://doi.org/10.1016/j.chb.2019.08.018>.
- Ali, M., & Asrori, M. (2017). *Psikologi Remaja Perkembangan Peserta Didik*. Jakarta: Bumi Aksara.
- Amidah. (2022). Pengaruh Efikasi Diri dan Teman Sebaya Terhadap Kemandirian Belajar Pada Mahasiswa Pendidikan Ekonomi Undana. *Journal Economic Education, Business and Accounting (JEEBA)*, 1(2), 60–65.

- Anggraini, D., & Tusyanah, S. (2023). Pengaruh Motivasi Belajar, Sarana dan Prasarana dan Lingkungan Keluarga terhadap Kemandirian Belajar dengan Efikasi Diri sebagai Variabel Mediasi. *Business and Accounting Education Journal (BAEJ)*, 4(2), 155–171. <https://doi.org/10.15294/baej.v4i2.68896>.
- Arista, M., Sadjarto, A., & Santoso, T. N. B. (2022). Pengaruh Motivasi Belajar dan Teman Sebaya terhadap Kemandirian Belajar Pelajaran Ekonomi pada Pembelajaran Daring di Masa Pandemi. *Jurnal Basicedu*, 6(4), 7334–7344. <https://doi.org/10.31004/basicedu.v6i4.3499>.
- Balapumi, R., von Kinsky, B. R., Aitken, A., & McMeekin, D. A. (2016). Factors Influencing University Students' Self-Regulation of Learning. *Proceedings of the Australasian Computer Science Week Multiconference*, 1–9. <https://doi.org/10.1145/2843043.2843067>.
- Bandura, A. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory*. In Social foundations of thought and action: A social cognitive theory. Prentice-Hall, Inc.
- Bandura, A. (1991). *Self-efficacy Conception of Anxiety*. In Anxiety and self-focused attention. (pp. 89–110). Harwood Academic Publishers.
- Bandura, A. (1998). *Self Efficacy*. In I. H. Friedman (Ed.), *Encyclopedia of Mental Health*. Academic Press.
- Desmita. (2009). *Panduan bagi Orang Tua dan Guru dalam Memahami Psikologi Anak Usia SD, SMP, dan SMA*. Bandung: PT. Remaja Rosdakarya.
- Ghozali, I. (2016). *Aplikasi Analisis Multivariete Dengan Program IBM SPSS 23*. Semarang: Badan Penerbit Universitas Diponegoro.
- Ghozali, I., & Latan, H. (2014). *Partial Least Squares Konsep, Metode dan Aplikasi Menggunakan Program Warppls 4.0*. Semarang: Badan Penerbit Universitas Diponegoro.
- Hu, L., & Bentler, P. M. (1999). Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives. *Structural Equation Modeling*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>.
- I Nyoman Paska, P. E., & Laka, L. (2020). Pengaruh Lingkungan Sosial Terhadap Self-Regulated Learning Siswa. *SAPA - Jurnal Kateketik Dan Pastoral*, 5(2), 39–54. <https://doi.org/10.53544/sapa.v5i2.133>.

- Jariyah, A., & Rochmawati, R. (2020). Pengaruh Pengetahuan Awal Akuntansi, Kecerdasan Emosional dan Efikasi Diri Terhadap Tingkat Pemahaman Akuntansi. *Jurnal Pendidikan Akuntansi (JPAK)*, 8(1), 9–16. <https://doi.org/10.26740/jpak.v8n1.p9-16>.
- Karmila, N., & Raudhoh, S. (2021). Pengaruh Efikasi Diri Terhadap Kemandirian Belajar Siswa. *Pedagonal: Jurnal Ilmiah Pendidikan*, 5(1), 36–39. <http://journal.unpak.ac.id/index.php/pedagonal>.
- Laili, N. (2021). Pengaruh Self-Efficacy dan Motivasi Belajar Terhadap Kemandirian Belajar Matematika. *Afeksi: Jurnal Penelitian Dan Evaluasi Pendidikan*, 2(2), 98–103. <https://doi.org/10.35672/afeksi.v2i2.35>.
- Macek, P., & Jeek, S. (2007). *Adolescents' Assessments of Parents and Peers: Relationships To self-Esteem and Self-Efficacy*. Retrieved from <https://api.semanticscholar.org/CorpusID:53056190>.
- Masrotin, M., & Wahjudi, E. (2021). Peran Efikasi Diri Dalam Memediasi Pengaruh Pengenalan Lapangan Persekolahan (PLP) dan Persepsi Profesi Guru Terhadap Minat Menjadi Guru Akuntansi. *Jurnal Pendidikan Akuntansi (JPAK)*, 9(2), 178–189. <https://doi.org/10.26740/jpak.v9n2.p178-189>.
- Montroy, J. J., Bowles, R. P., & Skibbe, L. E. (2016). The Effect of Peers' Self-Regulation on Preschooler's Self-Regulation and Literacy Growth. *Journal of Applied Developmental Psychology*, 46, 73–83. <https://doi.org/10.1016/j.appdev.2016.09.001>.
- Oktariani, O., Munir, A., & Aziz, A. (2020). Hubungan Self Efficacy dan Dukungan Sosial Teman Sebaya Dengan Self Regulated Learning Pada Mahasiswa Universitas Potensi Utama Medan. *Tabularasa: Jurnal Ilmiah Magister Psikologi*, 2(1), 26–33. <https://doi.org/10.31289/tabularasa.v2i1.284>.
- Olasehinde, K. J., & Olatoye, R. A. (2014). Self-Regulation and Peer Influence as Determinants of Senior Secondary School Students' Achievement in Science. *Mediterranean Journal of Social Sciences*. 5(7), 374–380. <https://doi.org/10.5901/mjss.2014.v5n7p374>.
- Rachmaningtyas, A. T., & Khoirunnisa, R. N. (2022). Hubungan Antara Dukungan Sosial Teman Sebaya dan Self-Regulated Learning Pada Mahasiswa Tahun Pertama di Masa Pandemi Covid-19. *Character: Jurnal Penelitian Psikologi*, 9(1), 34–45.

- Richardson, M., Abraham, C., & Bond, R. (2012). Psychological Correlates of University Students' Academic Performance: A Systematic Review and Meta-Analysis. *Psychological Bulletin*, 138(2), 353–387. <https://doi.org/10.1037/a0026838>.
- Santosa, S. (2006). *Dinamika Kelompok*. Jakarta: Bumi Aksara.
- Santrock, J. W. (2007). *Perkembangan Anak Jilid 1 Edisi Kesebelas*. Jakarta: PT. Erlangga.
- Saragih, F. (2020). Pengaruh Lingkungan Terhadap Kemandirian Belajar. *Jurnal Pendidikan PKN Pancasila Dan Kewarganegaraan*, 1(2), 62–72.
- Sihotang, J. A. T. (2019). Efek Mediasi Efikasi Diri Pada Pengaruh Pola Asuh Orang Tua Dan Kelompok Teman Sebaya (Peer Group) Terhadap Kemandirian Belajar: Survey Pada Siswa Kelas XI IPS SMA Negeri di Kota Cimahi. *S2 Thesis*, Universitas Negeri Medan. <http://repository.upi.edu/41254/>.
- Sobri, M., Nursaptini, N., & Novitasari, S. (2020). Mewujudkan Kemandirian Belajar Melalui Pembelajaran Berbasis Daring Diperguruan Tinggi Pada Era Industri 4.0. *Jurnal Pendidikan Glasser*, 4(1), 64-71. <https://doi.org/10.32529/glasser.v4i1.373>.
- Sumuer, E. (2018). Factors Related to College Students' Self-Directed Learning with Technology. *Australasian Journal of Educational Technology*, 34(4), 29-43. <https://doi.org/10.14742/ajet.3142>.
- Usher, E. L., & Pajares, F. (2008). Sources of Self-Efficacy in School: Critical Review of the Literature and Future Directions. *Review of Educational Research*, 78(4), 751–796. <https://doi.org/10.3102/0034654308321456>.
- Zimmerman, B. J. (1989). A Social Cognitive View of Self-Regulated Academic Learning. *Journal of Educational Psychology*, 81(3), 329–339. <https://doi.org/10.1037/0022-0663.81.3.329>.
- Zimmerman, B. J., & Kitsantas, A. (2005). The Hidden Dimension of Personal Competence: Self-Regulated Learning and Practice. In *Handbook of competence and motivation*. (pp. 509–526). Guilford Publications.