

## Students' Learning Independence from Different Specialization Classes: A Comparative Study

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### Abstract

The purpose of this study is to examine the learning independence of students in different specialization classes. This study employed a quantitative, comparative approach. The subjects of the study were class X SMA. There are 21 students in class X MIPA and 36 students in class X IPS in SMA Nurul Fallah Kefamenanu. A questionnaire about learning independence was used to collect data. The results indicated that students in different specialized classes differed in their independence in learning. The learning independence of MIPA specialized students is 19.99% greater than that of IPS specialization students. This may be due to the inappropriate grouping of specialization classes and the existence of a negative stigma towards students enrolled in IPS specialization classes. This stigma has the potential to have a negative impact on self-confidence, learning motivation, learning creativity and student learning discipline. Therefore efforts that need to be made are to improve the system for determining specialization classes and to provide equal opportunities and support for each student to develop themselves according to their interests, talents and potential.

**Keywords:** comparative study, independent learning, specialization class



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### INTRODUCTION

The relationship between the level of education and the quality of life in a society is strong. A quality education may have a good effect on the spiritual and social attitudes, as well as the skills and expertise of community members (Peedikayil et al., 2023; Rangkuti & Ulfa, 2022; Sele & Dewi, 2022). The relationship between the quality of education and a society's standard of living is strong. Community members' spiritual and social attitudes, as well as their knowledge and skills, can be positively influenced by a quality education. Darmayanti et al., (2021) pointed out that the aim of adopting SMA specialization classes was to encourage students to select subjects based on their abilities and interests. Through learning experiences in specialization classes, it is hoped that students' competencies can be developed holistically and optimally, in terms of

competence, knowledge, attitudes, and skills, because they are encouraged to study subjects that align with their talents, interests, and academic abilities.

Regulation Number 59 of 2014 of the Minister of Education and Culture specifies three SMA specialty classes: Mathematics and Natural Sciences (MIPA), Social Sciences (IPS), and Language and Culture. The name of the specialization class in Permendikbud No. 59 of 2014 differs marginally from the name of the specialization class in the previous Minister of Education and Culture Regulation No. 69 of 2013. Before, the MIPA concentration was known as Mathematics and Natural Sciences (MIA), whereas the IPS concentration was known as Social Sciences (IIS). Even if they use distinct terminology, the topics in issue have many similarities with the specialization class in question ([Kemendikbud, 2013](#)).

The Minister of Education and Culture's Regulation No. 59 of 2014 explains further that the determination of specialization classes has been conducted since students registered at the SMA level ([Kemendikbud, 2014](#)) Consider the interests, skills, and academic ability of students as evidenced by their report cards, results on the junior high school national test, and suggestions from guidance and counseling teachers when determining the class. [Prabowo & Noranita \(2015\)](#) explained that the process of determining specialization classes that was done manually was ineffective and inefficient so that a decision support system for determining student specialization was needed that assisted teachers in determining students' interests. This is supported by report of [Prakasa \(2016\)](#), [Prayitno & Lukman \(2016\)](#) and [Serelia & Saf \(2020\)](#) that IT-based decision support systems for identifying specialties can limit the possibility of inaccurate specialization classes.

Despite the fact that the above research results indicate that IT-based specialization classes would be more effective and efficient than manual class determination, little progress has been made in this area. The determination of specialist courses at SMA Nuruh Fallah Kefamenanu, a private school in the NKRI-RDTL border region, is still performed manually. Because the school has not yet offered IBB specialization classes, students who enroll at SMA Nurul Fallah Kefamenanu will be separated into MIA and IIS classes. The average score on the SMP National Examination is also still used to determine the specialization class. The students are arranged from the highest average score to the lowest average score, and those with high scores are placed in the MIA specialization class while those with low scores are placed in the IIS specialization class.

The above-described method for determining specialization classes has the potential to give the impression that students enrolled in IIS specialization classes have limited abilities. [Mu'awanah & Jacky \(2015\)](#) stated that due to erroneous beliefs, the MIPA class is perceived to be superior to the IPS class. This is a phenomena that requires attention. The reason for this is because the decision of specialist classes is conducted primarily to assist students in developing themselves in accordance with their interests and abilities, and not to label them negatively.

Studying the quality of MIPA and IIS students, for instance from the perspective of student learning independence, is one method of analyzing the quality of the implementation of education at the high school level, which is conducted in the form of specialization classes. [Anzora \(2017\)](#) and [Hadi & Farida \(2013\)](#) stated that independence

in learning is the ability of students to learn based on their own will, awareness, and choices, enabling them to engage in the learning process responsibly. Students with a high level of learning independence will develop into persons who are self-assured, accountable, and capable of overcoming the hurdles and challenges they meet during the learning process.

Hidayat et al. (2020) and Zahro et al. (2021) stated that Independent learning is an important part of the learning process that must be considered. Autonomous learning enables students to manage and apply the learning process with self-discipline, allowing them to attain optimal learning results. Accordingly, Kopzhassarova et al. (2016) reported that independent learning is important for high school graduates because it enables the development of the information, skills, and creative and inventive thinking abilities necessary for addressing the difficulties posed by societal changes. Interest, ambition, and self-awareness to learn and develop oneself are the primary characteristics influencing student learning independence.

Many research on the quality of student learning independence and efforts to foster it have been undertaken to far. Fatihah (2016) and Wijaya et al. (2021) reported that it has a significant influence on learning outcomes and student achievement. Asmar & Delyana (2020) stated that Independence in learning may have a significant impact on pupils' critical thinking abilities. With the utilization of learning patterns and the combination of multiple learning media, learning independence may be fostered. In addition to these research, a study of student learning independence has been conducted in terms of gender, birth order, and mathematical dispositions, among others (Ab (2021); Sembiring & Wardani (2021); Tagela (2021)).

Although there have been several studies on learning independence, no research has been conducted on learning independence in terms of disparities in student specialization classes. Although while this is vital to accomplish in order for it to serve as the foundation for empowering student learning freedom, it is no longer possible to eliminate gaps between students in various specialist classes. Thus, the purpose of this study is to examine the learning independence of students in different specialization classes.

## **METHOD**

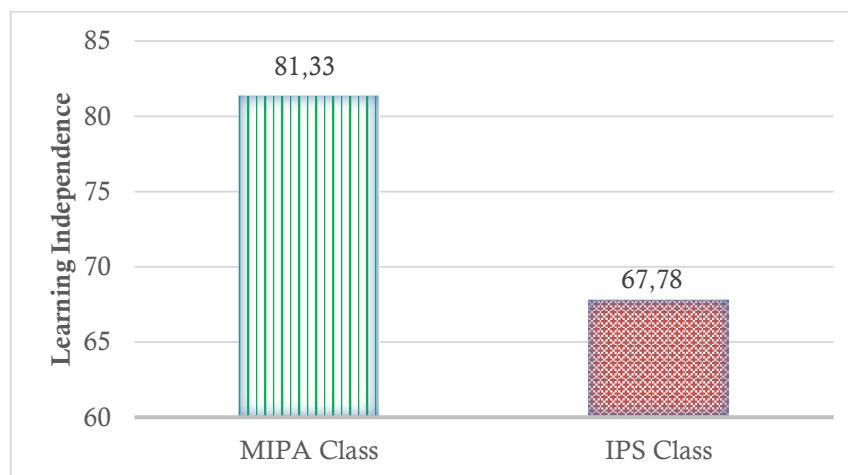
This research is a comparative research with a quantitative approach. The research subjects were class X SMA Nurul Fallah Kefamenanu consisting of 21 students in the MIPA class and 36 students in the IIS class. Data was collected using a learning independence questionnaire developed by Hidayati & Listyani (2010). The questionnaire was compiled based on 6 indicators which were then translated into 20 statements. The six indicators include indicators of independence from others, indicators of self-confidence, indicators of disciplined behavior, indicators of a sense of responsibility, indicators of behavior based on one's own initiative and indicators of exercising self-control. After the student learning independence data is collected, then a prerequisite test is carried out in the form of a normality test and a data homogeneity test. If the data is normally distributed and homogeneous, then the data is analyzed using the Anova test.

Data analysis in the form of prerequisite tests and ANOVA tests was carried out with the help of SPSS 22.0 for windows.

## RESULTS AND DISCUSSION

### Results

Data on the average value of student learning independence in different specialization classes, namely students in the MIPA class and IIS class can be seen in Figure 1.



**Figure 1.** The Average Value of Learning Independence for Different Specialization Classes

Based on the data presented in Figure 1, it can be seen that MIPA class students have an average score of learning independence of 81.33, while IIS class students have an average value of learning independence of 67.78. From these data, it shows that the average value of independent learning for MIPA class students is 19.99% higher than the average value of learning independence for IIS class students. Furthermore, the results of the prerequisite test in the form of a data normality test can be seen in Table 1, while the results of the homogeneity test can be seen in Table 2.

**Table 1.** Results of the Normality Test for Learning Independence Data

		Learning Independence
N		57
Normal Parameters <sup>a</sup>	Mean	72.7719
	Std. Deviation	10.50683
Most Differences	Extreme Absolute	.092
	Positive	.044
	Negative	-.092
Kolmogorov-Smirnov Z		.693
Asymp. Sig. (2-tailed)		.723

a. Test distribution is Normal.

**Table 2.** Results of Learning Independence Data Homogeneity Test

Levene Statistic	df1	df2	Sig.
2.552	1	55	.116

The data normality test using the one-sample Kolmogorov-Smirnov test as presented in Table 1 shows a significance value of 0.723. This value is greater than 0.05, so it can be concluded that the data on student learning independence is normally distributed. Accordingly, the data homogeneity test using Levene's Test of Equality of Error Variances shows a significance value of 0.116, which is greater than 0.05. This means that learning independence data is homogeneous data. Taking into account the prerequisite test results, which show that the data is normally distributed and homogeneous, data analysis is carried out using ANOVA. The results of testing using ANOVA will be used as a basis for determining whether there are differences in learning independence between students of different specialization classes.

In full, the results of the ANOVA test for student learning independence from different specialization classes can be seen in Table 3. Based on the data in the table, it can be seen that the significance value of student learning independence is 0.000. Because the significance value is less than 0.05, this indicates that there are differences in the learning independence of students in MIPA and IPS class at SMA Nurul Fallah Kefamenanu.

**Table 3.** Results of the ANOVA Test for Student Independence in Different Classes of Specialization

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2437.146	1	437.146	35.794	.000
Within Groups	3744.889	55	8.089		
Total	6182.035	56			

## Discussion.

Internal variables, i.e., elements that originate from the students themselves, and external factors, i.e., forces that come from outside the student's self, are the two primary causes of differences between the autonomous learning of MIPA class students and IPS class students. Internal factors can be in the form of the ability to learn based on one's own initiative without depending on others, self-confidence, discipline, responsibility and self-control. While external factors include support from schools to provide educational services according to the circumstances and potential of each student. In addition, [Nuris & Istyaningputri \(2021\)](#) and [Patras et al. \(2021\)](#) stated that Self-confidence, learning motivation, learning creativity, and student learning discipline have the ability to significantly influence the quality of student learning independence. External variables might include the home environment and the school environment ([Ramli et al., 2018](#)).

Students in the IPS specialization class have a lower learning independence score of 19.99% compared to students in the IPS specialization class, which may suggest that the quality of the internal factors of the IPS specialization class students is not optimal.

Students still lack self-confidence, motivation to study, creativity in learning, and good learning discipline. This is supported by report of [Mu'awanah & Jacky \(2015\)](#) who stated that IPS class students are often considered as students who have low academic abilities, are lazy to learn, are not creative and often show undisciplined behavior both in curricular activities and extracurricular activities. IPS class students are often labeled as naughty and undisciplined students.

Psychologically, the prevalence of a negative stigma against students enrolled in IPS courses would have a detrimental influence on the learning process and the attained learning results. This is supported by reports of [Aprielieva et al. \(2021\)](#), [Beharu \(2018\)](#), and [Kolo et al. \(2017\)](#) which stated that several psychological aspects impact students' knowledge to organize, implement, and assess their learning process as effectively as feasible for success. Students have the right to get aid and support from their school, community, and parents. All students have the right to grow themselves to become better, notwithstanding their varying abilities.

In the context of determining specialization classes, school as one of the external factors has a very strategic role. Schools must ensure that the determination and implementation of specialization classes are carried out as well as possible and really take into account the interests, talents and abilities of each student. The conventional pattern of specialization class division, which groups students with high academic ability into the MIPA class while students with low academic ability in IPS class, must be avoided. This is supported by reports of [Prakasa \(2016\)](#), [Prayitno & Lukman \(2016\)](#) and [Serelia & Saf \(2020\)](#) who stated that the proper grouping of students into specialization classes must take into account the role of the specialization program as a program for channeling interests and abilities in order to maximize the potential growth of students.

Moreover, the fact that there are discrepancies in the learning independence of MIA and IIS class students demonstrates the necessity for a variety of improvement initiatives to ensure that each student has equal and fair chances and help to increase their learning independence. Independence in learning is characterized by the capacity of students to engage in the learning process with self-assurance, self-discipline, and responsibility, without relying on others, demonstrating own initiative to improve, and demonstrating self-control. This is significant since autonomous learning is a key factor in determining the success of a student's education. According to [Hidayat et al. \(2020\)](#), [Kopzhassarova et al., \(2016\)](#) and [Zahro et al. \(2021\)](#), every student has the right to receive support in increasing awareness and personal responsibility so that learning independence can be formed optimally.

Improving the method for classifying students into specialization classes and providing equitable and fair opportunity for students in different specialization classes to realize their potential are required improvements. The implementation of these enhancements will minimize or remove the negative stigma associated with IIS concentration course. Because IPS class students have the right to get quality educational services and the ability to succeed. In addition, progress may be achieved through enhancing each student's knowledge of their own potential and personal responsibility for their achievement. Pupils must understand that internal variables play a significant role in their future success. Students will be successful regardless of the opinions of others if

they have positive internal attributes. In contrast, regardless of how strong the assistance from other circumstances may be, success cannot be attained without high self-quality.

## CONCLUSION

There are variances in learning autonomy amongst students of different specialization classes. Students in the MIPA specialization exhibit greater learning freedom than those in the IIS specialization. This may be due to the improper grouping of specialization programs and the prevalence of a negative stigma towards students enrolled in IIS specialization classes. This stigma has the ability to negatively affect students' self-confidence, willingness to learn, creativity in learning, and learning discipline. Hence, efforts must be made to strengthen the system for establishing specialist courses and to offer each student with equal chances for development according to their interests, skills, and potential.

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