

## The Role of Medication in Learning Achievement: A Study of Student Competency, Motivation, and Training on Student Work Readiness

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### ABSTRACT

Vocational school students' work readiness is the student's ability to enter the world of business and industry after graduating from school. This research aims to study the influence of the role of learning achievement on vocational school students' work readiness in terms of competence, motivation, and training. The research method uses a quantitative approach by collecting survey data on vocational school students. Vocational school student data was collected using a questionnaire on 200 final-year vocational school students using a total sampling technique. Data analysis in this study used SEM-PLS (Structural Equation Modeling-Partial Least Square). The results of this research indicate that the learning achievement variable is not able to mediate the influence of the competency variable but is able to provide a mediating influence on the motivation and training variables on work readiness in vocational school students.

**Keywords:** Medication in Learning Achievement; SEM-PLS; competence, motivation, and training

### INTRODUCTION

The school vocational education system is specifically designed to prepare a person to be more capable of working in one occupational group or one occupational field rather than in other occupational fields. The field of study is vocational education as long as the field of study is studied in more depth and this depth is intended as preparation for entering the world of work. Increasingly tight job competition causes an increase in the number of unemployed due to the low quality of job seekers as a result of the global economic downturn [1]. The transformation of education into the era of society 5.0, technology has become very sophisticated, and integrated with human life, which is always changing and developing, graduates are required to always learn new things in order to compete [2]. Increases and competition in the world of work, as well as threats to alumni jobs, which can be replaced by machines.

Technology, automation and disruption have a direct impact on the future of labor and jobs. All of this results in disruption of ways of working, patterns of work-interaction-economic activities, education, and independence in entrepreneurship or the skills required for work. [3]. This cannot be allowed to continue because the large number of unemployed students could risk increasing the crime rate.

Work readiness in the era of economic digitalization requires a person's self-competence to be able to carry out skilled work in a field that is in accordance with an effective and professional framework supported by network readiness throughout the world. [4]. Work readiness is a condition where a person is declared ready based on the person's abilities, as well as the student's willingness and ability to immediately enter the business/industrial world after graduating from school.

Work readiness can be influenced by several factors, including competence, motivation, training, and learning achievement [5].

Competency is an important factor in increasing the readiness of prospective workers to enter the world of work which can deepen and expand a person's work abilities [6]. The more often someone does the same job, the more skilled they are and the faster they complete the job. Several important factors to be analyzed in studying the readiness of prospective vocational school graduates to enter the world of work include aspects of learning achievement, motivation, competency, and training in analyzing work readiness factor analysis.

Apart from competence, motivation is an important factor in increasing work readiness [7]. Motivation is formed from employees' attitudes in facing work situations in the company. Motivation is a condition or energy that moves employees who are directed or directed toward achieving the company's organizational goals. Motivation is one of the things that influences human behavior. Motivation is also called a driver, desire, support, or need that can make a person enthusiastic and motivated to reduce and fulfill one's own impulses so that they can act and act in certain ways. will lead to the optimal direction. Work motivation that exists within and outside the student will provide enthusiasm and strength to carry out an activity, the strength of the student's motivation means that he will try to carry out an action that requires him to carry out work.

Job training for students is also an important factor that influences prospective workers in getting job opportunities [8]. Training is one effort to improve the quality of human resources in the world of work. Someone who has attended job training will be better prepared to work. The skills gained when attending training can be used when working so that it is easier to carry out work later. Each person has their own abilities, but the abilities they have do not necessarily match the specifications sought and

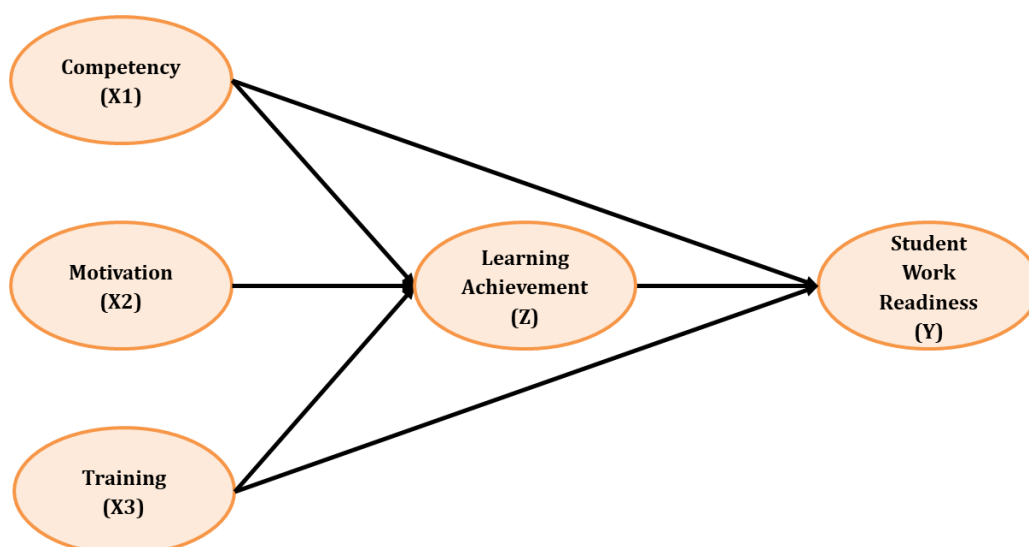
needed by the company, therefore it is important for companies to carry out training so that employees know what they should do and how to do it. Training is an effort to improve individual and group abilities so that they can contribute to organizational effectiveness and efficiency. Programmed job training makes prospective workers have a high work ethic, discipline, responsibility, independence, self-confidence, the ability to communicate and collaborate, as well as competencies appropriate to their field. The accumulation of knowledge, skills, independence, and the ability to communicate and collaborate are modalities for the ability to solve problems that are very much needed in entering the world of work.

Apart from these three factors, student learning achievement is also an important factor in increasing the readiness of prospective workers to enter the world of work. Learning achievement is the reality or development of a person's various potentials and capacities. This means that a person has the potential to be developed within himself. By adhering to this potential, it can be said that a person will have good work readiness.

The aim of this research is to analyze the mediating role of learning achievement on competence, motivation, and training on student work readiness. This research is expected to have an impact on the world of education, especially Vocational Schools in preparing their graduates so that they can easily be accepted by the world of work as a consideration for society, especially students. who will graduate from school in preparation for entering the world of work.

#### METHODOLOGY

This research is quantitative descriptive research with a survey approach [9] which aims to describe the current state of the subject or object of research based on facts about the influence of competence (X1), motivation (X2) and job training (X3) on work readiness (Y) through learning achievement (Z).



**FIGURE 1:** Modification model of the role of learning achievement on competence, motivation and training on work readiness.

**Population and sample**

The population of this study was all 200 grade 3 students at Vocational High Schools. The sampling technique used was total sampling, where the entire population was used as the research sample. The reason for selecting the population and sample of final grade students is to respond to students' self-readiness and considerations for society, especially students who will graduate from vocational high schools in preparing themselves to enter the competitive world of work.

**Instrument**

The instrument used in this research was a questionnaire. The scale used in preparing the questionnaire is the Likert scale. The Likert scale is a scale used to measure the attitudes, opinions and perceptions of a person or group of people about a social phenomenon[10]. This research uses a Likert scale which has positive statements. The Likert scale can be described through the following Table 1.

**TABLE 1:** Alternative Answer Score.

Statement	
Alternative Answer	Score
Strongly agree	5
Agree	4
Disagree	3
Don't agree	2
Strongly Disagree	1

**Data Analysis**

Data analysis uses structural equation modeling or Structural Equation Modeling (SEM) with the Smart Partial Least Square approach [11] to solve the hypothesis model that was built. Mediation Test Analysis Regression analysis of mediating variables using the product of coefficient method tests the strength of the indirect influence of competency (X1), motivation (X2) and job training (X3) variables on work readiness (Y) through learning achievement (Z).

To test the significance of the indirect effect of the mediator variable on the dependent variable it is (ab) with a standard error which will produce a statistical t value. To calculate the standard error ab, the following formula is used, Ghazali (2018). Meanwhile, the t coefficient ab value is as follows: If the z test is above 1.96 (standard absolute z value) then there is a mediation effect.

**RESULT**

**TABLE 2:** R-Square Value.

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
<b>Working readiness (Y)</b>	0.512	0.535	0.067	7.678	0.000
<b>Learning achievement (Z)</b>	0.193	0.206	0.058	3.318	0.001

Based on table 2 and figure 1, it can be seen that the R-Square value for the influence of competence, motivation and training on learning achievement is 0.193, meaning that the variables of competence, motivation and training on learning achievement are able to influence the learning achievement variable by 19.3%, while the rest 80.7% is explained by other variables outside the variables studied.

Meanwhile, the R-Square value on the influence of competence, motivation, work training and learning

achievement on work readiness is 0.512, meaning that the variables of competence, motivation and training on learning achievement are able to influence the learning achievement variable by 51.2%, while the remaining 48.8% is explained by other variables outside the variables studied.

The mediation test is used to determine whether there is an indirect effect of the variables competency (X1), motivation (X2) and job training (X3) on work readiness (Y) through learning achievement (Z).

TABLE 3: Hypothesis Testing Results.

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
<i>Competence (X1) -&gt; Learning achievement (Z) -&gt; Working readiness (Y)</i>	-0.036	-0.032	0.043	0.843	0.400
<i>Motivation (X2) -&gt; Learning achievement (Z) -&gt; Working readiness (Y)</i>	0.103	0.101	0.035	2.929	0.004
<i>Training (X3) -&gt; Learning achievement (Z) -&gt; Working readiness (Y)</i>	0.096	0.092	0.038	2.518	0.012

Based on table 3, the t value is 0.843, where the t table value is 1.981 and the sig value is 0.400. So, the calculated t value < table is  $0.843 < 1.981$  and the sig value is  $0.400 > 0.05$ , thus it can be stated that the learning achievement variable is not able to mediate the influence of competence on work readiness or the competency variable has no effect on students' work readiness through learning achievement. Hypothesis testing in this research was carried out by looking at the T-Statistics value. The research hypothesis can be declared accepted if the t-count value > t-table.

Based on table 3, the t-count value is 2.929 and the sig value is 0.004, where the t-table value is 1.981. So, the value of tcount < ttable is  $2.929 > 1.981$  and the sig value is  $0.004 < 0.05$ , thus it can be stated that the learning achievement variable is able to mediate the influence of motivation on work readiness or the motivation variable influences students' work readiness through learning achievement. The research hypothesis can be declared accepted if the tcount > ttable. Based on table 3, the tcount value is 2.518 and the sig value is 0.012, where the ttable value is 1.981. So, the value of tcount > ttable is  $2.518 > 1.981$  and the sig value is  $0.012 < 0.05$ . Thus, it can be stated that the learning achievement variable is able to mediate the influence of job training on work readiness or that the job training variable influences students' work readiness through study achievement.

## DISCUSSION

### The Influence of Competency Variables on Work Readiness Through Learning Achievement

The test results stated that the competency variable had no effect on work readiness through work performance. The results of this study confirm research findings which state that the role of self-mediation in student work performance has a positive effect on self-efficacy on student work readiness. [12]. The results of this research are not in line with the opinion that defines competency as a combination of skills, knowledge and attitude. These skills, knowledge and behaviors can be observed and applied critically for work readiness [13]. The results of the respondents' responses with the highest score on the competency variable were statement number 1, namely I have sufficient knowledge about the world of work in the high category. This can be

interpreted as meaning that the respondent has sufficient knowledge about the world of work. One of the reasons why high school graduates are not ready to work or are unemployed is because their competencies are not sufficient to be accepted in the world of work. Work competency is an important component that every prospective worker needs to have to be accepted in the world of work. High school students do not have lessons oriented to specific areas of expertise and competency. So high school graduates are not ready to enter the world of work.

Many factors influence student work readiness, such as teacher role variables, student education level, competency and support for digitalization of learning. The results of research on students majoring in economics show that there is a moderate determination of work readiness through the role of teachers in providing assistance and learning in the industrial era 4.0 [14]. The student self-efficacy factor is also very important to study regarding the influence of accounting productive competence and the family environment on student work readiness as the results of previous research confirm the findings in research on management and student self-motivation that the variable which plays a mediating role in work readiness is student self-efficacy [15]. In the current era of rapid globalization, the unemployment rate in Indonesia is still quite high, especially at the vocational school graduate level. Unemployment is an event or situation where people who are part of the workforce cannot find work when looking for work. Vocational schools should receive attention and higher levels of employment opportunities. However, in reality it is inversely proportional, where the vocational school education level has graduates with a high number of unemployed compared to other levels of education. The current era of global competition requires schools as educational institutions to be able to foster motivation and academic achievement as an important pillar in preparing students for continued self-development. students towards global job competition [16].

However, the results of the research above are in line with previous research conducted by entitled The Influence of Locus of Control and Self-Competence on Work Readiness, where the results show that

there is a positive and significant influence of self-competence on students' work readiness. [17]. Job readiness requires active learning in students. Active learning allows students to become subjects so that they are more creative and innovative in their learning activities, both inside and outside the classroom because interaction between teachers and students is fostered [18]. As an effort to improve student learning achievement, good learning methods are needed and monitoring and evaluating learning achievements are expected to have an impact on students' competency and work readiness [19].

### **The Influence of Motivational Variables on Work Readiness Through Learning Achievement**

The research results show that motivation influences work readiness through learning achievement. These results are in accordance with the results of previous research which stated that there was a positive and significant influence of self-efficacy and work motivation variables on students' work readiness through work interest as an intervening variable. [20]. The results of this research also confirm that the learning achievement variable is the level of success in achieving the goals that have been set in a well-planned program with indicators of success in learning outcomes that are monitored and evaluated continuously. [8] Learning achievement is also important to know through the level of mastery of both material and learning and practice that has been mastered as well as motivational support from students [21].

The respondent's response with the highest score on the leadership variable was statement number 5 which read "I am required to work immediately after graduating from school". The average value is 4.08 in the high category. These results indicate that the majority of students are motivated to be ready to work because there is a family demand to work immediately after graduating from school. Hypothesis testing carried out using the t-test resulted in results stating that the hypothesis was accepted, which means that motivation has a positive and significant effect on work readiness. Students who have high motivation will always be motivated to continue trying so that optimal results will be achieved. In this way, students' motivation and sincerity will be able to master as many work skills as possible. Mastery of many skills means students will be more work ready.

Motivation is also a force that drives individual activities to move individuals to carry out activities to achieve a goal. In this case it is encouraging individuals to enter the world of work. The results of previous studies show that there is an influence of industrial work practice experience, motivation to enter the world of work, and soft skills ability on the level of student work readiness, where the research results show that there is an influence of motivation to enter the world of work on the level of work readiness [24].

Motivation is one of the factors that influences student success. A person will get the desired results in learning if within him there is a desire to learn. Motivation can function as a driving force for achieving good results. A person will carry out an activity because there is motivation within him. Having high motivation in learning will achieve optimal results [22]. In the post-pandemic era, the impact of learning through digitalization of service courses for students is very much needed to increase student performance in facing the world of work [23].

### **The Influence of Job Training Variables on Job Readiness Through Learning Achievement**

The research results state that job training has an effect on job readiness through job performance. The results of this research are in line with the opinion that students' readiness to enter the world of work is everything that must be prepared in carrying out something to achieve a goal. The readiness of students as prospective workers is an individual condition resulting from education and training or skills that are able to provide answers to situations in the implementation of work [25]. The results of this research are in line with previous research which states that there is a positive and significant influence of student training on performance with work motivation as a mediating variable for employees, where the results show that training has an effect on work readiness through work motivation [26].

The respondent's response with the highest score on the job training variable was statement number 7 which read "The length of training time is sufficient to improve my abilities" with an average of 3.95 in the high category. These results indicate that the majority of students feel that long-term training will improve students' abilities.

This is in accordance with previous research which states that job training carried out by schools will improve students' abilities and will have an impact on their readiness to enter the world of work after graduating from school. Training is a learning process that enables employees to carry out current work according to standards. Training is an environmental forum for employees, where they acquire or learn specific attitudes, abilities, skills, knowledge and behavior related to work [27]. The results of this research are in line with previous research conducted with the title model of strengthening graduate work readiness where the research results show that training has an effect on students' work readiness [28].

### **CONCLUSIONS**

The conclusion that can be drawn from the results of this research is that competency has no effect on students' work readiness through learning achievement, but learning achievement plays a mediating role in motivation and training variables on work readiness in vocational students.



**DECLARATION OF CONFLICTING INTERESTS**

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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