Analysis of College Students Interest in Independent Learning Policy Program in Era of COVID-19 Pandemic

[1]S A A Renata, [1]S N Apsariny, [1]M A Aisyah, [1]D P Ningrum, [2]Nur Chamidah*

[1]Study Program of Statistics, Faculty of Science and Technology, Airlangga University, Surabaya, Indonesia
[2]Department of Mathematics, Faculty of Science and Technology, Airlangga University, Surabaya, Indonesia
*Corresponding Author: nur-c@fst.unair.ac.id

Abstract: The minister of Education and Culture of the Republic of Indonesia Nadiem Makarim unveiled a package of education policy program in Indonesian is called "Merdeka Belaja Kampus Merdeka" (MBKM). There are four important policies in the MBKM, one of the points is "The Right to Learn Maximum Three Semesters Beyond their Study Program " which has been set in Permendikbud No. 3 of 2020 on the National Standards for Higher Education. However, problems arise when this policy will be applied due to the declaration of Independence Learn eventually hampered by the pandemic COVID-19. Where the main focus of this policy is the college students as the main implementer of the policy. For that, there should be analysis of how enthusiastically the policy of "Kampus Merdeka" from the point of view of them, how the relation of the interest students college with other factors about the implementation of program policies independent learning entitled MBKM in the era of COVID-19 Pandemic. The analysis is carried out using data results of the survey through the online platform with college students all over east java province as the population and gained about 100 more samples of respondents. Using the statistical Chi-square Test, it was concluded there are relations between the interests of students with the factors that are considered influential and the students have the enthusiasm and high interest to implement MBKM policy.

Keywords: Independent Learning Policy, Era of COVID-19 Pandemic, Student College Interest, Chi-square Test

1. INTRODUCTION

The MBKM is one of the policies of the Minister of Education and Culture of the Republic of Indonesia, Nadiem Makariem. *"Merdeka Belajar"* is intended to provide independency for students to choose fields according to their needs to create a learning culture that is innovative, non-restrictive and following student needs. This means that students are not only superior from the academic field but are also skilled in the skills needed by the market. The trick is to increase the vocational portion through a blended academic-vocational curriculum.

However, recently this policy has been running, problems arise due to the pandemic of the Corona Virus Diseases-19 (Covid-19) which has hampered the teaching and learning system in Indonesia and the world. It is still a question whether campuses in Indonesia are ready to implement the policy of MBKM especially amid a pandemic like this, many sectors of life are chaotic and need restructuring, one of which is the education sector. Every new policy has consequences related to the supporting infrastructure and the mindset of the implementers.

Along with the changes in the method above, of course the additional cost burden for students, especially the COVID-!9 pandemic conditions, all of which are a major obstacle to financing new programs in education. Even though with the word learning independence, it turns out that there are still unexpected field obstacles so that the implementation of the program may not run smoothly and smoothly. Because in its application it is impossible for this policy to work alone, this policy involves various academicians on campus. Where the main focus is students as the main implementers of policy. Every policy issued

must have a different response from the community. Based on previous considerations for that matter, we would like to see how enthusiastic the *"Kampus Merdeka"* policy is from the student's point of view.

2. LITERATURE REVIEW

2.1 Independent Learning Policy

The MBKM is one of the policies of the Minister of Education and Culture of Indonesia, Nadiem Makariem. One of the programs of the MBKM policy is maximum three semester study rights in outside their study program. This program is the mandate of various regulations/legal foundations for higher education in order to improve the quality of learning and higher education graduates [1].

2.2 Form of Implementation of MBKM

Forms of Implementation of the MBKM in accordance with Permendikbud No. 3 of 2020 Article 15 paragraph 1 can be carried out inside the Study Program and outside the Study Program including [1].

a. Student exchange

Some forms of learning activities that can be carried out within the framework of a learning exchange are as follows Student Exchange between Study Programs at the same University, Student Exchange in the same Study Program at different universities, Student Exchange between Study Programs at different universities

b. Internships / Work Practices

Internship Program The program provides students with sufficient experience, direct learning in the workplace

(experiential learning). During the internship, students will receive hard skills and soft skills. Meanwhile, the industry gets talents that, if appropriate, can be recruited immediately, thereby reducing recruitment costs and initial training / induction. Students who are familiar with the workplace will be more resilient in entering the world of work and careers.

With the internship activity, industrial problems will flow to universities so that updating teaching and learning materials for lecturers and research topics in universities will be more relevant. Learning activities carried out in collaboration with partners, including companies, non-profit foundations, multilateral organizations, government institutions, and startups.

c. Teaching Assistance in the Education Unit

Teaching assistance programs in educational units provide opportunities for students who have an interest in the field of education to participate in teaching and deepen their knowledge by becoming teachers in educational units, and can help improve the distribution of education quality, and the relevance of primary and secondary education to higher education and development. era.

d. Research / Research

Research program or student research is expected to improve its quality. In addition, the student experience in a large research project would topically strengthen the research talent pool. In addition, students gain research competence through direct guidance by researchers at research institutes / study centers, and with this program students can improve the ecosystem and quality of research in Indonesian laboratories and research institutions by providing research resources and regenerating researchers from an early age.

e. Humanity Project

With this humanitarian project program, it is hoped that it can prepare superior students who uphold human values in carrying out tasks based on religion, morals and ethics. In addition, training students to have social sensitivity to explore and explore existing problems and provide solutions according to their respective interests and expertise.

f. Entrepreneurial Activities

The entrepreneurial activity program provides students with entrepreneurial interests to develop their business earlier and be guided. In addition, it can handle unemployment problems that result in intellectual unemployment among scholars.

g. Independent Study / Project

Independent study programs or projects embody students' ideas in developing innovative products that become their ideas. In addition, it can organize research and development-based education (R&D), and it can improve student achievement in national and international events.

h. Building a Village / Thematic Real Work Lecture

This program can provide opportunities for students to take advantage of their knowledge, technology, and skills in collaboration with many stakeholders in the field. In addition, it can help accelerate development in rural areas together with the Ministry of Village, PDTT.

2.3 Contingency Table
2.3.1 Contingency Table for 2 Variables

Contingency table for 2 variables with row b and column k is known as bxk contingency table. The row and column totals in the table are called marginal frequencies

Table 1: Contingency Table of bxk

		Second Variable				Sum
		1	2	...	k	
First Variable	1	n_{11}	n_{12}	...	n_{1k}	$n_{1\blacksquare}$
	2	n_{21}	n_{22}	...	n_{2k}	$n_{2\blacksquare}$
	⋮	⋮	⋮	⋱	⋮	⋮
	b	n_{b1}	n_{b2}	...	n_{bk}	$n_{b\blacksquare}$
Sum		$n_{\blacksquare 1}$	$n_{\blacksquare 2}$	...	$n_{\blacksquare k}$	$n_{\blacksquare\blacksquare}$

To test the independence / independence hypothesis of the two classification / category variables the hypothesis used are:

H_0: The two variables are independent (independent)

H_1: The two variables are not independent (dependent)

or

H_0: The first variable does not depend on the second variable

H_1: The first variable depends on the second variable

Test Statistic(1)

$$\chi^2 = \sum_{i=1}^{b}\sum_{j=1}^{k}\frac{(n_{ij}-e_{ij})^2}{e_{ij}} \sim \chi^2(v); \quad v=(b-1)(k-1) \quad (1)$$

n_{ij} = Observation frequency in row i and column j.

e_{ij} = The frequency of expectations / expectations in row i and column j.

$$e_{ij} = \frac{n_{i\blacksquare}n_{\blacksquare j}}{n_{ij}} \quad (2)$$

With the critical area is reject H_0 if
$$\chi^2 > \chi^2_{\alpha;v}; \quad v=(b-1)(k-1)$$

2.3.2 Contingency Table for 3 Variables

Contingency tables for 3 variables, namely row variables (B) with b categories, column variables (K) with k categories,

and layer variables (L) with l categories, are called three-dimensional contingency tables bxkx

Table1. Contingency Table of bxkxl

To test the independence / independence hypothesis of the three categorical variables whose observation data is recorded in the three-dimensional contingency table bxkxl, the hypothesis used is:

H_0: The three variables are independent (independent)

H_1: The three variables, partially or completely, are not

independent (dependent)

In the form of opportunity, the hypothesis can be written as

$$C^2 = \sum_{p=1}^{b} \sum_{q=1}^{k} \sum_{r=1}^{l} \frac{(n_{pqr} - E_{pqr})^2}{E_{pqr}} \sim C^2(v); \quad v = bkl - b - k - l + 2 \quad (3)$$

n_{pqr} = Observation frequency in p-p row, q-column, and r-layer

E_{pqr} = The frequency of expectations / expectations in the p-row, q-th column, and r-th layer

With the critical area is reject H_0 if $C^2 > C_{\alpha,v}^2$

3. Result and analysis

3.1 Presentation of Data

The researchers get the data from the questionnaires completed by 139 respondents. The population used is the students of universities in East Java. The Data obtained that the form of the score of Students Interest in the form of Implementation of the MBKM was categorized into 2 categories, the status of the Universities was categorized into 2 categories, namely Public Universities and Private Universities, where each Public Universities and Private Universities was categorized into 2 categories as well as shown in Tabel 2.

Table 2: Contingency table bxkxl of Student Interest, Type of Universities and Fields of Science Table

Student Interest in the Form of Implementation of the MBKM	Universities			
	Public universities		*Private universities*	
	exact	*social*	*exact*	*social*
Unconcern	17	8	12	7
Concern	38	15	17	25

The following is a contingency table for 139 respondents in the form of Student Interest in the Form of Implementation of the "Merdeka Belajar: Kampus Merdeka" which is categorized into 2 categories and Information regarding the Form of Implementation of the *MBKM* which is categorized into 2 categories as follows Tabel 3.

Table 3: Contingency Table bxk of Student Interest and Information regarding the Form of Policy

Student Interest in the MBKM	Information regarding the Implementation Form of the MBKM	
	Already Know	*do not know*
Unconcern	40	5
Concern	65	29

The following table is a contingency table for 139 respondents in the form of Student Interest in implementation of the MBKM which is categorized into 2 categories and the status of the college which is categorized into 2 categories as given in Table 4.

Table 4: Contingency Table bxk of Student Interest and Universities Status

Student Interest in the Form of Implementation of MBKM	Universities Status	
	Public universities	*Private universities*
Unconcern	25	20
Concern	53	41

3.2 Analysis of the Association between Student Interest, College Status, and Major Fields

Analyze the students interest to Implementation of the Policy Program with some other supporting variables that are considered have association. The analysis in this study using chi-square test, because in its development chi-square test can also be used to test the hypothesis whether some of the variables selected are mutually independent. The level of significance or error rate used in this study is equal to 5%. The results of the analysis are presented in Table 5.

Table 5: The Results Of The Analysis Contingency Tables Using The Statistical Chisquare Test

Association	df	X^2	P-Value	Decision
Student Interest between the Origin of the College and the Field of Science	4	10.52098	0.0325	Reject H_0
Association Between Student Interest And Knowledge Information About The Policy	1	6.418	0.0112	Reject H_0
Association between Student Interest with the Origin of Universities	1	0.00838	0.92706	Accept H_0

4. CONCLUSION

Based on the data obtained through the questionnaire (G-form), it was found that many students college who have the enthusiasm and high interest to the implementation of the policy independent campus. This is in line with the results of the analysis using the Chisquare test that gives the decision and the conclusion that the variable of high education in the field of social science and exact science and the variables of knowledge information are not mutually smoke (dependent) against the interest of students relating to MBKM. Whereas,the status of universities is independent to the interest of students related to the MBKM

5. References

[1] The Directorate General of Higher Education Ministry of Education and Culture. (2020). Book Guide Independent Learning-Campus Independent. The Directorate General of Higher Education Ministry of Education and Culture Republic of Indonesia.Jakarta.

[2] Sumantyo, F. D. S. (2020). Higher Education in the Future and Post COVID-!9. The Journal Study Scientific, vol. 1, pp. 81-92.

[3] Suliyanto. (2019). Handbook of Statistics II. Airlangga University. Surabaya. pp. 25-26.

[4] Puguh Suharso. 2020. Research methods for Business. PT indeks: Jakarta. pp. 36-37.

[5] Sugiyono. 2005. Business Research Methods. Alfabeta: Bandung. pp. 11-12.

[6] Sugiyono. 2011. Quantitative Research methods, Qualitative and R&D. Alfabeta: Bandung.

[7] Sugiyono. 2009. Methods Of Educational Research. Alfabeta: Bandung. pp. 60-61.