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Analysis of The Learning Style of College Student Athletes for Preparation Of Distance Learning

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***Abstract*— Every individual has a different learning style. By knowing the learning style, an approach can be chosen that fits each of these learning styles. The purpose of this study was to find out the learning styles of students from athletes who performed well at provincial, national and international levels. The research method used is a quantitative method with a descriptive approach and uses a Likert scale questionnaire which is distributed to the subjects of the study, amounting to 30 students from high achieving athletes. The data analysis technique used is the average, standard deviation, percentage, minimum and maximum values. The results showed that 46,8% subjects had a kinesthetic learning style, 13,3% subjects had visuals learning style, 13,3% subjects had an auditory learning style, 13,3% subjects had a combination of visual and kinesthetic learning styles and 13,3% had had a combination of auditory and kinesthetic learning styles. The results of this study can be used as the basis of the approach in the preparation of distance learning media.**

***Keywords*— Auditory, athletes, kinesthetic, learning style, visual**

I. INTRODUCTION

Problems that are held by the Sports Coaching Education Study Program at the Faculty of Sports Sciences, Universitas Negeri Surabaya are student-athletes who have problems to conduct lectures. These problems are caused by students who are provincial or national athletes having to carry out intensive training in accordance with the sport in training camp. students do exercises outside the Surabaya area even abroad in a long duration.

This makes the student-athletes unable to attend and cannot follow the lecture process. Students-athletes have less attendance frequency so that they affect learning outcomes and will have problems in the lecture assignments, midterm scores and final semester exams and not graduating in certain subjects [1]. From this description, it can be concluded that the worst event is that student-athletes are obstructed in the graduation process in a timely manner.

Student-athletes should have different learning services and according to their respective learning styles. At the level of lectures, students are required to have the ability to analyze the problems contained in lecture material and have planned in terms of learning activities [2]. But not all students have the ability to understand lecture material easily because each individual has unique and different ways of understanding lecture material [3].

Each student has a speed of understanding, speed of performance and different learning styles [4]. Learning styles can be said to be a way that has become a habit and is used by students to understand, absorb, process and remember the lecture material provided [5]. A study of learning styles states that as many as 73% of students who understand their learning styles are proven to have good learning outcomes. Students who know their learning style will be able to find out their weaknesses and strengths so they can design learning strategies and can evaluate ways of learning [1].

To find out the appropriate learning style can be known through understanding yourself. Students who

can understand their learning styles will get optimal learning methods and each lecture material provided will be easily understood [6]. Learning style is the key to success in understanding material. In addition, students who understand their learning styles will be able to remember lecture material in a longterm memory [7].

Students who have a visual learning style can understand lecture material by looking at or paying attention to the material delivered directly by the lecturer, they tend to understand the material that is delivered in a coherent manner. Students who have auditory learning styles understand the material by using sensitivity to sound or hearing. Students who have kinesthetic learning styles can understand the material if directly involved, have a high level of activity, high imagination to movements, and like to move [8].

To understand the material delivered by lecturers in the classroom, students must have auditory and visual learning styles. Because in the classroom learning methods lecturers use lecture methods and presentation of material using projectors [2]. This fact is strengthened by the existence of research, which states that as many as 49.13% of students have a visual learning style. The percentage of learning styles is higher than auditory and kinesthetic learning styles. In the classroom, students understand the material more quickly if it is delivered in a visual form [1]. This fact is supported by the results of research that state that students who do learning in the classroom have a tendency towards visual learning styles. A total of 47.27% of students have a visual learning style, as many as 32.73 % students have auditory learning styles and as many as 20% of students have kinesthetic learning styles [9].

By looking at the description of the facts and the results of the study, it noted that the average student conducting lectures in the class has a visual learning style. The advantage of visual learning styles is that it is easy to capture material quickly because learning uses the help of images and diagrams so that students can accelerate in understanding the material [10].

The problem that was possessed by the Sports Coaching Education Study Program at the Faculty of Sports Sciences, Universitas Negeri Surabaya, was the lack of frequency of student-athletes from college. Thus students need special learning services so that the lecture process and learning outcomes are not disrupted and help student-athletes who are good at getting the right to education.

Education is an effort to educate the nation, so the government is very aware of the importance of education. In accordance with the statement contained in article 31 of the Constitution of the Republic of Indonesia which states that every Indonesian society has the right to get an education and teaching [11]. Therefore, Sports Coaching Education Study Program at the Faculty of Sports Sciences, Universitas Negeri Surabaya, wants to provide special services for student-athletes to continue to get an education.

One of the services provided in the presence of distance learning with based e-learning. A study states that lectures using internet-based virtual technology media have increased the absorption of lecture material 78% more than conventional learning / face-to-face learning models [12]. Because the media is more flexible, students are free to learn in various places. In this modern age students in everyday life can not be separated from the use of information technology and the use of sophisticated electronic goods [13].

The purpose of this study was to find out the student-athletes learning style. It is known that the learning styles of students with athletes backgrounds and it can be used as a basis for the preparation of learning media that are in accordance with the characteristics of each student.

II. METHODS

This study uses quantitative research with descriptive approach and survey research design. The target of the study was to use 30 subjects as elite athletes who were still active in provincial, national and international championships. In this study using a questionnaire research instrument with a Likert scale which serves to find out the learning style of students with athletes backgrounds. The data analysis technique in this study is average, standard deviation, minimum, maximum, and percentage.

The results of the study were obtained through the results of the questionnaire data recapitulation which had been filled with student-athletes. The closed questionnaire uses the facility of google form which contains 27 questions consisting of nine questions about visual learning styles, nine questions about auditory learning styles, and nine questions about kinesthetic learning styles. Questions from these three learning styles will produce a score. Student learning styles can be known from the highest scores produced through three types of learning styles. Known description of student learning styles as follows:

(1) The highest score of the three learning styles is an indicator of the learning style of the subject. Can be concluded that the subject is more dominant in the learning style.
(2) If there are two equal scores from three learning styles, it can be concluded that the subject has two learning styles.

(3) If the score has a difference of one point, it can be concluded that the research subjects have a combination of learning styles.

III. RESULTS

After completing the learning style questionnaire by students with athletes backgrounds, in the next stage data analysis was carried out on the results of the research obtained. To find out the trend of learning styles in students, this study used several symbols ;

(1) For students who have a tendency towards visual learning styles, the symbol "V".
(2) For students who have a tendency towards auditory learning styles, the symbol "A".
(3) For students who have a tendency towards kinesthetic learning styles, the symbol "K" is given.
(4) For students who have a tendency to combine visual and kinesthetic learning styles, the symbol "VK".
(5) For students who have a tendency to combine auditory and kinesthetic learning styles, the symbol "AK".

Then an explanation of the age and gender profile of the study subjects is shown in table 1.

Table 1
Subjects profile

Sex		Age				
Female	Male	19 yo	20 yo	21 yo	23 yo	24 yo
50%	50%	26,6%	26,6%	36,3%	6,7%	3,3%

Table one explains that the subject consists of 50% male student-athletes and 50% female student-athletes and also explains that the age range of student-athletes is around 19 to 24 years

Table 2
Descriptive statistics score

Learning style	Min	Max	Mean and SD
V	24	38	30.1 ± 4,3
A	24	40	30.6 ± 5
K	23	45	33.2 ± 7,1

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From table two it can be explained that the maximum score obtained by the subject if answering all questions is 45 and the minimum score the subject obtained if answering all questions is 9. It is explained that the question about visual learning style has a minimum value of 24, a maximum value of 38 and an average score of 30.1. In table 2 it is also explained that auditory learning styles have a minimum score of 24, a maximum value of 40 and an average score of 30.6. In the table, it is also explained that kinesthetic learning styles have a minimum score of 23 and a maximum score of 45.

Table 3
The learning style of student-athletes

Learning Style	Students	Percentages
V	4	13,3%
A	4	13,3%
K	14	46,8%
VK	4	13,3%
AK	4	13,3%

The table three, it is explained that the questionnaire contains questions of learning style that have been answered by 30 students. The table explained that there are 13,3% of students have a tendency towards visual learning styles, 13,3% of students with a tendency towards auditory learning styles, and 46,8% of students have a tendency towards kinesthetic learning styles. Not only that, it turns out there are 13,3% of students having a combination of two learning styles namely visual and kinesthetic learning styles and as many as 13,3% of students have a combination of two learning styles namely auditory and kinesthetic.

IV. DISCUSSION

Based on the results that have been shown, it can be discussed that the tendency of kinesthetic learning styles is more dominant among students with high-achieving athletes. As many as 46,8% of students with high-achieving athletes have kinesthetic learning styles. So after seeing the results of the data displayed it is not surprising that students with high-achieving athletes have a tendency in kinesthetic learning styles. In daily activities, students are filled with activities that involve physical activity.

Physical activity is intended as a routine of physical and technical training in a sport. Besides that, student-athletes from the Sports Coaching Education Study Program at the Faculty of Sports Sciences, Universitas Negeri Surabaya, most of the subjects they attended were outdoor practising. Students who have a kinesthetic learning style can basically understand the material given if they are directly involved in it. Kinesthetic learning styles quickly understand the material by moving muscles, doing structured, imaginative movements, and collecting information intuitively and in the learning process do not use it in words [14].

Students with kinesthetic learning styles are faster capture information provided with movement and store that information in long-term memory [15]. Kinesthetic learning styles prefer material with competitive forms of play and in the delivery of

material / information using tools such as sports equipment, laboratory equipment, music equipment and real objects that can be used for practice [16].

From the data presented, it is known that kinesthetic learning styles dominate more. The fact is further strengthened by the presence of 13,3% of students having mixed learning styles namely visual learning styles combined with kinesthetic learning styles. In addition, 13,3% of students have an auditory mix learning style and are combined with kinesthetic learning styles. The results of these studies further reinforce the fact that students with high-achieving athletes have a tendency towards kinesthetic learning styles. The fact is further strengthened by the existence of a study that states that students with athletic status have low visual and auditory learning styles. As many as 73% of students with outstanding athletes have kinesthetic learning styles [9].

From this description, it is known that students-athletes have low visual and auditory learning styles. Students who have kinesthetic learning styles are slow to understand the lecture material conducted in the classroom. So it is not surprising that only 13,3% of students have a tendency towards visual learning styles and 13,3% of students with a tendency towards auditory learning styles. Student-athletes feel they do not understand the material when learning in the classroom because the process of delivering material is using lecture methods and presentation of material through the projector.

Students with a tendency towards kinesthetic learning styles sometimes feel quickly experiencing a sense of boredom when doing activities such as reading and listening. Students with kinesthetic learning styles cannot concentrate if the muscles in their body are not moved. Students tend to feel bored and feel anxious when receiving material in class. Students with kinesthetic learning styles will be able to understand the material quickly if explained and involved directly / practice [17].

This is reinforced by the results of research that say that in the direct lecture conditions, students with high-achieving athletes tend to like active learning styles. Active learning style is that students are given the opportunity to practice skills directly so experience and confidence will increase [18]. In order to produce good learning outcomes, it is necessary to accommodate and need to pay attention to the characteristics of each student. Each individual has different characteristics, therefore the method should be specialized [19]. A study states that only about 30% of students can follow and understand the lecture material delivered by lecturers in the class. 70% of them cannot understand the material delivered by lecturers in the classroom due to the incompatibility of the learning styles they have [9].

The problem is that student-athletes from Sports Coaching Education Study Program at the Faculty of Sports Sciences, Universitas Negeri Surabaya have problems in attending lectures directly. The frequency of attendance of fewer than 15 meetings can influence the understanding of lecture material and impact on learning outcomes. With this, the effort that can be made is to provide learning services specifically.

In this modern era, the community is helped by the technological sophistication in the field of information. Sophisticated electronics such as smartphones, smart computers and supported by the internet network that provides all the information needed by the community[19]. With the existence of these facilities can facilitate the provision of educational services to students with distance learning [2].

The learning service is e-learning which is distance learning. E-learning delivers lecture information / material using the sophistication of information technology, using electronic devices such as laptops, smartphones that can expand the learning and teaching process [21]. It is more flexible in terms of time and place and the advantages of e-learning are material presented in the form of writing, video, animation, and audio that is presented in an interesting way [22]. Besides that excellence, it is flexible in terms of time and place, in e-learning learning does not require an instructor or teacher because all lecture material is available in it. But in providing e-learning services must pay attention to student learning styles [23].

A study stated that students using e-learning learning media experienced an increase in learning outcomes by 78%. E-learning learning media is considered more interesting than conventional learning because students can do the learning process outside the classroom and do learning using their learning styles and can choose the right time to do the learning process [24]. A study of the influence of virtual learning media based on the internet said that there was an increase in understanding of the material which was marked by an increase in the pre-test to post-test learning outcomes. Internet-based virtual learning is considered more interesting because the content provided contains various kinds of material that are displayed attractively and contain various types of practice questions [20].

From the description of the advantages of e-learning learning media above, it is explained that the media is superior in the field of visual and audio. The media is very suitable for students with visual and auditory learning styles. Whereas as we know kinesthetic learning styles dominate student-athletes from the Sports Coaching Education Study Program at

the Faculty of Sports Sciences, Universitas Negeri Surabaya. A study shows that students who have a tendency to kinesthetic learning styles cannot benefit from learning that utilizes multimedia technology. Students with kinesthetic learning styles can understand the material provided if the content is added to the video containing daily case examples so students can imitate and practice it [25].

V. CONCLUSION

Students-athletes tend to have kinesthetic learning styles. Thus it can be concluded that the Study Program of Sports Coaching Education at the Faculty of Sports Sciences, Universitas Negeri Surabaya composes distance learning services and is guided by the learning styles of each student.

VI. SUGGESTION

(1) Students must understand the learning style in order to design ways of learning and evaluate how to learn.
(2) Lecturers should not generalize to the learning styles of all students because each student has different uniqueness.
(3) Educators design e-learning accompanied by video content that can be practised by students

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