

The Relation between Student Interpersonal Relationships and Self-Regulation with Academic Engagement Mediated by Academic Self-Efficacy

Hilya Aulia^{1*}, Niken Titi Pratitis², Mamang Efendy³

Universitas 17 Agustus 1945, Surabaya

Corresponding Author: Hilya Aulia; hilyaaulia@surel.untag-sby.ac.id

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ABSTRACT

The significance of comprehending the part that personal and social factors play is that students make maximum efforts to achieve learning targets and make the most of their efforts to participate fully in the learning process. The aim of this research was to examine how academic self-efficacy mediates the link between self-regulation and student interpersonal relationships (parents, peers, teachers) with academic engagement in 243 students of MA Al-Hikmah Purwoasri Kediri. Data analysis using Path Analysis with JASP Software for Windows. The study's findings indicate that academic self-efficacy works as a mediator in the relationship between self-regulation and academic engagement with p value 0.04 (<0.05). Also, this study clarifies that when academic self-efficacy acts as a mediator, student interpersonal relationships have no impact on academic engagement with p value 0.06 (>0.05). The results of this study provide implications for educators that the quality of students' interpersonal relationships at school, students' self-regulation, and high academic self-efficacy can increase engagement in learning

INTRODUCTION

Optimal teaching and learning conditions can be achieved if teachers are able to organize learning that encourages students to make every effort to achieve learning targets and students maximize their efforts to actively participate in learning (Wibowo, 2016). Indications of low academic engagement among students were also revealed in a survey published in 2021, according to the State Department of Education, where only 45.7% of students were reported to be involved in school activities (Edge, 2021). The same survey by Lisandy (2022) of 94 working students found that only 14.6%, or 14 students showed high academic engagement.

The results of the researcher's initial interviews with students from Al-Hikmah Purwoasri MA classes XI-D and XI-E also showed that 3 out of 5 students interviewed tended to be reluctant to contribute to learning. These students chose to remain silent or do other activities such as chatting with their friends next to them, drawing pictures in their books, or even sleeping during class. Low academic engagement has an impact on the loss of motivation to complete school because they find it difficult to concentrate while studying, have an increasing amount of homework, have poor interactions with teachers and peers, and have unpleasant experiences at school (LeMay IV, 2017; Sartika & Nirbita, 2022).

A student who feels happy at school will be willing to listen attentively when the teacher explains, participate in various competitions organized by the school, and be motivated to become a champion, partly because they have good interpersonal relationships with teachers, peers, parents, and school administrators (Christenson et al., 2012; Opdenakker & Minnaert, 2011; Green et al., 2012). Good interpersonal relationships have an impact on the school environment, creating a comfortable, safe, and positive atmosphere for students (Zandvliet et al., 2014; Fan & Williams, 2010; Sökmen, 2021), thereby encouraging students to be enthusiastic and motivated to participate in various activities held at school (Cintia & Yuniarsih, 2020).

Benlahcene et al. (2024) stated that positive student interpersonal relationships, including relationships with parents, peers, and teachers, accompanied by high academic self-efficacy, can increase student academic engagement in various academic activities, such as effortlessly establishing learning objectives, tracking the learning process, and assessing learning results (Nauvalia, 2021), application of learning strategies, increased effort, and better understanding of problems (Uçar & Sungur, 2017; Zhen et al., 2017).

In addition, students' willingness to engage in various academic activities can also be encouraged because they have good self-regulation (Kubi, 2021; Tejedor et al., 2016; Bierman et al., 2008; Hamdiyah et al., 2024; Hedeshi, 2017). Babajani et al. (2021) also found that academic self-efficacy plays an indirect role in linking self-regulation and academic engagement. Their research results state that students who have good self-regulation will significantly influence their confidence in completing academic tasks (academic self-efficacy), and when this is present in students, it will significantly influence their desire to be involved in every learning activity (Fachmi, 2023; Yudianti et al., 2023).

LITERATURE REVIEW

According to Fredrick et al. (2004), one of the characteristics of high academic engagement among students is behavioral involvement, which is demonstrated by their behavior in mastering knowledge and diligently following classroom rules and norms. Feeling comfortable with their teachers during interactions, especially if the teachers provide support, can influence students' behavior in following classroom rules and norms (Wentzel, 2010). Fredrick et al. (2004) mention another aspect that characterizes high academic engagement, namely emotional involvement, which is a connectedness and appreciation of learning outcomes. Feelings of belonging and being appreciated can be triggered by support from peers (Juvonen et al., 2012). Good support and a pleasant circle of friends motivate students to engage in various academic activities. Another aspect that can describe academic engagement is cognitive involvement. Using learning practices that facilitate comprehension of teachings is related to cognitive involvement (Fredrick et al., 2004).

Fraser (2012) states that student interpersonal relationships are supportive and warm interactions that occur in the classroom, providing equal learning opportunities. Generally, students who are willing to focus their minds on learning receive optimal support from their parents (Martin & Dowson, 2009). The fulfillment of learning needs at home, a pleasant atmosphere at home, and parents who understand their children will encourage them to join in school activities and succeed academically.

High academic engagement in students can stem from good self-regulation skills (Tejedor, 2016). Students with strong self-regulation skills usually have a lot of motivation (Linnenbrink & Pintrich, 2003) and persevere when encountering obstacles in achieving their goals (Pichardo et al., 2014; Kubi, 2021), make firm and mature decisions, learn from their mistakes, and find solutions to problems (Pichardo et al., 2014). They will be able to follow lessons they do not like because they have confidence in themselves to get through it, so they continue to perform well during lessons.

On the other hand, high academic engagement among students can be fostered by their self-efficacy, which refers to their confidence in their ability to succeed in various academic activities (Sagone & Caroli, 2014). One way to achieve this is by trying to find ways to improve understanding in learning in order to remain engaged in learning activities (Baños et al., 2023). This is particularly true when employing techniques for learning achievement. In other words, students who use strategies in learning are more confident in their efforts to improve their understanding of learning, and this makes students more likely to participate and contribute to learning activities.

Positive relationships within the school environment, willingness to accept help from others, and mutual support have an impact on students' willingness to appreciate the success of their efforts in the educational process (Babajani et al., 2021). Students will decide to raise the standard of their education as they encounter different challenges in the learning process based on their personal considerations. This will enable students to better manage themselves in sorting out things that can support the learning process (Akyol & Kabasakal, 2023).

Based on the above explanation, this study will test several hypotheses, including the following:

1. A positive correlation, mediated by academic self-efficacy, between student interpersonal interactions and academic engagement.
2. Academic self-efficacy acts as a mediator within the positive link between academic engagement and self-regulation.
3. Interpersonal interactions and academic engagement among students are related.
4. Academic engagement and self-regulation are positively correlated.
5. Academic engagement and academic self-efficacy are positively correlated.
6. Students' academic self-efficacy and interpersonal relationships are positively correlated.
7. Academic self-efficacy and self-regulation are positively correlated.

METHODOLOGY

Sampling techniques are needed in a study to determine who the participants are so as not to cause confusion when conducting fieldwork (Amin et al., 2023). This study used stratified random sampling. The target sample size was determined using the Issac and Michael table, resulting in 243 people with a 5% margin of error based on the 843 students enrolled for the 2024–2025 school year, with 97 males and 146 females spread evenly among 81 students from grades 10, 11, and 12 at MA Al-Hikmah Purwoasri Kediri.

The variables used in this study are:

Academic engagement

Academic engagement is described as specific behavioral involvement that is routinely performed for learning reasons of perseverance and effort (Fredricks et al., 2004; Chapman, 2003). This behavioral involvement is very valuable considering that to be successful in school, children need to perform various academic and social competencies (Wentzel, 2012). Harackiewicz et al. (2002) and Soini & Aro (2014) mention that academic engagement is a student's orientation to be able to understand, comprehend, and master the subject matter as well as possible.

According to Kuh (2009) and Chen & Zhang (2022), Academic engagement is a measure of how much time students spend on learning and the quality of their educational efforts. Liem & Chong (2017) offer a different perspective in defining academic engagement. According to them, academic engagement places greater emphasis on feelings of attachment and belonging to school, characterized by commitment, trust, bonds, and involvement. The term "academic engagement" also describes the visible behaviors that students display when they participate in class work (Finn, 1989). These behaviors include paying attention in class, finishing homework at home, and improving learning through extracurricular academic activities (Finn & Zimmer, 2012).

Fredricks et al. (2004) found three aspects of the concept of academic engagement, namely:

1. Behavioral engagement: following classroom rules and norms, actively participating in learning.

2. Emotional engagement: actively participating in learning, contributing to school activities, feeling a sense of belonging, appreciating and valuing learning outcomes, expressing feelings (happiness, sadness, boredom, and anxiety) towards lessons, teachers, and friends.
3. Cognitive engagement: asking questions to clarify ideas, persevering in completing difficult tasks, being flexible in problem solving, using learning strategies and self-regulation that support learning.

According to Fredricks (2004), Academic engagement can be affected by a number of factors, including:

1. Teacher Support: The support shown by teachers to students can influence students' behaviour, emotions, and cognition to engage in the learning process. The support provided by teachers to students can encourage students to participate, thereby having a positive impact on their academic success.
2. Peers: Peers are school children who have strong relationships and support from their peer group, enabling them to face discrimination and making it more likely for them to remain engaged in school.
3. Classroom Structure: Classroom structure refers to teachers who have clear rules and norms in carrying out academic activities, which are more effective in getting students involved in learning activities.
4. Motivation: Motivation is an individual's basic psychological need. Students will engage in learning when their basic psychological needs are met.
5. School level and classroom context: Class level at school is a factor in increasing engagement in learning, because generally those in higher grades have adapted well so that they can comfortably participate in various activities in the classroom or at school.

Collie & Martin (2019) mention several factors that influence academic engagement, including motivation, self-regulation, self-control, and mastery orientation. The academic engagement scale in this investigation was developed according to the Fredrick et al. (2004), consisting of 36 statement items, with a reliability result of α 0.882, which means that the academic engagement scale is proven to be reliable.

Student Interpersonal Relationship

Martin & Dowson (2009) argue that Social interactions that teach individuals about themselves and how to fit into a specific group are termed as interpersonal relationships. This includes both academic and non-academic aspects, with adjustment to the group encompassing adjustment to parents or caregivers, teachers, and peers (Martin, 2014). This is reinforced by the opinions of Brok et al. (2006) and Mo & Singh (2008), who also say that interpersonal relationships in the educational sphere include relationships with classmates, teachers, school leaders, and parents who discuss school-related topics so as to motivate students' academic behavior.

According to Collie et al. (2016), interpersonal relationships are usually defined as long-lasting relationships between two individuals, uniquely characterized by a degree of continuity, a history of togetherness, and

interdependent interactions in various situations and activities. This is expanded to include the quality of a relationship, as evidenced by the level of trust, intimacy, positive effects, closeness, and the communication's content and quality. Meanwhile, according to Chandralekha (2022) and Fraser (2012), Interpersonal relationships occur when two or more people in an environment engage in reciprocal social and emotional interactions that has similar interests and goals so that they have equal learning opportunities.

There are several factors that influence student interpersonal relationships according to Chandralekha (2022), which are grouped into three categories, namely:

1. Personal Factors

Personal factors that can influence interpersonal relationships include gender, trust and honesty, compatibility, feelings of security, effective communication, self-concept, and flexibility in establishing relationships.

2. Situational

Important factors that influence interpersonal relationships depend on the environmental situation, the complexity of the problems faced, the sphere of influence, and the number of individuals involved in the relationship pattern.

3. Sociocultural

Cultural, ethnic, social, and linguistic diversity play an important role in influencing interpersonal relationships. Factors related to values, attitudes, customs, and cultural habits provide the basis for everyone's way of thinking.

It has been found that three aspects of student interpersonal relationships have significance to their healthy development and functioning (Martin & Dowson, 2009). These include: (1) Positive interactions with instructors, getting help from teachers for learning needs, and getting praise from teachers for academic efforts are all examples of student-teacher relationships. (2) Student-parent relationships: receiving fair treatment from parents, receiving understanding from parents. (3) Student-peer relationships: being able to establish quality interactions with peers, receiving support from peers, and receiving recognition from peers. These aspects then became the reference for creating a scale in this study, which was described in 32 items with a reliability result of α 0.869, which means that the student interpersonal relationship scale proved to be reliable.

Self-Regulation

Self-regulation, according to Pichardo et al. (2014), is the capacity of an individual to flexibly plan, direct, and observe their behavior in the face of shifting conditions in order to achieve predetermined goals. According to Prasad & Chen (2010), The ability to practice self-control is referred to as self-regulation, including setting goals or objectives and focusing on the desired outcomes, thereby preventing them from deviating from social norms and returning to normal standards (Baumeister & Heatherton, 2009).

Self-regulation is also described as a cycle of past experiences that are used to adjust current efforts. Self-regulation refers to self-motivated ideas, sentiments, and behaviors that are intended to accomplish individual objectives (Zimmerman, 2000). According to Ryan and Deci (2000), Self-regulation is the process by how individuals assimilate social norms and extrinsic contingencies

and progressively transform them into personal values and self-motivation. In addition, self-regulation is also described as an individual's effort to According to Ormrod (2014) and Alwisol (2009), self-regulation is defined as knowledge and skills that are specific to certain problems, as well as self-regulation skills that have an influence on the surrounding environment.

The four components of self-regulation are goal-setting, perseverance, decision-making, and learning from failures (Pichardo et al., 2014). These dimensions then became the reference for creating a scale in this study, which was described in 40 items with a reliability result of α 0.918, which means that the self-regulation scale proved to be reliable.

Academic Self-Efficacy

Academic self-efficacy is defined by Sagone & Caroli (2014) as a person's confidence in their ability to complete a variety of academic assignments. One of the most accurate indicators of successful academic outcomes is academic self-efficacy, which is also described as students' faith and confidence in their capacity to complete academic assignments (Eakman et al., 2019).

Academic self-efficacy, described by Zimmerman (1995), is a concept in the academic setting that has to do with a person's feeling of flowing with their belief in their ability to do academic tasks. Self-confidence, flexibility, cognitive ability, intelligence, and the ability to perform under pressure are all included in this notion, according to Lesmana & Bidanghan (2021).

Research funding by Mukti & Tentama (2019) state that interest, attachment style, and resilience are factors that influence academic self-efficacy. Sagone and Caroli (2014) suggest that academic self-efficacy can be described by four dimensions: interpersonal climate, self-involvement, self-oriented decision-making, and other-oriented problem-solving. This study's academic self-efficacy scale was developed using the criteria described by Sagone & Caroli (2014), consisting of 36 statement items, with a reliability result of α 0.927, it indicates that the reliability of the academic self-efficacy scale has been proven.

RESULTS

Modeling and Analysis

The data analysis technique in this study uses path analysis to examine the relationship model between variables. The assumption testing and data analysis processes will use *Jeffrey's Amazing Statistics Program (JASP) for Windows*.

Assumption Test

1. Normality Test

The purpose of the data normality test is to ascertain whether the study's data is normally distributed. Jeffrey's Amazing Statistics Program (JASP) for Windows was used to perform the data normalcy test in this investigation by looking at the skewness and kurtosis values. According to Field (2005), to see the normality of data in samples with large size categories, the skewness and kurtosis values can be observed. Skewness and kurtosis values between -1.96 and 1.96 can be used to classify data as regularly distributed.

While the student interpersonal relationships variable is not normally distributed, the academic engagement, self-regulation, and academic self-efficacy variables have skewness and kurtosis values between -1.96 and 1.96, indicating that the data in this study is normally distributed.

Table 1. Normality Test Result

Variabel	Skewness	Std. error skewness	Kurtosis	Std. error kurtosis	Description
Academic Engagement	-0,303	0.156	1,861	0.311	Normal
Student Interpersonal Relationship	-0,498	0.156	2,303	0.311	Not Normal
Self-Regulation	0,054	0.156	0,213	0.311	Normal
Academic Self-Efficacy	0,068	0.156	0,113	0.311	Normal

Source: Output JASP Versi 0.19.1.0

2. Data Analysis

The JASP for Windows application is also used in this study's data analysis method, which employs path analysis to look at the relationship model between variables. Academic engagement is the study's dependent variable, self-regulation and interpersonal interactions are its independent variables, and academic self-efficacy serves as its mediator.

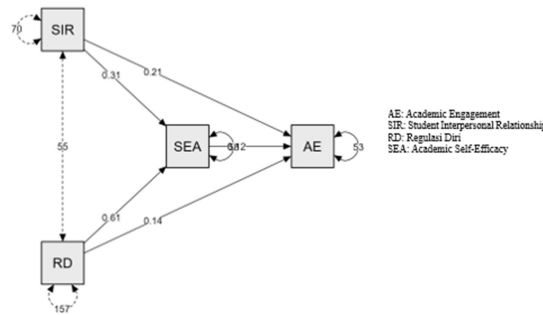


Figure 1. Path Diagram

Indirect Effect

Table 2. Indirect Effect Result

Variabel		t	p	Description
Student Interpersonal Relationship	Academic Self-Efficacy → Academic Engagement	0,039	0,063	Hypothesis rejected
Self-Regulation	Academic Self-Efficacy → Academic Engagement	0,076	0,045	Hypothesis accepted

Source: Output JASP Versi 0.19.1.0

1. The first hypothesis test showed that academic self-efficacy does not act as a mediator between how students relate to each other and their level of academic engagement. The result was 0.063, which is not significant because the p-value was higher than 0.05. So, the first hypothesis was not supported.
2. The findings from the second hypothesis test indicated a significant effect of academic self-efficacy as a mediator between self-regulation and academic engagement, with a value of 0.045 ($p < 0.05$).

Direct Effect

Table 3. Direct Effect Result

Variabel		t	p	Description
Student Relationship Engagement	Interpersonal → Academic	0,215	0,002	Hypothesis accepted
Self-Regulation Engagement	→ Academic	0,144	0,012	Hypothesis accepted
Academic Academic Engagement	Self-Efficacy →	0,125	0,042	Hypothesis accepted
student interpersonal relationship → Academic Self-Efficacy		0,313	<0,001	Hypothesis accepted
Regulasi Diri → Academic Self-Efficacy		0,607	<0,001	Hypothesis accepted

Source: Output JASP Versi 0.19.1.0

1. Tests indicate a significance level of 0.002, which is less than 0.05. This means there is a strong and positive connection between how well students get along with others and how much they are involved in their studies. This supports the third hypothesis that the researcher suggested.
2. The hypothesis test show a significance value between self-regulation and academic engagement of 0.012 ($p < 0.05$). This is in accordance with the fourth hypothesis proposed by the researcher.
3. The results from the hypothesis test show a significant value of 0.042, which is less than 0.05. A positive correlation exists between academic self-efficacy and academic engagement. This finding supports the fifth hypothesis that the researcher proposed.
4. Based on the results of the hypothesis test, which indicate a significance value of <0.001 ($p < 0.05$), it can be said that academic self-efficacy and student interpersonal interactions are positively and significantly correlated. This is consistent with the researcher's sixth hypothesis.
5. The findings of the hypothesis test indicate a <0.001 ($p < 0.05$) significance value between academic self-efficacy and self-regulation. This is consistent with the researcher's seventh hypothesis.

CONCLUSIONS AND RECOMMENDATIONS

The study showed that academic self-efficacy does not clearly act as a mediator between student relationships and their level of academic engagement. Healthy student interpersonal relationships had a more dominant influence on student academic engagement at school, especially within the framework of the collective culture that exists in Indonesian society. Social interaction and a sense of togetherness among students with their peers are very meaningful, so that students usually feel more comfortable and exited to arrive at school on time and contribute to various activities at school. Students who have the ability to regulate themselves and also have confidence in their own abilities can increase their involvement, active participation, and courage in proposing ideas in academic activities (Lubis, 2018; Qonita et al., 2024).

Positive interpersonal relationships, such as students who have good relationships with their parents, such as parental involvement in helping with homework or household chores, create an environment that supports learning, such as motivating children and setting realistic expectations, and can increase their learning efforts at school (Amponsah et al., 2018). Other findings also show that students' self-regulation skills in planning and setting goals and the inclusion of student expectations, purpose, anticipation, and progress reports can enhance learning and encourage students to engage in meaningful activities. (Singh et al., 2022).

When students need help from others to solve problems, they will learn to use various strategies based on advice from others so that the learning process continues to run optimally. Collaborative learning strategies in certain fields can increase Student involvement in class (Youngren, 2021). When students and teachers talk to each other in a kind and helpful way, especially when teachers encourage them during learning, it can make a big difference in how well students do in school and help them reach their goals (Amerstorfer & Kistner, 2021). According to Lee et al. (2021), the ability to use more effective learning strategies, including setting goals and making careful decisions while considering the risks involved, is related to a person's self-efficacy.

Further research should aim To enhance the precision and dependability of measuring equipment, for example, through additional statistical tests or by testing a larger population. Moreover, the sample size needs to be increased to ensure that the research results are more representative and offer stronger generalizations.

REFERENCES

- Akyol, M. E., & Kabasakal, H. Z. (2023). Examining Academic Flow Levels of High School Students According to Different Variables*. *ISPEC International Journal of Social Sciences & Humanities*, 7(2), 348–362.
- Alwisol. (2009). *Psikologi Kepribadian*. Malang: UMM Press.
- Alyaa Qonita, N., Aldalia, D., Lestari, S. A., & Purwantini, L. (2024). Pengaruh Regulasi Diri Dan Efikasi Diri Terhadap Stress Akademik Mahasiswa. *Observasi: Jurnal Publikasi Ilmu Psikologi*, 2(1), 114–120.
- Amerstorfer, C. M., & Freiin von Münster-Kistner, C. (2021). Student Perceptions of Academic Engagement and Student-Teacher Relationships in Problem-Based Learning. *Frontiers in Psychology*, 12(October), 1–18.
- Amin, N. F., Garancang, S., & Abunawas, K. (2023). Konsep Umum Populasi dan Sampel dalam Penelitian. *Jurnal PILAR: Jurnal Kajian Islam Kontemporer*, 14(1), 15–31.
- Babajani, M., Erfani, N., Yarahamdi, Y., & Ahmadian, H. (2021). Developing a Causal Model of Academic Engagement based on Self-Regulation and Academic Emotions with the Mediating Role of Academic Self-handicapping: The Effectiveness of the Plan from the Model on Academic Burnout. *Journal of Applied Psychological Research*, 12(1), 369–387.
- Baños, R., Calleja-Núñez, J. J., Espinoza-Gutiérrez, R., & Granero-Gallegos, A. (2023). Mediation of academic self-efficacy between emotional intelligence and academic engagement in physical education undergraduate students. *Frontiers in Psychology*, 14(July), 1–11.
- Baumeister, R. F., & Heatherton, T. F. (2009). Self-Regulation Failure: An Overview. *Self-Regulation Failure: An Overview*, 7965(October 2011), 37–41.
- Benlahcene, A., Mohamed Abdelrahman, R., Ahmed, M., & Aboudahr, S. M. F. M. (2024). A Pathway to Engagement: The Mediating Role of Self-Efficacy Between Interpersonal Relationships and Academic Engagement. *Cogent Psychology*, 11(1).
- Bierman, K. L., Domitrovich, C. E., Nix, R. L., Gest, S. D., Welsh, J. A., Greenberg, M. T., Gill, S. (2008). Promoting academic and social-emotional school readiness: The head start REDI program. *Child Development*, 79(6), 1802–1817.
- Chandralekha, E. (2022). *Interpersonal Relationship*. Retrieved from

- Chapman, E. (2003). Alternative approaches to assessing student engagement rates. *Practical Assessment, Research and Evaluation*, 8(13), 1-7.
- Chen, H., & Zhang, M. H. (2022). The relationship between basic psychological needs satisfaction and university students' academic engagement: The mediating effect of emotional intelligence. *Frontiers in Psychology*, 13(December).
- Christenson, S. L., Wylie, C., & Reschly, A. L. (2012). *Handbook of Research on Student Engagement*. Handbook of Research on Student Engagement.
- Collie, R.J., Martin, A.J., Papworth, B., & Ginns, P. (2016). Students' interpersonal relationships, personal best (PB) goals, and academic engagement. *Learning and Individual Differences*, 45, 65-76.
- Den Brok, P., Brekelmans, M., & Wubbels, T. (2006). Multilevel issues in research using students' perceptions of learning environments: The case of the Questionnaire on Teacher Interaction. *Learning Environments Research*, 9(3), 199-213.
- Dewi Fani Cintia, & Yuniarsih, T. (2020). Pengaruh lingkungan sekolah dan peran guru terhadap motivasi belajar siswa. *Jurnal Pendidikan Manajemen Perkantoran*, 5(1), 1-13.
- Eakman, A. M., Kinney, A. R., Schierl, M. L., & Henry, K. L. (2019). Academic performance in student service members/veterans: effects of instructor autonomy support, academic self-efficacy and academic problems. *Educational Psychology*, 39(8), 1005-1026.
- Edge, S. (2021). Student engagement drops - again - during the pandemic. Retrieved December 2, 2024, from
- Eric Appiah-Kubi. (2021). Influence of Self-Regulated Learning on Academic Engagement, the Moderating Role of Ocean Personality Traits Among SHS Students in the Berekum Municipality of Ghana. Thesis submitted to the Department of Education and Psychology, Faculty of Educational Foundations, College of Education Studies, University of Cape.
- Fachmi, T. (2023). Pengaruh Self-Efficacy Terhadap School Engagement Santri Pondok Pesantren. *Geneologi PAI: Jurnal Pendidikan Agama Islam*, 9(1).
- Fan, W., & Williams, C. M. (2010). The Effects of Parental Involvement on Students' Academic Self-Efficacy, Engagement and Intrinsic Motivation. *Educational Psychology*, 30(1), 53-74.
- Field, A. P. (2005). *Discovering statistics using SPSS: and sex and drugs and*

rock "n" roll (2nd Edition).

- Finn, J. D. (1989). *Withdrawing From School*. *Review of Educational Research*, 59(2), 117-142.
- Finn, J. D., & Zimmer, K. S. (2012). *Student Engagement: What Is It? Why Does It Matter?* BT - *Handbook of Research on Student Engagement*. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.) (pp. 97-131). Boston, MA: Springer US.
- Fraser, B. J. (2012). *Classroom Learning Environments: Retrospect, Context and Prospect* BT - *Second International Handbook of Science Education*. In B. J. Fraser, K. Tobin, & C. J. McRobbie (Eds.) (pp. 1191-1239). Dordrecht: Springer Netherlands.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). *School Engagement Potential of The Concept*. *Review of Educational Research*, 74(1), 59-109.
- Green, J., Liem, G. A. D., Martin, A. J., Colmar, S., Marsh, H. W., & McInerney, D. (2012). *Academic motivation, self-concept, engagement, and performance in high school: Key processes from a longitudinal perspective*. *Journal of Adolescence*, 35(5), 1111-1122.
- Hamdiyah, R., El-Yunusi, M. Y. M., & Darmawan, D. (2024). *Pengaruh Kebiasaan Belajar, Regulasi Diri dan Lingkungan Sosial Terhadap Prestasi Belajar Siswa MTs Al-Ikhwan Gresik*. *Journal on Education*, 6(4), 21190-21210.
- Harackiewicz, Judith M. Barron, Kenneth E. Tauer, John M. Elliot, A. J. (2002). *Predicting success in college: A longitudinal study of achievement goals and ability measures as predictors of interest and performance from freshman year through graduation*. *Journal of Educational Psychology*, 94(3), 562-575.
- Hardianti Sartika, S., & Nila Nirbita, B. (2022). *Webinar dan Call for Paper Fakultas Ekonomi Universitas Tidar. Resiliensi Akademik terhadap Student Engagement dalam Menghadapi Transisi Pembelajaran Daring-Luring*, 19 (Sept)
- Hedeshi, V. M. (2017). *The Effect of Self-Regulatory Learning Strategies on Academic Engagement and Task Value*. *World Family Medicine Journal/Middle East Journal of Family Medicine*, 15(10), 242-247.
- Juvonen, J., Espinoza, G., & Knifsend, C. (2012). *The Role of Peer Relationships in Student Academic and Extracurricular Engagement* BT - *Handbook of Research on Student Engagement*. In S. L. Christenson, A. L. Reschly, & C.

- Wylie (Eds.) (pp. 387–401). Boston, MA: Springer US.
- Kuh, G. D. (2009). The National Survey of Student Engagement: Conceptual and Empirical Foundations 6 Using NSSE In Institutional Research. *New Directions for Institutional Research*, (141), 5–20.
- Lee, D., Allen, M., Cheng, L., Watson, S., & Watson, W. (2021). Exploring Relationships Between Self-Efficacy and Self-Regulated Learning Strategies of English Language Learners in a College Setting. *Journal of International Students*, 11(3), 567–585.
- LeMay IV, J. O. (2017). Academic Engagement, Motivation, Self-Regulation, and Achievement of Georgia Southern University Sophomore Students. *Electronic Theses and Dissertations*, Georgia Southern University.
- Lesmana, T., & Bidanghan, L. (2021). The Effect of Academic Self-Efficacy and Mindfulness on Students Academic Stress During the Covid-19 Pandemic Period. *Proceedings of the International Conference on Economics, Business, Social, and Humanities (ICEBSH 2021)*, 570(Icebsh), 91–95.
- Liem, G. A. D., & Chong, W. H. (2017). Fostering student engagement in schools: International best practices. *School Psychology International*, 38(2), 121–130.
- Linnenbrink, E. A., & Pintrich, P. R. (2003). Reading & Writing Quarterly : Overcoming Learning Difficulties The role of self efficacy beliefs in student engagement and learning. *Reading & Writing Quarterly*, 19(2), 119–137.
- Lisandy, S. P. (2022). Academic Self-Efficacy dan Openness to Experience dengan Academic Engagement pada Mahasiswa Bekerja. *Skripsi tidak diterbitkan, Program Studi Psikologi, Universitas 17 Agustus 1945 Surabaya*.
- Lubis, I. S. L. (2018). Hubungan Regulasi Diri dalam Belajar dan Efikasi Diri dengan Prokrastinasi Akademik Mahasiswa. *Jurnal Diversita*, 4(2), 90.
- Martin, A. J. (2014). Interpersonal relationships and students' academic and non-academic development: What outcomes peers, parents, and teachers do and do not impact. *Interpersonal Relationships in Education: From Theory to Practice*, 9–24.
- Martin, A. J., & Dowson, M. (2009). Interpersonal relationships, motivation, engagement, and achievement: Yields for theory, current issues, and educational practice. *Review of Educational Research*, 79(1), 327–365.
- Mo, Y., & Singh, K. (2008). Parents' Relationships and Involvement: Effects on

- Students' School Engagement and Performance. *RMLE Online*, 31(10), 1-11.
- Nauvalia, C. (2021). Faktor eksternal yang mempengaruhi academic self-efficacy: Sebuah tinjauan literatur. *Cognicia*, 9(1), 36-39.
- Opdenakker, M. C., & Minnaert, A. (2011). Relationship between learning environment characteristics and academic engagement. *Psychological Reports*, 109(1), 259-284.
- Ormrod, J. E. (2014). *Essentials of Educational Psychology Big Ideas to Guide Effective Teaching*. United States of America: Pearson Education Limited.
- Owusu Amponsah, M., Yaw Milledzi, E., Twum Ampofo, E., & Gyambrah, M. (2018). Relationship between Parental Involvement and Academic Performance of Senior High School Students: The Case of Ashanti Mampong Municipality of Ghana. *American Journal of Educational Research*, 6(1), 1-8.
- Pichardo, C., Justicia, F., De La Fuente, J., Martínez-Vicente, J. M., & Berbén, A. B. G. (2014). Factor structure of the Self-Regulation Questionnaire (SRQ) at Spanish universities. *Spanish Journal of Psychology*, 17(2).
- Prasad, S., & Chen, D. J. Q. (2010). !Pashad_modelutama_regulasi diri.pdf. *PACIS Proceedings*, 159.
- Sagone, E., & Caroli, M. E. De. (2014). Locus of Control and Academic Self-efficacy in University Students: The Effects of Self-concepts. *Procedia - Social and Behavioral Sciences*, 114, 222-228.
- Singh, M., James, P. S., Paul, H., & Bolar, K. (2022). Impact of cognitive-behavioral motivation on student engagement. *Heliyon*, 8(7), e09843.
- Sökmen, Y. (2021). The role of self-efficacy in the relationship between the learning environment and student engagement. *Educational Studies*, 47(1), 19-37.
- Tejedor, E. M. (2016). Career adaptability and its relation to self-regulation, career construction, and academic engagement among Spanish university students. *Journal of Vocational Behavior*, 93, 92-102.
- Tuominen-Soini, H., & Salmela-Aro, K. (2014). Schoolwork engagement and burnout among Finnish high school students and young adults: profiles, progressions, and educational outcomes. *Developmental Psychology*, 50(3), 649-662.

- Uçar, F. M., & Sungur, S. (2017). The role of perceived classroom goal structures, self-efficacy, and engagement in student science achievement. *Research in Science and Technological Education*, 35(2), 149-168.
- Wentzel, K. (2012). Part III Commentary: Socio-Cultural Contexts, Social Competence, and Engagement at School BT - Handbook of Research on Student Engagement. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.) (pp. 479-488). Boston, MA: Springer US.
- Wentzel, K. R. (2010). Students' relationships with teachers. In J.L. Meece & J.S. Eccles (Eds). In *Handbook of Research on Schools, Schooling and Human Development* (1st Editio, p. 17). New Yor: Routledge.
- Wibowo, N. (2016). Upaya Peningkatan Keaktifan Siswa Melalui Pembelajaran Berdasarkan Gaya Belajar di Smk Negeri 1 Saptosari. *Elinvo (Electronics, Informatics, and Vocational Education)*, 1(2), 128-139.
- Yudiani, E., Khosiyah, S., & Umer, A. (2023). the Effect of Gratitude and Academic Self Efficacy on Academic Engagement in Students. *Psikis : Jurnal Psikologi Islami*, 9(1), 154-160.
- Zandvliet, D., Brok, P. den, Mainhard, T., & Tartwijk, J. van. (2014). *The Theory and Practice of Interpersonal Relationships in Education. Interpersonal Relationships in Education.*
- Zhen, R., Liu, R.-D., Ding, Y., Wang, J., Liu, Y., & Xu, L. (2017). The mediating roles of academic self-efficacy and academic emotions in the relation between basic psychological needs satisfaction and learning engagement among Chinese adolescent students. *Learning and Individual Differences*, 54, 210-216.
- Zimmerman, B. J. (1995). Self-efficacy and educational development. In A. Bandura (Ed.), *Self-efficacy in changing societies* (pp. 202-231). Cambridge University Press.
- Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *handbook of self-Regulation*. Cambridge, MA : Academic Press, 13-39.