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## THE INFLUENCE OF INDUSTRIAL INTERNSHIP BASED TRAINING ON SMK ACCOUNTING TEACHER PROFESSIONAL COMPETENCE THROUGH TEACHER MOTIVATION

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### ABSTRACT

This study aims to study 1) The influence of industrial internship based training on the professional competence of SMK Accounting teachers; 2) The influence of teacher motivation on the professional competence of SMK Accounting teachers; 3) The influence of industrial internship based training on teacher motivation and 4) The influence of industrial internship based training on the professional competence of SMK Accounting teachers is mediated by teacher motivation. This study used a survey research method with a research instrument in the form of a questionnaire. The sample and population in this study were teachers of the SMK accounting expertise program in Central Java. Data analysis was carried out quantitatively using path analysis techniques. The results of the study show as follows. (1) industrial internship based training has an influence on the professional competence of SMK Accounting teachers; (2) teacher motivation has an influence on the professional competence of SMK Accounting teachers; (3) industrial internship based training has an influence on teacher motivation and (4) industrial internship based training has an influence on the professional competence of SMK Accounting teachers if it is mediated by teacher motivation.

**KEYWORDS:** Training, Industrial Internship, Teacher Motivation, Professional Competence

### INTRODUCTION

Along with the current developments, teachers must have 21st-century competencies as capital to develop in the world of education. 21st-century skills refer to a broad range of knowledge, skills, work habits, and character traits essential for success in today's world (Malik, 2018). Teachers need to have 21st-century skills to improve their abilities with professional development and become learners (Pacific Policy Research Center, 2010). Teachers are at the forefront of change and they must have the knowledge, skills, and support to become effective 21st-century teachers in the workplace (Trilling & Fadel, Ananiadou & Claro, 2009).

Teachers in carrying out their duties in learning, are required to have qualified competencies to support success in implementing learning in schools. One of the competencies that teachers need to

master is professional competence. According to Law No. 14 of 2005, professional competence is the ability to master subject matter broadly and in-depth which includes mastery of the subject matter curriculum in schools and the scientific substance that covers the material, as well as mastery of the scientific structure and methodology. Teacher professional competence means that teachers understand the substance of knowledge, understand teaching materials according to the school curriculum, understand scientific methods, and apply scientific concepts in everyday life (Febriana, 2019). Professional competence is a competency needed by teachers in classroom learning. This is the same as the concept of content knowledge in the TPACK approach by Shulman (1986) which is needed by teachers in mastering the learning material that will be presented in class.

Based on the UKG scores for SMK teachers in Indonesia as of 2019 contained in the Regional Education Balance, the score for SMK teachers nationally has an average value of 54.52, which means that this has not shown significant gains and is below the minimum standard of 55. Follow-up from the average value obtained is through training as an effort to improve competence, one of which is professional competence. Teachers must develop their abilities and profession as a teacher, one of which is through training. The reason for this is that teachers play a fundamental role in determining school quality and are the center of school considerations so improving the quality of learning can improve school quality (Hanushek & Rivkin, 2006).

In SMK, students are prepared to be ready to work after graduation later. One of the important factors in facing the current challenges of vocational education is producing superior human resources in various fields. SMK teachers must ensure that their technical knowledge and skills are kept up-to-date in order to adequately prepare learners for a technically enhanced work environment (Stephens, 2011). Teachers at SMKs are role models for work ethics and morals, considering that SMKs in Indonesia are directed to create the workforce needed by industries that are starting to grow and develop in various cities in Indonesia (Amin, et.al, 2019). In preparing students who are ready for the work environment, teachers need the competencies needed by the industry today. Therefore, vocational teachers need to develop their professional competence by participating in industry-based training such as internships. Internships in the industrial world can be an option for vocational teachers to gain insight and direct experience about existing competencies in the industry. Industry knowledge and practical experience are important assets for vocational teachers to deliver vocational education and training effectively and facilitate the entry of vocational learners into the labor market (Kaske, Torres & Jeon, 2022). In addition, apprenticeships in the industry are a program that aims to generate links and matches between SMKs and the industry as a matter of priority to improve the quality of SMKs.

Industrial internship based teacher training is a training that can provide something new that has never been obtained by vocational school teachers before. Industrial internships can provide insight for teachers to study work culture, and applicable company SOPs, and get a complete picture of the field of work that will be transferred later to students during learning. The results of the training can

provide relevant provisions to students regarding matters needed by the industry for its human resources. The output of SMK graduates has the prospect of being able to work in the industry according to their competence. Vocational teachers play an important role in ensuring the competitiveness of vocational graduates in the labor market (Zhou, Tigelaar & Admiraal, 2022). This reinforces that vocational teachers provide provisions for vocational students to adapt to a changing work environment.

Teachers in carrying out their duties and responsibilities need motivation as encouragement. Motivation is motivation as a process that explains the strength, direction, and persistence of a person in an effort to achieve goals (Robbins & Judge, 2015). Teacher motivation is a way to encourage teachers in their professional work for better performance (Hung, 2020). This is in line with Kunter (2013), that teacher motivation is seen as enthusiasm in fulfilling a teacher's professional competence which is useful in learning.

According to Bowen and Shume (2018), the existence of teacher training in the form of industrial internships can provide benefits, namely increasing understanding of the importance of basic competencies for problem-solving, collaboration, and communication today according to the workplace environment, and expressing a commitment to creating classrooms for students to develop. With internship, vocational teachers can develop their basic knowledge to carry out vocational learning. According to Forrest & Beverly (2010), a professional teacher is required to have essential knowledge, one of which is knowledge of the field of study that is his learning obligation. This means that the teacher's ability to learn the material is the main element of professional competence that needs to be possessed by professional teachers. Through industrial internships, the professionalism of teachers is increasing which is marked by their ability to teach students to the demands of the industrial world (Sunardi & Sudjimat, 2016). The existence of teacher training can cause some increase in teacher motivation (Tenorio, et.al, 2020). This means that training makes teachers more motivated to carry out their duties in learning at school.

Industrial internship based teacher training is needed by vocational teachers in developing professional competence. Teacher's professional competence needs to be strengthened with education and training related to mastery of school material, optimizing mastery of teaching material to improve professional competence, so that students can teach well (Dudung, 2018). Vocational school teachers need additional knowledge and skills that are relevant to current industry competency needs as a step to produce students who are in line with industry demands.

Teacher training in the concept of education is an effort to increase teacher professionalism and performance (Nurzaman, 2021). Training is a means to develop competence in various relevant ways. Teacher training is a key component of high-quality education (Buchberger, Campos, Kallós, Stephenson, 2000); and transfer of teacher training shows how teachers apply the competencies they have learned (Ciraso, 2012). According to Mulyawan (2013), there is a positive relationship between

training experience and teacher professional competence. Professional competence is the teacher's mastery of learning material broadly and in-depth which allows students to reach the established competency standards (Firmadani, 2021).

Teachers are required to optimize their performance in carrying out their duties and responsibilities to achieve educational goals, which in this case relates to teacher motivation (Utomo, 2018). The achievement of educational goals by the teacher is a success in learning activities at school. In achieving this, professional competence is needed which is the capital in providing learning material or content to students. Motivation influences knowledge sharing which can be an opportunity for teacher's professional development (Zhou, Tigelaar & Admiraal, 2021).

Training attended by teachers can provide new knowledge and skills to support their duties in carrying out learning. Teacher training is a form of self-professional development in maintaining competencies that are already owned and developing them. Thus, the competencies possessed by teachers are always developing and relevant to their needs. According to Tenorio, et.al (2021), teacher training can lead to some improvements in teacher motivation. With teacher training, teacher motivation in carrying out their duties and responsibilities is getting bigger. This is because the development of competencies possessed by teachers raises the desire to provide maximum results in their work.

According to Gorozidis & Papaioannou (2014), if teachers were more independently motivated to attend training, they might engage in this kind of professional development program to amount to a positive impact on their students and the successful adoption of innovations. Continuous teacher training can increase or update teacher knowledge that is useful for classroom learning (Tenorio, et.al, 2021). Teachers are not advised to focus exclusively on transmitting content-specific knowledge, but rather on strategies to cope with work-related demands and maintain engagement throughout a career (Kunter, et.al, 2013). This can be interpreted that job demands and involvement in a career as a teacher are motivations that must be possessed by teachers.

## **METHODOLOGY**

This research is survey research conducted at SMK Teachers in the Accounting Expertise Program in Central Java Province. The sample used was 95 teachers from a total population of 1731 accounting teachers. Data collection was carried out through online questionnaires. This study was used to find out how the professional competency of vocational accounting teachers is related to industrial internship based training and teacher motivation. The independent variable in this research is industrial internship based training, the intervening variable is teacher motivation and the dependent variable is the professional competence of SMK Accounting teachers. The data used is quantitative data with analysis using path analysis.

## RESEARCH RESULT

This study uses path analysis with two models to examine the relationship between each variable.

**Table 1. Summary of Research Results**

Value	Model 1	Model 2
	$Z = PZX1 + \epsilon1$	$Y = PYX1 + PYZ + \epsilon2$
F	19,323	43,924
Sig	0,000	0,000
R <sup>2</sup>	0,172	0,488

Source: Processed Data (2023)

Model 1 states that training (X) influences teacher motivation (Z). From the results of the ANOVA test, an F value of 19.323 was obtained and a significance value of 0.000, which means that industrial internship based training has an influence on teacher motivation.

The R<sup>2</sup> value was obtained at 0.172 or 17.2%. This value illustrates that industrial internship based training contributes to teacher motivation by 17.2%, while the remaining 82.8% is influenced by other factors.

Model 2 states that training (X) and teacher motivation (Z) affect the professional competence of SMK Accounting teachers (Y). From the results of the ANOVA test, an F value of 43.924 was obtained and a significance value of 0.000, which means that industrial internship based training and teacher motivation affect the professional competence of SMK Accounting teachers.

The R<sup>2</sup> value was obtained at 0.488 or 48.8%. This value illustrates that industrial internship based training and teacher motivation contributed to the professional competence of SMK Accounting teachers by 48.8%, while the remaining 51.2% was influenced by other factors.

### Hypothesis Test

Hypothesis testing was carried out using path analysis to see the direct and indirect influences of industrial internship based training variables (X) on the professional competence of SMK Accounting teachers (Y) through teacher motivation (Z). A variable is declared to have a significant influence if the t value has a value  $> 1.986$  or has a significance value  $< 0.05$ .

**Table 2. Relationship Test between Variables**

	<b>Relations Between Variables</b>		<b>Beta</b>	<b>t</b>	<b>Significance</b>	<b>Conclusion</b>
(1)	Industrial Internship Based Training (X)	Teacher Motivation (Z)	0,415	4,396	0,000	Significant
(2)	Industrial Internship Based Training (X)	Professional Competence (Y)	0,479	5,846	0,000	Significant
(3)	Teacher Motivation (Z)	Professional Competence (Y)	0,348	4,242	0,000	Significant

Source: Processed Data (2023)

Based on table 2, it can be seen the correlation value of each variable between industrial based training (X) with teacher motivation (Z), industrial internship based training (X) with professional competence (Y), and teacher motivation (Z) with professional competence (Y). The first correlation has a t-value of  $4.396 > 1.986$  and a p-value (significance) of 0.000, so there is an influence of industrial internship based training (X) on teacher motivation (Z). The second correlation has a t-value of  $5.846 > 1.986$  and a p-value (significance) of 0.000, so there is an influence of industrial internship based training (X) on the professional competence of SMK Accounting teachers (Y). The third correlation has a t-value of  $4.242 > 1.986$  and a p-value (significance) of 0.000, so there is an influence of teacher motivation (Z) on the professional competence of SMK Accounting teachers (Y).

To see the value of the indirect influence of the industrial internship based training variable (X) on the professional competence variable of SMK accounting teachers (Y) through teacher motivation (Z) can be seen in the Sober test as follows:

**Table 3. Sober Test**

<b>a</b>	<b>b</b>	<b>Sa</b>	<b>Sb</b>	<b>Z</b>	<b>p</b>	<b>Conclusion</b>
0,614	0,383	0,140	0,090	3.05	0.00	Mediation

Source: Processed Data (2023)

Based on table 3, it can be seen that the Z value obtained is 3.05 with a p-value (significance) of 0.00. This means that the Z value obtained meets the criteria because it is  $> 1.96$ , so there is a mediating relationship between the variables of industrial internship based training on the professional competency of vocational accounting teachers through teacher motivation.

**Table 4. Direct and Indirect Effects**

Effect	Variable	Connection	Value
Direct	Industrial Internship Based Training on Professional Competence	X-Y	<b>0,479</b>
Indirect	Industrial Internship Based Training on Professional Competence through Teacher Motivation	X-Z-Y	$(X-Z) \times (Z-Y)$ $= 0,415 \times 0,348$ <b>= 0,144</b>
Total	Direct and Indirect Effects		$0,479 + 0,144$ <b>= 0,623</b>

Source: Processed Data (2023)

Based on table 4, it is known that the value of the direct influence of training on professional competence is 0.479 and the value of the indirect influence of training on professional competence through teacher motivation is 0.144. For the total value of direct and indirect influence, a value of 0.623 is obtained.

## DISCUSSION

### The Influence of Industrial Internship Based Training on the Professional Competence of SMK Accounting Teachers

Industrial internship based training has a direct influence on the professional competence of SMK accounting teachers, based on the test results obtained a significance value of  $0.000 < 0.05$  and a t value of  $5.846 > 1.986$ . It can be interpreted that there is a direct influence of industrial internship based training on the professional competence of SMK Accounting teachers. The magnitude of the direct influence of industrial internship based training on the professional competence of vocational accounting teachers is 0.479 or 47.9%, meaning that the professional competence of vocational accounting teachers is influenced by industrial internship based training at 47.9%.

Industrial internship based training is an option for vocational teachers to develop their professional competence. The benefits of industrial internship based training for vocational teachers can be a capital for transferring knowledge to their students as a provision for entering the world of work later. Providing vocational teachers with quality industry internships aims to ensure that their vocational competencies meet current standards (Kaske, Torres & Jeon, 2022). The professional competence of SMK teachers, especially accounting teachers, is needed to understand the concepts and systematics of material in the field of accounting, both theory and practice. Industrial internships attended by SMK Accounting teachers will provide insight into the application of accounting theory and practicum

concepts applied in industrial work. Theoretical concepts mastered by SMK Accounting teachers will be harmonized with real competencies in the industry, so as to renew the professional competence possessed by teachers.

**The Influence of Teacher Motivation on the Professional Competence of SMK Accounting Teachers**  
In this variable, there is a direct influence of teacher motivation on the professional competence of vocational high school accounting teachers. Based on the test results, a significance value of  $0.000 < 0.05$  was obtained, and  $t$  value of  $4.242 > 1.986$ . It can be interpreted that there is a direct influence of teacher motivation on the professional competence of SMK Accounting teachers. The magnitude of the direct influence of teacher motivation on the professional competence of vocational accounting teachers is 0.348 or 34.8%, which means that the professional competence of vocational accounting teachers is influenced by teacher motivation at 34.8%.

Teacher motivation encourages to be able to do their job as well as possible in order to produce quality students. This gives the value that teachers who have good motivation will carry out their responsibilities well too. Professional competence possessed by teachers who are properly motivated will provide benefits in being able to master the material and develop their professionalism. In addition, teachers who are motivated to give maximum effort will trigger the development of learning materials they teach at school.

#### **The Influence of Industrial Internship Based Training on Teacher Motivation**

Industrial internship based training has a direct influence on teacher motivation, based on the test results, a significance value of  $0.000 < 0.05$  was obtained, and a  $t$  value of  $4.396 > 1.986$ . It can be interpreted that there is a direct influence of industrial internship based training on teacher motivation. The magnitude of the direct influence of industrial internship based training on teacher motivation is 0.415 or 41.5%, which means that teacher motivation is influenced by industrial internship based training by 41.5%.

Industrial internship based training attended by vocational teachers will lead to better teacher work behavior. If the training he attends is felt to have benefits, then the teacher's work behavior will also increase. Teachers will have additional capital in the form of insight and experience which will increase their confidence to give their best in learning. According to research by Darmawan, et.al (2017), that training has a positive and significant influence on work motivation.

#### **The Influence of Industrial Internship Based Training on the Professional Competence of SMK Accounting Teachers through Teacher Motivation**

Industrial internship based training has a direct influence on the professional competence of vocational high school accounting teachers through teacher motivation, based on the test results, the value of the influence of industrial internship based training on teacher motivation has a significance value of  $0.000$ , with  $t$  count  $>$   $t$  table of  $4.396 > 1.986$ ; and the calculation results of the influence of teacher



motivation on the professional competence of SMK Accounting teachers has a significance value of 0.000, with  $t_{count} > t_{table}$  of  $4.242 > 1.986$ . From the results of the Sobel test on the relationship of industrial internship based training to the professional competence of vocational accounting teachers through teacher motivation, it was found that the Z value was 3.05, which is based on the criteria if  $Z > 1.96$  means there is a mediating relationship. The magnitude of the indirect influence of industrial internship based training on the professional competence of vocational accounting teachers through teacher motivation is 0.144 or 14.4%, which means that the professional competence of vocational accounting teachers is indirectly influenced by industrial internship based training through teacher motivation of 14.4 %.

Vocational school teachers after participating in industrial internship based training are expected to have better professional competence. However, if the teacher lacks motivation in carrying out his duties, then this will have an impact on the professional competence that is expected to increase earlier. A good motivation is needed to be able to take advantage of the training attended by vocational teachers to be able to become capital for their professional competence. Training enables teachers to face daily challenges in the field of education, streamline their teaching processes and improve their competency and performance in this field (Jabeen & Iqbal, 2015). Training can significantly affect the competence of a teacher indirectly through work motivation (Fajariah, 2019).

## CONCLUSION

Based on the results of research conducted on SMK Accounting teachers in Central Java Province, it can be concluded that (1) industrial internship based training has an influence on the professional competence of SMK Accounting teachers; (2) teacher motivation has an influence on the professional competence of SMK Accounting teachers; (3) industrial internship based training has an influence on teacher motivation and (4) industrial internship based training influences the professional competence of SMK Accounting teachers if it is mediated by teacher motivation.

The results of this study imply that professional competence for vocational teachers is a very important thing to pay attention to and develop according to the needs of the times so that there is a development of professional competence in the form of new knowledge, skills, and experiences for teachers which provide broad benefits for the quality of vocational education. The results of this study are expected to provide education policymakers with information as material for discussion in making policies related to the professional competence of teachers, especially vocational teachers. For further research, this research can be used as a reference and can be developed with other relevant variables or factors and has a wider range of respondents.

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