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The Influence of Industrial Internship and Self-Efficacy on Teaching Readiness of Mechanical Engineering Education Graduates

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ABSTRACT

The purpose of this research is to find out the influence of industrial apprenticeship and self-efficacy on teaching readiness. The research method used is the survey method. The population in this study were 118 graduates of mechanical engineering education who taught as teachers. The sampling technique used random sampling with as many as 91 respondents. The results of the data have been normally distributed and linear. The results of the data did not occur multicollinearity with a *tolerance value of* 0.399 > 0.10 and *VIF* 2.508 < 10. The results of the data did not show heteroscedasticity. The regression equation obtained is Y = 4,443 + 0,464X $_1$ + 0,578X $_2$. Based on the results of the industrial apprenticeship T-test on teaching readiness of 4.510 > 1.987 where Tcount > Ttable, there is a partial effect of industrial apprenticeship on teaching readiness. The results of the T-test, self-efficacy on teaching readiness amounted to 4.840 > 1.987 where Tcount> Ttable, so there is a partial effect of self-efficacy on teaching readiness. The results of the F hypothesis test (Fcount > Ftable is 97.347 > 3.10. Based on the coefficient of determination, industrial apprenticeship and self-efficacy affect teaching readiness by 0.689. So, in conclusion, there is a positive influence between industrial apprenticeship and self-efficacy on readiness for teaching graduates of Mechanical Engineering Education of Universitas Sebelas Maret.

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1. INTRODUCTION

One of the factors that have a broad role in developing the quality of human resources (HR) is education (Ariyanti & Bowo, 2018); (Alimni et al., 2022). Apart from that, as a way to realize the ideals of the Indonesian nation (Indy et al., 2019), the purpose of education is to educate the nation's life and develop human resources (Sunarti, 2019). Education is an effort to prepare students for their future assignments through teaching and learning activities (Wibowo, 2015). However, in practice, there are still

obstacles, such as the quality of human resources, quality of education, inefficient learning, and educational progress (Yustika et al., 2019).

Graduates need to prepare themselves for work after completing their study period at tertiary institutions (Wiharja MS et al., 2020). Because it is the responsibility of tertiary institutions in preparing graduates so that they have the provisions/skills to enter the world of work (Jamil et al., 2013). However, the problems faced are the challenges, demands, and work arrangements of the world of work in the future which are always changing with the times, so preparation and readiness are needed (Afarina & Sukardi, 2022).

The readiness and motivation of teachers to teach are also an important factor in the success of education because good teacher quality will produce quality education (Chairul et al., 2018). Teacher competence in teaching is also needed (Sukmawati, 2019). Research by Agustini et al. (2020) shows that there is evidence that good and bad education is strongly influenced by teacher readiness. Efforts to prepare teachers are often faced with students being equipped with knowledge and skills by their development (Surono & Wagiran, 2016) and based on the results of Indra Jati's study showing that teacher factors are the most dominant in student achievement (S et al., 2017). Many teachers are still lagging in technology knowledge and skills due to the uneven distribution of infrastructure in the world of education (Akbar & Noviani, 2019).

According to research by Sudjimat (2016), vocational high school (hereafter, SMK) aims to prepare students specifically for certain professional fields to start their careers and work professionally. The world of business and work is always associated with vocational high schools because of their competency skills (Edi et al., 2017). This is what encourages SMK to have teachers who are competent in their fields. Therefore, this industrial internship is important to improve the ability and competence of students' teaching skills (Samidjo, 2017).

Improving the quality of vocational teacher competencies cannot be separated from improving the quality of the learning process as well (Yang & Kaiser, 2022). Improving the quality of productive teachers, especially in terms of professional competence, is a necessity for improving their quality in SMK. Vocational technical education, including Mechanical Engineering Education (PTM) FKIP UNS is an educational institution that makes a major contribution to producing qualified teacher candidates, especially vocational graduates (Ruhendi & Kosim, 2022). However, in reality, students in educational programs are given more theoretical knowledge or expertise, which causes an imbalance between work practice or industrial internships in the field and theory in lectures (Sumiati et al., 2018). For this reason, this industrial internship program is very important (Sudjimat, 2016).

According to (Sudjimat, 2016), an increase in the relevance of teacher expertise competence is followed by current science and technology developments, either through industrial apprenticeship programs. Research (Suharno et al., 2019) also agrees with this. However, based on previous research interviews about industrial apprenticeships, students were less serious about carrying out the apprenticeship. Most of the students do not work regularly, but internship hours are still counted. In addition, some students do apprenticeships in small workshops that are not incorporated, or workshops that are not proper, causing a lack of a good management system. This agrees with research (Samidjo, 2017).

In addition to the problems above, competition for selection in the world of work, especially teaching as a teacher, is getting tighter and more complicated, or in other words, it is a little more difficult to get into it, so HR is required to have certain competency skills according to their qualifications (Andina & Arifa, 2021). Based on this, the mechanical engineering education program facilitates students to hone one of their competencies in the industrial sector with compulsory industrial internship courses (Industry, 2020). Industrial internships aim to increase knowledge, skills, and experience in the field of technology, adjust to work situations, collect information, and write reports related to specific assignments (Bilge & Severengiz, 2019). Industrial internships influence the work readiness of PTM graduates (Nurlaela et al., 2022)

Teachers must be able to master vocational knowledge and skills (Sailer et al., 2021). To be ready to teach, some of these competencies must be mastered by professional teachers, namely personality, pedagogic, professional, and social (Grammens et al., 2022). The industrial internship is included as one of its competencies. Armed with industrial internship experience, students can indirectly have more confidence to compete in the world of work, especially teaching (Azwar, 2019). But in reality, there are still some prospective teachers or students who still don't have much experience and confidence to enter the world of work, so they are afraid to face the world of work, especially becoming teachers, because of the lack of interaction and feeling awkward with people in their environment (Afarina & Sukardi, 2022). So, work readiness, especially in teaching, is not only influenced by the practical experience of industrial internships but also by self-efficacy (Zulaehah et al., 2018). Self-efficacy influences graduates' readiness for work, especially in teaching (Nadzima et al., 2021), and skills in planning learning materials. Based on initial observations, teacher self-efficacy is still low.

The PTM Study Program of the Faculty of Teacher Training and Education (FKIP) UNS has an important role in producing reliable graduates for vocational and industrial teachers (ptm@fkip.uns.ac.id, 2018). Based on previous research conducted by alumni, PTM student graduates can easily be absorbed into getting jobs as teachers. This is shown in research (Agus, 2022), where the profile of the distribution of types of work of PTM graduates being teachers occupies the highest or highest position of 56%, self-employed 15%, industrial employees 13%, continuing Masters/S3 6%, others 6% and entrepreneur 4%. However, despite occupying the highest position in the labor force absorbed as teachers, based on preliminary research interviews, problems were found related to the lack of self-efficacy of graduates related to practical teaching readiness in Vocational High Schools.

Self-efficacy is an individual's assessment of their abilities, significantly impacting their career (Makki et al., 2015). The same thing was also expressed by (Riahmatika & Widhiastuti, 2019), who said that self-efficacy greatly influences teaching readiness. It shows that self-efficacy influences the teaching readiness of prospective vocational teacher education graduates, and graduates feel that they still need to maximize their practice.

According to research conducted by Kendawati and Jatmika (2010) in Khadifa et al. (2018), an individual's work preparedness can be enhanced by possessing a future orientation, high self-confidence, and good abilities. Nevertheless, prior studies have shown that self-efficacy issues persist in the professional realm, particularly in the field of education. One reason for this is that students often don't take their industrial internships seriously enough. It demonstrates that graduate students' readiness to teach mechanical engineering is impacted by their self-efficacy and their experiences in industrial internships.

Both high and low levels of self-efficacy impact job readiness and self-efficacy, which are components of self-understanding that have the most impact on day-to-day experiences (Ganing et al., 2019; Khadifa et al., 2018). To be ready for work, one must have self-efficacy (Makki et al., 2015). If current and future educators believe they can make a positive impact on their students, this is known as self-efficacy (FAR Putri & Fakhruddiana, 2019). Anisah et al. (2022) noted that low self-efficacy is associated with a number of issues, one of which is a decline in learning quality or the choice of less engaging subjects.

Apart from the above problems, the large number of unemployed graduates is also an educational problem in Indonesia (Kasanah et al., 2019). According to the Central Bureau of Statistics (BPS, 2022), the percentage rate of open unemployment at the undergraduate level is in third place after SMK and SMP, namely 4.80%, while SMK at 9.42% has the highest open unemployment rate compared to other levels of education. On this basis, the government is optimizing the function of SMK by requiring industrial apprenticeships to hone the skills of prospective teachers (Mehran Shahhosseini et al., 2020). Research (Feijoo et al., 2019) also agrees that the practice of industrial internships is a competency that must be mastered to deepen one's knowledge.

The novelty of this study is the context of the problems raised in the research, namely teaching readiness. Most previous research, such as research (Afarina & Sukardi, 2022), (Khadifa et al., 2018), (Zulaehah et al., 2018) explained more about the context of work readiness in the industry. However, this

research explained more about work readiness in teaching so that the development of the instruments to be made in this study is possible. Competency standards at work in an industry with competency standards in teaching readiness are different. The implications of the instruments used in this study are different. In addition, the object of this study is different from previous research.

Essential analysis is conducted to assess the preparedness of PTM graduates for teaching in terms of industrial apprenticeship and self-efficacy. Analytical tasks are conducted to determine the levels of teaching preparedness among graduate students and to identify the reasons behind graduate students not meeting the anticipated skill levels. This study investigates the impact of industrial internships and self-efficacy on the preparedness of mechanical engineering education graduates for teaching.

2. METHODS

This research employs a quantitative technique to assess how industrial internships and self-efficacy impact the teaching preparedness of mechanical engineering education graduates. The participants in this study were individuals who graduated from mechanical engineering programmes between 2016 and 2021 and were employed as educators. This study had 91 grads as samples. This investigation employed a random sampling technique. Data collection involves the use of a questionnaire. Data analysis involved doing precondition tests such as normality testing, linearity tests, multicollinearity assessments, and heteroscedasticity evaluations. A hypothesis test was conducted utilising the T-test, F-test, and coefficient of determination.

The implementation stage of this research was developing a questionnaire and testing it on 30 respondents. The questionnaire trial was analyzed using SPSS to determine the validity and reliability of the questionnaire. After being declared valid and reliable, the questionnaire was sent to respondents using the Google Form method. The next stage is analyzing the questionnaire data. This stage begins with prerequisite testing: data normality, linearity, multicollinearity, and heteroscedasticity. After the prerequisite tests meet the requirements, use the SPSS application to conduct multiple regression analysis and test hypotheses using partial correlation analysis (T-test), F test, and coefficient of determination test. The final stage of this research is analyzing descriptive statistics for each variable and then discussing each hypothesis to obtain conclusions.

3. FINDINGS AND DISCUSSION

The research questionnaire contains 42 statement items that have gone through a validity and reliability testing process distributed to 91 respondents who graduated from mechanical engineering education in 2016-2021 and who teach at Vocational High Schools. The questionnaire was measured using a Likert scale. Based on the results of the research conducted, industrial internships consist of 3 indicators: organization, implementation, and evaluation of industrial internships.

3.1 . Industry internship data description

Table 1. Average industry apprentice indicators

Variable	**Industrial internship**		
Indicator	Organizing	Implementation	Evaluation
Number of items	2	11	2
Score	789	4356	817
Percentage	13.234%	73.063%	13.703%

The table above shows the distribution of the average frequency of industrial apprentice indicator calculations. The industrial apprentice implementation indicator has the highest percentage of 73.063%. Meanwhile, the lowest percentage was found in the industrial apprentice organizing indicator at 13.234%. This shows that even though the implementation of industrial apprenticeships is carried out well, the organization of industrial apprenticeships is still not optimal.

3 .2. Description of self-efficacy data

Table 2. Average self-efficacy indicators

Variable	**Self Efficacy**		
Indicator	Magnitude or level	strength	generality
Number of items	4	4	4
Score	1573	1575	1606
Percentage	33.088 %	33.13%	33.782%

The table above shows the average frequency distribution for calculating self-efficacy indicators. The *generality indicator* has the highest percentage of 33.782%. While the lowest percentage is found in the *magnitude* or *level indicator* of 33.088%. This shows that self-efficacy in *general* is in the good category. However, when viewed from the *magnitude* or *level indicators,* self-efficacy is in the lowest category.

3. 3. Description of teaching readiness data

Table 3. Average indicators of teaching readiness

Variable	**Teaching Readiness**	
Indicator	Professional Competence	Pedagogic Competence
Number of items	8	7
Score	3162	2754
Percentage	53.448%	46.552%

The table displays the average frequency distribution for computing markers of teaching preparedness. The professional competency indicator has the highest percentage, 53.448%. Pedagogic competence has the lowest rate at 46.552%. This shows that the readiness to teach in the indicator of professional competence is in a good category, while pedagogic competence is still lacking.

The normalcy test utilised the Kolmogorov-Smirnov test at a significance level of 0.05. If the significance level is greater than 0.05, the data is considered to be regularly distributed. If the significance level is less than 0.05, the data is considered to not be normally distributed. The industrial apprenticeship variable, self-efficacy, and teaching preparedness variables all have p-values greater than 0.05, indicating that they follow a normal distribution.

The results of the linearity test used a significance level of 0.05. The testing criteria *for deviation from linearity* > 0.05 were declared valid. *The deviation from linearity of* the industrial apprenticeship variable is X1 with Y of 0.200 > 0.05 while *the deviation from linearity* of the self-efficacy variable is 0.115 > 0.05. So it can be concluded that there is a linear relationship between industrial apprenticeship and readiness to teach and there is a linear relationship between self-efficacy and readiness to teach.

The results of the multicollinearity test can be seen in Table 6. The tolerance value is 0.399 > 0.10 and VIF (Variance Inflation Factor) is 2.508 <10. So a decision can be made that there is no multicollinearity in the regression model of this study. The result of the heteroscedasticity test is the Glejser test. Decision making Glejser test, if the significance value is> 0.05 then there is no heteroscedasticity. Based on table 7, the significance value of the industrial internship variable is 0.596> 0.05 while self-efficacy is 0.923> 0.05. So it can be concluded that there is no heteroscedasticity in this variable.

Table 4. Multiple regression equation

Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	std. Error	Betas		
1	(Constant)	4,443	4,387		1013	.314
	MI	0.464 _	0.103 _	0.425 _	4,510	.000
	ED	0.578 _	0.119 _	0.456 _	4,840	.000

a. Dependent Variable: KM

The multiple regression equation derived from the analysis findings is Y = 0.464 X 1 + 0.575 X 2. If the industrial apprenticeship and self-efficacy variables are unchanged or equal to 0, the teaching readiness value is 4443 according to the regression equation. The X1 regression coefficient is 0.464, indicating that a one-unit increase in the industrial apprenticeship variable (X1) results in a 0.464 increase in the preparedness teaching score (Y), holding other factors constant. The regression coefficient X2 is 0.578, indicating that a one-unit increase in the self-efficacy variable results in a 0.578 rise in teaching readiness (Y), holding other factors constant.

The coefficient values of the variables X1 and X2 show a positive value, which means that there is a unidirectional influence between the dependent variable (Y) and the independent variables X1 and X2.

Table 5. T-test results

Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	std. Error	Betas		
1	(Constant)	4,443	4,387		1013	0.314 _
	MI	0.464 _	0.103 _	0.425 _	4,510	0 000
	ED	0.578 _	0.119 _	0.456 _	4,840	0 000

a. Dependent Variable: KM

Based on the table shows that the results of the Tcount of the industrial apprenticeship variable are 4.510 > Ttable 1.987 and a significance value of 0.000 <0.05. So it can be concluded that the first hypothesis proves that industrial apprenticeship has a partial effect on teaching readiness. On the self-efficacy variable, the results of Tcount were 4.840 > Ttable 1.987 and a significance value of 0.000 <0.05. So it can be concluded that the second hypothesis is proven to have a partial effect between self-efficacy and readiness to teach. The Ttable formula is with significance/2 = 0.025 with degrees of freedom df = nk-1 or 91-2-1 = 88. The Ttable results are 1.987.

Table 6. F test results

ANOVA [a]

Model		Sum of Squares	Df	MeanSquare	F	Sig.
1	Regression	2232099	2	1116049	97,347	0 000 [b]
	residual	1008,890	88	11,465		
	Total	3240989	90			

a. Dependent Variable: KM

b. Predictors: (Constant), ED, MI

Based on the ANOVA table or the results of the F test, the Fcount value is 97.347 > Ftable 3.10 and the significance value is 0.000 <0.05, it can be concluded that the third hypothesis is proven to have a joint effect on teaching readiness.

Table 7. Test results for the coefficient of determination

Summary models

Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	0.830a	0.689	0.682	3,386

a. Predictors: (Constant), ED, MI

a. Predictors: (Constant), ED, MI

b. Dependent Variable: KM

From the table, the R-value is 0.830 or close to 1. This means that there is a relationship between the independent variable and the dependent variable getting closer. The R Square value (coefficient of determination) is 0.689, which means that the influence of variables X1 and X2 on teaching readiness is 68.9%. While 31.1% is influenced by other variables not examined in this study. The adjusted square is r square which has been adjusted to a value of 0.682. The standard error or error size is 3.386.

Discussion

The effect of industrial apprenticeship on teaching readiness

Based on the results of multiple regression analysis, the effect of industrial apprenticeship on teaching readiness through the t-test obtained a Tcount of 4.510. Based on the table above, it is known that the count is 4.510 > Ttable 1.987 and a significance value of 0.000 <0.05, which means that there is a partial effect with a significance of <0.05 between industrial apprentices on teaching readiness. Testing the hypothesis with multiple regression analysis produces the following multiple regression equation, namely Y = 4443 + 0.464X1 + 0.578X2. It can be seen that the regression coefficient for industrial apprenticeship is 0.464, which means that if the value of the industrial apprenticeship variable increases by one unit, the value of teaching readiness will increase by 0.464 assuming other variables have a fixed value. The coefficient value X1 shows a positive value, which means that there is a unidirectional effect between variable X and variable Y.

Based on previous research (Ilham, 2022), industrial internships are influenced by length of work experience, level of knowledge, skills, and mastery of what they do. This theory is reinforced by research (Nadzima et al., 2021), which states that the factors that influence industrial apprenticeship are organization, implementation and evaluation. Based on the score processing, the industrial apprenticeship variable resulted in a score of 5962 or 87.3% with the lowest score found in the organizing indicator on the item which reads the supervisor monitors the development of industrial apprenticeships. This means that there is a lack of monitoring from supervisors when graduates or students carry out industrial internships, so this can cause graduates to be less serious when carrying out industrial internships. This agrees with research (Samidjo, 2017) which states that there are students who are less serious when carrying out industrial internships.

Based on the results of the data, if the implementation of industrial internships is carried out optimally, industrial internships will have a good effect on the competencies possessed by graduates. Research (Suharno et al., 2019) also supports that industrial internships can increase graduate competency. Industrial internships, it can provide opportunities for graduates or students to apply or develop theories obtained in lectures to the industrial world. This is based on the questionnaire items that state that industrial internships can improve professional competence. The results of this study are supported by other research which also states this, namely research (Sudjimat, 2016); (Mustikawati & Qomariah, 2020) where teacher competency is influenced by many factors, one of which is industrial

apprenticeship. And according to (DM Putri et al., 2020) internships can support professional human resources at work.

Several researchers have carried out other research relevant to these findings. Previous research shows that industrial internships positively influence teaching readiness, namely research (Nadzima et al., 2021) and (Nurlaela et al., 2022). This research supports previous research, namely that a partially significant positive influence exists between industrial internships and teaching readiness.

The effect of self-efficacy on teaching readiness

Testing the hypothesis with partial correlation analysis or T-test between self-efficacy and readiness to teach produces an effect or Tcount of 4.840 > 1.662 and a significance of 0.000 <0.05. So it can be concluded that there is a partial influence between self-efficacy on teaching readiness. This agrees with research (Afarina & Sukardi, 2022), which states that partial self-efficacy has a positive and significant effect on teaching readiness.

Testing the hypothesis with multiple regression analysis produces a multiple regression equation as follows Y = 4443 + 0.464X1 + 0.578X2. It can be seen that the self-efficacy regression coefficient is 0.578, which means that the value of the self-efficacy variable increases by one unit, so the value of teaching readiness will increase by 0.578, assuming other variables have a fixed value. The coefficient value X2 shows a positive value, meaning that there is a partial effect between variable X and variable Y.

This study uses Bandura's theory (Arifin et al., 2014), which in this theory says that three factors influence teaching readiness, namely magnitude or level, strength, and generality. Magnitude or level is a person's belief in the behavior he is doing. Strength is the amount of a person's stability in his beliefs. While generality is related to the behavior of graduates or students who must know the field of work that must be carried out.

In this study, graduates who have self-efficacy in the high category of self-efficacy variables obtained a score of 4754 or 87%. This value has not reached 100%, which means that there are still deficiencies in graduate self-efficacy. The data shows that the magnitude or level indicator has a percentage value of 33.08%, strength of 33.13%, and generality of 33.78%. The highest percentage is shown on the generality indicator while the lowest percentage is on the magnitude or level dimension. This shows that the confidence of graduates is still lacking in their readiness to teach. In other words, a graduate who thinks that something he is doing is complicated means he is unsure, anxious or worried that what he is doing is optimal or not. This means that students still lack self-efficacy towards what they are doing. These results are in line with research (Afarina & Sukardi, 2022) which states that there are still graduates or students who have low self-efficacy when viewed from the magnitude or level dimension. Even though good self-efficacy is when individuals feel confident about what they are doing so that they are successful which is in accordance with research from (Alifia & Hardini, 2022).

If individuals or graduates know the area of work they have to work on and have experience, indirectly a graduate will have provisions in his work or in this research have provisions in teaching his students. This is in accordance with the generality indicator in this study which has the highest score. This means that graduates have high self-efficacy in the generality dimension.

Based on the things above, this research is in line with Bandura's theory of self-efficacy where someone who has high self-efficacy certainly has strong motivation or has a positive attitude in doing things according to what he wants (Makki et al., 2015; Septianti et al., 2022). In addition, the results of this study are strengthened and supported by research (Nada Nisrina et al., 2023; Afarina & Sukardi, 2022; Khadifa et al., 2018) which shows that self-efficacy has a partially positive effect on job readiness, especially teaching. Research (Septianti et al., 2022) also states that self-efficacy influences teaching readiness.

The Effect of industrial apprenticeship and Self-efficacy on teaching readiness

Testing the hypothesis with the F test or jointly producing a Fcount of 97.347, thus obtaining a Ftable of 3,100. In addition, a significance of 0.000 was obtained with a level of 0.05%, a significance of

<0.05 or it means that there is a positive influence between industrial apprenticeship and self-efficacy on the readiness to teach PTM graduates. This also agrees with research (Khadifa et al., 2018) which states that industrial apprenticeship and self-efficacy have a joint effect on work readiness, especially teaching, of Tcount 26.572.

Readiness to teach, according to (Sintadewi & Putra, 2021), namely those who have professional, pedagogic, social and also personality competencies. A graduate who is ready to teach certainly wants to progress when working or teaching and has a professional attitude in working or teaching. In the teaching readiness variable, a score of 5916 or 86.6% is obtained, the value has not reached 100%, which means that there are still deficiencies in graduate teaching readiness. This means that in this questionnaire item, graduates are still not 100% able to master competence in the world of work, especially teaching or have not been fulfilled in this regard. This can be shown by the lowest score of the questionnaire which reads that after my industrial internship, I was able to select and arrange lesson plans according to the practice material that I mastered. In addition, on the professional competency indicators, especially on the skills sub-indicator, there is still a score that is classified as moderate. Meanwhile, work demands such as mastery of work competencies, especially teaching, must be mastered by graduates.

Several factors influence the willingness to teach. Teaching readiness in this study was affected by two factors: industrial apprenticeship and self-efficacy. The study found that industrial apprenticeship and self-efficacy significantly influenced teaching readiness, accounting for 68.9% of the variance. The remaining 31.1% of the variance was attributed to unexamined factors or variables. The R square values indicate that industrial apprenticeship contributes 33.0% to teaching preparedness, whereas self-efficacy contributes 35.7%.

This aligns with the studies conducted by Afarina & Sukardi (2022; Riahmatika & Widhiastuti, 2019; Puspitasari & Bahtiar, 2022). A study by Afarina & Sukardi (2022) found a substantial correlation between industrial apprenticeship and self-efficacy on work readiness, explaining 51.3% of the variance. Khadifa et al. (2018) found a favourable and significant effect with a simultaneous contribution value of 41.5%. Furthermore, Septianti et al. (2022) further complemented this research by highlighting self-efficacy as a factor influencing teaching preparedness. In addition to self-efficacy, industrial apprenticeship is another component that affects work readiness (Puspitasari & Bahtiar, 2022). Another study (Ilham, 2022) suggests that industrial apprenticeship or work experience can enhance an individual's preparedness for a job, particularly in the field of teaching. This is in line with studies by (Sudjimat 2016; Wahyuni, 2019; Coetzee et al., 2022), indicating that industrial apprenticeships might enhance work preparation, particularly in terms of teaching or professional skills. Job preparation in teaching is affected by both practical experience gained from industrial internships and self-efficacy (Zulaehah et al., 2018).

4. CONCLUSION

Industrial internships and self-efficacy have a positive and significant effect on teaching readiness. The conclusions of this research can be used as a basis for scientific development regarding the implementation of industrial programs and building student self-efficacy so that their teaching readiness increases. The results of this research can also be used as material for studying and monitoring industrial apprenticeship activities. This research opens up opportunities for further research by considering the value of other variables, including the environment, social, cognitive, and learning processes.

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