Analysis of Increasing Student Achievement: The Role of Self-Regulation and Academic Guidance

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Abstract. Zimmerman's Theory and Social cognitive theory were used to underlined this research. This research aims to determine student academic achievement from the influence of self-regulation in learning and academic guidance. The population in this research was students of one of the Islamic universities in Purwokerto totaling 2500 students and the sample used was 550 students. Data collection uses questionnaires that are shared online, then the data is processed using PLS (Part Least Square). The results showed that self-regulation in learning affects student academic achievement, while academic guidance does not affect student academic achievement.

Keywords: Academic achievement, Academic guidance, Self-regulation in learning,

1 Introduction

Education is a process in changing attitudes and structuring the behavior of each individual or group in an effort to mature human beings through efforts to develop human resources. In the era of globalization which is full of competition, the development and improvement of human resources is absolutely necessary. According to Aruan [1]In this globalization technology, a truly qualified workforce is needed. It is not surprising that there is a very fierce competition for existing jobs. Education is believed to be a means of creating change, both and bad human behavior is part of education. The Indonesian nation has high hopes for educators in the development of the nation. It is hoped that educators will be able to form a generation with intelligent character and be able to advance the nation.

Having skills in academics and professionals in applying, developing and creating science, technology and the arts is the goal of higher education to train students in the development and dissemination of knowledge widely[2]. Basically, students continue their education in higher education with the hope that they can follow their education well. But this is not always the case, there are various problems they face with regard to the process of student studies in college. In higher education, in addition to providing lessons, conducting research, and providing administrative services, it also has the responsibility to guide each student to improve student academic achievement.

A student's success comes from the level of academic achievement achieved. According to Thompson, Orr, Thompson, & Grove[1] academic success is influenced by several factors such as time management (goal setting), academic advice or guidance, stress and institutional integration. Meanwhile, according to Hollis[3], academic advisors hold the key to the progress of each student in providing coaching through general education options, course selection, and selection of minor courses.

A student is required to have certain qualities, one of which is required to have a good GPA (Grade Point Average) or in accordance with the standards needed by stakeholders (Power holders) later. Based on findings from Graunke & Woosley[2] explained that commitment to academics and satisfaction with faculty interactions, both are significantly predictors of academic achievement (GPA). According to Arif (in Aruan, 2020) with a GPA that meets the Standards, it is assumed that the student can become a quality human resource

The unique needs and priorities of students in improving the effectiveness of the teaching and learning process, every higher education must provide an educational experience to every student. One aspect that has an important role in experiencing student education is academic guidance. In addition, student perceptions have an important role in academic advisors. Lecturers have an important role in guiding each student's academics as organizers, facilitators, innovators, inventors, role models, valuators, guides, creators, devotees and servants to the community, and counselors.

Academic achievement is a learning method that is enforced by every student in provide replacement in knowledge, understanding, application, and assessment of learning [4]. Independent learning strategies are one of the things that affect academic achievement. This is related to the principle of student learning which is seen as an individual who takes the initiative and independently manages the process of learning. Students at least have capabilities and abilities to manage their study activities, control their behavior in learning and know the purpose of learning. The process of learning by using effective learning self-regulated strategies will help achieve high and good achievement. Self-regulated learning has an important role in one's learning activities. According to Chung [5] Academic achievement which is the result of the learning process is influenced by several external and internal factors controlled by the individual. The process of forming self regulated learning is active and constructive so that it requires individual understanding and awareness.

Students learn to self-regulate by experience and reflection. Lecturers participate in forming self-regulated learning in students by training students to learn independently [6]. According to Hussain and Woltress' research, self-regulation is not a personality trait, so students can control their behavior and influence it to improve their learning and academic achievement. In addition, independent study is very natural for students, because they can study according to the schedule they have and control it [7]. There is a tendency for students to self-regulate their learning time and environment, and to avoid needless procrastination in the completion of academic assignments, which is an important pathway between personal characteristics and student performance. This is marked by a focus on the motivational aspects and strategies of self-directed learning. When students with self-regulation find that study strategies are not enough, they set up their own learning activities.

Overall, it can be concluded that self-regulation is an important factor in student success and many students can benefit from teaching formats that emphasize and facilitate the

processing and application of the skill and attitude components that make up self-regulation learning. The capability of self-regulating the process of learning has also been shown to increase with age and school experience. [7].

Self-regulation is to place the human being as a person who can self-regulate, influence behavior by means of regulating the environment, creating cognitive support, holding consequences for his own behavior [8]. Every individual must be able to regulate himself to lead to positive things for the ideals they dream of and become a good person. The motivation that arises from within him to achieve brilliant achievements and not easily give up on things that are not in accordance with what he wants to achieve, because of the completeness of learning achievements. If student learning achievement is low, it can be an obstacle in achieving educational goals.

In Western countries, researchers have demonstrated the effectiveness of self-directed learning on academic achievement and learning motivation [9]. In China, it is found that online self-study positively predicts undergraduate writing achievement. This relates to the ability to assess time, time monitoring and self-efficacy are significantly related to the academic performance of primary school students [10]. Thus, Western education has the same effect on the relationship between self-study and academic achievement Autonomous learning consists of many strategies, including goal setting, self-efficacy, goal orientation, metacognitive tracking, self-assessment, and more.

Lindner's findings suggest that self-study is a necessary component of academic achievement and is measurable using self-report tools. The results also showed significant relations between self-directed study and the grade point average. In addition, according to Zimmerman and Martinez-Pons, the total score has a stronger correlation with performance. That is, self-learning is considered one global factor that shows the strongest relationship with performance. Overall, it can be concluded that self-regulation is an important factor in student success and can benefit from teaching formats that emphasize and facilitate understanding and use of the components of skills and attitudes that make up learning self-regulation. It is also shown that the capability to self-directs the process of learning increases with age and with the experiences formed in the process of learning.

Research related to self-directed learning, academic advising and normative achievement is plentiful. Based on the phenomenon that occurred, researchers are interested in developing previous research by Xiao et al [7],Aruan et al [1], Putrie et al [11], and Suprihatin [2] related to self-directed study, academic guidance, and achievement. In addition, researchers will also measure how influential self-regulated learning and academic guidance are on student academic achievement..

1.1 The Effect of Self-Regulated Learning on Academic Achievement

According to Aduke [12], academic achievement refers to the level of achievement of student goals in educational institutions. In this case it includes the achievement of individual goals that have been specifically designed in a structured environment such as a university. According to Cuesta [13], the intellectual ability of a student in a particular education system is often measured by academic achievement that is recognized globally. A student is expected to achieve good academic performance within a certain period of time.

According to Gupta & Mili [14], low academic achievement can result in students losing opportunities to pursue higher education, technical training, and desired careers. In addition, the country can also lack the skilled labor needed to achieve the national agenda and attract international investors. Numbers, letters, or actions are a result achieved by students in learning activities. In the cognitive realm the results of learning itself can be knowledge, understanding, application, analysis, synthesis, and evaluation. In managing a thought, behavior and emotion of each individual self-regulated learning has an important role in order to succeed in regulating the learning experience [15][16].

This is in accordance with research conducted by Yahaya et al [17] on randomly selected grade X students of public schools in Brunei and Koosha et al [18] on undergraduate students, that self-regulated learning affects academic achievement. In addition, Tee et al [19] on private school students in Malaysia, that self-directed learning has shown a positive effect on academic achievement.H1: Self-regulated learning affects academic achievement.

1.2 The Effect of Academic Advising e on Academic Achievement

According to Uwaifo[20] The development of a country always involves a process of transmission of existing norms in society. According to Zunker and Uwaifo [20] there is an integral and very important aspect in educational services, namely advising and counseling services, in every school advising services must be well organized. Where in this advising is focused on leading someone to always actualize and help themselves in developing and improving the potential that exists in each individual. This self-actualization has a goal that it will be difficult to achieve something if in each student is not aware of his potential. According to Bhatnagar and Gupta[14] stated that academic advising is a process that can help each individual to find solutions to the problems at hand and can accept them well.

This is in line with Engin's [21] research on elementary school teachers and grade 4 elementary school students and Ngeno[22] on high school students in Rift Valley Region, that academic guidance affects academic achievement. In addition, the results of research by Ibrahim et al [20] on 5 principals, 25 class teachers, 10 guidance teachers, and 160 students from five selected schools, that academic guidance affects academic achievement.

H2: Academic guidance affects academic achievement

2 Theoritical Review

Zimmerman and Schunk[7] define self-regulated learning as a thought, feeling, and action carried out by individuals systematically oriented towards the achievement of predetermined goals. Zimmerman's theory states that self-regulated learning consists of three dynamic phases that are intertwined, including: forward-oriented thinking, performance or volitional control, and self-reflection.

According to Zimmerman [12], self-regulated learning can be seen when students actively participate metacognitively, motivationally, and preilequently in their own learning

process. Social cognitive theory reveals, The self-regulated learning is not only dictated by personal processes, it is also affected by the surrounding environment and behavior in a reciprocal manner. In learning the student must devise certain strategies to achieve academic goals based on his self-confidence.

Thoresen & Mahoney [24], explains that there are three common strategies to increase the influence of one's self-regulation processes, including: strategies designed to control behaviors, environments, or processes hidden within oneself. Self-regulated learning strategy is an action and process aimed at obtaining information and abilities by involving intermediaries, goals, and perceptual instruments of students. Zimmerman [12] asserts that learning outcomes are influenced by an individual's ability to apply self-regulated learning strategies.

Academic advising is one of the very important aspects of a student's educational experience in college. Advising and counseling play a role in helping students in facing and solving problems experienced, which are related to education and teaching so as to make it easier for individuals to achieve well-being. Individuals are led to be able to develop their potential and competencies as optimally as possible [25]. Potential development includes three stages, namely understanding and awareness, attitude and acceptance (accomodation), and skills or actions in carrying out developmental tasks.

To improve the effectiveness of teaching and learning, colleges must listen to the specific needs and priorities of their students. According to Crookston [26], academic advising is an activity aimed at providing the necessary information and monitoring academic progress. Prescriptive guidance assumes that once advice is given, then the responsibilities of the guardian lecturer are largely fulfilled. Furthermore, it is up to the student to give his responsibility in carrying out the academic process that has been determined. Academic advisors for each student play an important role in the advancement of coaching in students. Student academic mentoring is a process that depends on the strength of the advisor relationship. Academic advisors can help students feel comfortable and then enhance academic and professional growth [3].

The role of academic advisor (PA) is also as an organizer, facilitator, innovator, inventor, role model, valuator, guide, creator, devotee and servant to the community, and counselor. Individual advising during the study period in accordance with the supervisor's duties is an encouragement and facilitator can improve the professionalism and self-development of students [27]. Errors in mentoring can cause negative impacts on students, such as choosing the wrong course, and financial loss due to failing the course. Higher impacts on student development can include the appearance of guilt, self-doubt, inadequacy and possible financial difficulties, as well as experiencing feelings of insecurity about their status. Students may not know and understand why they are experiencing academic barriers, but they are aware that they have a problem.

Academic achievement is the outcome of a learning process. Achievement is an individual's psychological characteristics consisting of behavioral, attitudinal, and cognitive aspects that affect student learning outcomes. [28]. Academic achievement is influenced by many factors, among them self-regulated learning. A lot of research shows that self-study is among the best predictors of academic achievement. [29]. According to Raina & Verma[30] Academic achievement is among the important goals that individuals must achieve in the study

process. Their consciousness of the relationship between the process of learning and the outcomes of learning, and secondly, the use of learning strategies to achieve their academic goals. [31].

3. Research Method

This research was conducted on students at an Islamic university in Purwokerto, with a total of 550 students as respondents. The data collection technique used the Google form which was distributed to students in a forum, so that random respondents were obtained from various faculties and study programs. Then the data was processed using PLS analysis to confirm the results of this research.

4. Result and Discussion

PLS analysis in the first round shows an outerloading value below 0.5 so there needs to be a second round. The outer loading value obtained exceeds 0.5 after the third round. Table 1 shows the reliability and validity constructs obtained by the Cronbach alpha value above 0.7, the reliability composite value above 0.7, the AVE value above 0.5 so that the indicators are declared valid and the variables are declared reliable.

Table 1. Composite Reliabity & Validity Test

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Academic Achievement	0.942	0.950	0.635
Academic advising	0.977	0.979	0.707
Self Regulation	0.938	0.946	0.576

To find out the causal relationship between variables followed by bootstrapping analysis. Table 2 shows that the p-value of academic advising on academic achievement is greater than the t-table, and the p-value of the academic advising variable is 0.063 and exceeds 0.05 so it is not significant. While the p-value of self-regulation of academic achievement is below 0.05, namely 0.000, so it is declared significant.

Table 2. Parameter Coefficient and Statistical Values

	Original Sample (O)	Sample Mean (M)	St. Deviation (STDEV)	T Statistics	P Value
Academic advising => Academic Achievement	0.087	0.082	0.047	1.860	**0.063**
Self Regulation => Academic achievement	0.709	0.712	0.043	16.632	0.000

Based on the results of the PLS analysis, the first hypothesis which states that academic advising has an effect on student academic achievement is not supported. The second hypothesis which states that self-regulation affects student academic achievement is supported.

The results of the study show that academic advising has no effect on students' academic achievement. It is necessary to evaluate the leadership at the University on the role of academic supervisors and the effectiveness of the implementation of the academic advising. In the academic lecturer's guide it is stated that students carry out advising at least 3 times in one semester, namely at the beginning of lectures, when they are about to take midterm exams

and then at the time of final exams. Student responses to several statements of the variable role of academic advising on achievement indicate that students rarely consult with supervisors.. Academic mentoring lecturers' attention to students is quite low even though student achievement in general is quite good. Academic student achievement is clearly visible without the role of academic assistance and when students have problems they do not feel the help of academic supervisors.

It can be seen from the results of research on the role of self-regulation in student learning processes in terms of achievement demands. Students have high self-regulation as a scholar compared to students who have low self-skills because they cannot manage their own learning. Self-regulation is a person's ability to control themselves over what they want to achieve during practice and requires actions to realize the results they want to achieve. Students are said to be successful if they have learning achievements that continue to increase in each semester. Control of external factors and internal factors is very influential in student self-regulation. Because the ability to control the surrounding environment can form a standard evaluation of a person to behave. And students must be able to control themselves whether or not their behavior and appearance are good in an effort to call for achievement.

5. Conclusion

This research adds to the results of previous research related to student academic achievement which is influenced by self-regulation and academic advising. The results of this study indicate that the role of the academic supervisor is not optimal in the academic demands of student achievement. Evaluation of the performance of academic supervisors needs to be done to be able to contribute to students. Students in achievement violations sometimes have problems that are not only academic. Other problems can arise and students need a place to consult and find solutions to the problems they face.

Self-regulation affects the encouragement of student academic achievement, this shows that students are aware, responsible, know how to study efficiently and are able to self-regulate. Students who carry out self-regulation, namely setting goals and planning their activities then monitor and control cognitive aspects, motivation and behavior in achieving goals.

This research has limitations and there needs to be additional research with different dimensions. In addition, it is necessary to analyze the learning context's role in cognition and academic motivation. This research is needed to support research results related to self-regulation and academic guidance on student academic achievement.

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