



The Influence of Knowledge about the Application of Work Ethics in Practicum to the Readiness of Students of The Informatics and Computer Engineering Education Program at Makassar State University

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**Abstract**

*This correlational study aims to determine the effect of knowledge about the application of work ethics in practicum on the work readiness of students of the Informatics and Computer Engineering Education study program at Makassar State University. This type of research is ex post facto. The population in this study were all students of the 2017 informatics and computer engineering education study program with a total of 264 students, with a simple random sampling technique obtained 159 students. The data collection technique for the variables of work ethics and student work readiness used a questionnaire that was distributed to 159 students as respondents, with descriptive analysis methods and simple linear regression analysis. The results showed that knowledge of work ethics in practicum positively and significantly affected student work readiness.*

**Keywords:** *Work Ethics; Work Readiness.*

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**INTRODUCTION**

In the current era of globalization, every country must be competitive by prioritizing the advantages of their respective resources. In another era, it also presents a level of competition that is certainly getting higher, especially in the labor market circle. Wijaya (2012) suggested that one of the main problems currently being faced by the Indonesian people in balancing themselves from competition in the era of globalization is related to the condition of human resources (HR) which looks still relatively low that observed from the ownership of educational background. Data from the Central Statistics Agency (2020) outlines that the labor force in August 2020 was recorded at 138.11 million people, up 2.36 million compared to August 2019. In line with the increase in the number of the labor force, the labor force participation rate (TPAK) also rose by 0.24 percentage points. Then the open unemployment rate (TPT) in August 2020 was 7.07 percent, framing 1.84 percent points compared to August 2019. This illustrates that Human Resources (HR) quality is relatively low and needs improvement.

Baiti & Munadi (2014: 165) said, "one of the steps to improve the quality of human resources can be done through education." This makes education units in Indonesia face severe challenges in producing graduates with competence and qualifications that can compete in the free market. Education is a planned, conscious effort to realize the learning atmosphere and learning process in which students actively develop their potential to later have the knowledge, religious, spiritual strength, self-control, personality, intelligence, noble character, and skills needed for themselves, society, nation, and state. One level of education that can be an effort to realize quality resources is the college level.

Higher education is a unit of higher education providers as an advanced level of Secondary Education in formal education. In college, students will be introduced to the world of practicum in accordance with their respective fields. This practicum activity not only aims to hone technical skills or hard skills but also hone and form soft skills. This is expected to be a provision for students after graduation. This soft skill is an important point in a workgroup. Still, it leads to the nature of the personal character,



which is divided into several parts such as communication skills, organizational skills, leadership, ability to strive, cooperation, and work ethics. This reveals that knowledge about applying work ethics in practicum is part of the soft skill. Because, in the scope of practicum, especially in the world of campus or college, we work a lot in the form of a team, but it is also possible to work individually. Conditions of application of ethics in practicum can include how students work hard and do not easily surrender but diligent and tenacious, loyal, efficient and effective, have a sense of responsibility, respect the time and have a future orientation can be applied in practicum.

Work readiness is the ability of students to be able to plunge directly into the real world of work after graduation without requiring a long time to adjust themselves in the work environment with the support of physical readiness, mental readiness, and learning experience that has been obtained, which is then in accordance with the needs of the world of work itself. So it is often associated that work readiness that is owned can help students compete while surviving in the world of work. The context of work readiness has meaning as the ability of skills and readiness possessed by each individual in accordance with its potential and the demands of society in various types of specific jobs.

The world of work is a place where students will realize all forms of knowledge and experience gained during their education in the PTIK TIK Study Program, FT UNM. The PTIK study Program has 4 excellent program concentrations, namely: (1) Software Engineering (RPL), (2) animation, (3) Multimedia, and (4) computer networks (Mustari, 2021). This study program is inseparable from various practicum activities in implementing student learning within the scope of Informatics and computer engineering materials to realize the vision as a center for Education, study, and development of Computer Science and informatics with superior technopreneur insight in eastern Indonesia region in 2025.

In this study, related soft skills that will be discussed are only work ethics and specifically work ethics in Practicum which in practicum activities are full of work ethics values that are expected to be provisions in the world of work. The world of work is a world that will be a place where students realize every knowledge and experience they have since studying. There are still many students who pay less attention to the provision that will be under the world of work. One of them is the application of work ethics in practical activities, which is one of the important points in preparing provisions for the world of work. Work ethic has a very important role in the world of work. Because this work ethic is a habit or student's attitude which can then cause enthusiasm and quality of work later in the world of work, examples that prove the importance of work ethics in the world of work such as, the habit of applying or implementing time discipline will make students accustomed to attending and working on time, besides the spirit and sense of responsibility will affect the quality of work and student morale.

Based on the initial observation that the researchers did with the method of interviews with several students, it can be concluded that the application of work ethics in practicum on the scope of the campus looks already applied in some classes but is not optimal and comprehensive as the discipline of time both in terms of attendance or collection of tasks, the readiness of students to follow practicum such as carrying Lab clothes and complying with the rules in the classroom or in the Lab, as well as awareness and ability to work together in a team for a project. This proves the lack of attention to the provision that will be under later in the world of work. Based on the explanation above, the researcher is interested in examining matters related to work ethics in practicum with work readiness after graduation and the relationship between the variables of the study with the title: "the effect of knowledge about the application of work ethics in practicum on Student Work Readiness Informatics and Computer Engineering Education Program Makassar State University."

## METHOD

The type of research used is quantitative research using a correlation approach to examine and determine how the knowledge about the application of student work ethics, how the form of student work readiness, and how much influence is found between two variables, namely the variable work ethics (X) and work readiness (Y). This study is an ex-post facto study or after-event measurement



that examines cause-and-effect relationships that are not manipulated or not treated by researchers. Based on the level of expansion, this research is classified as causal associative Research (cause-effect) because it describes the relationship or influence between the independent variable X (Work Ethics) and the dependent variable Y (work readiness).

This research was carried out at the Informatics and Computer Engineering Education Study Program Department of Informatics and computers Faculty of Engineering, Makassar State University, which is located at Jalan Mallengkeri Parangtambung Makassar and was held in May-July 2021.

The population in this study was 264 students of the 2017 Strata One (S1) program for the Informatics and Computer Engineering Education Program at Makassar State University (PTIK Prodi Data, 2021). The sample selection technique in this study is simple random sampling using the Slovin formula. Based on the results of applying the Slovin formula, the number of samples obtained was as many as 159 students as a research sample.

The data collection techniques used in this study consisted of two methods: documentation and questionnaires. The documentation used in this study is useful to obtain data such as the number of students of the Informatics and Computer Education Study program Makassar State University Class of 2017 who became the research population, data on the profile of Informatics and Computer Education Study program, data on work ethics in a practicum that has been applied and data in the form of research implementation documentation.

While the questionnaire used in this study is in the form of a closing statement which in this questionnaire, researchers have prepared answers so that respondents choose the answer to each statement, the questionnaire used in this study is useful to obtain respondent data from existing samples and the data obtained in the form of answers that prove whether there is a true effect of the application of work ethics in practicum on student work readiness.

In this study, there are two types of analysis performed, namely, analysis using descriptive analysis and simple linear regression analysis. Descriptive analysis is used to describe the research variables, namely work ethics (x) and work readiness (y), in the table presentation of answers or responses from the questionnaire. While simple linear regression analysis is used to test the research hypothesis by revealing whether knowledge about the application of work ethics in practicum influences student work readiness.

## RESULT AND DISCUSSION

### Results

In this study's results, two analyses used descriptive analysis and simple linear regression analysis. First descriptive analysis aims to describe or describe the data that has been collected. This descriptive table includes frequency, average (mean), mode (Mo), median (Me), minimum value, maximum value, and standard deviation.

Variable work ethics (X) in this study consisted of 27 items of instruments given to 159 respondents. The results of the descriptive analysis in this study using the IBM SPSS statistical software version 25 with the results on the variable work ethics, obtained Mean values are 84.77. Then the Median and mode values in the sequence are 83.00 and 81, then the Minimum and Maximum values in the sequence are 30 and 118, and the standard deviation is 9.931. Based on the data obtained previously will then be processed into a categorization table to determine the level of the variable tendency of work ethics.

Based on the processing with categorization then obtained intervals 99.66 – 118 as many as 14, interval 89.73 – 99.65 as many as 30, interval 79.80 – 89.72 as many as 74, interval 69.87 – 79.79 as many as 38, and interval 30-69.86 as many as 3. From these data, we can conclude that the interval with the most frequency is 79.80 – 89.72 as many as 74 of the total 159, so the work ethics variable (X) is in the medium category.

Next is the work readiness variable (Y) in this study consists of 27 items of instruments given to 159 respondents. The results of the descriptive analysis in this study using the help of IBM SPSS statistical software version 25 with the results of the work readiness variable obtained a Mean value is 89.29. Then the Median and mode values are sequentially 89.00 and 80, then the Minimum and Maximum values are sequentially 35 and 108, and the standard deviation is 9.659. Based on the data obtained earlier will then be processed into a categorization table to determine the level of the variable tendency of work readiness.

Based on the processing with categorization obtained intervals 103.77 – 108 as many as 10, interval 94.11 – 103.76 as many as 42, interval 84.46 – 94.10 as many as 49, interval 74.80 – 84.45 as many as 55, and intervals 35-74.79 as many as 3. From these data, we can conclude that the interval with the most frequency is 74.80 – 84.45, as many as 55 of the total 159, so the variable readiness (Y) is included in the category of less.

After doing descriptive analysis, the data in this study will be tested hypothesis. The hypothesis test has two tests: the prerequisite analysis test and the simple linear regression analysis. In the first Test, prerequisite analysis is the normality test. The Kolmogorov-Smirnov normality test is part of the analytical test, which aims to determine whether the residual values are normally distributed or not. Because a good regression model is to have residual values that are normally distributed, based on the results of the normality test using IBM SPSS statistical software version 25 obtained a significance value of  $0.074 > 0.05$ , it can be concluded that the residual value is normally distributed. Thus, the normality test is met in this regression model. Then the linearity test, which aims to determine the shape of the relationship between variables, is linear. Based on the results of the linearity test using IBM SPSS Statistic version 25, the software obtained a GIS value. Deviation from Linearity  $0.200 > 0.05$  and Sig value.Linearity  $0.000 < 0.05$  and the value of F count  $0.664 < F$  Table 1.46. It can be concluded that there is a linear relationship between the variables of work ethics with work readiness variables, so the linearity test is fulfilled in this regression model.

After testing the prerequisites of analysis and research data has been qualified, that is, normal distribution and linear pattern then, the next analysis is a simple linear regression analysis; the results of this analysis consist of 159 respondents with the number of valid items per variable as many as 27 items. The results of the analysis using the IBM SPSS statistical software version 25 in the ANOVA table obtained the value of F count = 155.538 with a significance level of  $0.000 < 0.05$ , then the regression model can be used to predict the work readiness variable, or in other words, there is the influence of work ethics variable (X) to the work readiness variable (Y).

Next, in the coefficients table, based on research data processed using the help of IBM SPSS statistical software version 25, the simple linear regression equation can be seen as the value of regression coefficients in the unstandardized column in Column B. In sub-column B, there is a constant value (constant) of 31.122 while the value of the regression coefficient for work ethics (X) of 0.686. From

these results can be formulated a simple linear regression equation model in this study can be written as follows:

$$Y = a + bX$$

$$Y = 31.122 + 0.686 X$$

Based on the simple linear regression equation model above, it can be interpreted by knowing the constant value of 31.122 ( $b_0$ ), meaning that the consistent value of the work readiness variable is equal to 31.122. In this case, if the work ethic is ignored or equal to zero, then the work readiness is equal to 31,122. Then known the value of the regression coefficient of work ethics (X) of 0.686. This states that with every addition of 1% of the value of work ethics, the value of work readiness increases by 0.686 or 68.6% and vice versa. The regression coefficient is positive, so it can be said that the direction of the influence of variables X to Y is positive. The category has a strong relationship level if interpreted based on the regression coefficient value of 0.686.

In simple linear regression, there is a correlation coefficient Test (R) and the coefficient of determination ( $R^2$ ). Coefficient of determination testing aims to determine how much the ability of the independent variable, in this case, the work ethic, can explain the dependent variable: work readiness. Based on the results of the data obtained R-value of 0.705 means that the independent variable, work ethics, has a strong and positive correlation to the dependent variable, work readiness, with a percentage rate of 70.5%. While the coefficient of determination ( $R^2$ ) or the value of R Square of 0.498 indicates the strength of the independent variable that can explain the work ethic dependent variable, that is, work readiness of 0.498 or only 49.8%, while the remaining 50.2% is influenced by other variables or case studies outside of this study.

Here there is a T-test (significance test) which is still a part of simple linear regression. This test was conducted to determine whether the independent variable, work ethics (X) has a positive and significant effect on the dependent variable, work readiness (Y).

Hypothesis:

$H_0$ : there is no positive and significant influence of knowledge about work ethics in practicum on the work readiness of students of the Informatics and Computer Engineering Education Program at Makassar State University.

$H_a$ : there is a positive and significant influence of knowledge about work ethics in practicum on the work readiness of students of the Informatics and Computer Engineering Education Program at Makassar State University.

The results of the t-test on the variable work ethics (X) showed a value of 12.471 and a t-table of 1.654 with a significant value of 0.000. So if the value of t-test > t-table and significant value < 0.05 then  $H_0$  is rejected and  $H_a$  is accepted, which means it can be concluded that the knowledge of work ethics in the lab has a partially positive and significant effect on the readiness of students of Informatics and Computer Engineering Education Program Makassar State University. To see the percentage of the variable influence of work ethics on job readiness, look at the table in the column beta standardized coefficients obtained a beta value of 0.705, or the percentage of the influence of work ethics on job readiness is equal to 70.5%.



## **Discussion**

This study aims to determine the effect of knowledge about the application of work ethics in practicum on the work readiness of students of the Informatics and Computer Engineering Education Program at Makassar State University. This study was carried out by taking the information or data needed about the respondents to use a questionnaire/questionnaire with the research subject of 159 students. The data obtained were then processed using IBM SPSS Statistics version 25. The questionnaire was given to students of the Informatics and Computer Engineering Education program at Makassar State University as many as 159 students in 2017 with a total of eight classes, namely PTIK A to PTIK H total of eight classes, named PTIK A to PTIK H.

## **CONCLUSION AND SUGGESTION**

### **Conclusion**

Based on the results of research and discussion, knowledge about the application of work ethics in practicum is one part that can be applied and familiarized as a provision to formwork readiness so that students can compete and survive in the world of work. So that the knowledge of work ethics that is applied partially has a positive and significant effect on the work readiness of students of the Informatics and Computer Engineering Education Program at Makassar State University.

### **Suggestion**

Students are always expected to get used to the little things that impact their mental readiness to face the adventure after graduating from college, related to this research, such as knowledge about the application of work ethics in practical activities that cannot be separated from the daily life of students on campus. So that habituation can form a mental, personality and thinking that is really ready to take part in the world of work later.

For educators, it is expected to improve student understanding further and pay attention to student conditions related to the importance of preparing themselves with things that are often done on campus, such as knowledge about the application of work ethics in practicum. The next research to be done is expected to be able to develop the scope of this research to be used as reference material.



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