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The Mediating Role of Sense of Belonging: Exploring the Impact of Perception of Classroom Activity on Self-Regulation Learning in Hybrid Learning College Students

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A B S T R A C T

This study aims to determine the role of perception of classroom activity on self-regulated learning (SRL) through sense of belonging (SOB) as a mediator variable in college students who take part in hybrid learning. This study used three scales that have been adapted with high validity and reliability. The analysis technique used in this study used path analysis with the help of Jeffrey's Amazing Statistic Program (JASP) for Windows. The results showed that the hypothesis was accepted that there was a significant positive role between the perception of class activity on SRL through SOB as a mediator variable in college students who participated in hybrid learning. In addition, the mediation of SOB variable on the role of perceived classroom activity on SRL is categorized as partial mediation because there is still a significant direct relationship between perception of classroom activity on SRL when SOB is included as a mediator variable in college students who follow hybrid learning.

Keywords: *college student, hybrid learning, perception of classroom activity, self-regulated learning, sense of belonging*

Introduction

The Corona Virus Disease (COVID-19) pandemic began with the spread of the Covid-19 virus to Indonesia in 2020, precisely in March. One of the efforts made by the government is to distribute circulars Number 4 and 15 of 2020 which contains in suppressing the spread of the virus, learning from home online or online is carried out (Wijaya, et al., 2023). Many platforms are present and can be used in carrying out the learning suggested by the government, including e-learning, whatspp groups, google class, google doc, google form, and zoom meeting facilities (Astini, 2020). These social media platforms have been considered capable of improving student learning achievement (Yadewani, et al., 2020; Wijaya, et al., 2023).

As time goes on through this pandemic and a vaccine has been implemented in 2021. The decline in Covid-19 cases began to be seen, so the government again shared a new policy to conduct limited face-to-face learning meetings. This policy comes from the Joint Decree of the Minister of Learning and Culture, Minister of Religion, Minister of Health, and Minister of Home Affairs of the Republic of Indonesia concerning Guidelines for the Implementation of Education during the Covid-19 Pandemic, an appeal to conduct limited face-to-face lectures (PTMT) (Wijaya, et al., 2023). PTMT itself is also known as hybrid learning. Hybrid learning is learning with an online system combined with face-to-face meetings. Some people consider hybrid learning as well as blended learning, which is the use of online models. The main purpose of hybrid learning is to provide opportunities for various characteristics of learners to learn independently, continuously, and develop throughout life, so that learning will be more effective, more efficient and more interesting (Abdelrahman & Irby; 2016; Gultom, 2022; Helsa, et al., 2023).

In higher education, hybrid learning offers flexibility and access to educational resources including lecturers, faculty, and course materials. Flexible courses are delivered in hybrid form to achieve a balance between face-to-face and online learning. One of the requirements that an institution needs to fulfill to implement hybrid learning is that they need to have a strong online education management system where courses can be delivered fully online. In addition, another necessary requirement is the ability to use information technology, since hybrid learning is a combination of face-to-face and online learning. The ability to deliver learning materials with this mixed method must also be owned by lecturers because the success of hybrid learning lies in the role of lectures who master the competencies to manage hybrid learning (Abdelrahman & Irby, 2016; Gultom, et al., 2022; Helsa, et al., 2023). Hybrid learning has been increasingly adopted in academic settings across Indonesia since the Covid-19 pandemic. One of the challenges for college students participating in this learning is their ability to self-organize their learning. This means that they need to be able to manage their time, space and resources effectively to maximize their learning experience. In this hybrid learning, college students spend less time in class and more on independent learning (Rizkiyah, et al., 2023).

In online learning, which is part of hybrid learning, one of the distinctive characteristics is the autonomy of college students' experience in learning. College students are asked to be more independent, active in determining goals, learning experiences, selecting learning materials, and evaluating learning

outcomes (Moore, 1993, in Barnard, et al., 2008). College students need to manage their own learning to be successful in the learning. It was stated by Jonassen et al. (1995, in Puzziferro, 2008) that the need to organize learning in a learning environment is more important than face-to-face learning. This behavior can be shown when college students choose their own learning, access learning materials, manage learning time, adjust learning speed, and use appropriate learning strategies. The process of managing their own learning is known as self-regulated learning (SRL) (Zimmerman, 2002). SRL is a critical factor in online learning (Barnard et al., 2009; Bol & Garner, 2011). Research also suggests that SRL ability will predict the success of learners who follow online learning which is part of hybrid learning (Yukselturk & Bulut, 2007; Puzziferro, 2008). The need for SRL is also greater in the context of higher education. This is because the learning autonomy experienced by students is increasing, such as the freedom to set their lecture schedule, choose their courses, set their learning pace, not always being absent in class, etc. (Pedrotti & Nicolae, 2019). There is a higher expectation of SRL ability in college students who take part in online learning, which is part of hybrid learning. The results show that theoretically college students who take part in learning, especially online, should be followed by good SRL skills.

This is different from the field conditions that occur. A survey conducted by Amaliyah et al. (2023) showed that 68.1% of college students were dissatisfied with lectures with this learning. The survey was conducted on 167 students at the D1, D2, D3, D4 and S1 levels at universities in Surabaya. College students considered online lectures ineffective (83.1%) and found it difficult to follow online lectures (62%). The lack of ability to organize, manage, and direct the situation/environment as well as the willingness to achieve learning success is experienced by college students (Barnard-Brak, et al., 2010). The combination of skill/knowledge and willingness/desire functions is something that has not been shown by the majority of participants when participating in the learning. For example, for skills or knowledge, college students do not have good study time management, use learning strategies that are less diverse and less appropriate, do not set learning goals and standards, are confused in determining priorities, and do not ask for help from others when struggling. The function of will and desire is also shown by college students who do not give extra effort to understand the material, do other things during online lectures, lack of initiative to find out, and do not organize the environment from distraction.

A survey conducted by Marifa et al. (2021) on 185 college students also found several online learning barriers originating from within themselves related to SRL. The biggest problem is that students become passive and do not respond when there is miscommunication between lecturers and college students. Followed by laziness that arises when unable to interact face-to-face, not trying to avoid distractions that break concentration, and lack of time management skills and managing priorities. Lack of willingness and ability to achieve learning success (Barnard-Brak, et al., 2010) refers to learners' problems in managing their own learning. The survey results are also supported by the results of interviews by Amaliyah et al. (2023) on three undergraduate students at universities in Surabaya. The obstacles of planning and learning goals, time management, assessing or evaluating learning, low motivation, weak defense from environmental distractions that lead to SRL behavior are experienced by college students. The gap between the SRL abilities that should be possessed by college students in this learning environment and the factual conditions experienced by students is the phenomenon that underlies this research.

Babakhani (2014) and Amaliyah et al. (2023) in their research examined the perception of classroom activity on students' SRL ability mediated by SOB. Perception of classroom activity and SOB are factors that can influence SRL. Consistent with the social cognition perspective, SRL is the result of the interaction between personal factors, behavioral factors, and environmental factors (Zimmerman, 2002). A classroom environment that can fulfill learners' psychological needs such as providing opportunities for opinion, creating enthusiasm, providing relevant and useful material, facilitating interaction between learners encourages students' SOB (Anderman, 2003; Freeman, et al., 2007; Zumbrunn, et al., 2014). Learners will tend to show positive emotions towards learning, feel supported, valued and accepted (Zumbrunn, et al., 2014). Learners who have a positive perception of their classroom activities will feel included in the class and feel connected to their learning environment. Feeling accepted, valued and part of their class leads them to exhibit behaviors that control and manage their learning process (Babakhani, 2014; Won, et al., 2017).

The relationship between the perceptions of classroom activity, SOB, and SRL that have been described, the author argues that when the hybrid classroom environment, both face-to-face and online, can provide choice, control, encourage tasks that can be challenging, relevant to what is being learned, and generate fun and enthusiasm, it will facilitate interaction between learners and teachers. College students will feel valued, accepted in their learning environment, feel fit and connected, and feel part of the class and campus. The existence of a sense of security in their environment can make college students tend to be more involved in learning, active, initiative to show appropriate SRL strategies, manage and organize their learning. The description of this phenomenon is the background for the author to find out whether college students' perceptions of their classroom activity affect SRL with the mediator variable SOB in college students who take part in hybrid learning. The context of college students in hybrid learning will affect the selection of research participants and measuring instruments that are appropriate to the context.

Method

Research Design

This research uses explanatory quantitative research that seeks to explain a phenomenon or event by providing empirical evidence to support or deny (Neuman, 2014) where the phenomenon or event that occurs in this case is SRL in students who take hybrid learning.

Research Subject

In accordance with the research topic raised by the author, the population in this study were college students who attended lectures in hybrid learning. The sampling technique used is convenience sampling, namely collecting samples by taking samples located around the location or internet service (Edgar & Manz, 2017). Sampling was carried out by distributing research questionnaires using Google Form. The sample obtained in this study was 118 people.

Research Variable and Instruments

This study uses three variables, namely the variable of perceived class activities as the independent variable, the variable of self-regulated learning as the dependent variable, and the variable of sense of belonging as the mediating variable. The research instruments used in this study are Gentry and Gable's My Class Activities Scale (2001) to measure perceptions of class activities with aspects of interest, challenge, choice, and fun, Ingram et al.'s Perceived Student Belonging Scale (2012) with aspects of social belonging, academic belonging, and perceived institutional support, and Barnard et al.'s Online Self-regulated learning Questionnaire (OSLQ) (2009) in the context of online and blended learning to measure six subscale constructs of goal orientation, environmental structuring, time management, help seeking, self-evaluation, and task strategy. The three scales have been adapted to be translated and adjusted to the cultural context by Amaliyah et al. (2023).

Research Procedures and Data Analysis Techniques

The research procedure carried out by the author went through several stages as follows. First, determining the population, sample, and criteria for research subjects. Second, preparing research instruments in the form of adaptation scales that have been carried out in Indonesia and measuring the three variables in the same context as students. Furthermore, the author compiled the three scales into a google form. The author distributes the scale to the research subjects who have been determined previously. Finally, the author starts processing the data by scoring and analyzing the data. The data analysis technique in this study uses path analysis to determine the direct effect between the independent variable and the dependent variable, as well as the indirect effect using the mediating variable. The data analysis process in this study used the help of the Jeffrey's Amazing Statistical Program (JASP) for Windows program.

Result and Discussion

The results of this research can be seen from table 1. shows that first, the value of estimate = 0.559 (b = 0.559); coefficient z = 3.318 (z $\geq$ 1.96); standard error (SE) = 0.169 and p < 0.001. These results indicate that there is a significant and positive role between perception of classroom activity and SRL. The estimated value of the role between perception of classroom activity on SRL is between 0.890 to 0.229 in the confidence interval coefficient, which means that there is a direct effect between perceived classroom activity on SRL because there is no value of 0 (zero) in the 95% confidence interval range. Second, in table 1. obtained the path coefficient of perception of classroom activity to SOB of 0.941 (b = 0.941) with a significance level below 0.05; SE = 0.231. This shows that perception of classroom activity has a positive role on SOB. Third, in table 1, the path coefficient of SOB to SRL is 0.238 (b =0.238) with a significance level below 0.05; SE = 0.063. This shows that SOB has a positive role on SRL.

Table 1 also shows the results of mediation analysis where the estimate value = 0.224 (b = 0.224); coefficient z = 2.773 (z $\geq$ 1.96); standard error (SE) = 0.081 and p = 0.002 (p < 0.05). These results indicate that there is a positive and significant role between perception of classroom activity and SRL through SOB. The estimate value of 0.05 is between 0.383 to 0.066 in the confidence interval, which means that there is an indirect effect between perception of classroom activity on SRL through SOB because there is no value of 0 (zero) in the 95% confidence interval. Mediation of SOB variable on the role of perception of classroom activity on SRL is categorized as partial mediation because there is still a significant direct effect between perception of classroom activity on SRL when SOB is included as a mediator variable.

Table 1. Hypothesis Testing Results

Direct effects

			Estimate	Std. Error	z-value	p	95% Confidence Interval	
							Lower	Upper
PCA	→	SRL	0.559	0.169	3.318	< .001	0.890	0.229

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

Indirect effects

					Estimate	Std. Error	z-value	p	95% Confidence Interval	
									Lower	Upper
PCA	→	SOB	→	SRL	0.224	0.081	2.773	0.002	0.383	0.066

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

Total effects

			Estimate	Std. Error	z-value	p	95% Confidence Interval	
							Lower	Upper
PCA	→	SRL	0.784	0.167	4.685	< .001	1.111	0.456

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

Path coefficients

			Estimate	Std. Error	z-value	p	95% Confidence Interval	
							Lower	Upper
SOB	→	SRL	0.238	0.063	3.789	< .001	0.115	0.361
PCA	→	SRL	0.559	0.169	3.318	< .001	0.890	0.229
PCA	→	SOB	0.941	0.231	4.068	< .001	1.395	0.488

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

Based on the results of the study which proved that the higher/positive college students' perceptions of their classroom activities, the higher the SRL ability of college students who participated in hybrid learning. The results are consistent with the social cognitive theoretical framework which explains that social and environmental factors have an important influence on learners' SRL (Zimmerman, 1989; 2002). Perception of classroom activity is defined as learners' attitudes toward their classroom educational experience (Gentry & Springer, 2002). This factor is considered to encourage learners to monitor, control and evaluate their own learning (Sungur & Gungoren, 2009; Vanasupa, et al., 2010; Kareshki, 2011). The connection is explained by self-determination theory regarding basic human psychological needs, namely competence needs, autonomous needs, and relatedness needs (Amaliyah et al., 2023). The components of perceived classroom activities that include interest, challenge, choice and fun are drawn from these three human psychological needs (Grolnick, et al., 1997; Niemiec & Ryan, 2009). A learning environment that can fulfill these basic psychological needs is considered to strengthen college students' ability to regulate their own learning. The results of this study are in line with Kareshki (2011) research which states that students' perceptions of their classroom activities have a positive and significant influence on SRL. Learners' SRL behavior can emerge when their basic psychological needs, in this case referring to the perception of classroom activities, can be fulfilled. The connection of basic psychological needs referring to SDT is also supported by Vanasupa et al. (2010) that the classroom environment and climate that can meet the needs of competence, relatedness, autonomy can encourage learners to initiate and manage their own learning. Broadly speaking, Vanasupa et al. (2010) suggest that ecological influences that meet learners' psychological needs can strengthen their ability to organize their own learning.

Sungur and Gungoren (2009) research also supports the results of this study. Learners who perceive that their classroom environment provides opportunities to complete motivating tasks, are given autonomous choices, will tend to be more confident in their abilities, show intrinsic interest in academic tasks, and learn for reasons of self-development and mastery. Learners also tend to understand their failures and bounce back, try to learn and understand the material, persist longer, and use other more effective strategies (Sungur & Gungoren, 2009). Learners' SRL ability tends to be shown more when the environmental context can support freedom of choice, increase competence, and the link to present involvement (Grolnick & Raftery-Helmer, 2015). The results of these studies thus explain how perceptions of positive classroom activities influence college students' SRL abilities.

The results of the hypothesis testing conducted show that there is a significant and positive direct role on sense of belonging. The results prove that the more positive college students' perceptions of their classroom activities both online and offline, the higher the level of SOB towards the institution, social context, and academic environment. Classroom environments that emphasize personal effort, mastery of skills, perceiving the tasks assigned as interesting, important, and useful tend to maintain learners' sense of acceptance and validity in their school (Anderman, 2003; Freeman, et al., 2007). A positive educational environment facilitates cooperative interactions between college students, provides opportunities to explore opinions and identities, encourages college student participation, thus enhancing SOB. The influence of classroom context on SOB in Freman et al.'s (2007) study supports the results of the author's research. The classroom environment can encourage college students' SOB when lecturers can build a classroom atmosphere that is enthusiastic, warm, respectful, cooperative interaction with college students, and emphasizes mastery of meaningful material. When college students feel they have SOB, they tend to be more confident to achieve academic goals and participate in class activities. Similarly, according to Zumbrunn et al. (2014) a supportive classroom environment is an important aspect of learner belonging. A learning environment where the teacher can show interest in learners, provide opportunities for opinion, be present when needed makes learners feel part of the class (Zumbrunn, et al., 2014). This research contributes that learners' perceptions of their classroom context are related to SOB.

Other results also show that there is a significant and positive direct role between SOB and self-regulated learning. This proves that the more college students feel connected to the educational community, institutions, and academic activities, the more it will encourage college students' SRL abilities. The relationship between SOB and SRL is in line with the research of Won et al. (2017). Won et al. (2017) suggested that college students who are

connected to their institutions tend to use strategies for planning, monitoring, and organizing their learning process, as well as strategies for managing and organizing study time. College students who feel more accepted and supported by their peer group tend to utilize peer-related learning strategies. This is because wanting and having a secure relationship with peers allows college students to more easily approach their peers for academic assistance, and encourages college student participation in study groups or other strategies that rely on interaction. It can be concluded that college students who are connected to their university and accepted and supported by their peer group tend to use more strategies related to SRL because they feel they have a secure relationship with their learning environment.

The results of this study are also supported by Hensley et al. (2019) which explains the influence of SOB on SRL strategies. College students who consider themselves an important part of a social context where they feel accepted and supported will tend to organize their learning process strategically. This is done by asking for support or explanations that can facilitate and help understand learning material (Hensley et al., 2019). It can be concluded that college students who are connected to their university and accepted and supported by their peer group tend to use more strategies related to SRL The last research result, which shows that there is an indirect role of perceived class activity on self-regulated learning through sense of belonging in college students who take hybrid learning. This proves that SOB can be a mediator variable that connects perceived classroom activity and SRL. When class activities are perceived positively, college students feel connected to their peers, feel supported in their academic activities, and the institution provides support services will encourage the SRL ability of college students who take part in online and offline learning.

This study shows that SOB has a mediating role between the variables of perceived classroom activity and SRL. The relationship between perceived classroom activities, SOB and SRL is explained when the classroom environment both offline and online can provide choice and control, encourage challenging tasks, relevant to what is learned, attract interest, generate pleasure and enthusiasm will create positive emotions towards college students. College students feel valued, supported, accepted by their peers, their institution, and their academic activities. The existence of a sense of security, fit, and connection to their learning environment makes college students tend to show aspects of SRL such as goal orientation, environmental structuring, task strategies, time management, seeking help, and self-evaluation.

The results of this study are in line with Babakhani (2014) and Amaliyah et al. (2023) research that SOB has an important role in mediating the perception of classroom environment on SRL. Positive classroom perceptions where learners believe that they can be given the opportunity to independently choose their learning activities based on their abilities, ways, interests, be involved in making decisions in class, be considered capable people, and valuable in the eyes of the teacher. There is also a feeling of belonging to the class and school. Learners then become involved in the educational experience with more responsibility and commitment and will control their learning process. SOB acts as an intermediary linking perceptions of classroom activities with the use of SRL strategies.

4. Conclusion

Based on the results and discussion previously described, it can be concluded that all hypotheses are accepted. This means that there is a significant positive role between perception of classroom activity on SRL through SOB as a mediator variable in college students who follow hybrid learning. The research also shows that the mediation of SOB variable on the role of perceived classroom activity on SRL is categorized as partial mediation because there is still a significant direct relationship between perception of classroom activity on SRL when SOB is included as a mediator variable in college students who follow hybrid learning.

References

Abdelrahman, N., & Irby, B.J. (2016). Hybrid learning: Perspectives of higher education faculty. *Blended Learning, Concepts, Methodologiests, Tools, and Applications,* 4, 1-28, doi: https://doi.org/10.4018/978-1-5225-0783- 3.ch001.

Amaliyah, A., Yoenanto, N.H., & Prihastuti, P. (2023). Perception of classroom activity, sense of belonging and self regulated learning in students taking online learning. *Psikostudia,* 12(3), 257-263.

Astini, S.N.K. (2020). Pemanfaatan teknologi informasi dalam pembelajaran tingkat sekolah dasar pada masa pandemi covid-19. *Jurnal Lembaga Mutu STKIP Agama Hindu Amlapura,* 11(2), 13-25.

Babakhani, N. (2014). Perception of class and sense of school belonging and self-regulated learning: A causal Model. *Procedia - Social and Behavioral Sciences, 116*(1993), 1477–1482. https://doi.org/10.1016/j.sbspro.2014.01.420

Barnard, L., Paton, V., & Lan, W. (2008). Online self-regulatory learning behaviors as a mediator in the relationship between online course perceptions with achievement. *International Review of Research in Open and Distance Learning, 9*(2), 1-11, doi:10.19173/irrodl.v9i2.516.

Barnard-Brak, L., Lan, W. Y., & Paton, V. O. (2010). Profiles in self-regulated learning in the online learning environment. *International Review of Research in Open and Distance Learning, 11* (1), 61-80, doi: https://doi.org/10.19173/irrodl.v11i1.769.

Bol, L., & Garner, J. K. (2011). Challenges in supporting self-regulation in distance education environments. *Journal of Computing in Higher Education,* 23(2- 3), 104–123, doi: https://doi.org/10.1007/s12528-011-9046-7.

Edgar, T.W., & Manz, D.O. (2017). *Exploratory Study. Res. Methods Cyber Secur*, pp. 95–130.

Freeman, T. M., Anderman, L. H., & Jensen, J. M. (2007). Sense of belonging in college freshmen at the classroom and campus levels. *The Journal of Experimental Education, 75*(3), 203-220. doi: https://doi.org/10.320 0/ JEXE.75.3.203-220.

Gentry, M., & Gable, R. K. (2001). From the student's perspective-my class activities: An instrument for use in research and evaluation. *Journal for the Education of The Gifted,* 24(4), 322-343, doi: https://doi.org/ 10.1177 /016235320102400403.

Gentry, M., & Springer, P. M. (2002). Secondary student perceptions of their class activities regarding meaningfulness, challenge, choice, and appeal: An intial validation study. *The Journal of Secondary Gifted Education, XIII*(4), 192-204, doi: https://doi.org/10.4219/jsge-2002-381.

Gultom, J.R., Sundara, D., & Fatwara, M.D. (2022). Pembelajaran hybrid learning model sebagai strategi optimalisasi sistem pembelajaran di era pandemi covid-19 pada perguruan tinggi di Jakarta. *Mediastima,* 28(1), 11-22, doi: https://doin.org/10.55122/mediastima.v28il.385.

Grolnick, W., Deci, E. L., & Ryan, R. M. (1997). Internalization within the family: The self-determination theory perspective. Dalam G. J. E., & K. L. (Eds.), *Parenting and children's internalization of values: A handbook of contemporary theory* (pp. 135-161). John Wiley & Sons Inc.

Helsa, Y., Marasabessy, R., Juandi, D., & Turmudi. (2023). Penerapan hybrid learning di perguruan tinggi Indonesia: literatur review. *Jurnal Cendekia: Jurnal Pendidikan Matematika*, 7(1), 139-162.

Hensley, L. C., Won, S., & Wolters, C. A. (2019). Brief research report: sense of belonging and academic help-seeking as self-regulated learning. *The Journal of Experimental Education,* 89(1), 1-13, doi: https://doi.org/10/10 80/00220973.2019.1703095.

Ingram, D. C., Stipek, D. J., Antonio, A. L., Hakuta, K. (2012). *College students' sense of belonging: Dimensions and correlates* [Doctoral dissertation, Stanford University, School of Education]. Standford Digital Repository. http://purl.stanford.edu/rd771tq2209.

Kareshki, H. (2011). Relations among perceptions of classroom activities and self- regulating learning. *Procedia Social and Behavioral Sciences,* 12, 409-413, doi: https://doi.org/10.1016/j.sbspro.2011.02.050.

Marifa, K., Komariah, K., Hamidah, S., & Sugiyono, S. (2021). Hambatan pembelajaran daring dalam perkuliahan pada masa pandemi Covid-19. *Prosiding PTBB FT UNY, 16*(1).

Neuman, W. L. (2014). *Social research methods: Qualitative and quantitative approaches (7ᵗʰ Ed).* Pearson Education.

Pedrotti, M., & Nicolae, N. (2019). How students fail to self-regulate their online learning experience. *Transforming Learning with Meaningful Technologies*, 377-385, doi: https://doi.org/10.1007/978-3-030-29736-7_28.

Puzziferro, M. (2008). Online technologies self-efficacy and self-regulated learning as predictors of final grade and satisfaction in college-level online courses. *American Journal of Distance Education,* 22(2), 72-89, doi: https://doi.org/10.1080/08923640802039024.

Rizkiyah, N., Napis., & Alfin, E. (2023). Kemampuan regulasi diri dalam belajar (self regulated learning) mahasiswa dalam pembeljaran hybrid pada mata kuliah eksak dan non eksak. *Innovative: Journal of Social Science Research*, 3(2), 8857-8856.

Sungur, S., & Gungoren, S. (2009). The role of classroom environment perceptions in self-regulated learning and science achievement. *Elementary Education Online, 8*(3), 883-900.

Vanasupa, L., Harding, T. S., & Stolk, J. (2010). Application of self-determination and self-regulation theories to course design: planting the seeds for adaptive expertise. *International Journal of Engineering Education, 26*(4), 914–929.

Wijaya, R., Ydewani, D., & Nagara, P. (2023). Pengaruh pemanfaatan hybrid learning terhdap motivasi dan prestasi belajar mahasiswa di masa post pandemi. *Target: Jurnal Manajemen dan Bisnis*, 5(1), e-ISSN: 2715-9361, doi: https://doi.org/10.30812/target.v5i1.2872.

Won, S., Wolters, C. A., & Mueller, S. A. (2017). Sense of belonging and self- regulated learning: testing achievement goals as mediators. *The Journal of Experimental Education*, 86(3), 402-418, doi: https://doi.org/10.1080 /00220973.2016.1277337.

Yadewani, D., Lukman, M., Wahyu, A., & Mursalini, I. (2020). Pengaruh pemanfaatan platform sosial media pada era digital terhhadap prestasi mahasiswa. *Apresiasi,* 8, 521-527.

Yukselturk, E., & Bulut, S. (2007). Predictors for student success in an online course. *Educational Technology & Society*, 10(2), 71-83.

Zimmerman, B. J. (1989). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology, 81*(3), 329-339, doi: https://doi.org/10.1037/0022-0663.81.3.329.

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory Into Practice, 41*(2), 64-70, doi: https://doi.org/10.1207/s15430 421tip4102_2.

Zumbrunn, S., McKim, C., Buhs, E., & Hawley, L. R. (2014). Support, belonging, motivation, and engagement in the college classroom: a mixed method study. *Instructional Science*, 42, 661-684, doi: https://doi.org/10.1007/s11251-014-9310-0.