# Exploring Self-Regulation Dynamics among Psychology Students: a Pathway to Effective Blended Learning in Higher Education

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Abstract. Blended learning is a mixed method of learning that involves face-to-face meetings in the classroom with online learning (either synchronously or asynchronously). The success of learning in higher education with the blended learning method is influenced by various factors involved in the success of learning, one of which is good self-regulation. Therefore, this study aims to explore students' self-regulation in participating in learning activities at the Department of Psychology, Padang State University. The study used a descriptive quantitative research design to describe the self-regulation found in students of the Department of Psychology. The measuring instrument used in this study was the Self-Regulated Learning Questionnaire which consisted of 24 items and open-ended questions regarding forms of behavior in regulating oneself in learning. The number of subjects in this study was 117 people (male: 37, female: 80). The results showed that students tended to have adequate self-regulation in participating in blended learning. This is also indicated by the existence of behavior that supports the success of the learning activities that have been set. However, students still need to improve good selfregulation in the learning system in online sessions. Therefore, this study recommends that students can participate in various other positive activities that can improve soft skills that play a role in the success of the learning activities they participate in.

Keywords: Self-regulated learning; blended learning; college students; psychological student

# 1 Introduction

Post-covid-19 pandemic learning has caused many changes, both in the system and learning mechanism. The learning implementation process that was previously commonly carried out was using face-to-face learning (traditional), then switched to fully using online learning techniques. But now, the learning that is carried out is using mixed learning (face-to-face and online).

Blended learning is a learning system that uses learning methods that involve the maximum use of technology. In this learning, students (learners) not only learn through face-to-face in class, but there are also sessions that are conducted online where learners are required to be active and effective in using technology, such as e-learning, or other online applications that can support learning success ([1][2][3].

Blended learning can provide a positive experience for students as learning participants. With the diversity in learning methods, students do not only follow one specific activity, such as face-to-face which requires them to come to class for all courses. But also presents different learning procedures, namely online sessions (either carried out synchronously or asynchronously) [4] [5]. This can prevent students from feeling lazy from monotonous activities. Students also have the opportunity to explore potential with the flexibility in the learning they go through. Furthermore, blended learning also provides a sharper exploration experience in the use of technology and digital [6].

Blended learning also has challenges in its implementation. Facilitators are required to have adequate skills in delivering learning materials, both online and offline. In addition, it is also supported by the ability to apply digital technology so that the blended learning process can be carried out optimally. The challenges of blended learning also come from the learner's side. Where students also have limitations in accessing important learning points that are not carried out face-to-face [7].

In addition, blended learning that provides flexibility for students can also make students careless in learning (especially online sessions). In these sessions, students are required to be able to make learning plans independently, without strong control from the learning facilitator. In other words, it can be said that students who are able to manage themselves well tend to show more optimal results in learning involving blended learning [8]. This is called self-regulated learning which plays a role in learning success [9].

Students with sufficient self-regulated learning demonstrate their ability to manage their own learning when it is fully engaged. These learners are able to regulate the rhythm of learning, the learning process that is undertaken, and set standards (learning outcomes) that will be achieved [10]. In learning in higher education, students are required to be able to regulate themselves with the learning process that is undertaken, so that the learning outcomes achieved can be maximized and in accordance with the targets set. However, students often do not have adequate self-regulated learning, so that the learning that is undertaken does not get maximum results. Based on the

explanation above, this study aims to determine the description of the self-regulated learning of students in the Psychology Department in participating in blended learning.

## 2 Method

This study uses a research design with a survey method type. A questionnaire is the primary instrument used in survey research to gather research data. The population in this study were all students of the Department of Psychology, Faculty of Psychology and Health, Padang State University. The sampling technique used was purposive sampling, namely Psychology students who implemented the blended learning system, excluding students in batch 1. First-year students were not included as research samples because students were still in the early stages of learning using blended learning. The number of samples in this study was 117 students (male: 37, female: 80).

Data collection in this study used a self-regulated learning questionnaire containing items on how individuals regulate themselves in relation to the learning activities they go through. The self-regulated learning questionnaire consists of 24 items, consisting of 4 subscales, namely environment structuring, goal setting, time management, help seeking, task strategies, and self-evaluation. The response options in the following questionnaire are Strongly Agree, Agree, Disagree, Strongly Disagree. In addition, the researcher also used a questionnaire with open questions to obtain information on the forms of self-regulation behavior carried out by students in learning activities.

The data obtained in this study were analyzed using descriptive statistics and inferential statistics. Average, percentage, and frequency were used to answer the research questions. All data were analyzed using the JASP program version 0.19.0.

# 3 Results and Discussion

#### Results

The following table shows the distribution of demographic data of the subjects involved in this study. Demographic data of the subjects is seen from the variables of gender, Internet Access Quality, Parents' Educational level, Time Spent on Online Learning. Details can be seen in the table below.

Table 1. Distribution of research subjects

Variable	Category	Frequency (f)	Percentage (%)
Gender	Male	16	11%
	Female	101	89%
	2 <sup>nd</sup> year	27	23%
	3 <sup>rd</sup> year	89	76%
	4 <sup>th</sup> year		1%
	•	1	

Internet Access Quality	Excellent	72	61%
•	Moderate	39	33%
	Poor	6	6%
Parents' Educational	Elementary School	5	3%
level	Junior High School	10	9%
	Senior High School/Vocational	50	43%
	Diploma	4	3%
	S1	36	31%
	S2	9	8%
Time Spent on Online	Less than 1 hour	11	10%
Learning	1–2 hours	71	61%
-	2–3 hours	27	23%
	More than 3 hours	8	6%

**Table 2.** Mean score and Cronbach-a value (N = 117)

Subscales	Mean	Cronbach's Alpha
Environmental structuring	3.91	0.682
Goal Setting	4.28	0.739
Time management	3.20	0.521
Help Seeking	3.94	0.372
Task Strategies	4.07	0.458
Self evaluation	4.26	0.376

**Table 3.** Results from the description of psychology students' self-regulated learning behavior (n=117)

Statement	n
Setting up learning goals for each semester	20
Create the desired grade for each course	12
Establish a timetable for self-stud	14
Prepare yourself when there is a quiz/exam	22
Do not miss the tasks given	16
Learning is a top priority	12
Make an evaluation of the learning that has been done	13
(know your strengths and weaknesses)	

## Discussion

In this study, there are exploration results regarding the description of self-regulated learning in psychology students in blended learning. The results found that psychology students have sufficient self-regulated learning in following the learning that has been done. This is indicated by the existence of behaviors that support good self-regulation, such as arranging learning schedules

optimally, reviewing points that can support maximum learning outcomes, and conducting evaluations in the learning process that has been neglected.

The findings in this study are supported by the results of previous studies [11], found that self-regulated learning is not only important for achieving maximum learning outcomes, but is also influenced by the importance of monitoring and support from peers. This indicates that the success of blended learning is not only influenced by self-regulated learning, but there is still a role from the environment around the individual, especially peers. Friends who provide positive support tend to motivate someone to get better learning outcomes. In addition, positive peers provide a mirroring effect on other individuals. If someone sees peers who tend to have good and maximum learning outcomes, then the individual also has the desire to perform optimally too, so it can be said that the role of peers plays a fairly important role in the process and success of a person's learning.

Furthermore, several factors that influence the persistence of an individual's learning success in participating in online learning include self-efficacy, self-regulated, and self-directedness [12]. This shows that good self-regulation in learning is one of the determinants of learning outcomes obtained by a person. Thus, it can be said that the results of the study also support the findings of the research that has been conducted.

Several previous studies also showed different results that self-regulated can indeed affect a person's flow, stress and learning engagement, but not significantly enough to affect students' academic performance [13]. Thus, it can be seen that the success of learning is not directly influenced by how individuals are able to regulate themselves well in participating in learning activities. Self-regulated learning can also improve other learning success factors, such as health, curriculum development, and SRL which tend to be dynamic and complex in their influence on a person's learning success [14].

There are interesting previous research results that self-regulated learning is beneficial for student learning, but it must be designed very carefully with the aim of avoiding student dissatisfaction with the learning outcomes that have been attempted. This can potentially provide losses (negative impacts) on the learning that students go through [10] [15].

The limitations of this study are related to the distribution of research samples obtained through the distribution of questionnaires. The sample in this study was focused on students of the Psychology Department, so that the sample selection was limited to that department. Then the limitations of this study are also related to the statements contained in the questionnaire. It is better if the statements in the research questionnaire are followed by open questions, so that more in-depth data and information can be obtained regarding the self-regulation of students who participate in blended learning. Thus, the recommendation that can be given through this study is a research questionnaire that does not only contain closed questions, but also contains open questions to be able to dig deeper information. In addition, this study is also expected to be carried out not only in the psychology

department, but also in various other departments to obtain variations in the picture of students' self-regulated learning in blended learning.

#### 4 Conclusion

Based on the research findings that have been presented above, it can be concluded that self-regulated learning of psychology department students is quite high in following blended learning applied in the learning mechanism. This is indicated by the behavior of students who are able to optimally regulate the learning mechanisms that are passed, such as optimal time management for learning, evaluating learning achievements, and setting learning targets.

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