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THE INFLUENCE OF SCIENCE AND IPS DEPARTMENT ON LEARNING OUTCOMES IN CLASS XI STUDENTS IN CITIZENSHIP EDUCATION

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ABSTRACT
In this study, the factors causing differences in students' abilities were focused on the intelligence factor used by the school to place students in the Science and Social Studies specialization group. This difference in placement was based on cognitive ability, and student interest carried out by the school. Schools still consider the division of the second major to be more critical based on moderate to low levels of cognitive abilities, so students are in the social studies class group, while moderate to high cognitive abilities are in the science class group. Citizenship education subjects are divided into two groups, where the groups have been divided based on students' cognitive abilities. In this group condition, the two social studies and science class groups should have a different impact on student learning outcomes. Is the justification that the Social Studies class group, which is grouped based on medium to low cognitive abilities, has lower student end-of-semester exam results than the Science class group, or is it the other way around? This research is included in the quasi-experimental research with a purposive sampling technique. This research was conducted on class XII high school students majoring in science and social studies. Data collection techniques for learning outcomes use good descriptions to measure knowledge or skills. The data analysis technique used is non-parametric (Mann-Whitney U Test). The results of the research show that the learning outcomes of students majoring in civic education in social studies are lower than those majoring in natural sciences, or the learning outcomes of students majoring in natural sciences are higher in citizenship education than students majoring in social studies.

Keywords: Department, Learning Outcomes, Student Ability.

INTRODUCTION

Achievement of subject competency standards is an absolute requirement for students to achieve their learning outcomes. The end-of-semester exam activity is a means to test the extent to which students understand the learning material that has been given for one semester(Ananda, 2019). The final semester exams have a collection of questions arranged based on several competency standards students must achieve.

At the senior secondary education level, a higher cognitive level is a requirement in the test exams so that test takers must answer correctly and correctly. Many factors cause students' ability to answer end-of-semester test questions to be challenging to answer. These difficulties have a negative impact which results in poor final semester learning outcomes for students.

The difficulty level of the questions is always directly proportional to the student's ability. The ability of the student to work on the questions given correctly and correctly, as mentioned earlier, is undoubtedly influenced by ability factors which will ultimately be compared to learning achievement. Several factors cause differences in students' ability to achieve learning outcomes, including internal and external factors(Tinov & Widhana, 2020). The internal factors that influence students' abilities include (1) intelligence; (2) Interests; (3) Talent; and (4) Motivation. At the same time, external factors that are considered to affect students' abilities are (1) the school

environment, such as the completeness of school facilities, adequate teacher competence in both pedagogic, personality, social, and professional aspects, as well as learning culture, and (2) family.

In this study, the factors causing differences in student abilities were focused on the intelligence factor used by the school as a decision to place students in specialization groups science and Social Sciences. This difference in placement is based on cognitive abilities and student interest carried out by the school. Schools still consider the division of the second major to be more important based on moderate to low levels of cognitive abilities, so students are in the social studies group, while moderate to high cognitive abilities are in the science class group. However, if the student's interest is very high to choose the major he wants, he will enter the chosen group.

Citizenship education subjects are subjects in the two groups, where the groups have been divided based on the cognitive abilities of students. In this group condition, both groups should be class IPS and Science are expected to have a different impact on student learning outcomes. Is the justification that the Social Studies class group, which is grouped based on medium to low cognitive abilities, has lower student end-of-semester exam results than the Science class group, or is it the other way around?

METHOD

This research is included in the quasi-experimental research with the technique of determining the sample using purposive sampling. This type of research was chosen because the researcher cannot fully control the external variables that influence the research. Other considerations are due to adjusting research characteristics such as facilities owned by students, networks that support student lectures in participating in learning, as well as the subject matter taught.

This researchcarried out for class XII high school students majoring in Science and Social Sciences at SMA AL-Rahmah in the first semester of the 2022/2023 school year. Data collection techniques for learning outcomes use descriptions both to measure the realm of knowledge or skills that are formed in an assignment that has been adapted to learning indicators

The data analysis technique used in both variables was tested for normality first. If the data is normally distributed, the next step can be taken using a homogeneity test and then the independent sample t test, whereas if the data is not normally distributed, the researcher can continue the analysis using nonparamatic concepts (Mann Whitney U Test).

The form of the statistical hypothesis proposed in this study is as follows:

H0: there is no difference in the average student learning outcomes in the realm of knowledge in the experimental class (IPA) and the control class (IPS)

H1: there is a difference in the average student learning outcomes in the realm of knowledge in the experimental class (IPA) and the control class (IPS)

The next hypothesis test is the right-hand t-test. The right-hand t test is used if H0 sounds smaller or equal to (≤) and H1 sounds bigger (>). Based on
the research hypothesis that has been described previously, a statistical hypothesis is needed
in testing the research sample. Before carrying out the right-sided t test, it is necessary to know

research statistical hypothesis as follows:
H0: R1 ≤ R2 (the average value of the experimental class is not better than the control class)
H1: R1 > R2 (the average value of the experimental class is better than the control class)

Information:
R1: experimental group
R2: control group
Then it is necessary to know the statistical test criteria as a basis for decision making on the right-hand t test as follows:
a. if tcount<ttablethen H0(null hypothesis) is accepted and H1(alternative hypothesis) is rejected
b. if tcount> ttablethen H0(null hypothesis) is rejected and H1(alternative hypothesis) is accepted.

RESULTS AND DISCUSSION

Table 1
Frequencies

	Class	N
The value of learning outcomes	IPA (Control)	30
	IPS (Experimental)	26
	Total	56

Based on the results of the analysis carried out in table 1 (Frequencies) it can be seen that the sample involved in this study was 56 people. Divided into 30 samples in the experimental class (IPA) and 26 samples in the control class (IPS). All samples in this study were women who were in class XI SMA Al-Rahmah Serang Banten

Table 2
Ranks

	Class	N	MeanRanking	Sum of Ranks
The value of learning outcomes	IPA	30	36.72	1101.50
	IPS	26	19.02	494.50
	Total	56		

Table 3
Statistics test

	The value of learning outcomes
Mann-Whitney U	143,500
Wilcoxon W	494,500
Z	-4,053
asymp. Sig. (2-tailed)	.000

a. Grouping Variables: IPS/IPA

Based on the results of the analysis carried out, in table 2 (Rank) of the Sum of Ranks pool, the number of rankings for science majors is = 1101.50 and the ranking for social studies class = 494.50. Furthermore, in table 3 (Test Statistics) for the Man

Whitney U line, the price is U = 145.5 and p-value = -4.053/2 = = 2.0265 <0.05 or H0 is rejected, so that the learning outcomes of citizenship education subjects for Social Sciences majors are higher. lower than students majoring in science. Thus, the learning outcomes of students majoring in natural sciences are higher in citizenship education subjects than students majoring in social studies.

Research resultthis provides support as well as reinforcement of several research results on differences in students' abilities between science and social studies majors in understanding general subject matter, especially civics education material. However, there has not been much discussion on the specific studies on the differences in the abilities of the two departments, especially in the civics education subject, therefore, at the beginning of the discussion, the researcher explained that the results of this study were support and reinforcement in the world of teaching.

The research results statedthe learning outcomes of students majoring in natural sciences are higher, especially in citizenship education subjects compared to students majoring in social sciences, this is in line with the results of Pusparia's research (2008) in(Silondae, 2019)and(Sutrisno & Siswanto, 2016)which stated that the learning outcomes of students majoring in science tended to be higher compared to students majoring in social sciences, and language, this was due to the different achievement motivations between the two majors. further(Astiti et al., 2021)explained that there were several factors that influenced class XI students in general to have good learning outcomes including intelligence, learning motivation, and interest, which were usually higher for students in science majors than social studies.(Varera, 2018)elaborate further if there are two factors that affect the learning outcomes of junior high school students internal factors such as emotional control and external factors such as learning tools and media.

CONCLUSION

The results of the research conducted show thatthe learning outcomes of civics education subjects for students majoring in social studies are lower than students majoring in natural sciences. This is evident from the Man Whitney U value obtained at U = 145.5 and p-value = -4.053/2= = 2.0265 <0.05 or H0 is rejected. Thus, the learning outcomes of students majoring in science are higher in educational subjects citizenship compared to students majoring in social studies.

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