

EMPLOYABILITY ANALYSIS USING THE PREDICTOR OF THE GRADE POINT AVERAGE (GPA) AND STUDY PERIOD: A CASE STUDY OF FRESH GRADUATES AT WIDYATAMA UNIVERSITY IN 2019

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ABSTRACT

The number of educated unemployed in Indonesia still shows an alarming number. SAKERNAS data published by the Central Statistics Agency (BPS) shows that the unemployment rate for undergraduates in Indonesia in 2019 reached over 600,000 people per year. The high number of undergraduate unemployment indicates the low employability of undergraduates in Indonesia.

This study aims to analyze the employability of undergraduate graduates in Indonesia by using the cumulative achievement index and duration of study as predictors.

The research method used in this study is a quantitative research method by calculating the multiple correlation between the cumulative achievement index, study period and employability. The grade point average (GPA) is calculated by adding up the scores obtained by students during their lectures divided by the number of credits. While the study period is calculated based on the number of semesters taken by the graduate from the time he entered until he graduated. Employability in this study is calculated using the graduate waiting time indicator, namely the time period between graduating from a bachelor's degree until the graduate works. The samples used in this study were graduates of the Widyatama University Undergraduate Education program in 2019.

The result study reveal that the GPA variable and study period together do not have a significant effect on the employability of Widyatama University graduates in 2019; The GPA variable and study period only explain 24% of the variation in the employability value of Widyatama University graduates in 2019; 3. There are many factors outside the model that further affect the employability of graduates of Widyatama University in 2019. These factors include: (1) a greater supply of labor than the demand for workers with higher education graduates; (2) the decline in the rate of industrial growth in Indonesia; (3) mismatch between the knowledge and skills of graduates with the knowledge and skills needed by the world of work; (4) There are still many undergraduate graduates who choose to work in the formal sector, thus prolonging the waiting time to get a job

Keywords: undergraduate unemployment, cumulative achievement index, study period, employability

I. INTRODUCTION

Unemployment is one of the most important indicators in the employment economy. Although unemployment conditions in Indonesia have tended to decline in recent years, the unemployment rate is still relatively high compared to unemployment conditions in several neighboring countries, such as Malaysia, Thailand, and Vietnam. Nationally, the unemployment rate in Indonesia was around 6% in 2019, which is above neighboring countries which have unemployment rates below 4%. However, this unemployment rate is already below the double-digit level experienced by Indonesia in the mid-2000s.

One of the characteristics of unemployment in Indonesia is the high unemployment with higher education or called educated unemployment. Based on data from the National Labor Force Survey, unemployment in Indonesia is dominated by the workforce with high school education (both general and vocational) and higher education (bachelor and diploma). This phenomenon is ironic considering that the higher a person's education, the higher the

probability or possibility of someone becoming unemployed. An important factor behind this phenomenon of educated unemployment is the long transition between education and the labor market. Research from Allen (2016) shows that a third of the unemployed, especially at a young age, have to wait one year to enter the labor market, especially to enter the formal sector job market. They are the ones who are then referred to as "choosy educated job seekers".

In addition to the difficulty of entering the desired labor market (formal sector labor market), several conditions exacerbate this transition, including the lack of training institutions or institutions that channel skilled labor into the labor market, the faster growth of the educated young workforce in the population. , and also the relatively small scope of the formal sector job market when compared to the informal sector job market scope. This condition is actually almost the same as what happened in the Philippines, especially for the 'middle class' case, but the Indonesian workforce tends to lack mobility given the limited language, the quality of schools, or the lack of family contacts in other areas.

Table: 1 Number of Unemployed by Education Level in Indonesia (persons)

	2015	2016	2017	2018	2019
Elementary School (SD)	1241882	1452047	1347555	1229652	1004961
Junior High School (SMP)	2138864	1714776	1689643	1566838	1373919
Senior High School (SMA)	2376254	1867755	1925660	1962786	2280029
Vocational High School (SMK)	1161362	1067009	1258201	1332521	1569690
Diploma	276816	200028	185103	193517	251541
Univesity	543216	445836	434185	495143	653586

Source: Central Bureau of Statistics (2020)

Table 1 describes unemployment in Indonesia by education level. Based on the table, it can be seen that graduates of SMA or SMK and above dominate the highest number of unemployed. Even more ironic is that the number of unemployed at the SMA and SMK levels has increased from year to year when compared to those who have graduated from SMP or SD. This is in fact in line with the implementation of the 9-year education system which makes the number of elementary and junior high school graduates in the workforce decreasing. On the other hand, the workforce with high school education and above will continue to increase, so that the structure of the workforce in Indonesia in the next few years is expected to experience changes compared to previous years. However, this means that there are more job seekers with the capacity of high school and vocational high school graduates or more and more educated job seekers.

On a macro level, educated unemployment is a waste if it is associated with the opportunity costs sacrificed by the state as a result of the unemployment of the educated workforce, especially higher education. From an economic point of view, educated unemployment has a greater economic impact than less educated unemployment when viewed from the contribution that the economy fails to accept. And in the micro view, unemployment can affect the level of individual utility (Sutomo, et al, 1999; Dung, 2020; Ncube & Kolobah, 2020; Melike & Avci, 2020).

At the internal level of higher education, the employability of university graduates is indicated by the graduate waiting time indicator which shows how long it takes a graduate to get his first job. Employability of a graduate is related to a number of dimensions of human capital and social capital possessed by a graduate. In human capital research, university graduates are measured using the cumulative achievement index (GPA) indicator. Another indicator that is thought to be a predictor for the employability variable is the study period.

This study aims to determine the relationship between the cumulative achievement index, study period and the employability of graduates of Widyatama University in 2019.

II. LITERATURE REVIEW

Achievement

Achievement is an important indicator of the results obtained during education. If it is based on the correct terms or grammar according to the Big Indonesian Dictionary, achievement can be interpreted as the result achieved (Language Center Dictionary Drafting Team in Iksan, 2012:11).

In the context of educational psychology, achievement is defined as a specific level of a specific skill or ability that a person has, for example arithmetic ability and reading ability (Van de Bos in Iksan, 2012:11). The term achievement generally does not stand alone but is associated with several terms such as academic, achievement level and achievement motivation.

Achievement is the result that has been achieved by someone in carrying out activities. According to Maghfiroh (2011: 24) Achievement is a task-oriented behavior that allows individual achievements to be evaluated according to internal and external criteria, involving individuals to be competent with others. Achievement is evidence of effort that has been achieved (W.S Wingkel, 1996:165).

Muhibbin Syah (2010: 150) reveals that achievement is a person's level of success in achieving the goals that have been set in a program. In contrast to A. Tabrani (1991:22) who argues that achievement is the real ability (actual ability) achieved by individuals from an activity or business. from within and from outside the individual in learning.

According to Sudjana (1998) learning achievement can be divided into 3 levels, namely:

- a. High learning achievement, with a value or score above the average obtained from the results of the learning evaluation, so that knowing the value or score the student can be declared successful in achieving the goals of education.
- b. Moderate learning achievement, the average value or score that can be obtained by learning evaluation or examinations obtained by students so that by knowing the scores obtained students can be said to be successful and achieve educational goals.
- c. Low learning achievement, value or score below the average obtained from the results of research or exams, with the results of these scores it can be said that the student failed in his studies and failed in his educational goals.

Based on the description above, it can be concluded that achievement measurement can be done by giving a test that has a function to measure students' abilities and the success of teaching programs and evaluate student learning outcomes by looking at the results of students' final test scores.

Learning achievement is the result that is created or carried out (Purwodarminto, 1994). According to Saleh (2001) learning achievement is the result created by students by mastering a certain level of mastery of knowledge with a measuring instrument in the form of an evaluation expressed in the form of numbers, letters, or symbols. The notion of learning achievement is also stated (Tyasasih, 2004) as a result created by learning citizens which is manifested in the form of values, which are obtained through learning evaluations as a reflection of mastery of knowledge, skills and attitudes after experiencing the learning process in a certain period.

Learning achievement is very important in the world of education. Students as students in higher education institutions certainly have a very important role to educate the next generation that is better. Achievement can be interpreted as the results obtained because of the learning activities carried out, because in principle everyone who carries out the learning process will experience a change in himself. Therefore, learning achievement is something that cannot be separated from learning activities, because learning activities are a process while achievement is a result of the learning process.

Academic achievement

Academic achievement or more often referred to as learning achievement is a sentence consisting of two words, namely achievement and academic. To understand more about the meaning of academic achievement, the researcher tries to describe the meaning of the two words.

Based on the definition of achievement, that self-achievement includes learning achievement or often called academic achievement and non-academic achievement. Academic achievement or learning achievement is a learning process experienced by students and produces changes in the fields of knowledge, understanding, application, analytical power, synthesis and evaluation. Based on the opinion expressed by Bloom, student academic achievement is a process carried out by students to obtain and achieve the desired goals or in this case academic values, which are followed by students during the lecture period.

The academic achievement created cannot be separated from the learning process, because academic achievement is influenced by the learning process itself. Slameto (2003) states that "learning is a process of effort by a person to obtain a new level of behavior change as a whole, as a result of his own experience in interaction with his environment". Johnson (2007) defines the learning process experienced by students produces changes in the field of knowledge and understanding in the areas of values, attitudes and skills.

Djamarah (1994) states that achievement is what can be created, the result of work, pleasing results obtained by working tenacity. Meanwhile, Harahap (in Djamarah, 1994) states that achievement is an educational assessment of the development and progress of students regarding the mastery of the subject matter presented to students.

The second meaning of the word, namely academic or learning, according to Slameto (2003) is an effort made by a person to obtain a new change in behavior as a whole, as a result of his own experience in interaction with his environment. Muhibbin Syah (2000) states that learning is a stage of change in all individual behavior that is relatively permanent as a result of experience and interaction with the environment that involves cognitive processes.

Sobur (2006) suggests that academic achievement is a change in behavioral skills, or abilities that can increase over time and are not caused by a growth process, but by a learning situation. Between academic achievement and learning achievement has the same meaning as stated by Nurkencana (1986) that learning achievement is the result that has been achieved or obtained by children in the form of subject values. In addition, learning achievement is a result that results in changes in the individual as a result of learning activities.

Based on the explanation above, learning can be interpreted as an activity that is carried out consciously which results in changes in the behavior of the individual in interacting with his environment.

In addition to academic achievement, there are also non-academic achievements of students where these achievements can be through UKM (Student Activity Unit) which are extracurricular activities or non-academic activities that exist in universities to train students' abilities or skills in an organization. UKM is a place to hone students' abilities and skills.

Study duration

The length of study is the time required by a student to complete his education. Based on the time required by students to complete their studies, the length of their studies can be categorized into 2 categories, namely on time and late. Students are said to have completed their education on time if the length of study is less or equal to 4 years. For the Strata-1 (S1) program, students are given a span of 4 years and a maximum of 7 years with a study load of 144 credits to complete their studies.

The number of graduates who finish their studies on time reflects the quality of a university and the departments in it. According to the National Accreditation Board for Higher Education (BAN-PT) (2008), the percentage of ups and downs in students' ability to complete their studies on time is an element of university accreditation assessment. Therefore, the number of students who finish their length of study on time is an important component and needs to be considered

Student study period is one of the indicators commonly used to measure the quality of college graduates. Referring to the higher education accreditation guidelines, the study period is one of the indicators to assess the effectiveness and productivity of education. Universities are required to evaluate the student's study period so that it can be considered in developing various programs to improve educational efficiency. There are many factors that can affect the student's study period, including the Grade Point Average (GPA) of students when completing their studies. The higher the GPA, the shorter the student's study period. This is because students with high passing GPAs usually have a high grade point average (IP). The semester IP will determine the number of courses that students can take as measured by the semester credit system (SKS). Thus, students with high GPAs tend to finish their studies faster.

Employability

Employability in the scope of the world of work, is one of the important factors that affect the success of employees in carrying out their work is employability. The term employability was first introduced in 1909 ((De Grip, Van Loo & Sanders, 2004) and began to be used in various studies in the late 1990s (Thijssen, Van der Heijden & Rocco, 2008). An Englishman named William Beveridge in his book entitled "Unemployment: A Problem of Industry". In the book it is explained that the term employability was first used to identify the difference between someone who can be employed and who cannot be employed (Misra & Khurana, 2017). studied from different levels, namely individual, organizational and industrial levels, and studied from various disciplines, namely business, management, human resource development (HR), psychology, science and careers (Thijssen, Van der Heijden & Rocco , 2008). As stated by McQuaid & Lindsay (2005) the term employability is used in a variety of contexts and has been discussed in several literatures that have received attention in the international media.

Employability as skills, knowledge, and competencies that increase a person's ability to get and keep a job, thrive in the workplace and be able to face change, get another job if he wants to quit or be laid off and can return to the world of work easily at different times in the workplace. in its life cycle.

Based on the Decree of the Minister of Manpower number 161 of 2015 concerning Stipulation of Indonesian National Work Competency Standards for Education Categories of Main Class Education Services in the Field of Standardization, Training and Certification, employability skills are defined as basic abilities that support the implementation of work, consisting of 8 (eight) aspects, namely: communication , teamwork, problem solving, initiative and effort, planning and organizing, self-management, learning ability, and use of technology.

III. RESEARCH METHOD

The research method used in this study is a quantitative research method by calculating the multiple correlation between the cumulative achievement index, study period and employability. The grade point average (GPA) is calculated by adding up the scores obtained by students during their lectures divided by the number of credits. While the study period is calculated based on the number of semesters taken by the graduate from the time he entered until he graduated. Employability in this study is calculated using the graduate waiting time indicator, namely the time period between graduating from a bachelor's degree until the graduate works. The samples used in this study were graduates of the Widyatama University Undergraduate Education program in 2019.

The hypothesis in this study, there are as follows:

H0 : There is a significant relationship between GPA, Study Period and Employability

IV. RESULT AND DISCUSSION

To examine the relationship between grade point of average, study period and employability, a sample of 35 people from undergraduate program graduates in 2019. The sample selection was done randomly. The amount of GPA, study period and employability of the 35 selected samples are as shown in Table 2 below.

Table 2. GPA Value, Study Period and Employability of Widyatama University Graduates in 2019

No	GPA	Study Period (Year)	Employability (Graduate Waiting Time /in Month)
1	3.21	3.7	4.8
2	3.84	3.7	4.6

3	3.11	4.7	4.7
4	2.81	4.7	4.8
5	3.55	3.7	4.5
6	3.28	3.7	4.6
7	3.11	3.7	4.7
8	2.99	5.8	4.8
9	3.31	3.8	4.6
10	3.24	3.8	4.5
11	3.04	3.8	4.8
12	3.29	3.8	4.9
13	3.55	3.8	4.6
14	3.52	3.8	4.7
15	3.28	3.8	4.6
16	3.43	3.8	4.6
17	3.29	3.8	4.9
18	3.45	3.8	4.8
19	3.30	3.8	4.9
20	3.40	3.8	4.9
21	3.56	3.8	4.8
22	3.39	3.8	4.9
23	2.76	4.8	4.8
24	3.02	6.8	4.5
25	3.59	3.7	4.6
26	3.56	3.7	4.5
27	3.37	3.7	4.7
28	3.24	3.7	4.8
29	3.49	3.8	4.5
30	3.15	4.8	4.6
31	2.90	4.8	4.6
32	3.12	4.8	4.5
33	3.42	3.8	4.7
34	3.70	3.8	4.8
35	3.44	3.8	4.9

Source: Reprocessed primary data

The results of the partial correlation test of the GPA variable on Employability and Study Period on Employability show the results as shown in Table 3

Table 3 GPA Partial Correlation, Study Period and Employability

Correlations					
Control Variables			X1	X2	Y
-none-a	X1	Correlation	1.000	-.433	.050
		Significance (2-tailed)	.	.000	.610
		df	0	103	103
	X2	Correlation	-.433	1.000	.111
		Significance (2-tailed)	.000	.	.258
		df	103	0	103
	Y	Correlation	.050	.111	1.000
		Significance (2-tailed)	.610	.258	.
		df	103	103	0
Y	X1	Correlation	1.000	-.442	
		Significance (2-tailed)	.	.000	
		df	0	102	
	X2	Correlation	-.442	1.000	

		Significance (2-tailed)	.000		
		df	102	0	
a. Cells contain zero-order (Pearson) correlations.					

As previously suspected, the GPA variable has a negative relationship with the employability variable (-0.433). This means that the higher the GPA score, the shorter the waiting time for graduates to work. While the partial correlation between study period and employability has a unidirectional positive relationship. This means that the shorter the study period, the shorter the waiting time for graduates.

Although the results of the partial correlation test show the direction as expected, the results of the multiple correlation test between GPA, study period and employability show that there is no significant effect of the GPA variable and study period on employability (see Table 4). Even the GPA variable and the study period only explain 24% of the employability value. This means that 76% of the variation in employability values is determined by other variables outside the model.

These results show that various variables outside the equation model are more dominant that affect the employability of Widyatama University graduates in 2019. Various factors outside the model that are thought to affect the employability of graduates include:

1. The supply of higher education graduates is greater than the demand for highly educated workers in Indonesia in 2019 . This also explains why until 2019 the number of unemployed undergraduates in Indonesia is still above 600,000 people per year.
2. The growth rate of industry in Indonesia has decreased and can only grow below 5% per year even though working in the formal sector is still the foundation for some university graduates in Indonesia.
3. There is still a mismatch between the knowledge and skills needed by the business world and the knowledge and skills possessed by university graduates
4. There are still many undergraduate graduates who choose to work in the formal sector, thus prolonging the waiting time to get a job

Table 4 Multiple Correlation Test for GPA, Study Period and Employability

Model Summary ^b									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.156 ^a	.024	.005	.2319	.024	1.274	2	102	.284
a. Predictors: (Constant), Lama Studi, IPK									
b. Dependent Variable: Employability									

V. CONCLUSION

1. The GPA variable and study period together do not have a significant effect on the employability of Widyatama University graduates in 2019
2. The GPA variable and study period only explain 24% of the variation in the employability value of Widyatama University graduates in 2019
3. There are many factors outside the model that further affect the employability of graduates of Widyatama University in 2019. These factors include: (1) a greater supply of labor than the demand for workers with higher education graduates; (2) the decline in the rate of industrial growth in Indonesia; (3) mismatch between the knowledge and skills of graduates with the knowledge and skills needed by the world of work; (4) There are still many undergraduate graduates who choose to work in the formal sector, thus prolonging the waiting time to get a job

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