The Effect of Academic Motivation and Information Literature Self-Efficiency on Student Academic Achievement

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Abstract

The purpose of this study was to determine whether there is an influence of academic motivation and information literacy self-efficacy on student academic achievement at the University of Kuningan. The population in this study were all students of the Elementary School Teacher Education (PGSD) study program at the University of Kuningan. While the sample in this study were students who were active in the 2019/2020 academic year, namely 2017, 2018, and 2019 classes as many as 183 people. The sampling technique in this study was done by selecting a simple random (Simple Random Sampling). This research uses the path analysis method. Data collection techniques in this study used a questionnaire or questionnaire. The linearity test results show that all path coefficient values between research variables are more than ttable with a coefficient = 0.05 so that H0 is rejected and H1 is accepted. The conclusions in this study are, 1) student academic motivation has a direct effect on student academic achievement by 0.82; 2) information literacy self-efficacy has a direct effect on student academic achievement by 0.18, and 3) academic motivation has a direct effect on student information literacy self-efficacy by 0.98.

Keywords: Academic Motivation; Information Literacy Self-Efficacy; Academic Achievement

Introduction

The current era of increasingly rapid development of science and technology accompanied by an increasingly unstoppable flow of information makes every individual strive to develop his or her abilities to adapt to the times. One of the efforts made to deal with this problem is to improve the quality of education (MA’RIFAH & SUHAIMI, 2020). Education as the main capital of a nation is expected to be able to create superior individuals. Through education, individuals are also provided with knowledge and skills to solve every problem in their life. If we respond positively to this era of globalization, we should be able to develop our abilities to be able to adapt to change (Sugeng & Iswahyudi, 2020). To be able to adapt to changes, individuals need to be lifelong learners, because this era of globalization has opened up wide learning opportunities that are not limited by space and time.
This awareness for lifelong learning should be the driving force for individuals to consistently explore their knowledge. Moreover, the information explosion (information outburst) is a phenomenon of the rapid pace of information followed by the development of media and storage sources such as various print media in the form of books, non-book print media, audio media, audiovisual media, electronic media, digital media, and other media. Others that can provide a place for users to get information from each other instantly (Fachrurrazi, 2010). However, behind the availability of abundant information, it does not guarantee that individuals as users can obtain and utilize information appropriately. Only a small portion of information can be stored in human memory, especially those that have been converted into storage media known as documents, both analog documents and digital documents (Buckland, 2001).

Knowledge born from less relevant sources of information can lead to misconceptions between newly formed knowledge and existing knowledge so that the main key to lifelong learning in exploring each science is the ability to process information. These skills can be done if the individual has the will or motivation. According to Serap Kurbanoglu (2003), Independent learning and information literacy are the main keys for lifelong learning.

The concept of lifelong learning in Indonesia is explained in the determination of the principles of national development according to MPR Decree No. IV/MPR/1970 jo. Decree No. IV/MPR/1978 which stipulates the principles of national development, as follows. National development is carried out in the context of developing Indonesian people as a whole and the development of all Indonesian people (long-term development direction). Education lasts a lifetime and is carried out in the family (household), school and community. Therefore, education is a shared responsibility between family, community, and government. (CHAPTER IV GBHN education section).

The above stipulation shows that every citizen has the same opportunity to be as wide a student as possible through school education or outside school. Every citizen is expected to be able to learn at any stage of his life in developing himself as an Indonesian person. Higher education as a forum that plays an important role in developing the human resources of a nation can transform knowledge through its studies as the function of higher education according to Law No. 12 of 2012 article 4 concerning higher education, namely. Develop capabilities and shape the character and civilization of a dignified nation in the context of the intellectual life of the nation; develop an innovative, responsive, creative, skilled, competitive, and cooperative academic community through the implementation of the Tridharma; and develop Science and Technology by paying attention to and applying the values of Humanities (Untari, 2020).

According to Ross, Perkins, & Bodey (2016:2-9) states that universities and other higher education institutions are expected to become facilitators for lifelong learning, as well as discipline-based knowledge and skills. However, the rapid development of information currently places students in a confusing situation in sorting and choosing which information is valid to be used as a reference for each academic assignment. Efforts to fulfill the function of individual higher education are required to change their study habits for the better. Habits are not innate but can be formed by the individual himself and his supporting environment so that in the academic process it is necessary to have confidence and believe that the individual can overcome problems in every learning. Self-confidence can encourage individuals to do certain behaviors. The belief that exists within the individual is known as self-efficacy (Mujiati, 2020).

Furthermore, Myers (2012) said that "children and adults who have a high level of academic efficacy, are more unyielding, are not easily anxious and depressed, live healthier lives and excel academically". If self-confidence is embedded in the individual, he is more enthusiastic in doing every academic task he faces, on the contrary, if his self-efficacy is low he tends to avoid it. The experience of individual success in completing tasks effectively will increase a person's assessment of himself about his academic abilities. When the individual's self-efficacy is high, he will be more active in completing tasks, more prepared to face problems, and have endurance when facing difficulties to achieve better results. Conversely, if the individual's self-efficacy is low, he will have difficulty completing tasks and tend to
despair. As stated by Bandura (1997) that self-efficacy has a very large role in mathematical achievement and writing ability.

Learning attitude is a prerequisite for determining individual academic achievement. Learning attitudes that are not adapted to learning aspects make individuals have inappropriate learning attitudes such as being lazy to study and not actively participating in learning, and neglecting every task. Each learning input is needed to believe that students can overcome all academic problems (self-efficacy) and the ability to sort, choose and use the information obtained according to their needs (information literacy skills) so that they can produce output in the form of academic achievement. Therefore, individuals must be able to evaluate any information they receive to obtain reliable and credible information according to their needs. In addition, individuals must also have confidence that they can obtain relevant and accurate information. Self-confidence in obtaining and evaluating information is referred to as information literacy self-efficacy.

Many studies related to information literacy have been carried out with student backgrounds, but recent research explains that in information literacy self-efficacy is needed. According to Serap Kurbanoglu, Buket Akkoyunlu, and Aysun Umay (2006) Self-efficacy and information literacy play an important role in lifelong learning. Low self-efficacy can be a significant factor limiting an individual's ability to gather information and solve problems important for lifelong learning. One of the reasons why self-efficacy is so important for lifelong learning is if the individual feels competent and confident about his information literacy skills, then he will find it easy to solve problems and if not, he will avoid and hesitate more to try to solve problems. Students who must have high self-efficacy will exert greater effort and have endurance in facing various difficulties in completing academic tasks, including in finding various sources of relevant and accurate information.

Based on the Focus Group Discussion conducted by the researcher with lecturers, librarians, and students of Universitas Kuningan, it was found that students were used to doing information literacy but still felt unsure in determining the relevant information, meaning that students' information literacy self-efficacy was still low. Then the results of interviews with several students of the Kuningan University Elementary School Teacher Education Study Program showed that they were less confident in information literacy.

The experience of individual success in solving information literacy challenges, namely finding, managing, and using information effectively will increase a person's self-assessment. When a person's self-efficacy in information literacy increases, he will be more active in completing tasks, more prepared to face problems, and have endurance when facing difficulties to achieve better results. As Bandura in Ross, Perkins, and Bodey (2016) explains that a high level of self-efficacy leads to the setting of greater personal challenges along with personal commitment and motivation to meet these challenges. The student's academic motivation will affect all the activities and abilities they have, including the ability to self-efficacy information literacy. In general, students are faced with a thought about how much achievement they want to achieve, such as achieving satisfactory academic achievements. One of the efforts to get the achievement of the individual must have high motivation.

Academic motivation can be seen in various academic activities, such as being active in every lesson, discussing with friends and lecturers, attending various seminars, participating in scientific work competitions, and so on. This is under what was expressed by DiPerna and Elliott (1999:209) that academic motivation describes the tendency of students to be diligent and interested in an academic subject and the results are related to learning scores and academic achievement. Research on the relationship between academic motivation and information literacy self-efficacy has been investigated by several scientists, one of which was carried out by Ross, Perkins, and Bodey (2016: 2) stating that the concept of information literacy self-efficacy is associated with higher levels of student motivation and also with success academic. This means that if the individual's academic motivation is high, the self-efficacy of information literacy is also high and becomes one of the factors of academic achievement.
However, looking at the reality on the ground, it turns out to be different, based on the results of initial observations that students of the Kuningan University Elementary School Teacher Education Study Program have high academic motivation but their information literacy self-efficacy is low. Therefore, it is necessary to conduct more in-depth research on academic motivation with information literacy self-efficacy and its effect on student academic achievement.

Based on the explanation above, researchers are interested in researching the effect of academic motivation and self-efficacy of information literacy on student academic achievement. Previously, similar studies have been conducted in Turkey and Australia and based on the knowledge of the researchers, in Indonesia, there has never been any research linking academic motivation and information literacy self-efficacy with academic achievement, so this research is important and must be done. This research was conducted at Kuningan University, an elementary school teacher education study program with 328 active students in the 2019/2020 academic year with the title "The Influence of Academic Motivation and Information Literacy Self-Efficacy on Student Academic Achievement".

Students' academic motivation can be measured through a questionnaire on the academic motivation scale. The academic motivation scale has been modified from the scale created by Vallerand et al, namely the Academic Motivation Scale (AMS), modifications were made to language and adapted to the research subject, namely students. The information literacy self-efficacy scale consists of 28 items with five alternative answers for each statement by choosing the one that describes the subject better. The information literacy self-efficacy scale has been modified from the scale made by Kurbanoglu, namely ILSES, modifications were made to language and adapted to the research subject, namely students. The information literacy self-efficacy scale consists of 28 items with five alternative answers for each statement by choosing the one that describes the subject better.

Student academic achievements are obtained directly from the campus, namely by looking at the scores obtained during lectures in the form of an even semester GPA for the 2019/2020 school year. There are many benefits of academic motivation that have a good impact on students. The role of motivation in learning activities is very important because motivation can affect what we learn when we learn, and how we learn (Schunk, 1995: 283). Students who are motivated in learning a topic tend to involve themselves in various activities that they believe can help them in learning, this is shown in behaviors such as focusing on paying attention to the subject matter presented, taking notes on each subject matter to facilitate the next learning activity, mentally organizing and memorizing the material. what to learn, check the level of understanding, and ask for help when there is the material that is not understood (Zimmerman, 2000).

Self-determination theory in various literature is considered very useful as a framework to explain academic motivation. The theory of self-determination is considered as one of the useful theories for understanding the level of individual motivation. The uniqueness of the theory of self-determination is its emphasis on identification, vitalization, and increasing the motivational sources that already exist in students that are universal (such as basic psychological needs, curiosity). Therefore, instructional tasks are designed based on these assumptions and the aim is to increase high involvement in learning (Reeve & Halusic, 2009). In simple terms, Clark & Schroth (2010:19) define academic motivation as the factors that influence an individual to get an education and later get the expected degree. Then it can be understood that academic motivation refers to a condition that can influence and can maintain activity to achieve specific goals in the academic field.

The concept of self-efficacy was first put forward by Albert Bandura (1997:3) explaining that self-efficacy is "Self-efficacy refers to an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments". Self-efficacy refers to the belief in one's ability to organize and carry out the program of action needed to carry out activities related to the given task. Individuals who have self-efficacy can exert more effort to achieve tasks and are more persistent and patient. Self-efficacy influences task choice, effort, persistence, and achievement. Students with high self-
efficacy in the subjects followed, show a persistent struggle to achieve success. On the other hand, students with low self-efficacy tend to avoid academic tasks, their persistence in trying is low when facing difficulties they easily give up (Bandura & Schunk, 1981; Pajares, 2003). So that self-confidence in completing academic tasks can be interpreted as academic efficacy.

Self-efficacy or a person's self-confidence can be associated with a variety of skills including information literacy skills. In simple terms, information literacy can be defined as the ability to find, evaluate and use the information needed effectively. The essence of information literacy is a set of skills needed to search, search, analyze, and utilize information (Bundy: 2001). According to Hasugia (2008:36) explained that since the early seventies the concept of information literacy has been interpreted and carried out in various ways. The initial terms that are often used are study skills, research skills, and library skills and tend to be used in the context of educational activities. Therefore, information literacy is an inseparable part of educational and/or learning activities. Self-efficacy is needed in the use of information literacy skills because low self-efficacy can be a significant factor that limits individuals from using information literacy skills (Serap Kurbanoglu, 2010:4).

Academic achievement and the learning process become inseparable units because academic achievement is influenced by the learning process itself. Achievement is an important indicator of the results obtained during education. According to the APA Dictionary of Psychology (2007), it is explained that academic achievement refers to success in the field of study, where a person has achieved scholastic skills or competencies at a certain level, both in general and in particular. In general, academic achievement can be proven through individual graduation from an educational program. And specifically, academic achievement can be seen from the value of the lessons obtained or the rating of a person's value compared to other individuals.

According to Saleh (2014: 110) at the higher education level, students are required to be active in the teaching and learning process through existing media, such as libraries, journals, and the internet. Almost all assignments are given in higher education generally require students to search for literature and develop their mindset to complete assignments effectively. Academic requirements in higher education are not just attending lectures, but there are other provisions such as the percentage of attendance in lectures, completion of assignments, and active participation in other academic activities (discussions, presentations, taking exams, quizzes). Thus, student academic achievement is a process carried out by students to obtain and achieve the desired goals or in this case, the academic value followed by students during the lecture period which can be measured through the GPA (Academic Achievement Index).

**Research Method**

The research method used in this study is a causal survey method with path analysis techniques, where the constellation of the problem can be seen in the following path diagram.

![Path Diagram](image.png)

*Figure 1. Research flowchart method*
Description:

- Direct influence
- Indirect influence

X₁ : Academic motivation
X₂ : Information literacy self-efficacy
X₃ : Academic achievement

This research was conducted at the University of Kuningan. The population in this study were all students of the Elementary School Teacher Education (PGSD) study program at Kuningan University as many as 505 people. While the sample in this study were students who were active in the 2019/2020 academic year, namely 2017, 2018, and 2019 classes as many as 183 people. The sampling technique in this study was done by selecting a simple random (Simple Random Sampling).

Result and Discussion

The results of the study were based on data obtained and processed for each variable of Academic Motivation, Information Literacy Self-Efficacy, and Academic Achievement in PGSD students at Kuningan University in the 2019/2020 academic year. There are 3 hypotheses in this study, namely: (1) there is a direct influence of academic motivation on student academic achievement, (2) there is a direct influence of information literacy self-efficacy on academic achievement, (3) there is a direct influence of academic motivation on student information literacy self-efficacy. Hypothesis testing is done by using the regression linearity test.

The first hypothesis contains the direct influence of academic motivation (X₁) on academic achievement (X₃). Based on the results of the path analysis calculation between X₁ and X₃, the path coefficient value is 0.82 and the \( t_{\text{count}} \) coefficient is 18.59 with the \( t_{\text{table}} \) coefficient for \( \alpha = 0.05 \) of 1.653. Because (18.59) > (0.05;146) (1.653), then H₀ is rejected, so it can be concluded that academic motivation has a significant effect on student academic achievement. Based on the results of hypothesis testing, it shows that academic motivation has a direct effect on academic achievement. So, if students' academic motivation is high, their academic achievement will also be high.

Self-determination theory in various literature is considered very useful as a framework to understand the level of individual academic motivation. The theory explains that someone who understands their purpose to be involved in their tasks will allow them to feel more motivated and try their best to maintain their efforts.

Pintrich (2003) explains the influence of academic motivation on academic achievement, namely, "stated that motivation is the most important factor affecting the academic success or failure of an individual in the learning process." It can be seen that motivation is the most important factor influencing the academic success or failure of an individual in the learning process. According to Pintrich and De Groot (1990); Renchler (1992); Ellis and Worthington, (1994); Scheuermann (2000) A successful individual is socially adequate, goal-oriented, and internally motivated individual who can effectively balance the social and academic aspects of schooling.

The second hypothesis contains the direct influence of information literacy self-efficacy (X₂) on academic achievement (X₃). Based on the results of the path analysis calculation between X₂ and X₃, the path coefficient value is 0.18 and the \( t_{\text{count}} \) coefficient is 4.035 with the \( t_{\text{table}} \) coefficient for \( \alpha = 0.05 \) of 1.653. Because the value of the coefficient (4.035) > (0.05;146) (1.653), then H₀ is rejected, so it can be concluded that information literacy self-efficacy has a significant effect on student academic achievement. Based on the results of hypothesis testing, it shows that information literacy self-efficacy has a direct effect on academic achievement. So, if the self-efficacy of students' information literacy is high, their academic achievement will also be high.
According to S. Serap Kurbanoglu (2003:638) self-efficacy will affect the emotions, thinking patterns, and actions shown by individuals. Individuals who have self-efficacy will show their emotions, thinking patterns, and actions in a positive form, such as self-confidence, optimism, and feeling capable of their expertise. With high self-efficacy in each student's ability, it will produce the best abilities in the high category. Moreover, the ability to self-efficacy information literacy, where this ability is related to the achievement of student academic achievement. As stated by Kurbanoglu, Akkoyunlu, and Umay that information literacy self-efficacy predicts academic achievement.

The third hypothesis contains the direct influence of academic motivation (X1) on information literacy self-efficacy (X2). Based on the calculation of the path analysis between X1 and X2, the path coefficient value is 0.98 and the $t_{count}$ coefficient is 22.34 with the $t_{table}$ coefficient for $\alpha = 0.05$ of 2.347. Because the value of the coefficient (22.34) > (0.05:146)(1.653), then $H_0$ is rejected, so it can be concluded that academic motivation affects the self-efficacy of student information literacy. Based on the results of hypothesis testing, it shows that information literacy self-efficacy has a direct effect on academic achievement. So, if the self-efficacy of students' information literacy is high, their academic achievement will also be high.

Several studies have discussed the importance of motivation for academic achievement and mastery of information literacy skills. Dekker and Perkins (2016:10) in higher education developing an understanding of academically based motivation is important to improve academic achievement and information literacy skills. The construct of information literacy self-efficacy has been associated with student motivation (Maria Pinto and Dorra Sales, 2010: 618). In addition, the construct of information literacy self-efficacy has also been associated with academic success (Hale Bayram and Arif Comek, 2009:1526). A summary of the path analysis model can be seen in figure 2.

![Figure 2. Context of Research Variables](image)

**Conclusion**

Based on the results of data analysis, the following conclusions are obtained that there is an influence of academic motivation on student academic achievement. That is, students who have high academic motivation are proven to have high academic achievements as well. There is an influence of information literacy self-efficacy on student academic achievement. That is, students who have high information literacy self-efficacy are proven to have high academic achievement as well. There is an influence of academic motivation on students' information literacy self-efficacy. This means that students who have high academic motivation are proven to have high information literacy self-efficacy as well.

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