

Utilizing Path Analysis to Examine the Influence of Internship Experiences and Work Information Mastery oh VHS Students' Work Readiness

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Abstract

This research investigates how internship experience and work information mastery influence vocational students' work readiness, with work motivation acting as a mediating factor. The research population comprises all twelfth-grade students majoring in Mechanical Engineering at a Vocational High School in Yogyakarta, Indonesia, totaling 310 individuals. The maximum sample of 170 students was determined using Issac & Michael's formula. The sample was selected through purposive sampling techniques, and data were collected using questionnaires, tests, and documentation. Descriptive statistical analysis was employed to summarize the characteristics of each variable, while hypothesis testing was conducted using path analysis in an ex-post facto research design. The results indicate that the proposed research model satisfies both validity and reliability tests, thus validating the suitability of the model. The findings reveal: (1) a significant indirect effect between internship experience and work readiness mediated by work motivation ($t = 3.787$, sig. 0.000), and (2) a significant indirect effect of work information mastery and work readiness through work motivation ($t = 2.907$, sig. 0.003). The results of the study indicate that internship experience and mastery of information through work motivation influence students' job readiness. The implication of this research is that schools need to increase collaboration with industry and strengthen the role of teachers, parents, and the Community Empowerment Agency (CEA) in providing information and guidance about the world of work, so that vocational high school graduates are better prepared and more easily accepted into the workforce.

Keywords: Internship Experiences, Information Mastery, Work Readiness, Work Motivation.

1. Introduction

The Industrial Revolution 5.0 is characterized by the integration of advanced technologies such as Artificial Intelligence (AI), the Internet of Things (IoT), and big data with human-centric capabilities. This paradigm shift demands a workforce that not only possesses technical proficiency but is also adaptive, innovative, and capable of contributing meaningfully to society. Industry 5.0 represents a transformative change in the way individuals live, work, interact, and humanize technology for the benefit of society [1]. Within this context, Vocational High Schools (VHS) play a crucial role in equipping students with the competencies required to thrive in the industry 5.0 era.

In the context of Industry 5.0, internships (industrial work practice) serve as a crucial bridge for developing practical and social skills that facilitates students transition into professional workforce. Adapting to the latest technology in the industry can expose students to industry practices and the technologies used, preparing them to meet the demands of industry 5.0, which is driven by rapid advancements in science and technology. Given the accelerated pace of change, a strong understanding of the working world is essential. Therefore, mastery of labor market information helps students to define their career paths and understand the competency requirements. Such information provides insights into job opportunities, types of occupations, and the necessary preparations.

Work Motivation connects internship experiences and information mastery with job readiness. This link is crucial for Industry 5.0 in terms of activating competencies, where knowledge and experience (as gained through internships and labor market information) alone are insufficient; motivational momentum is required to translate these into workplace application. This also supports vocational policy, aligning with Indonesia’s "link and match" initiative, which aims to encourage students to recognize the practical and industrial relevance of their education, ultimately enhancing their job readiness in response to the evolving demands of Industry 5.0.

This preparation extends beyond technical proficiency; it also encompasses the development of adaptability, innovation capacity, and the ability to give meaningful contributions to an increasingly connected society as well as human-centered environments.

VHS is included as secondary education in Indonesia, which is designed to equip graduates with the competency required to enter the workforce directly. VHS serves to prepare the graduates to be ready for entering the industrial workforce [1]. This mandates align with the Indonesian National Education Law No. 20 of 2003 article 3 concerning the goals of national education, while article 15 states that vocational education is a secondary school specifically designed to prepare students for working in specific fields. Despite these goals, based on the Statistics Indonesia (BPS) in February 2024 indicates that the unemployment rate among VHS graduates stands at 9.01%, which is the highest across other educational levels. According to the open unemployment rate of education, from 2022 to 2025, consistently show that graduates of VHS represent the highest proportion of unemployed individuals when compared to those from other educational levels (Figure 1).

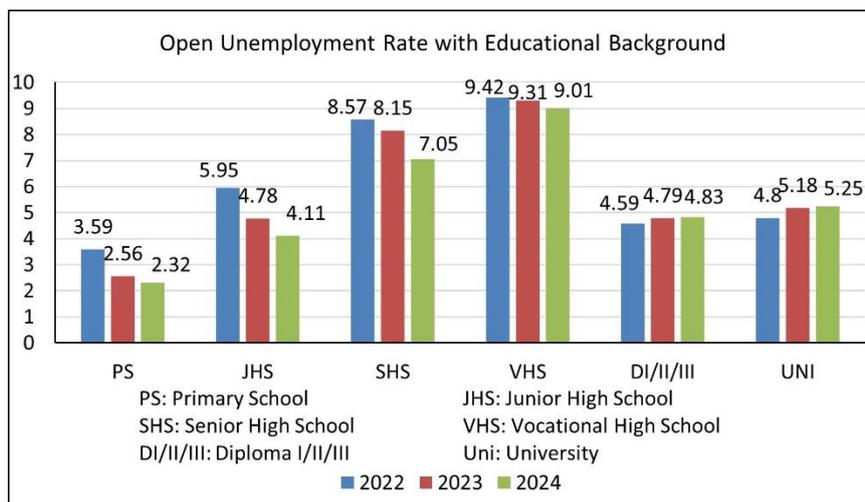


Figure 1. Open Unemployment Rate (source: bps.go.id)

The presented data clearly demonstrate that a significant number of VHS graduates remain unemployed, despite already having received formal training that prepares them for the industry's needs. This persistent mismatch between graduates and industry demand can lead to issues of unemployment rates [2]. This indicates that the VHS graduates may not yet meet the objective of vocational education. Supporting this, a report from Harian Jogja indicates that 20% of VHS graduates in Yogyakarta are currently unemployed. The high unemployment rate and NEET proportion among Generation Z-which includes final-year university students and recent graduates-indicate a gap between the skills possessed by Gen Z and the demands of the labor market [3]. This percentage represents the highest proportion of unemployed individuals compared to graduates from other education levels. These issues prove that the absorption of VHS graduates into the industry or workforce remains suboptimal, so that it fails to meet the goals and expectations of vocational education.

While collaborative programs between government and schools have facilitated some graduates to secure positions in both public and private sectors, the graphic reveals that many students are still unemployed and unable to pursue self-employment due to various constraints [4]. Factors contributing to this problem include limited job availability, the impact of automation, weak collaboration between vocational schools and industry, certification barriers, and low student interest and skill within their

vocational fields [5]. As a result, graduates often lack of capabilities and professional readiness required to compete in an increasingly demanding industry or workforce.

VHS graduates are expected to enter the workforce immediately after graduation. However, many of them are not optimally absorbed into the industry. Work readiness is developed through three core dimensions, namely: mastery of knowledge, professional behavior, and vocational skills [6]. These components play a critical role in ensuring that students are equipped to perform and adapt swiftly within industrial environments. Work readiness refers to an individual's ability to meet various industry demands, including physical, mental, and emotional conditions, personal motives, as well as relevant skills and knowledge [7]. To succeed in employment settings, students must prepare comprehensive competencies, such as personal competence and communication skills, teamwork, and mastery of information technology. These competencies not only enhance their readiness but also stimulate a stronger desire to engage with the workplace. In this context, students' willingness to work reflects a balance between physical and mental maturity and learning experiences, which enable them to have behaviors and actions aligned with working responsibilities [8].

As an effort to prepare students for starting their careers, VHS offers internship programs through collaborative partnerships with various stakeholders. From the perspective of vocational education theory, internships serve to broaden students' professional insight, while from a workforce perspective, they are considered a form of practical job training. Given that internships provide direct learning and skill-based industry experience, they are considered essential [9]. These programs are specifically designed to bridge the gap between theoretical instruction delivered in classrooms and the realities of industrial practice. Internship programs provided by schools can serve as a depiction for students of what the real world of work is like, while high work motivation can have a positive effect on students who are seriously involved in the program [10]. Schools that implement well-structured internship programs and maintain close partnerships with companies tend to see more successful employment outcomes among their graduates. Through internships, students not only acquire sharper technical skills, but also build the social and interpersonal skills required in a working environment [11]. Some companies often recruit outstanding students during their internship periods. Students' hands-on fieldwork experience significantly enhances their knowledge and skills, along with their preparedness to join the workforce in line with their specific areas of expertise [12].

According to preliminary observation conducted at 2 Yogyakarta State Vocational School using interview techniques, it revealed that the students' willingness to work is strong, meanwhile the readiness remains limited. This is due to the factors that they have lacked exposure to industrial information, as well as negative experiences during their internship, which have discouraged them from working at their internship placement site. Instead, many prefer to work in different industries or pursue occupations outside the machining field, such as entrepreneurship or employment in general companies. Students also revealed that they do not possess adequate knowledge about the world of work, are unaware of the types of workers the industry currently demands, and lack information about required competencies. As a result, many graduates are unsure about where they will work and remain unfamiliar with real industry conditions. Although the involvement of the job fair at schools is already optimal, many students remain uninterested and reluctant to actively seek or ask further about industry information. Nevertheless, job fair initiatives have had a positive impact on facilitating the integration of VHS graduates into the workforce [13]. Additionally, word of work information helps students define their future career goals and direction [14]. It is hoped that this information will provide an overview of available opportunities, the types of jobs offered by specific companies or institutions, and the necessary preparations. All of this information serves as a reference for students in considering the appropriate steps when entering the workforce.

Based on initial survey results, VHS students demonstrated a strong willingness to work. Vocational education plays a major role in enabling this transition, with the primary motivation for work among students being to earn an income. Motivation to work can arise from both internal and external factors, which enhances students' career understanding and readiness for future work [15]. The drive to join the workforce can lead to enthusiasm, which is a desire that influences a person's actions and behaviors towards reaching their objectives, including obtaining employment, as strong motivation to enter the workforce positively impacts students' job readiness [16]. Many students express that working allows them to fulfill their financial needs. Moreover, some reported having no intention to continue studying at the university level. Family support, whether from parents, siblings, teachers, or peers, also

plays a significant role in shaping students' motivation to work. That support can be emotional encouragement, shared experiences, or financial assistance [17]. However, students show less commitment to work, which is evident from the low dedication of students in choosing a career, because they are still influenced by their peers. It can be stated that students' enthusiasm for learning is still low. Other findings from previous studies state that students' interest and motivation towards work readiness are considered lacking, and not ready to enter the world of work [18]. Based on the explanation above, there is a gap between what should happen and reality.

This study is supported by previous research findings, which indicate that competence has a positive and significant effect on the work readiness of VHS graduates. Similarly, work motivation also shows a positive and significant influence, as do internship experiences and access to adequate facilities, particularly among 12th-grade students in the electrical engineering program [19]. Collectively, these four variables contribute to students' overall readiness to enter the workforce. Prior studies further suggest that students' work readiness can be improved when educational institutions focus specifically on internship implementation, industry information, and working motivation [20].

While earlier research identified direct relationships between these factors and work readiness, the present study seeks to explore the indirect effects, specifically work motivation as an intervening variable. The aim is to examine how motivation mediates the indirect influence of internship experiences and vocational information mastery on VHS students' readiness for employment. Furthermore, other research has shown that information about the world of work has a positive impact on students' job readiness at Vocational High School of Bhakti Persada Kendal. This positive influence can be seen in students' perceptions that information on entering the world of work must be accurate and precise, clear in content and presentation, relevant, presented in an engaging manner, free from subjective factors, and useful and beneficial [21]. However, unlike other research findings, there are differences in the information students obtain in improving their self-understanding of job readiness [22]

Furthermore, the students' work readiness must continue to meet the demands of Industry 5.0, which is driven by the development of science and technology designed to support human productivity through technological assistance. Before Industry 5.0, industrial employees relied primarily on manual processes without technological integration [23]. In today's era, it is essential to have a strong command of information technology [24]. The emergence of the industrial revolution 5.0 has raised critical concerns regarding students' readiness to enter the workforce, an issue that needs examination to provide information and recommendations for educational institutions, government, the business and industrial sectors, and society. Based on the findings of the problems above, it encourages researchers to discuss students' work readiness in terms of work motivation, internship experience and mastery of information on the world of work of vocational high school students with the aim of knowing the indirect influence of internship experience through work motivation on the work readiness of vocational high school students in the field of machining in Yogyakarta city and the indirect influence between mastery of information through work motivation on the work readiness of vocational high school students in the field of machining in Yogyakarta city.

2. Method

The population in this study consists of all 310 twelfth-grade students enrolled in the Mechanical Engineering Expertise Program at a Vocational High School in Yogyakarta. From this population, 170 students were selected as the research sample, obtained based on calculations using the Isaac and Michael formula [23] through purposive sampling. The reason for using purposive sampling is that not all individuals in the population meet the criteria relevant to the phenomenon under investigation. Therefore, the use of purposive sampling in this study aims to ensure that the selected sample aligns with specific criteria pertinent to the research focus, namely the work readiness of vocational high school students after undergoing an internship, especially in the context of the Industrial Revolution 5.0. The reason for using purposive sampling is that not all samples meet the criteria appropriate to the phenomenon being studied. Therefore, the researcher chose a purposive sampling technique that establishes certain considerations or criteria that must be met by the samples used in this study. The sampling criteria determined by the researcher are as follows: 1) 12th-grade vocational high school students majoring in mechanical engineering, 2) students who have completed their field work practice.

Data collection methods included surveys and tests. Instrument validity is a crucial requirement for obtaining valid research results. This study employed construct and content validation (Table 1). To obtain reliable data, the research instrument used must be trustworthy or reliable (Table 2).

Table 1. Validity Test Results Table

Variables	Results	
	Valid	Invalid
Internship Experience	17	3
Information Mastery	16	2
Work Motivation	17	1
Work Readiness		
a. Soft Skill	22	3
b. Hard Skill	15	7

Table 2. Reliability Test Results Table

Instrument Variables	Alpha Coefficient	Results	Internal Consistency
Internship Experience	0.867	Reliabel	Good
Information Mastery	0.910	Reliabel	Excellent
Work Motivation	0.908	Reliabel	Excellent
Work Readiness			
a. Soft Skills	0.872	Reliabel	Good
Work Readiness hard skill			
a. Engineering Drawing	0.853	Reliabel	Good
b. Machining Theory	0.886	Reliabel	Good
c. Materials Science	0.927	Reliabel	Excellent

This research employed an ex-post facto design, with data analysis carried out using Path Analysis to test the proposed hypotheses. Two statistical methods were used in the hypothesis testing: multiple linear regression and path analysis. The hypotheses are as follows: 1) H₁: Internship experience has an indirect effect on job readiness through the work motivation of vocational high school students majoring in mechanical engineering in Yogyakarta, 2) H₂: Information mastery has an indirect effect on job readiness through the work motivation of vocational high school students majoring in mechanical engineering in Yogyakarta.

3. Result and Discussion

To validate the proposed hypotheses, this study employed two analytical methods, which are multiple linear regression and path analysis.

3.1 Regression Equation 1

The Table 3 presents the result of the first regression equation test, which examines the effect of internship experience (X₁) on work motivation (X₃). The significant value of the variable (X₁) is 0.000 < 0.05. The calculated t_{value} (4.487) > t_{table} (1.974), thus, it can be concluded that there is a partial influence of internship experience (X₁) on work motivation (X₃). Meanwhile, for the influence of work information mastery (X₂) on work motivation (X₃), the sig. value of variable (X₂) is 0.002 < 0.05. The calculated t_{value} (3.188) > t_{table} (1.974), thereby confirming that work information mastery has a partial influence on work motivation.

Table 3. First Regression Equation Test Results

Model	Coefficients ^a				
	B	Std. Error	β	t	Sig.

	(Constant)	28.844	3.707	6.702	0.000
1	Internship Experience	0.320	0.071	0.357	4.487
	Work Information Mastery	0.259	0.081	0.254	3.188

a. Dependent variable: work motivation

As reported in the Table 4, the R square value (coefficient of determination) is 0,296, indicating that internship experience and work information mastery influence the work motivation for 29,6%. The remaining 70,4% is influenced by other unobserved variables. Therefore, the value of residual value (e_1) is calculated as $e_1 = \sqrt{(1 - 0,296)} = 0,839$.

Table 4. R Square Value for the First Regression Equation

Model Summary						
Model	R	R Square	Std. Error of the Estimate	R Square Change	F Change	Sig. F Change
0.544 ^a	0.296	0.288	4.901	0.296	35.138	0.000

a. Predictors: (constant), information mastery, internship experience

Thus, the following diagram illustrates the path model of the first equation (Figure 2):

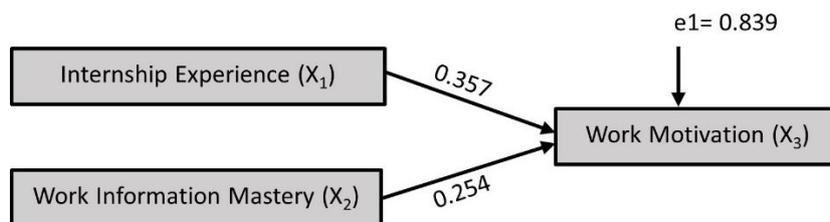


Figure 2. Path Model of the First Equation

3.2 Regression Equation 2

According to the second T-test result (Table 5), the value of variable X_1 towards Y is $0,015 > 0,05$. Therefore, internship experience influences work readiness. The value of variable X_2 towards Y is $0.112 < 0.05$, indicating that work information mastery does not have a statistically significant direct effect on work readiness. In contrast, variable X_3 against Y is $0.000 < 0,05$, suggesting that work motivation has a statistically significant effect on work readiness.

Table 5. Second Regression Equation Test Results

Coefficients ^a						
Model	B	Std. Error	β	T	Sig	
(Constant)	20.649	7.112		2.903	0.004	
1 Internship Experience	0.318	0.129	0.185	2.469	0.015	
Work Information Mastery	0.228	0.142	0.116	1.597	0.112	
Work Motivation	0.922	0.132	0.482	6.994	0.000	

a. Dependent variable: work readiness

Based on the Table 6 presented, the R-square value of 0.446 indicates that overall, the variables of internship experience, information mastery, and work motivation have an impact of 44.6% on job readiness. Meanwhile, the remaining 55.4% of job readiness is influenced by other unobservable factors. Therefore, the value of residual value (e_2) is calculated as $e_2 = \sqrt{(1 - 0,446)} = 0,744$.

Table 6. R Square Value for the Second Regression Equation

Model Summary						
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R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	Sig. F Change
0.668 ^a	0.446	0.436	8.348	0.446	44.530	0.000

a. Predictors: (constant), work motivation, work information mastery, internship experience

Thus, the following Table 7 summarizes the result of path analysis:

Table 7. Recapitulation of Path Analysis Result

Model	Path Coefficient	T	P	R ²
Sub structural 1 (X ₁ X ₂ ke X ₃)				
X ₁ (ρX ₃ X ₁)	0.357	3.246	.001	0.296
X ₂ (ρX ₃ X ₂)	0.254	4.595	.000	
Sub structural 2 (X ₁ X ₂ X ₃ ke Y)				
X ₁ (ρ y X ₁)	0,185	2.903	.004	0.446
X ₂ (ρ y X ₂)	0.116	2.469	.015	
X ₂ (ρ y X ₃)	0.482	1.597	.112	

The results of the indirect effect and total effect are presented below:

- The Effect of internship experience on work readiness mediated by work motivation

The direct effect of internship experience (X₁) on work readiness (Y) symbolized as (ρyX₁) is 0,185 (standardized coefficient beta). The indirect effect of internship experience (X₁) on work readiness (Y) through work motivation (X₃) can be calculated by multiplying the beta coefficient of 1 on Y with the beta coefficient of X₃ on Y, namely: (ρX₃X₁ . ρyX₃) = 0,357 x 0,482 = 0,172 < 0,185. The total effect of X₁ on Y consists of the direct effect and the indirect effect, calculated as: ρyX₁ + (ρX₃X₁ . ρyX₃) = 0,185 + 0,172 = 0,357.

- The Effect of work information mastery on work readiness mediated by work motivation

The direct effect of work information mastery (X₂) on employment readiness (Y), denoted as ρyX₂, is 0.116 (standardized beta coefficient). The indirect effect of X₂ through work motivation (X₃) on Y is calculated by multiplying the beta coefficient of 2 on Y with the beta coefficient of X₃ on Y: (ρX₃X₂ . ρyX₃) = 0.254 × 0.482 = 0.122 > 0,116. The total effect of X₂ on Y through the mediating variable (Z) is the sum of the direct and indirect effects: ρyX₂ + (ρX₃X₁ . ρyX₃) = 0,122+ 0,180 = 0,238.

Based on the calculation of direct, indirect, and total effects, hypothesis testing for path analysis can be conducted using the Sobel test. A mediating variable influences the relationship between the independent and dependent variables [25]. The mediation hypothesis test is conducted using the Sobel test, which was developed by Sobel.

3.3 Sobel Test

The Sobel test is applied to determine the extent to which the independent variable (X) indirectly influences the dependent variable (Y) through the role of the mediating variable (X₃). In this process, the standard error of the indirect effect (S_{ab}) is calculated using a tool in the form of a Sobel test calculator.

- Indirect effect of internship experience on work readiness through work motivation

Based on the Beta coefficient and Standard Error values presented in Table 2 (Internship Experience (X₁) on work motivation (X₃)) and Table 1 (work motivation (X₃) on work readiness (Y)), the following beta value and standard error values were obtained:

a = 0,320 (direct effect coefficient of variable X₁ on X₃)

b = 0,922 (direct effect coefficient of variable X₃ on Y)

S_a = 0,071 (Error Standard of a)

S_b = 0,132 (Error Standard of b)

By inserting the values of a, b, S_a, and S_b into the Sobel formula, the resulting standard error of the indirect effect (S_{ab}) is 0,078. To calculate the t_{value} for the indirect effect of internship experience (X₁) mediated by work motivation (X₃) on work readiness (Y), the formula t_{value} = ab/S_{ab} is used. Inputting

the values a, b, and S_{ab} into the formula, the resulting t_{value} is 3,759. Therefore, t_{value} is bigger than 1,974, which indicates statistical significance.

The calculated t_{value} can be verified using the Sobel test calculator, which is accessible at <http://quantpsy.org/sobel/sobel.htm>. inputting the value of a, b, S_a , and S_b , the calculator automatically processes the result, producing a t_{value} of 3,787, as illustrated in the Figure 3 below.

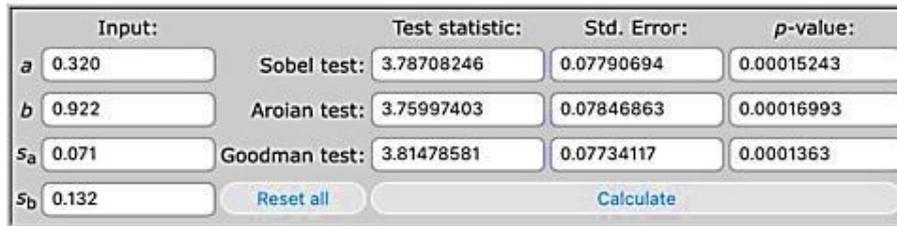


Figure 2. The Sobel Test Calculation of X_1 on Y mediated by X_3

From the Sobel test, it can be inferred that using the Sobel test calculator resulted in a p_{value} is $0,000 < 0,05$ and t_{value} $3,787 > t_{table}$ 1,974. These results indicate a significant indirect effect of internship experience (X_1) on work readiness (Y) through work motivation (X_3), leading to the rejection of the null hypothesis (H_0) and acceptance of the alternative hypothesis (H_1). Thus, partially, the internship experiences variable influences vocational high school students' work readiness both directly and indirectly through work motivation as a mediating variable. This mediation reduces the direct effect of the independent variable, namely internship experience, on the dependent variable, which is work readiness.

- Indirect effect of work information mastery (X_2) through work motivation (X_3) on work readiness (Y)

Referring to the beta values and standard errors in Table 2, which displays the coefficient of work information mastery (X_2) on work motivation (X_3), and in Table 1, which presents the coefficient of work motivation (X_3) on work readiness (Y), the following beta and standard error values are obtained:

$a = 0,259$ (direct effect coefficient of variable X_2 on X_3)

$b = 0,922$ (direct effect coefficient of variable X_3 on Y)

$S_a = 0,081$ (Error Standard of a)

$S_b = 0,132$ (Error Standard of b)

By inputting the values of a, b, S_a , and S_b into the Sobel formula, the standard error of the indirect effect (S_{ab}) is calculated as 0.828. To determine the t_{value} reflecting the indirect effect of information mastery (X_2) on work readiness (Y) as mediated by work motivation (X_3), the formula $t_{value} = ab / S_{ab}$ is applied. Using the corresponding values, the calculated t_{value} is 2.883, which is greater than the critical value of 1.974, indicating statistical significance. This result can be verified using the Sobel Test Calculator available at <http://quantpsy.org/sobel/sobel.htm>. After entering the values for a, b, S_a , and S_b into the calculator, the system automatically computes the output, generating a t_{value} of 2.907, as shown in the figure below.

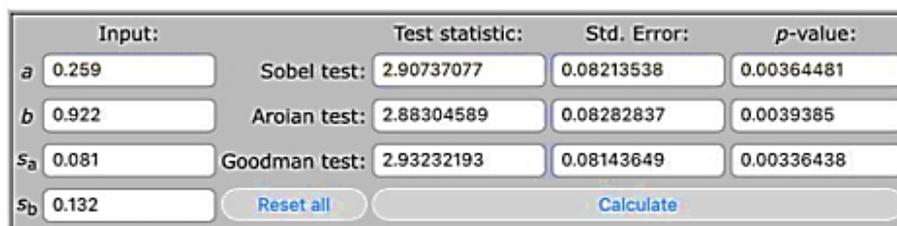


Figure 3. The Sobel Test Calculation of X_2 on Y mediated by X_3

The Sobel test results (Figure 4), obtained from the Sobel test calculator, showed a p_{value} of 0.003 (< 0.05) and a calculated t_{value} of 2.907, which is greater than the critical value of 1.974. This confirms a significant indirect effect of work information mastery (X_2) on work readiness (Y) through work Motivation (X_3), thereby leading to the rejection of the null hypothesis (H_0) and acceptance of the alternative hypothesis (H_2). Work information mastery indirectly influences students' work readiness through Work Motivation as a mediating variable. This means that work motivation successfully

mediates the relationship between information mastery and work readiness among vocational high school students. The mediation is both positive and statistically significant.

3.4 Hypothesis Testing Results

Table 8 presents strong internal motivation to work can be the connecting link between internship experience and students' work readiness. Internship experiences act as crucial links that correlate theoretical classroom education with practical application in the real world [26]. If students have a willingness to seek job opportunities, meaning their motivation comes internally, then internship experience is more likely to influence work readiness due to the presence of that internal motivation. In other hand, if the internship experience does not significantly impact work readiness, it indicates a lack of internal motivation. Motivation, therefore, acts as an intervening factor that enables internship experience, which facilitates their work readiness. In this case the need to have abilities/skills that become the driving force in fostering student motivation [27]. Essentially, work motivation can be understood as an internal (intrinsic) or external (extrinsic) force that stimulates an individual's desire to engage in work-related activities in pursuit of personal fulfillment and a better future [28].

A strong internal motivation to work functions as the link between work information mastery and work readiness. When students have a clear intention to pursue a job, the information they acquire becomes more impactful in enhancing their readiness to enter the workforce. In contrast, if work information mastery fails to affect work readiness, it is likely due to a lack of internal motivation. Thus, students' motivation supports work information mastery into practical readiness to work. The results of this study are similar to those of previous researchers who believe that the skills, soft skills, networks, and experience gained by students during internships will become more solid and stronger if combined with strong work motivation from within the employee [29].

Table 8. Hypothesis Testing Results

Hypothesis	Statement	Indirect Effect	Sig.	Decision
H1	There is an indirect effect between fieldwork experience and job readiness through the work motivation of students in the mechanical engineering field of vocational high schools in Yogyakarta City.	0.172	$T_{\text{value}} = 3.787 > T_{\text{table}} = 1.974$	Accepted
H2	There is an indirect effect between information mastery and work readiness through work motivation of vocational high school students majoring in mechanical engineering in Yogyakarta City.	0.122	$T_{\text{value}} = 2.907 > T_{\text{table}} = 1.974$	Accepted

Similar research found that internships have a significant positive effect on work readiness through learning motivation as an intervening variable [30]. These findings align with the literature that work motivation is often an important mechanism linking experience or knowledge to work readiness, and that this mediating pathway is quite common in the context of vocational practice and education in Indonesia. The Ministry also emphasized that motivation, competence, and industry link and match are key pillars in producing vocational graduates who are ready to work and become entrepreneurs. Motivation as the key to activating competence: Your results confirm that knowledge or experience alone is not enough—there must be motivational momentum that drives application to the world of work. This aligns with the link and match policy, which aims to motivate students to see practical and industrial relevance, thus being motivated to improve work readiness. Strengthening vocational policies: The government, educators, and industry must work together to ensure that practical experiences and information are directed to trigger motivation—for example, through certification, industry mentoring, or competency recognition.

Researchers recommend that vocational high schools (VHS) strengthen work motivation through internship programs that are closely connected to industry. Collaboration with industry partners enables students to gain relevant and challenging experiences. The assignment of qualified mentors is also essential to ensure effective guidance throughout the internship process.

Recommendations for industry partners emphasize the critical role of industry in providing authentic internship experiences. Internship programs should involve meaningful tasks that contribute to skill development. Furthermore, the integration of soft skills training is necessary to complement technical competencies. Companies are also encouraged to recruit high-performing students immediately following their internships.

Recommendations for vocational policy focus on strengthening certification processes. Vocational policies must ensure that competency certification is not merely a measure of technical ability, but also serves as a bridge to industrial recognition and career opportunities. Regulations concerning internship quality should establish minimum standards that industries must meet, including the duration of the program, the nature of assigned projects, and the requirement for qualified mentors.

Finally, the researcher highlights the importance of family and teacher support initiatives. Motivation is influenced by external factors such as encouragement from family members and educators, which play a significant role in shaping students' readiness for the workforce.

4. Conclusion

The data analysis results indicate a significant indirect effect of internship experience on work readiness through work motivation, as well as a significant indirect effect of information mastery on work readiness. These findings suggest that efforts to improve vocational high school students' work readiness can be effectively pursued by optimizing the implementation of internship programs, expanding knowledge of industry conditions, and strengthening students' motivation to work. A positive internship experience, supported by high levels of motivation, leads to enhanced work readiness. Likewise, strong information mastery combined with internal motivation further contributes to students' readiness for working. This study strengthens motivation and vocational learning theories by showing that internship experience and information mastery influence work readiness through motivation, highlighting motivation as a key mediator in preparing students for the workforce. The findings encourage the optimization of internship quality, broader access to industry information, and strategies to enhance student motivation. For industry, the results emphasize the importance of providing positive internship experiences to better prepare and motivate students to enter the workforce. This study is limited to vocational high school students in the machining field within one region, with variables focused only on internship experience, information mastery, motivation, and work readiness. Other factors such as family support, school environment, or industrial setting were not examined. Future research should broaden the sample across fields and regions, include additional variables like social support, non-technical competencies, or psychological aspects, and apply mixed methods to gain a more comprehensive understanding of how internship experience and motivation shape students' work readiness. This aligns with the link and match policy, which aims to motivate students to see practical and industrial relevance, thus encouraging them to improve their job readiness. Strengthening vocational policy strategies requires the government, educators, and industry to work together to ensure that practical experiences and information are directed toward motivating students, for example through certification, industry mentoring, or competency recognition.

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