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The influence of plagiarism and scientific attitude on learning outcomes of sports students

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Abstract
The purpose of this study was to reveal (1) the level of plagiarism, scientific attitudes, and learning outcomes of sports students (2) the differences in levels of plagiarism, scientific attitudes, and learning outcomes of sports students in terms of gender (3) the influence of the level of plagiarism, scientific attitudes on achievement sports student learning. This type of descriptive research with ex post facto design will be used. There are three variables revealed in this study, namely the level of plagiarism, scientific attitude, and learning achievement of sports students. The subjects in the study were sports students in the Sports Science and Physical Education Programs who were taken based on the distribution of online instruments. Through this technique, there were 59 students who filled out the research instrument. There were three research instruments used. First, the Plagiarism Action Questionnaire (ATP) was used to determine the level of plagiarism committed by sports students. Second, the Scientific Attitude Questionnaire (KSI) which consists of 8 question items that were used to find out how the scientific attitude of sports students was. Fourth, documentation was used to determine student learning achievements based on GPA. The data analysis technique used was descriptive analysis, two-way ANOVA and path analysis. All of these analyzes will be assisted by the SPSS version 26 program. The results of the study found (1) the level of plagiarism tended to be low which means this is good; while for the scientific attitude of students had a high average value; and for student learning achievement, the GPA value was relatively satisfactory because it was close to 3.00; (2) there was no difference in the level of plagiarism, scientific attitude and learning achievement of sports students in terms of gender; (3) there was an influence of the level of plagiarism and scientific attitude on the learning achievement of sports students.

Keywords: Plagiarism, scientific attitude, and learning achievement

Introduction
The National Standard for Higher Education Permendikbud No. 3 of 2020 states in its appendix that the general skill formulation for undergraduate level is that students are able to apply logical, critical, systematic, and innovative thinking. At first glance it seems not difficult, but growing logical, critical, systematic and innovative thinking in students is not an easy job. Even so, this formulation is one of the challenges that must be achieved for students and at the same time it is the task of learners (lecturers) in universities to design and implement lectures so that the above abilities are possessed by students.
In the higher education curriculum book [1] it is stated that one of the good learning processes can be seen from clear learning outcomes. Regarding learning achievement, the variables that surround it are not single-lined but multi-faceted. Learning variables are divided into three major variables which he calls the taxonomy of learning, namely: results, methods and conditions [2]. In the taxonomy it is stated that learning outcomes will be influenced by learning method variables; while the variable of the learning method will depend on the condition of the learner (students or students), such as scientific attitude, academic self-concept, learning style, achievement motivation, locus of control, and other psychological variables. According to the variables in the learner (students or students) are interrelated with one another and have an influence on learning achievement [3].
This study will be directed to reveal student condition variables such as scientific attitude, academic self-concept and plagiarism that are associated with sports student learning achievement.

The question is, what is the urgency to study these variables? Searching the results of research conducted at the digital reference gate (Garuda) at http://garuda.ristekbrin.go.id/ with the keywords "scientific attitude and academic self-concept" did not find any relevant research documents. The search was carried out by simplifying the keywords, namely "scientific attitude and self-concept" the results were found 3 documents. All of the research documents were sampled by students and non-students. In addition, the variable is self-concept and not academic self-concept. When the search was continued by adding one keyword "plagiarism", namely "scientific attitude and plagiarism", the result was not found any documents. The study is generally carried out partially on the above variables.

The first variable studied in this study is plagiarism. The issue of plagiarism is very important in the world of education. That's why, in 2010, the Minister of National Education issued Permendiknas number 17 regarding the prevention and control of plagiarism in universities. Even though there are rules that regulate plagiarism, the practice of plagiarism is still rife in the field. Plagiarism violations are still a problem for higher education institutions [4].

The question then is, what is meant by plagiarism or plagiarism? In Permendiknas number 17 of 2010 it is stated that plagiarism is an act intentionally or unintentionally in obtaining or trying to obtain credit or value for a scientific work, by quoting part or all of the scientific work of another party which is recognized as a scientific work, without stating the source correctly and adequate. Not long ago, in 2018, the Indonesian media was shocked by the emergence of plagiarism cases carried out by officials at one of the campuses in Southeast Sulawesi. Four years earlier, in 2014, a lecturer at one of Indonesia's leading and largest universities also experienced a similar case and forced him to resign from his position.

The results of research conducted found that the phenomenon of plagiarism among students is mushrooming [5]. It is no exaggeration if states that plagiarism is the most common violation found in a study [6]. Revealed that the level of plagiarism committed by students when completing the final project (thesis) was 31% [7]. This exceeds the tolerance limit for a scientific work. Research conducted on sports students found that students committed plagiarism in the high category of 43%, while 57% [8]. Although the results as above were found, the study conducted showed the opposite, namely that most of the students did not commit plagiarism [9].

Previous research has examined the condition variables of sports students such as learning styles, achievement motivation, academic self-concept and focus of control [10]. However, the study did not reveal how it relates to student learning outcomes. That's why no research results have been found that examines the variables of plagiarism, scientific attitudes and those associated with learning outcomes. Thus, the results of this study will complement and fill the current void.

The researcher considers that in relation to the formulation of general skills in Permendikbud No. 3 of 2020, scientific attitude becomes a very important variable because aspects or dimensions that exist in scientific attitudes include critical attitudes, objective thinking, and thinking to reach the future (innovative). This is in line with what stated that scientific attitudes are closely related to higher-order thinking skills [11]. Thus, studying scientific attitudes is seen as relevant to the formulation of general skills above. Furthermore, it is important to reveal the academic self-concept variable because stated that learning achievement is closely related to student self-concept, especially academic self-concept [12]. Next, the plagiarism variable is raised in this study because the issue of plagiarism is an important issue in the world of education, especially in universities. That is why, in 2010 Permendiknas number 17 was issued regarding the prevention and control of plagiarism in universities.

Several research results on the variables above also show inconsistencies when associated with learning outcomes. Research conducted found that there was a significant influence between scientific attitudes and learning outcomes [13]. Found different things that scientific attitudes did not have a significant relationship with student learning outcomes [3]. When analyzed further, it turns out that the scientific attitude possessed by students is also different. According to the scientific attitude of students is at a low level [14]. On the other hand found that students' scientific attitudes were at a high level [15]. It appears that the results of the study of scientific attitudes above are still contradictory and different from one another. In fact, according to the scientific attitude is an important factor in learning [14].

Based on the above, the purpose of this study is to reveal (1) the level of plagiarism and scientific attitudes of sports students; (2) the difference in the level of plagiarism, scientific attitude, and learning achievement of sports students in terms of gender; (3) the influence of the level of plagiarism and scientific attitude on the learning outcomes of sports students.

Materials and methods

To achieve the objectives of the study, a descriptive method with an ex post facto design will be used. According to "descriptive research is not generally directed toward hypothesis testing [12]. The aim to describe "what exists" with respect to variables or conditions in situation". The ex post facto design is very suitable to be used to reveal cause-and-effect relationships if the experimental design cannot be used by researchers [16]. Through the research design, it will be revealed how the level of plagiarism, scientific attitudes, and learning achievements of sports students will be revealed.

The research subjects are sports students at Cenderawasih University. In view of the COVID-19 pandemic, data retrieval was carried out online by using a Google form link distributed to students. Through this technique, obtained 59 sports students from two study programs, namely Sports Science and Physical Education, Health and Recreation.

There are three research instruments used in this study. First, plagiarism is measured by the Plagiarism Behavior Scale (SPP) developed by [17]. The SPP consists of 17 statement items with alternative answers ranging from Almost Always (HSL), Very Often (SS), Sometimes (KK), Very Rarely (SJ), and Almost Never (HTP). Second, to determine the scientific attitude, the Scientific Attitude Questionnaire (KSI) is used which refers to the dimensions given [18], namely curiosity (curiosity), inventiveness (discovery attitude), critical thinking (critical thinking attitude), and persistence. (Attitude of persistence). Based on the four dimensions of scientific attitude above, 19 items of scientific attitude statements were compiled that were adapted to the contexts faced by sports students when studying on campus. The scientific attitude questionnaire has four alternative answer choices, namely very suitable, suitable, not suitable and very inappropriate. Third, the learning achievement of sports students is taken by documenting the GPA obtained by students. This is in accordance with what was stated by [1] that GPA is an indicator of learning achievement that is often used.

The data analysis technique used is descriptive analysis, such as the average value, the lowest and highest value, standard deviation and percentage. In addition, the data obtained will also be displayed using a chart so that it can be known and read more easily. The next analysis will use two-way ANOVA and path analysis. All of these analyzes will be assisted by the SPSS version 26 program.

3. Results & Discussion

The data analysis technique used is descriptive analysis, such as the average value, the lowest and highest value, standard deviation and percentage. In addition, the data obtained will also be displayed using a chart so that it can be known and read more easily. The next analysis will use two-way ANOVA and path analysis. All of these analyzes will be assisted by the SPSS version 26 program.

Table 1: Descriptive analysis results

Variable		N	Mean	Std. Deviation	Minimum	Maximum
Plagiarism	Men	44	32.93	8.395	17	51
	Women	15	30.07	6.239	23	44
	Total	59	32.20	7.952	17	51
Scientific Attitude	Men	44	62.32	6.371	47	76
	Women	15	60.67	7.277	51	72
	Total	59	61.90	6.588	47	76
Learning achievement	Men	44	2.8907	.50953	1.20	3.76
	Women	15	3.1400	.38426	2.09	3.66
	Total	59	2.9541	.49001	1.20	3.76

The next analysis is a comparison test. This is done to find out whether there are differences in plagiarism, scientific attitudes, and learning outcomes based on the gender of students. The results of the comparative analysis are presented in table 2. From these results it appears that the plagiarism variable obtained an F value of 1.464 with sig. 0.231 ($\alpha > 0.05$) which means that there is no difference in plagiarism between male and female sports students. In the scientific attitude variable, the F value is 0.699 with sig. 0.407 ($\alpha > 0.05$) which means that there is no difference in scientific attitude between male and female sports students. In the learning achievement variable, the F value is 2,996 with sig. 0.089 ($\alpha > 0.05$) which means that there is no difference in learning achievement between male and female sports students. With these results, it can be said that both the variables of plagiarism, scientific attitude, and learning achievement were not found to be different based on the gender of sports students.

Table 2: Comparison test results

Variables		Sum of Squares	DF	Mean Square	F	Sig.
Plagiarism	Between Groups	91.831	1	91.831	1.464	.231
	Within Groups	3575.729	57	62.732		
	Total	3667.559	58			
Scientific Attitude	Between Groups	30.511	1	30.511	.699	.407
	Within Groups	2486.879	57	43.629		
	Total	2517.390	58			
Learning achievement	Between Groups	.695	1	.695	2.996	.089
	Within Groups	13.231	57	.232		
	Total	13.926	58			

The results of the next research are directed at how the direct and indirect influence of each exogenous variable on the endogenous variable. Analysis with path analysis technique is used and here are the results.

Table 3: The results of the first stage path analysis test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	DF 1	DF 2	Sig. F Change
1	.355[a]	.126	.095	7.565	.126	4.042	2	56	.023

a. Predictors: (Constant) Scientific Attitude
b. Dependent Variable: Plagiarism

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	37.405	12.075		3.098	.003		
Scientific Attitude	.391	.167	.324	2.345	.023	.819	1.221

Dependent Variable: Plagiarism

The results of the path analysis test with plagiarism as an endogenous variable found the Beta value on the scientific attitude variable of 0.391 with a path analysis coefficient of 0.324 and a significance value of 0.023. That is, there is an influence of the scientific attitude variable on the level of student plagiarism. Similarly, it was stated that training students' scientific attitudes and trying to form student characters who were independent in learning [3]. It was further stated that Universities have a great responsibility to provide education and socialization related to the prevention of plagiarism within the University [6]. The next analysis will be directed by making the learning achievement variable into an endogenous variable. Here are the results.

Table 4: Advanced path analysis test results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	DF 1	DF 2	Sig. F Change
1	.561[a]	.314	.277	.41667	.314	8.405	3	55	.000

a. Predictors: (Constant), Plagiarism, Scientific attitude
b. Dependent Variable: Learning outcome

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.303	.720		3.200	.002		
	Scientific attitude	-.019	.010	-.260	-2.011	.049	.746	1.341
	Plagiarism	-.017	.007	-.270	-2.263	.028	.874	1.144

Dependent Variable: Learning outcome

The results of the advanced path analysis test with the learning achievement variable as an endogenous variable found the Beta value on the scientific attitude variable of 0.19 with a path analysis coefficient of 0.260 and a significance value of 0.049. That is, there is an influence of scientific attitude variable on student learning achievement.

Conclusions

Based on the results obtained, it can be concluded that (1) the level of plagiarism tended to be low which means it is good; for student learning achievement, the GPA value was relatively satisfactory because it was close to 3.00, while for scientific attitudes it had a high average score; (2) there was no difference in the level of plagiarism, scientific attitude, and learning achievement of sports students in terms of gender; (3) there was an influence of the level of plagiarism and scientific attitude on the learning outcomes of sports students.

References

1. Tim Penyusun. Panduan Penyusunan Kurikulum Pendidikan Tinggi; c2020. https://dikti.kemdikbud.go.id/wp-content/uploads/2020/10/Buku-Panduan-Penyusunan-Kurikulum-Pendidikan-Tinggi-Mbkm.pdf.
2. CM Reigeluth. Instructional design theories and models an overview of their current status. London & New Jersey: LEA, publishers; c 1983 Nov 1.
3. Wahyudi. Prodi Pendidikan Fisika STKIP PGRI Pontianak. 2013;1:2. Available: http://e-journal.unipma.ac.id/index.php/JEMS/article/view/123/109.
4. A Ardinansyah, D Tenrisau, F Aslim, IS Wekke. Ketidakjujuran Akademik dalam Pendidikan Tinggi. Etika Akad. 2018;2(20):11. DOI: 10.13140/RG.2.2.12323.14884.
5. IMI Akib. Fenomena Plagiarisme Mahasiswa. Fenom. Sos. Pilihan Hidup Tidak Menikah Wan. Karier. 2016;3(1):1–10. Online Available: https://media.neliti.com/media/publications/70308-ID-fenomena-plagiarisme-mahasiswa.pdf.
6. Sukaesih. Permasalahan Plagiarisme Dalam Penelitian Kualitatif Di Indonesia. J. Polit. Indones. 2018;3(1):210–218. Online Available: https://journal.unsika.ac.id/index.php/politikomindonesiana/article/view/1424.
7. AN Hami. Analisis tingkat plagiarisme pada skripsi prodi ilmu perpustakaan S1 UIN Sunan Kalijaga Yogyakarta tahun 2016/2017. UIN Sunan Kalijaga, Yogyakarta; c2018. Online Available: http://digilib.uin-suka.ac.id/id/eprint/32459/.
8. EKT Muis. Studi Cyber Plagiarisme Akademik Mahasiswa Fakultas Ilmu Keolahragaan Universitas Negeri Surabaya study of cyber plagiarism students' academic in faculty of sport science state university of Surabaya. 2017;1:1-14. Available: https://jurnalmahasiswa.unesa.ac.id/index.php/jurnal-bk-unesa/article/view/19739/18053.
9. FT Aji. Perilaku Plagiarisme di Kalangan Mahasiswa Magister Universitas Airlangga. Pascasarjana Universitas Airlangga; c2018. Online Available: https://repository.unair.ac.id/74814/.
10. MF Putra. Gaya Belajar, Motivasi Berprestasi, Locus of Control Dan Academic Self-Concept Mahasiswa Fik Uncen. JOSSAE J. Sport Sci. Educ. 2017;1(1):1. DOI: 10.26740/jossae.v1n1.p1-7.
11. Hunaepi. Kajian literatur tentang pentingnya sikap ilmiah. Pros. Semin. Nas. Pus. Kaji. Pendidik. Sains dan Mat. Tahun (2017); c2016 January. p. 548–550. DOI: 10.31227/osf.io/mpueg.
12. A Ary, D Jacobs, LC Sorensen, C Razavieh. Introduction to Research in Education; c2010.
13. MDURV. Kusuma. Pengaruh Sikap Ilmiah terhadap Hasil Belajar Dan Kemandirian Belajar Melalui Strategi Scaffolding-Kooperatif. J. Pembelajaran Fis. 2013;1(2):23-33. Online Available: http://jurnal.fkip.unila.ac.id/index.php/JPF/article/view/338/147.
14. R Nurman, Y Hala, A Bahri. Profil Keterampilan Metakognitif dan Sikap Ilmiah Mahasiswa Jurusan Biologi FPMIPA UNM. Pros. Semin. Nas. Biol. dan Pembelajarannya (2018); c2000. p. 371-376, Online Available: https://ojs.unm.ac.id/semnasbio/article/view/6988.
15. DN Nikmah. Implementasi Budaya Akademik Dan Sikap Ilmiah Mahasiswa. Manaj. Pendidik. 2015;24(6):483-490. Online Available: http://ap.fip.um.ac.id/wp-content/uploads/2015/05/02-dwi-nur-nikmah.pdf.
16. INS Degeng. Rancangan penelitian. In LI Malang (Ed.), Dasar-dasar metodologi penelitian. Malang: Lemlit IKIP Malang; c1997.
17. B Bukhori, D Darmuin. Plagiarism Viewed From Students' Self-Efficacy and Academic Procrastination. Psympathic J. Ilm. Psikol. 2019;6(2):201–212. DOI: 10.15575/psy.v6i2.6211.
18. PC Gega. Science in Elementary Education. New York: John Wiley & Sons Ltd; c1982.