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Original Research Paper

The influence of self-control training on self-regulated learning in *Merdeka Belajar Kampus Merdeka* (MBKM) collage students

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Abstract
This study aims to examine the effectiveness of self-control training on self-regulated learning in UNISA collage students involved in the MBKM program. This research employs a quantitative method with an experimental design, specifically a pre-test post-test control group design. The criteria for subjects in this study are: 1) UNISA students in Yogyakarta participating in the MBKM program in 2024; and 2) willingness to complete the entire training process. The sample of the study was taken using a purposive sampling technique. The number of participants was 14 students who were participating in MBKM, consisting of 12 females and 2 males aged between 20 and 23 years old. Data collection involves using quesionare of the Self-Regulated Learning (SRL) likert scale, observations, and training evaluations conducted according to the Self-Control Training module. Data analysis methods include paired sample t-test to examine differences between pre-test and post-test conditions within a single group and independent sample t-test to assess differences between two groups (experimental and control). Based on the research results, a 2-tailed significance value of 0.013 < 0.05 indicates a significantly positive effect of the intervention. Based on the research findings, a two-tailed significance value of 0.013 was obtained, which is less than 0.05, indicating a significant positive effect of the intervention. Consequently, the Self-Control Training has a positive impact on the enhancement of Self-regulated Learning among MBKM students. The data analysis process was conducted using SPSS version 23 for Windows.

Keywords: collage students; MBKM; self-control training; self-regulated learning

1. Introduction

The ability of self-directed learning must be possessed by students, particularly those participating in Merdeka Belajar Kampus Merdeka (Independent Learning – Independent Campus / MBKM) program. The implementation of the Merdeka curriculum began in the 2021/2022 academic year by adopting "Independence" as the core concept of the Merdeka Belajar (Independent Learning) curriculum. The scope of educational institutions that have implemented the Merdeka Belajar Kampus Merdeka (MBKM) program in Indonesia includes universities, colleges, polytechnics, vocational education institutions, as well as non-governmental organizations, industries, and government agencies that can provide additional learning experiences for students, which are spread across the country. Merdeka Curriculum is expected to play a role in providing students with skills that are relevant to face challenges in the future and the work environment after graduation. Several forms of provision to prepare students have been stipulated in the Regulation of the Minister of Education and Culture Number 3 of 2020. The forms of learning in paragraph (4) can be lectures, response sessions, tutorials, seminars, practicums, studio practice, workshop practice, field practice, work practice, research, design or development, military training, student exchanges, internships, entrepreneurship, and/or other forms of Community Service. Several programs above have a clear goal to prepare students for entering the work environment.

The MBKM program is currently being implemented in Indonesia. Independence in learning is an important thing that must be possessed by students who participate in MBKM because students are given freedom to learn with direct practice in the field. Students are expected to be more independent because they are considered to be more mature and responsible individuals than when they were still at school (Daulay, 2021). The ability to learn independently is also known as Self-Regulated learning.

Self-regulated learning is an ability possessed by an individual in managing his/her learning experiences properly and effectively to obtain optimal learning outcomes (Harahap & Harahap, 2020) Self-regulated learning is really required by students to optimize their learning activities to obtain optimal academic outcomes (Hasanah et al., 2019). Low self-regulated learning ability in students will lead to a negative impact, including low academic performance and academic achievement (Saputra et al., 2018).

Self-Regulated Learning is a process where students activate their cognition, behavior, and feeling sequentially so that they are able to stay oriented in achieving their goals. Good students' ability in self-regulation when learning transforms their mental abilities into skills in the form of academic strategies. Based on Malahati (2023), the use of technology is also one of the factors that can be associated with the students' self-regulated learning abilities. Self-regulated learning has three phases: 1) Fore-Thought Phase, 2) Performance Phase, and 3) Self-Reflection Phase (Moylan, 2009).

Data obtained by the researcher regarding the learning evaluation of seventh-semester students in the Psychology Study Program who participated in MBKM reported that seven students had to extend the duration of their program because they were not able to participate in the program in accordance with the time agreed upon by partners. Moreover, among seventh-semester students who were writing their thesis, until two weeks before the MBKM ended, only 5% were ready to conduct a seminar for their thesis, while 80% of students were still in the data collection stage for a tryout. This indicates that students have not demonstrated the ability to regulate their learning to achieve the expected final learning goals. The results of (Putri et al., 2024) survey also indicate that although many students experience improvements in soft skills and practical abilities, only a portion feel prepared to face the job market, suggesting that self-directed learning management and the achievement of final goals are not yet optimal.

Students require self-regulated learning ability to adapt and control themselves in facing academic tasks, as well as managing and directing themselves. Moreover, Pintricth state that students will be motivated when they feel that they are competent in handling academic tasks, have confidence in their abilities, and are independent (Dörrenbächer-Ulrich et al., 2024). Therefore, it is important for students to have self-regulated learning abilities, particularly in completing the MBKM program. Therefore, a solution is needed to address this issue, as independent learners (such as MBKM students) must develop self-regulated learning skills for effective and autonomous learning (Astuti & Rozikin, 2024).

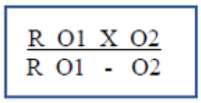
One of the solutions offered to improve the self-regulated learning abilities of MBKM students is by providing Self-Control Training. Self-control is an individual's ability to regulate behavior, thoughts, and decisions according to the situations and conditions that can lead to positive goals (Pradnyaswari & Susilawati, 2019). Self-control can be trained or improved through training (Tucker-Ladd, 2011). This is because self-control is part of the learning process of someone's life. An individual can improve their self-control abilities by learning how to practice good self-control. Learning process in the training will have an impact on an individual's self-control abilities. Self-control has several techniques/strategies that can be carried out, including relaxation response, meditation, self-monitoring/self-assessment, Autogenic training, behavioral self-management, self-instruction, and self-reinforcement.

Although previous studies, such as the one conducted have demonstrated the effectiveness of self-control training in reducing juvenile delinquency, there is a notable gap in the literature regarding its

impact on self-regulated learning among students, particularly those participating in the MBKM program. Therefore, this study aims to fill this gap by examining the effectiveness of self-control training specifically on self-regulated learning in UNISA collage students involved in the MBKM program. This research not only contributes to the existing body of knowledge in educational psychology but also offers practical solutions to enhance students' self-regulated learning abilities through targeted self-control strategies. In essence, this study represents a novel approach to understanding and improving self-regulated learning in the context of higher education, especially for students engaged in experiential learning programs like MBKM.

2. Research Methods

The research method explains the design of the study, the scope or subject, and the main materials and instruments. This study used a quantitative method with an experimental design with a pre-test-post-test control group design, as shown in Figure 1. The population of the study was students of UNISA Yogyakarta who were participating in the MBKM program in 2024. The sample of the study was taken using a purposive sampling technique, with the inclusion criteria being students who are enrolled in the MBKM program and are willing to participate in the Self-Control Training; and the exclusion criteria being students who do not meet the inclusion criteria, such as those who do not participate in the MBKM program or who are unwilling to attend the training.



Details:
R = Random Asignment
X = Self Control Training Treatment
O = Self-Regulated Learning Measurement

Figure 1. Experiment Design

Data collection of the study used primer data such psychological scale; and secondary data is in the form of observation, and training evaluation. The psychology scale used for pre-test and post-test was the Self-Regulated Learning (SRL) Likert Scale, modified from the study by Malahati & Santhoso (2024), based on the performance phase process according to Moylan (2009). This scale consists of 18 items with an Aiken's validity score ranging from 0.75 to 0.975, and a Cronbach's alpha reliability coefficient of 0.831. The data analysis method used was a paired sample t-test to test the difference between pre-test and post-test conditions in a group. The data analysis process was assisted by SPSS version 23 for Windows.

The training consists of 3 sessions starting at 07:30, beginning with an opening session lasting 30 minutes, which includes introductions and games. This is followed by Session 1, focuses on Self-Awareness. The material is presented for 60 minutes, followed by a 30-minute reflection. After the material presentation, there is a break and ice-breaking for 15 minutes. Next, Session 2 focuses on Self-Control for 60 minutes, followed by a 30-minute reflection. Session 3 lasts for 30 minutes and serves as a discussion session where participants can share their hopes and impressions of the training. The trainer for this session is a psychologist with over 2 years of experience in conducting training.

3. Results and Discussion

3.1.Results

This study aims to find out the influence of self-control training on Self-Regulated Learning in students who were participating in the Merdeka Belajar Kampus Merdeka (MBKM) program. This study was an experimental study. The number of participants was 14 students who were participating in MBKM, consisting of 12 females and 2 males aged between 20 and 23 years old. Participants in this study had moderate to high self-regulated learning scores.

Table 1. Normality Test Results

Tests of Normality						
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	.129	14	.200*	.971	14	.892
Posttest	.228	14	.048	.920	14	.217
*. This is a lower bound of the true significance.						
a. Lilliefors Significance Correction						

Before hypothesis testing, the normality test was conducted. Based on the normality test with Shapiro-Wilk, the results in the Self-Regulated Learning variable, both pre-test and post-test, obtained $p>0.05$ (pre-test, $p=0.892$; post-test, $p=0.217$) (see Table 1). The results of the test showed normal data, so that testing using parametric testing can be carried out, specifically a sample t-test.

Table 2. The Results of The Hypothesis Testing Using The Paired Sample T-Test

Paired Samples Test									
		Paired Differences							
				Std. Error	95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Pretest - Posttest	-4.92857	6.45057	1.72399	-8.65302	-1.20412	-2.859	13	.013

Hypothesis test used a paired sample t-test with a significance level of $p<0.05$. Based on the hypothesis test conducted, the Asymp. Sig. (2-tailed) In the Self-Regulated Learning scale, $p = 0.013$ (see Table 2), where the value was lower than $p<0.05$. It can be concluded that the hypothesis is accepted, indicating that there is a difference between the self-regulated learning value in the pre-test and post-test conditions. Thus, it can be concluded that self-control training has an influence on the self-regulated learning of students who were participating in MBKM. In other words, self-control training has had a significant impact on improving self-regulated learning in MBKM students. This supports the hypothesis that self-control training is effective in improving students' abilities to regulate their learning process. Thus, this training can be considered an effective intervention for MBKM students to support the development of their self-directed learning abilities.

3.2.Discussion

This study was a quantitative study with an experimental method using 2 variables with 1 intervention. These variables were self-control training and self-regulated learning. The novelty of this study is to provide self-control training on improving self-regulated learning abilities.

The results of the paired sample t-test indicates that the difference between pre-test and post-test values in the experimental group that received self-control training was statistically significant. In other words, there is a significant difference between the self-regulated learning performance of MBKM students before and after training. The findings in this study are supported by Rinawati & Adyani (2023), which demonstrate that self-control and self-regulated learning in newcomer students have a significant relationship. Moreover, a study conducted by Fitri & Laili (2022) involving students in the Faculty of Psychology and Education at the University also found significant results between the two variables. A study by Praweswari & Nur'aeni (2021) also demonstrates positive and significant results between the two variables.

This study obtained results that self-regulation in social and cognitive skills can be improved through self-control, strengthening students' abilities to learn independently and effectively in collaboration. Thus, this study supports that developing self-control through training helps students manage emotions, motivations, and learning behavior (Panadero & Järvelä, 2015). Another study by Koivuniemi et al. (2017) also demonstrates that self-control strengthens self-regulated abilities in both collaborative and individual tasks. Futhermore, research indicates that mindfulness training can enhance self-regulation and emotional control, suggesting that incorporating mindfulness practices into educational settings can further support students' self-regulatory skill (Fan & Cui, 2024).

This control training is designed to improve various aspects of self-regulated learning by teaching students techniques and strategies that help them manage distractions, improve concentration, and set and achieve learning goals. This training includes various components, including emotional regulation, time management techniques, and self-control strategies, in order to improve academic performance and students' abilities to learn independently. Thus, self-control training helps students to be more capable of managing their behaviors, thoughts, and emotions during the learning process, which is important for self-regulated learning.

Self-control training helps students set learning goals and plan effective strategies to achieve these goals. In self-regulated learning, students who are able to set their goals tend to be more successful in learning independently because they have clear directions and are able to monitor their progress. Research results found that self-regulated learning begins with the ability to formulate learning goals and develop strategies. Good self-control enables students to remain focused on their determined goals, ignore external distractions, and gradually achieve the expected outcomes.

Self-control is really important in effective time management, which is one of the pillars for self-regulated learning. Students who are trained in self-control are able to manage their time efficiently, avoid distractions, and complete tasks on time. Self-control has a more significant influence than IQ in predicting academic success. This is due to the ability of students with good self-control to manage time wisely and avoid procrastinative behaviors that may hinder the learning process.

Self-control training also plays a role in emotional management, which is an important aspect in self-regulated learning. Students who are trained in self-control can overcome stress, frustration, or boredom during the learning process, thus they can stay focused on their goals. Emphasizes that self-control helps students in regulating negative emotions, which often becomes a constraint in the learning process. With this ability, they can remain motivated, even when facing difficulties or challenges in the learning process.

Self-control training improves intrinsic motivation in learning, which is important in self-regulated learning. Students who are trained are able to delay instant satisfaction and remain disciplined in achieving their long-term goals. This enables them to continue learning independently even without external supervision. Bandura argues that self-control helps in maintaining motivation by regulating encouragement and behavior effectively (Çelik, 2024). This provides students with the ability to regulate themselves and remain involved in learning tasks, even when they face constraints.

Self-regulated learning requires the ability to monitor and evaluate learning progress. Self-control training improves students' abilities to evaluate themselves objectively and realistically. Student who are able to control themselves tend to be more effective in evaluating their progress and making adjustments required in their learning strategies. Appropriate self-evaluation is a key component in Self-regulated learning (Adel Elsayed et al., 2024). Students who are trained in self-control have better self-reflection, enabling them to identify their weaknesses and improve their learning strategies.

Self-control training also encourages students to develop positive learning habits, such as maintaining consistency in learning routines, creating learning plans, and sticking to the plans. These habits are important in self-regulated learning because they support students in maintaining an

organized and goal-oriented learning process. Therefore, it is important for MBKM students to be able to develop and improve self-control in order to improve Self-regulated learning, considering that they learn independently outside the campus. The enhancement of adaptation and initiative is also crucial for MBKM students, as it needs to be developed for them to become independent learners (Kurniawan, 2025).

This study has limitations. Samples in this study were limited, considering that the training was carried out concurrently with the implementation of MBKM. Moreover, data collection was only conducted twice. Therefore, the next researchers are expected to conduct similar studies with larger samples to ensure the generalization of the results, as well as add long-term measurements to assess the sustainability of the self-control effect on self-regulated learning. Collaborate with other researchers or institutions to pool resources and data. This can help in increasing the sample size and enhancing the generalizability of the findings.

4. Conclusion

Self-control training has a significant influence on improving self-regulated learning in students who participated in the Merdeka Belajar Kampus Merdeka (MBKM) program. The result indicate that self-control training is effective in improving students' abilities to regulate their learning process independently. This training helps students in setting goals, managing emotions, managing time, and enhancing motivation, all of which are important components in self-regulated learning. This study proves that self-control training can be an effective intervention in supporting the development of independent learning skills in MBKM students. Educational institutions implementing the MBKM program should consider integrating self-control training into their curriculum to enhance students' ability to manage their learning independently. Additionally, it is essential to develop more comprehensive training modules that encompass time management techniques, emotional regulation, and motivational strategies. By doing so, students will be better prepared to face academic challenges and adapt effectively in independent learning environments. This approach not only supports the development of self-regulated learning but also equips students with the necessary skills to thrive in their academic and future professional endeavors. However, further studies with larger samples and long-term measurement are required.

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