

Journal Educational of Nursing (JEN)

Vol. 4 No. 1 – January – June 2021; page 1-8

p-ISSN : 2655-2418; e-ISSN : 2655-7630

journal homepage: <https://ejournal.akperrspadjakarta.ac.id>

DOI : [10.37430/jen.v4i1.78](https://doi.org/10.37430/jen.v4i1.78)

Article history:

Received: February 19, 21

Revised: February 25, 21

Accepted: March 02, 21

Factors That Influence The Acquisition of Basic Biology Subject Values In Semester I Students at STIKes Salsabila Serang

Al-Bahra¹, Fathiyati², M. Hudzaifah³

¹Master of Informatics Engineering Study Program, Raharja University, Tangerang–Indonesia

²Department of Midwifery, Salsabila College of Health Sciences, Serang – Indonesia

³Al Hikmah Citra Raya Foundation, Tangerang - Indonesia

e-mail : albarha@raharja.info¹, fathiyati@gmail.com², hudzaifahinata98@gmail.com³

Abstract

The purpose of this study was to determine several factors that affect the acquisition of grades in Basic Biology courses in semester 1 students at STIKes Salsabila Serang. This research is an analytical study with a cross sectional approach (cross sectional). Based on the results of the study, it is known that 41% of the first semester students of STIKes Salsabila Serang get less grades. Students with a continuous learning style will have 4 times the chance to get good grades in basic biology courses compared to students whose learning styles the day before the exam. Students who have attention will have 5 times the chance to get good grades in Basic Biology compared to students who do not pay attention. Students with interest will have a 4 times chance of getting good grades in Basic Biology compared to students who have no interest. Students with good motivation will have the opportunity 1 time to get a good grade in Basic Biology compared to students with poor motivation.

Keywords: Basic Biology, Learning Style, Attention, Interests, Motivation

Preliminary

The development of science and technology, changes in society, understanding of students' methods and advances in communication and information media give its own meaning to contemporary educational activities today. One of the positive impacts of the development of science and technology on the learning process is the increasing diversity of learning sources and media such as textbooks, modules, pictures, models, videos, television, slides and so on.

Learning is a complex activity. Learning outcomes in the form of capabilities / abilities. After learning, people have skills, knowledge, attitudes

and values. The emergence of these capabilities is from stimulation that comes from the environment and cognitive processes carried out by learners. Thus, learning is a set of cognitive processes that change the stimulating nature of the environment, through processing information, into new capabilities.

In the whole process of education in schools, learning activities are the most basic activities. This means that the success or failure of achieving educational goals depends a lot on how the learning process is experienced by students. In the whole teaching and learning process, there is an interaction between various components.

Attempted to influence each component so that the goals of education and teaching can be achieved. We know that even today the learning system is still conventional, thick with an instructional atmosphere and feels boring, causing students to tend to be passive and not absorb all the material.

One of the success of the learning process in an educational institution can be seen through the value of learning outcomes achieved by students. The value of learning outcomes reflects the extent to which students have been able to achieve the goals set in certain fields of study in educational institutions. This learning success is influenced by several factors from the students themselves, both from within and from outside.

Learning styles are habits that a person does to understand, absorb, appreciate, practice the knowledge learned. The emergence of learning styles in a person, because of the potential or ability that is dominant in him which is influenced by environmental factors, habits, as well as science and technology.

An effective and impressive learning style is the dream of all students because it can determine student achievement. Learning style is a way for students to learn well. Learning styles will affect learning outcomes itself. Learning styles such as scheduling and execution, reading, memorizing and taking notes. Repeating learning materials, concentrating and doing assignments, will affect student achievement.

In general, learning styles can be distinguished as follows, namely field dependence learning styles, namely the learning styles of students who want to start learning if there is influence or pressure or dependence, usually studying before the exam. Furthermore,

field independence is a learning style that is carried out independently, without having to be forced by others. This autonomous style is based on satisfaction, need and high awareness that learning is an obligation that must be done alone. This style of learning is generally carried out continuously.

Learning styles, media and how to obtain material can affect the acquisition of value because not all students process information in learning with the same approach. Learning style is a combination of how it absorbs and then organizes and processes information.

Basic biology or life science courses are the studies that study the physical aspects of life. Biology lies in the basic science as the material object of midwifery which includes; anatomy, physiology, microbiology and parasitology, psychology, physics and biochemistry. Basic biology and developmental biology subject matter includes the disciplines of anatomy, physiology, microbiology, physics and biochemistry.

In relation to learning success, the value of these courses is sufficient to determine learning achievement which helps midwifery students to get to know the system of body organs in Latin which is needed in the subsequent application of midwifery sciences. Students in semester I are still used to studying only one night before exams, as they did when they were still in high school.

One indicator of the success of the learning process is a good average score. Getting these good grades is called achievement. Poor performance is analogous to low scores. The impact of low scores, namely disappointment in the personal self of students, educators and even parents so that it is not uncommon for students who get

low grades with ineffective learning styles tend not to care so that their enthusiasm for learning decreases.

This can affect the cumulative value of all courses. According to the results of previous research on first semester students at STIKes Salsabila Serang about the acquisition of Basic Biology course grades in class B showed 68% of the overnight learning style when they were about to have a C grade exam. Based on the preliminary study at STIKes Salsabila Serang 60% of 139 students, 3 classes get UTS scores that are still within the C limit. Basic Biology courses and the results of interviews from 13 students turned out to be 5 of them having the reason that, the term Biology in Latin is difficult to understand, and 3 of them said that the learning style is at once just about the exam, believed to be the reason for getting low scores, because with such a learning style it is only a rote, not an understanding.

Method

This research is an analytical study with a cross sectional approach (cross sectional). The aim is to determine the factors that affect the acquisition of grades in Basic Biology courses for 1st semester students at STIKes Salsabila Serang. The population of the study were 139 students registered at STIKes Salsabila Serang in semester 1. The sample in this study by taking the entire population, namely all 1st semester students registered at STIKes Salsabila Serang, as many as 139 people.

The tool used in this study is a questionnaire containing questions in which there are answer choices that will be determined by the respondent. The types of data collected in this study are primary data and secondary data were obtained from the results of the acquisition of basic biology course

scores for 1st semester students at STIKes Salsabila Serang. The tool used in collecting data was to use a questionnaire that was given, asked and evaluated directly to the student of STIKes Salsabila Serang level I.

Result

Bivariate Analysis Results

Table 1 Distribution of Semester I STIKes Salsabila Serang Students in 2019

Basic Biology Course Value	Frequency (n)	Percentage (%)
Not Good	57	41,0
Good	82	59,0
Total	139	100,0

Based on table 1, it is known that (41%) of the first semester students of STIKes Salsabila Serang received low scores.

Table 2 Distribution of Student Learning Styles at STIKes Salsabila Serang in 2019

Learning Style	Frequency (n)	Percentage (%)
The day before the exam	68	48,9
Continuously	71	51,1
Total	139	100,0

Table 2 shows that the learning styles of the first semester students of STIKes Salsabila Serang are relatively the same between the learning styles the day before the exam and the continuous learning styles, respectively (48.9% and 51.1%).

Table 3 Distribution of Student Attention at STIKes Salsabila Serang in 2019

Attention	Frequency (n)	Percentage (%)
No Attention	36	25,9
There is Attention	103	74,1
Total	139	100,0

Table 3 shows that there are still semester I students of STIKes Salsabila Serang who don't pay attention during basic biology lectures (25.9%).

Table 4 Distribution of Student Interest in STIKes Salsabila Serang in 2019

Minat	Frequency (n)	Percentage (%)
No interest	74	53,2
There is interest	65	46,8
Total	139	100,0

Table 4 shows that most of the first semester students of STIKes Salsabila Serang have no interest in basic biology courses (53.2%).

Table 5 Distribution of Student Motivation at STIKes Salsabila Serang in 2019

Motivation	Frequency (n)	Percentage (%)
Not Good	24	17,3
Good	115	82,7
Total	139	100,0

In Table 5, it shows that there are still semester I students of STIKes Salsabila Serang who get poor motivation towards basic biology courses (17.3%).

Bivariate Analysis Results

Table 7 Relationship between Student Learning Styles and Basic Biology Subject Values at STIKes Salsabila Serang in 2019

Learning Style	Basic Biology Course Value				Total		p value	OR (Odd Ratio)
	Not Good		Good		n	%		
	N	%	N	%				
The day before the exam	46	67,6	22	32,4	68	100,0	0,037	3,960
Continuously	11	15,5	60	84,5	71	100,0		
Total	57	41,0	82	59,0	139	100,0		

In table 7, it shows that students who obtained poor grades in the Basic Biology course had a higher proportion of students with a learning style the day before the exam (67.6%) than students with a continuous learning style (15.5%).

The results of the Chi Square statistical test showed the value of $p = 0.037$ ($p < 0.05$), which means that statistically there is a significant

relationship between student learning styles and the value of the Basic Biology course. The results of the analysis also showed that the OR (Odd Ratio) value = 3,960, meaning that students whose learning styles were continuous, would have a 4 times chance of getting good grades in basic biology courses compared to students whose learning styles the day before the exam.

Table 8 The Relationship between Student Attention and the Value of Basic Biology Courses at STIKes Salsabila Serang in 2019

Attention	Basic Biology Course Value				Total		p value	OR (Odd Ratio)
	Not Good		Good		N	%		
	N	%	n	%				
No Attention	24	66,7	12	33,3	36	100,0	0,045	4,888
There is Attention	33	32,0	70	68,0	103	100,0		
Total	57	41,0	82	59,0	139	100,0		

In table 8, it shows that students who get poor grades in Basic Biology courses have a higher proportion of students who do not pay attention (66.7%) than students who have attention (32.0%).

The results of the Chi Square statistical test showed that the value of $p = 0.045$ ($p < 0.05$), which means that statistically there is a significant relationship between student attention and the value of the Basic Biology course. The results of the analysis also

showed that the OR (Odd Ratio) value = 4.888, meaning that students who have attention, will have a 5 times

chance of getting good scores in Basic Biology courses compared to students who do not pay attention.

Table 9 Relationship between Student Interest and Basic Biology Course Values at STIKes Salsabila Serang in 2019

Minat	Basic Biology Course Value				Total		<i>p value</i>	<i>OR (Odd Ratio)</i>
	Not Good		Good		n	%		
	N	%	N	%				
No interest	40	54,1	34	45,9	74	100,0	0,010	3,666
There is interest	17	26,2	48	73,8	65	100,0		
Total	57	41,0	82	59,0	139	100,0		

In table 9, it shows that students who get poor grades in Basic Biology courses have a higher proportion of students with no interest (54.1%) than students with no interest (26.2%).

The results of the Chi Square statistical test showed that the value of $p = 0.010$ ($p < 0.05$), which means that statistically there is a significant

relationship between student interest and the value of the Basic Biology course. The results of the analysis also showed that the OR (Odd Ratio) value = 3.666, meaning that students who have an interest, will have a 4 times chance of getting good grades in Basic Biology compared to students who have no interest.

Table 10 Relationship between Student Motivation and Basic Biology Subject Values at STIKes Salsabila Serang in 2019

Motivation	Basic Biology Course Value				Total		<i>p value</i>	<i>OR (Odd Ratio)</i>
	Not Good		Good		n	%		
	N	%	N	%				
Not Good	20	83,3	4	16,7	24	100,0	1,000	1,117
Good	37	32,2	78	67,8	115	100,0		
Total	57	41,0	82	59,0	139	100,0		

In table 10, it shows that students who obtained poor grades in the Basic Biology course had a higher proportion of students with poor motivation (83.3%) than students with good motivation (32.2%).

The results of the Chi Square statistical test showed that the value of $p = 1,000$ ($p > 0.05$), meaning that statistically there was no significant relationship between student motivation and the value of the Basic Biology course. The results of the analysis also showed that the OR (Odd Ratio) value = 1.117 means that students with good motivation will have a chance of 1 time to get a good score in Basic Biology courses compared to students with poor motivation.

Dicussion

Basic Biology Course Value

Based on the results of the study, it was found that students who scored in the Basic Biology course were less, namely as many as 57 people (41.0%), while students who scored in the Basic Biology course were good, namely as many as 82 people (59.0%).

Shah (2007) suggests that evaluation means an assessment of the level of success of students in achieving the goals set in a program. The equivalent of the word evaluation is assessment which means the assessment process to describe the achievements of a student in accordance with predetermined criteria. In addition, there are other words that are

meaningful and relatively well-known in the world of education, namely tests, exams, and tests.

Evaluation of learning outcomes in the form of student test scores is a description of the level of success in the learning process. Therefore, the learning process is closely related to the learning outcomes achieved by students. This is where there is a strong influence between the means of learning and the value of student learning outcomes (Dimiyati & Mudjiono, 2006)

The main purpose of evaluating learning outcomes is to determine the level of success achieved by students after participating in a learning activity, where the success rate is then marked by a value scale in the form of letters or words or symbols.

Basic biology courses give students the ability to understand the shape and arrangement of the body both as a whole and its parts and the relationship of one organ to another.

From the research results, it turns out that only 59.0% of students have good grades, meaning that almost half of the students have poor grades in Basic Biology (41.0%). This condition can be caused by various factors, such as ineffective student learning styles, lack of student attention and interest in these subjects and lack of student motivation.

Learning Style

The results of the chi square statistical test showed that the value of $p = 0.037$ ($p < 0.05$), which means that statistically there is a significant relationship between student learning styles and the value of the Basic Biology course. The results of the analysis also showed that the OR (Odd Ratio) value = 3,960, meaning that students whose learning styles are continuous, will have a 4 times chance

of getting good grades in basic biology courses compared to students whose learning styles the day before the exam.

Learning is a process of effort by a person to obtain a whole new change in behavior as a result of his own experience in interaction with his environment. (Slameto, 2003)

Method is a method or path that must be followed to achieve a certain goal. Learning aims to gain knowledge, attitudes, skills, and skills, the methods used will become habits or styles. Learning styles will also affect learning outcomes itself. (Slameto, 2003)

Student learning styles such as continuous learning or installments can improve students' abilities towards the subjects they are learning. Repeating has a big effect on learning, because with repetition (review) material that is not well mastered and easily forgotten will remain embedded in a person's brain. Repeating can be immediate after reading, but it is also even more important, is to relearn lesson material that has been learned.

This method can be done by making a summary. Then to repeat it, it is enough to learn from the summary or also from studying the answer questions that have been made. In order to be able to repeat well, it is necessary to provide time to repeat and use that time as well as possible to memorize meaningfully and understand the material that is repeated in earnest. (Slameto, 2003).

Thus, students who often repeat lessons at home continuously can improve their understanding of the subjects they are studying, so that in the end the learning outcomes will be better than students who study with the overnight or sudden speeding system the night before the evaluation test. learning is implemented.

Attention

The results of the chi square statistical test showed that the value of $p = 0.045$ ($p < 0.05$), which means that statistically there is a significant relationship between student attention and the value of the Basic Biology course. The results of the analysis also showed that the OR (Odd Ratio) value = 4.888, meaning that students who have attention, will have a 5 times chance of getting good scores in Basic Biology courses compared to students who do not pay attention.

Attention is activity fixed on the object. To get good results, students need to pay attention to the lesson. If students are not interested in the lesson, then boredom grows so that students do not pay attention to the lesson. And vice versa, if students are interested in the lesson, there will be a sense of sincerity of students to pay attention to the lesson so that they can get good grades (Slameto, 2003)

The results showed that students' attention was significantly related to the scores they received. This can occur because of the student's attention to the courses delivered by the lecturers, it will be an important factor that can generate interest and motivation of students to study these subjects well and in the end can get good grades too.

Interest

The results of the chi square statistical test showed that the value of $p = 0.010$ ($p < 0.05$), which means that statistically there is a significant relationship between student interest and the value of the Basic Biology course. The results of the analysis also showed that the OR (Odd Ratio) value = 3.666, meaning that students who have an interest, will have a 4 times chance of getting good grades in Basic Biology compared to students who have no interest.

Interest is a constant tendency to notice and reminisce about certain activities. Interest has a great influence on learning outcomes, if the lesson is interested or liked by students, then students will learn well. Likewise, if the lesson is not in demand by students, then students will also tend not to want to study seriously (Syah, 2007).

Students who are not interested in basic biology courses taught by lecturers, automatically students also tend to have less enthusiasm to study these subjects. In contrast to students who are very interested in Basic Biology courses, they will have high motivation and enthusiasm to study these subjects, which in turn will contribute to the acquisition of grades during the learning evaluation.

Motivation

The results of the chi square statistical test showed that the value of $p = 1,000$ ($p > 0.05$), meaning that statistically there was no significant relationship between student motivation and the value of the Basic Biology course. The results of the analysis also showed that the OR (Odd Ratio) value = 1.117 means that students with good motivation will have a chance of 1 time to get a good value in Basic Biology courses compared to students with poor motivation.

According to Djamarah (2008), motivation has a strategic role in one's learning activities. Motivations that arise can cause someone to do something because they want to achieve the goal they want or get satisfaction with their actions.

Students who are motivated to learn solely to master the values contained in the course material are one of the factors that can arouse students' desire to learn about the course material, which in turn can improve learning outcomes achieved, especially in the

material students are learning. (Djamarah, 2008).

Summary

Based on the results of the study, it is known that 41% of the first semester students of STIKes Salsabila Serang get less grades. This condition can be caused by various factors, such as ineffective student learning styles, lack of student attention and interest in these subjects and lack of student motivation.

Students with a continuous learning style will have 4 times the chance to get good grades in basic biology courses compared to students whose learning styles the day before the exam. Students who have attention will have a 5 times chance of getting good grades in Basic Biology compared to students who do not pay attention

Students with interest will have a 4 times chance of getting good grades in Basic Biology compared to students who have no interest. Students with good motivation will have a chance of 1 time to get a good grade in Basic Biology compared to students with poor motivation.

Bibliography

- [1]. Arikunto Suharsimi. 2002. *Prosedur Penelitian Suatu Pendekatan Praktek*. Rineka Cipta. Jakarta.
- [2]. Dimiyati & Mudjiono, 2006. *Belajar dan Pembelajaran*. Kerjasama Departemen Pendidikan dan Kebudayaan dan Rineka Cipta. Jakarta.
- [3]. Djamarah, Syaiful Bahri, 2008. *Psikologi Belajar*. Edisi Kedua. Penerbit Rineka Cipta, Jakarta.
- [4]. Evelyn c.pearce,2006.*Anatomi dan Fisiologis untuk paramedis*.PT Gramedia.Jakarta
- [5]. Hamalik,Oemar. 2003. *Kurikulum dan Pembelajaran*. Bumi Aksara. Jakarta
- [6]. Hastono, SP. 2007. *Modul Analisa Data*. FKM – Universitas Indonesia. Jakarta
- [7]. Notoatmodjo, Soekidjo. *Metodologi Penelitian Kesehatan*. Rineka Cipta : Jakarta, 2005.
- [8]. Nursalam. 2006, www.kuncoroningrat.co.id
- [9]. Pratiknya, A.W. 2006. *Dasar-Dasar Penelitian Kedokteran dan Kesehatan*. PT Raja Grafindo Persada. Jakarta.
- [10]. Sabri, Ahmad, 2007, *Strategi Belajar Mengajar*, Quantum Teaching, Jakarta.
- [11]. Slameto, 2003. *Belajar dan Faktor-Faktor yang Mempengaruhinya*. Penerbit Rineka Cipta. Jakarta.
- [12]. Sudjana, Nana. 2006. *Penilaian Hasil Proses Belajar Mengajar*. Edisi Kesebelas. Remaja Rosdakarya. Bandung.
- [13]. Syah, Muhibbin. 2007. *Psikologi Pendidikan Suatu Pendekatan Baru*. PT. Remaja Rosdakarya. Bandung