

The Relationship between Learning Style and Self Directed Learning Readiness during Online Learning for Students of the Faculty of Medicine, University of Lampung

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Abstract: - The COVID-19 pandemic in Indonesia has caused changes in various aspects, one of which is education. The Indonesian government itself is trying to stop its spread, one of which is by implementing a policy of teaching and learning activities remotely or online learning. Changes in learning methods, into indirect lectures, students are required to have self directed learning readiness (SDLR). Learning style as one of the intrinsic factors plays an important role in the formation of students self directed learning readiness. This research is a comparative analytic study with a cross sectional with sampling using stratified random sampling technique. The samples used were 106 samples that met the research inclusion criteria. Furthermore, Chi square test was conducted to see the relationship between learning style and SDLR. The results of the Chi square test analysis is $p = 0.548$ ($p > 0.05$) which means H_1 is rejected and H_0 is accepted so as to produce data in the form of no relationship between learning style and self directed learning readiness. The learning style possessed by most of the respondents in this study was auditory as much as 31%. A high level of self directed learning readiness is the level possessed by most of the respondents in this study and none of the students had a low level of self-directed learning readiness.

Key-Words: - Learning Style, Online Learning, SDLR

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1 Introduction

The COVID-19 pandemic in Indonesia has caused changes in various aspects, one of which is education. The Indonesian government itself is trying to stop its spread, one of which is by implementing a policy of teaching and learning activities from a distance or online learning. Through the Ministry of Education and Culture, the Government has prohibited universities from conducting face-to-face (conventional) lectures and ordered them to hold lectures or online learning [1].

With the change in lecture methods during the COVID-19 pandemic, there was a transition process from face-to-face lectures to indirect lectures experienced by students, these changes required students to be able to adapt to new learning methods. The application of the learning process using the distance method makes each student need time to adjust because they are dealing with dynamics that also affect their interest in learning [2].

The adaptation process of students experiencing psychological problems in changing learning methods, in indirect lectures students are required to have self-directed learning readiness. [3]. Student-centered learning or student-centered approach forces students to be responsible for their tasks independently so that each student will find their own learning style. [4]. The key to success in study and work is knowing each person's unique learning or work style, accepting one's own strengths and weaknesses and adapting as much as possible to personal preferences in each learning, study or work situation Prashign (2007).

Broadly speaking, there are two factors that affect self-directed learning readiness, namely intrinsic factors and extrinsic factors. Intrinsic factors are factors contained in the individual, namely gender, learning methods, mood, health, intelligence, and education. Extrinsic factors are factors that come from outside the individual and are influenced by the environment, namely learning

time, learning place, learning motivation, and parenting patterns [6]. The way of learning (learning style) as an intrinsic factor plays an important role in the formation of student self-directed learning readiness. Study [7] shows that students who succeed in online learning are more likely to have stronger visual and literacy learning styles. This shows that differences in learning styles and teaching methods affect a person's success in the learning process (Drago & Wagner (2004)).

In distance or online lectures, the ability of students to study independently is one of the important things and the learning style applied is one of the factors supporting the success of students in learning independently. Based on research conducted by Canipe, it shows that there is no significant relationship between self-directed learning readiness and learning styles, these results occur in all types of learning styles [3], [8]. Meanwhile, according to Aljohani & Fadila, there is a positive relationship between self-directed learning readiness and learning styles, with kinesthetic learning styles having a dominant correlation with self-directed learning readiness [9]. According to Elazar, getting the results of the study there is a significant relationship between learning styles and self-directed learning readiness [10].

2 Metode

This research is a quantitative research with a cross sectional approach. The research was carried out at the Faculty of Medicine, University of Lampung from December 2020 to July 2021, which is the period when distance/online learning is applied. The population in this study was divided into 4 batches (Medical Study Program 2017, 2018, 2019, 2020) with each totaling 220 people, the 2017 class as many as 182 people, the 2019 class as many as 178 people, and the 2020 class amounting to 198 people. . The sampling technique used stratified random sampling technique. This technique is used if the population has members or elements that are not homogeneous and stratified (Sugiyono, 2014). The calculation to find out the minimum sample size

required is by using the sample calculation formula for descriptive data for the category of a total sample of 106 students.

Then in this study also uses the Self Directed Learning Scale (SDLRS) questionnaire. This questionnaire contains 36 questions, there are three factors that underlie Self-Directed Learning Readiness: consisting of 13 statements of self-management, 10 statements of desire to learn, and 13 statements on the control value. self using a Likert scale with a score range between 1-5. The data obtained will then be subjected to univariate analysis to determine the frequency of each variable and bivariate to examine the relationship between the two research variables, namely learning styles and self-directed learning readiness. The two scales used are nominal and ordinal categorical scales, then data analysis is carried out using the chi square test.

3 Result

Based on the research that has been done, it was found that the learning style that most students have is the auditory learning style with a total of 33 students (31%) out of a total of 106 students. Then followed by multimodal with a total of 28 students (27%) from a total of 106 students. Then the univariate analysis of self-study readiness found that the high SDLR level was the SDLR level owned by most students with a total of 60 students (69%) out of a total of 106 students, and 46 students with moderate SDLR levels (31%).

In this study, there was no low SDLR level. Then based on the data obtained, bivariate analysis was then carried out using the chi-square statistical test. The researcher decided to combine the moderate SDLR level group with the low SDLR level group into one medium and low SDLR level group. The number of groups with low SDLR levels is non-existent or zero, so they are combined with groups of moderate SDLR levels.

After all the data became categorical, then proceed with a different test using the chi square test which is presented in table 1. In table 1 the bivariate analysis test obtained a p value of 0.548 where the value is greater than sig. 0.05, it is stated that H1 is rejected, H0 is accepted, so in this study it is stated that there is no relationship between learning styles

and self-directed learning readiness in online learning for students of the Faculty of Medicine, University of Lampung in 2017-2020.

Table of the relationship between Learning Style and Self-Directed Learning Readiness

Learning Style	Self-Directed Learning Readiness				Total		p-values
	high level		Medium-Low level				
	n	%	n	%	n	%	
Auditori	17	16	16	15,1	33	31,1	0,548
Visual	11	10,4	7	6,6	18	17,0	
Kinesthetic	7	6,6	6	5,7	13	12,3	
Multimodal	19	17,9	9	8,5	28	26,4	
Read/Write	6	5,7	8	7,5	27	13,2	

P-value > 0,05 = Ho failed to reject

4 Discussion

The results of this study are in line with research conducted by (Canipe, 2001) entitled "The relationship between self-directed learning and learning styles" shows that there is no significant relationship between self-directed learning readiness and learning styles, these results occur in all types of learning. The learning style studied by Canipe uses the Learning Style Inventory (LSI) learning style model, where people with a high level of self-directed learning can adapt easily so that learning style is not the main thing that affects a person's self-directed learning ability [8]. As Long said, self-directed learners are: independent, flexible and adaptive [11].

In this study, there were no students with low SDLR levels, this shows that students of the Faculty of Medicine Unila class 2017-2020 as research respondents, have good self-study readiness and can learn independently and can adapt to different learning conditions both learning face-to-face and online learning. In addition, Unila Medical Faculty students have also attended the Learning Skills block in the early semester, where in the lectures they learn material about how students can study independently, face problems that will be faced while being medical students, get to know the basics of medical science, basics professionalism both as a medical student and as a professional doctor..

In distance learning activities, lectures are carried out online using various virtual classroom

platforms such as Zoom, Google Meet, and others. Online distance learning is also able to foster student learning independence, learning without direct guidance from lecturers makes students independently seek information about course materials and assignments given to them. Lectures through online learning media such as Zoom are synchronous learning where learning is carried out in real time, namely learning that is carried out between lecturers and students simultaneously online and can carry out two-way communication directly and provide feedback [12].

Distance learning using virtual classroom media can meet the learning needs of all learning styles. (1) Visual Students; displaying interesting pictures and concept maps during learning (2) Auditorial Students; repeating material that is considered important by using rhythmic voice intonation, using media in the form of video, (3) Read/Write students read the material displayed and record it Again, during online learning students can record and take pictures of the lecture material displayed, so that students easier to take notes yourself. (4) Kinesthetic Students; designing a learning model that makes students more active. Although self-study at home, practical activities are still carried out. [7].

In this study, it was found that students with auditory learning styles dominate the total respondents, students who use auditory learning styles tend to be easier to digest, process, and convey information by listening directly. In addition, during the Covid-19 pandemic, online learning is more dominant in conveying information through audio, making it easier for students who have an auditory learning style to master the material. In this study, there were no students with low SDLR levels, this shows that the 2017-2020 Unila Faculty of Medicine students as research respondents, have good self-study readiness. In this study, it can be seen that the success of independent learning readiness when online learning is not influenced by the student's learning style. This can be due to learning style is a relatively fixed or consistent learning method, in accordance with what Curry L said that learning style is a characteristic of cognitive, effective, and psychosocial behavior that serves as a relatively stable indicator of how

students perceive, interact and respond. learning environment [13].

And self-directed learning readiness is influenced by many factors, namely intrinsic factors and extrinsic factors. SDLR intrinsic factors are gender, age, learning style, mood, health, intelligence, education, basic knowledge, level of knowledge, and socialization. The extrinsic factors are the place of study, motivation to learn, parenting styles and accessibility of learning resources. Motivation can be one of the extrinsic factors that play an important role in the formation of student SLDR. According to Lisiswanti's research, the average motivation of Unila medical students is quite high, namely five of the seven highest scales. This shows that the motivation of the students of the Faculty of Medicine, University of Lampung is high motivation, it can be interpreted that the readiness to learn of Unila medical students is more influenced by the student's learning motivation compared to the student's learning style. [14].

However, the results of this study contradict the research conducted by Aljohani & Fadila (8) entitled "Self-directed learning readiness and learning styles among Taibah nursing students" where they found that there was a positive relationship between self-directed learning readiness and learning styles, with kinesthetic learning style that has a dominant correlation with self-directed learning readiness [9]. This shows that there are still various research results regarding the relationship between learning styles and SDLR, differences in samples, measuring instruments, and research demographics also affect this.

5 Conclusion

Based on the results of research that has been carried out that there is no relationship between learning styles and self-directed learning readiness when applying online learning to students of the Faculty of Medicine, Unila. The learning style possessed by most of the respondents in this study is auditory and a high level of self-directed learning readiness is the level most respondents have in this study.

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