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Readiness of Internships Program During The Covid-19 Pandemic: Students, School, and Industry Perspective

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Abstract

Pandemi COVID-19 membuat pembelajaran di sekolah tidak dapat dilakukan secara tatap muka, kondisi ini berdampak lebih buruk pada pendidikan vokasi yang tidak dapat melaksanakan pembelajaran praktik untuk mempersiapkan siswa yang harus melaksanakan prakerin di industri. Penelitian ini bertujuan untuk menggali tingkat kesiapan siswa dalam melaksanakan program magang selama masa pandemi dan perspektif lain dari sekolah dan industri. Artikel ini berfokus dari sudut pandang hasil survei online mix-method di antara 160 mahasiswa magang. Guru dan praktisi industri juga diwawancarai untuk menguatkan hasil penelitian kesiapan tersebut. Hasil penelitian menunjukkan bahwa 4,04% siswa memiliki tingkat kesiapan rendah, 60,18% memiliki tingkat kesiapan sedang, 24,98% memiliki tingkat kesiapan tinggi, dan hanya 10,80% yang memiliki tingkat kesiapan sangat tinggi. Sekolah memiliki tanggung jawab untuk mempersiapkan kompetensi siswanya sebelum mengirim mereka ke program magang di industri bahkan dalam situasi krisis karena industri sudah siap untuk kasus-kasus khusus seperti pandemi. Industri menyarankan sekolah untuk mempersiapkan siswa tentang kompetensi perawatan berkala sepeda motor. Sekolah dengan industri harus memiliki perencanaan program khusus dalam mempersiapkan kompetensi siswa untuk situasi krisis.

***Keywords*:** *Kesiapan, Praktik Kerja Lapangan, Teknik Sepeda Motor.*

Abstract

The COVID-19 pandemic has made learning at school unable to be carried out face-to-face; this condition has a worse effect on vocational education, which cannot carry out practical learning to prepare students that must carry out internships in industry. This study explores the student readiness level in carrying out internship programs during the pandemic and the other perspective from school and industry. This article focused from the point of view on the results of a mix-method online survey among 160 internship students. Teachers and industry practitioners were also interviewed to corroborate the results of the readiness research. The results show that 4.04% of students had a low level of readiness, 60.18% had a moderate level of readiness, 24.98% had a high level of readiness, and only 10.80% had a very high level of readiness. The school is responsible for preparing their student competence before sending them to the internship program in the industry, even in crises, because the industry is already prepared for exceptional cases like the pandemic. Industry advises schools to prepare students on the competence of motorcycle periodical maintenance. Schools with industry must have special programs planning to prepare students' competence for crises.

Keywords: Readiness, Internship, Motorcycle Engineering.

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1. INTRODUCTION

The Covid-19 pandemic has affected all sectors of the Indonesian government experiencing changes and adjustments, including the education sector using distance learning (Alvarez, 2020; Fernando et al., 2020). Online learning is new in the education system (Adedoyin & Soykan, 2020; Nuci et al., 2021; Rojabi, 2020). The changes to online learning are a new challenge for teachers, and they had never been planned before, and also they affect students' practical learning (Allen et al., 2020; Carrillo & Flores, 2020). Skills in using computers and online learning platforms are the primary keys teachers need to innovate in the online learning process (Avidov-Ungar et al., 2022). This decision significantly impacts practical learning carried out in vocational high schools (SMK).

In online learning, educators must be able to choose an e-learning platform that is suitable for students (Mustaqim et al., 2022; Nash & Churchill, 2020). Efforts to support online learning and media for discussion are needed, such as WhatsApp, Google Classroom, Zenius, Quipper, and Microsoft (Abidah et al., 2020; Pradita et al., 2022). Moodle is an effective online learning platform during a pandemic because students can enthusiastically receive lessons and put them into practice (Amin et al., 2022). Even so, online learning has weaknesses. Online mode users experience technical difficulties that hinder teaching-learning (Favale et al., 2020). Teachers have problems controlling many students when learning online (Frei-Landau & Avidov-Ungar, 2022). It is challenging for teachers to connect with students when teaching remotely or online learning (Klusmann et al., 2022). The students find it challenging to understand the material given by the teacher that only uses PowerPoint and voice learning media (Antara & Dewantara, 2022; Mardesci, 2021). This problem will be more severe for vocational education requiring hands-on practice than general education. Knowledge, skills, and skills for work are best acquired through hands-on, practice-based learning rather than theoretical learning (Andersson & Köpsén, 2018; Hordern et al., 2022). Learning during a pandemic requires the readiness of students, teachers, and schools to follow global developments and demands (Wakhidah et al., 2021). Students' technical readiness and Internet infrastructure are challenges when learning online (Yan et al., 2021).

One of the ways that schools can for students to be competent and skillful at working in specific fields is through dual system education in vocational high schools. The implementation of this dual system education is called the Internship Program. The internship program is direct learning for students at the SMK/MAK, SMALB, and LKP levels, which is carried out through actual practice in the business sector or the industrial sector within a specific time following the curriculum and the needs of the business sector (Struyven & De Meyst, 2010; Sutiman et al., 2022). In the socialization of the curriculum of the central vocational high school of excellence in 2020, it was stated that the duration of the implementation of this internship was at least one semester (Goller et al., 2020; Sakarinto, 2020). Another study in Sweden also reported that the internship program was 15 weeks, with industry supervisors obligated to train students while teachers were obligated to plan and assess (Mårtensson, 2020).

The internship aims to enable students to develop competencies that prepare them to become competent professionals who can cope with the demands of today's work (Baharuddin, 2021; Goller et al., 2020). The Internship is important to implement because it is a mandatory program for all students to be able to complete their education. Internships have three main objectives, namely (1) fostering a work culture and professional character for students; (2) improving the competence of students; (3) preparing the independence of students to work and entrepreneurship (Baharuddin, 2021). Carrying out internships in vocational schools is necessary to improve students' competence following the needs of the world of work. A person needs competencies and skills to perform specific tasks, offer services, and play certain roles in a job (Friedrich, 2021). Students must have good readiness before implementing this program to be able to carry out internships program. Readiness is the overall condition of a person who makes it ready to respond or answer in a certain way (Slameto, 2015). Readiness refers to the opinion that the satisfaction of an organism comes from the utilization of its introduction, where these units give rise to tendencies that encourage organisms to do or not do something (Utami & Hudaniah, 2013). Readiness covers the basics of current knowledge and the traits that influence its expansion in interaction with relevant materials or others (Wyszynska Johansson, 2020). According to some of the opinions above, we can define readiness as a condition that someone will obtain if he has the will or drive from within to do something with the experience he already has. In its journey, the Internship encountered several obstacles; a study stated that 56.25% of industries still

state that industrial cooperation with schools is not good (Arfandi & Sampebua, 2016). The workplace capacity factor is one of the causes of the industry's unpreparedness in accepting internship students (Pradipta et al., 2021). Another obstacle is that students are not ready to carry out internship programs. The unpreparedness of students in carrying out internships was conveyed by one of the heads of the Ahass motorcycle workshop (FQ) in Malang City, who revealed that in the field, there were many problems related to internship participants, including students who could not adapt to actual work environment conditions. They still thought that the practice of fieldwork was still the same as in regular schools, where they could come late, have excessive breaks, and even refuse the work they were assigned; this can decrease productivity at work and make the work environment unsatisfactory.

From the results of follow-up interviews with the industry, a student must have minimum competence to be ready to carry out internships. The minimum competence is competence in carrying out periodic maintenance of motorcycles. Competence of Periodical maintenance taken from Indonesia National Work Competency Standard (SKKNI) Level II sub-sector of motorcycle engineering. A school can use the minimum competencies of students as a reference in preparing students before they are deployed to the industries to carry out internships. For students, competence is one of the determinants of their success in completing work (Rosyidah et al., 2020). Other soft skills are also needed, such as knowledge, attitude, communication, motivation, responsiveness, skills to convince customers, interest, and cooperation according to industry standards; soft skills can help someone develop their hard skills; for example, someone with high motivation will try their best to achieve expert hard skills to achieve their goals (Rosyidah et al., 2020). General skills are considered necessary for students, but nowadays, students must be critical and reflective (Boelt et al., 2022). From the industry side, collaboration is fundamental for effective and collaborative work (Beagon et al., 2022). Students' skills are greatly influenced by learning at school, and learning is one of the inhibiting factors for the development of an automotive course (Sutiman et al., 2022).

Previous studies have discussed students' work readiness in general conditions (Mohsin et al., 2022; Siddique et al., 2022; van der Baan et al., 2022). Information on preparing students for critical times like the pandemic is still unclear. This study aims to describe the readiness level of students and how school and industrial perspectives on readiness implementing internships during the COVID-19 pandemic. This research is expected to produce a recommendation for students, companies, and industry to prepare students to conduct fieldwork practice programs if crisis conditions occur again. This research is essential because, besides not having many similar studies, this research is also expected to improve the partnership relationship between schools and the industrial sector. Schools can evaluate how to prepare participants for field workers ready to work in the industry and follow all existing regulations. Students will be more confident if they are equipped with the competencies needed according to the industry. From the industry side, the participants' internship readiness will make work more productive.

2. METHODS

This study uses a mixed method with a quantitative and qualitative approach. Quantitative using a survey by questionnaire to collect data from students. Interview uses in qualitative approach to collect data from schools and industry. The research was carried out in March-April 2022. The population was the head of the expertise program, totaling four people; instructors or assistants for internships in the industry, totaling four people; and all 160 grade XI students of the motorcycle engineering and business department of vocational high schools in Malang City.

The data collection method uses a questionnaire and interview. The questionnaires were prepared to reveal respondents' responses to current conditions. This response is in the form of readiness of students, schools, and industries where they carry out internships. Filling out the questionnaire was done by using Google Forms. The questionnaire and interview lists were validated by asking university lecturer experts to give their opinions about the questionnaire. The r-table value of 40 students with a significance level of 0.001 (1%) is 0.4026. Following the rules of instrument validity, if r count ≥ r table, it is considered valid. The questionnaire is valid, where r count > r table. The reliability was tested by selecting a sample consisting of 40 students. Cronbach's alpha was estimated to test the scale's reliability, and its value was 0.9487 for the whole scale. The grid of instruments is shown in Table 1.

Table 1. The Instruments Grid

Components	Indicators	Sub Indicators	Instruments
Student Readiness	Student Readiness in terms of competence	1. K3 Procedure 2. Basic knowledge of tools 3. Periodical Maintenance 4. Functional competence	Questionnaire
	Student Readiness in terms of the facilities and infrastructure provided	1. Facilities standard 2. Tools standard 3. Health protocol standard	
	Student Readiness in terms of the curriculum being taught	1. Material given 2. Hands-on experience 3. Preparation before internships	
School Readiness	School perspective on student readiness	1. School Preparation 2. Program planning 3. Facilities	Interview
Industrial Readiness	Industrial perspective on student readiness	1. Industrial mentoring 2. Student competence	Interview

Data analysis was performed using descriptive statistical techniques. The interpretation of quantitative research data uses the guidelines in Table 2.

Table 2. Guide to Interpretation of Quantitative Research Results

No	Category	Formula
1	Very High	X ≥ M+1,5SD
2	High	M+1,5SD > X ≥ M
3	Moderate	M > X ≥ M–1,5SD
4	Low	M–1,5SD > X

(Arikunto, 2018)

3. RESULTS AND DISCUSSION

Result

This Students Readiness

The distribution of student readiness answers is divided into three categories; the first category is student readiness based on the perspective of their competence. The second category is the readiness of students based on the facilities provided by the school, and the third category is seen as the readiness of students based on the curriculum being taught. Figure 1 shows the distribution of readiness in terms of competencies.

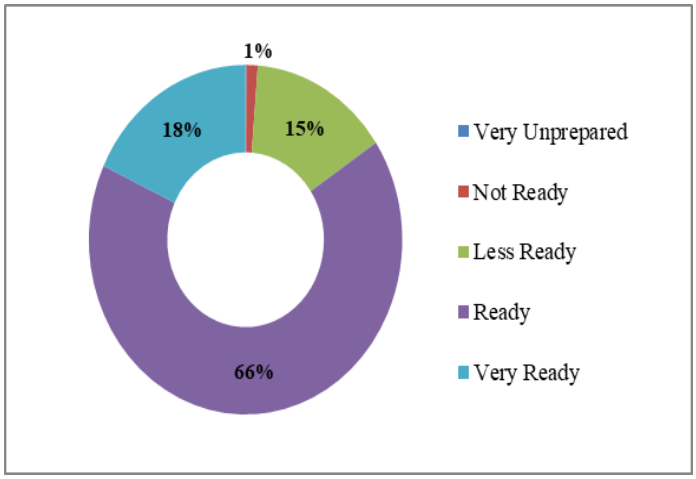

Figure 1. Data of Student Readiness in Terms of Competence

Based on Figure 1, 15% of students still feel their competence is inadequate to carry out the fieldwork practice program; 1% of students stated that they were not competently ready. Competency readiness here is a minimum requirement following industry requests regarding periodic motorcycle maintenance. Furthermore, students were asked about school facilities to support practical learning. The distribution of student readiness answers based on the facilities prepared by the school for learning is shown in Figure 2.

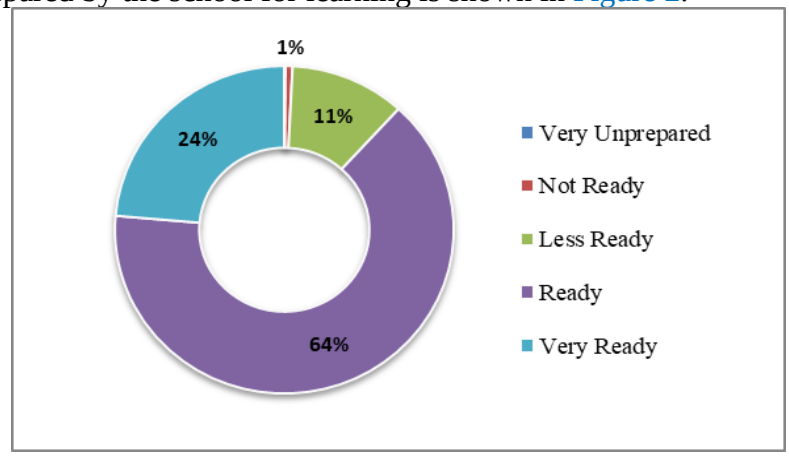

Figure 2. Data of Student Readiness in Terms of the Facilities and Infrastructure Provided

Figure 2 states that of the 148 students surveyed, there are 1% of students stated that the facilities used in schools were not ready to be used, 11% of students stated that the facilities used in schools were not ready to be used, 64% stated that the facilities were ready to be used for learning and the rest stated that they were very ready to use. One of the

questionnaire items asked about facilities at school for practice hands-on during a pandemic; the result of the answer has a mean of 4,19 of 5,00. Furthermore, students asked about the health protocol standard at school, and the results are 4,11 of 5,00 on the mean. The school prepared the curricula when the pandemic existed, and the results of students' answers based on the curricula being taught are shown in Figure 3.

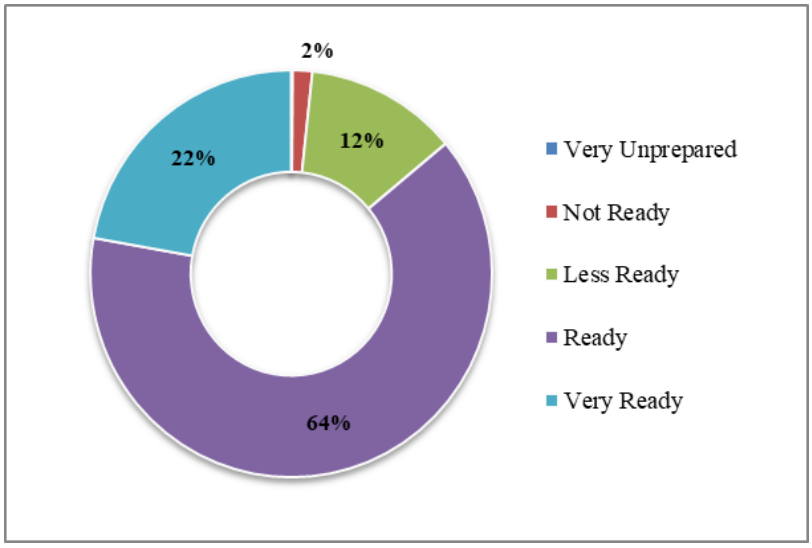

Figure 3. Data of Student Readiness in Terms of Curriculum Being Taught

The distribution of student answers from Figure 3 shows that around 2% of students still stated that they were not ready to carry out the Internship, 12% of students stated that they were not ready, and 22% stated that students were very ready. The remaining 64% said they were ready to complete the Internship. Overall answer based on competence, facilities and curriculum is analyzed using by quantitative approach. Data from answer distribution was then analyzed using SPSS to determine the minimum value, maximum value, mean, median, and standard deviation. The results show in Table 3.

Table 3. Data Analysis of Answer Distribution

Min. Score	Max. Score	Mean	Median	Standard Deviation
61	95	77,11	76	7,32

The data that has been analyzed to get the minimum value, maximum value, the mean, median, and standard deviation is then entered into a formula to determine the category of student readiness according to the reference in Table 2. The results of the interpretation of student readiness are presented in Table 4.

Table 4. Interpretation of Student Readiness

Category	Score Range	F	%
Very High	X ≥ 88,10	16	10.81
High	88,10 > X > 77,11	37	25
Moderate	77,11 > X > 66,13	89	60.14
Low	66,13 > X	11	4.05
Total		**148**	**100**

From Table 4, the student readiness level can be grouped into four levels. The readiness level is very high only 10.81% of students. A quarter of the population, or 25% of students, have a high level of readiness, 60.14% have a medium level of readiness, and the remaining 4.05% have a low level of readiness.; this shows that most students are at the intermediate level to carry out fieldwork practices during the pandemic.

School Readiness

School readiness was measured by an interview conducted with the head of the expertise competency of the four schools researched. The complete results of the interviews are summarized in tabular form. Table 5 shows the results of interviews from various themes that are formed according to the results of the interviews.

Table 5. School Readiness

Person	Answers	Conclusion
P1	The school has not prepared a selection of students ready to leave for internships. The industry must implement health protocols and inform the school about the student's condition and progress.	Some schools have made a selection for their students, and some have not decided who is considered ready to carry out the Internship. During the pandemic, the industry is expected to be still able to accept internship students by guiding them to always comply with health protocols.
P2	The school selects students who are ready to go for Internship, and the industry must be willing to accept internship students even during a pandemic with strict health protocols	
P3	The school has selected students who are ready to go for Internship; the industry is expected to provide more direction to students, especially during work practices during the pandemic	
P4	The school has not made a selection for students who are ready to go for internships and work placements in the industry must follow the student's competence, even during the pandemic	

Industrial Readiness

Industry readiness is assessed by interviews with supervisors or instructors accompanying internship students in 4 industries. The perspectives of the four industries are then summed up into a conclusion about industry opinion. The results of the interviews with the industry are presented in Table 6.

Table 6. Industry Readiness

Person	Answers	Conclusion
P1	The pandemic has affected limited face-to-face school learning, so student competencies are considered less ready for internships. Schools need to prepare essential competencies, especially periodic maintenance.	The industry agrees that students must master the essential competencies of periodic motorcycle maintenance before being handed over to the industry for
P2	Students are less proficient in essential competencies, so schools need to teach more about basic competencies in maintaining motorcycles.	

Person	Answers	Conclusion
P3	Students are often absent without permission; it is necessary to give students an understanding of industrial culture before leaving school for the Internship.	practical work. The instilling and introduction of industrial work culture need to be done by schools before sending students for internships.
P4	Students are easily offended when given directions which then makes students uncomfortable. Students must be instilled in industrial values before leaving for internships, especially during the pandemic	

Discussions

This research has confirmed many general points in studies describing students' readiness level to carry out the internship program. The interview confirms the other's perspective from school and industry. The study helps to confirm the research that has shown the findings or results by the actual condition at the fields. In general, the readiness of students to carry out an internship program is the overall condition of preparing to enter the world of work (Rosyidah et al., 2020). Students ready to do internships have already mastered the minimum competencies needed for the program. This competency measurement is carried out by conducting a competency or competency test. Competency measurement cannot be done only by using oral questions or through interviews. To master competencies, the students must have discipline, which plays a significant role in preparing them to enter the real world of work (Komariah et al., 2022). Good preparation is needed before students carry out internships. During the pandemic, readiness to carry out online learning must also be considered. Studies conducted in Pakistan show that students are not ready to implement online learning now; the majority (86%) stated that online learning only has a negligible impact on learning outcomes and prefer face-to-face learning (Abbasi et al., 2020). The readiness of students to carry out health protocols must also be considered during the COVID-19 pandemic. 34.45% of students are ready to apply health protocols, as many as 64.86% of students are ready to apply health protocols, and only 0.69% of students are not ready to apply health protocols during internships later.

The readiness of students is also greatly influenced by school readiness. The readiness of students in the vocational field is also influenced by support from teachers, self-motivation, and peers (Wyszynska Johansson, 2020). The teacher's experience managing practical classes supports student learning readiness (Rupp & Becker, 2021). Students must understand the knowledge of internships. From existing research results, as many as 24.32% of students know very much about internships, 62.83% understand internships, and 12.85% do not understand internships (Iriani & Soeharto, 2015). One way to instill an understanding of internships in students is by conducting ongoing socialization. The internship is a scheduled program that must be carried out by both the ready and not-ready students; this is also expressed in the results of research in Germany, which states that students must start an internship that schools have scheduled because; they cannot finish school without going through the internship process (Stam & Keskiner, 2020). Based on this, it can be concluded that all students who have entered the internship period must be ready to follow the program if they want to complete their studies.

School readiness is supported by the available resources, including supervising teachers during internships, school facilities and infrastructure provided for students to practice offline during the pandemic with strict health protocols, and partner industries where internships are carried out. School readiness is reflected in the preparation of internship participants by learning guidance from educators before students are deployed. Educators must be able to determine teaching media that can attract students' attention (Amin &

Mustaqim, 2021). Therefore, schools need to give more attention and intensity of guidance to students who do not know what an internship is. School readiness can also be seen from the decline in industrial participation in the implementation of internships; although industrial participation has decreased, schools always struggle to find substitute industries. The readiness of schools to face new things during this pandemic is also an added value for carrying out field practice programs so that they run on time. School readiness during the pandemic is also related to the readiness to conduct face-to-face offline practice debriefing for all students by implementing strict health protocols. Face-to-face learning can still be held with a limited number of students or even on different days dan be conserved (Hermawan, 2022).

To anticipate the shift to distance learning, teachers should implement an innovative pedagogical approach by rapidly designing more collaborative learning (Favale et al., 2020). One way that can be used is to use the media. Learning media can improve students' understanding of the subject matter and increase learning motivation, making learning objectives more efficient and effective (Priambodo & Arifin, 2019). In distance learning, media maintains the quality of learning by increasing students' understanding and motivation (Thaitami & Maksum, 2020; Wisada et al., 2019). Teachers can prepare learning videos for students to learn before face-to-face learning is carried out. Learning videos are an effective medium during the COVID-19 pandemic and can be used for assessment (Carrillo & Flores, 2020). In difficult times like this pandemic, teachers need self-efficacy and readiness to innovate with digital media and social support (Stang-Rabrig et al., 2022). Practical debriefing offline or face-to-face is very good for preparing technical competencies that students must possess, following the minimum competencies that must be mastered before carrying out internships. Teachers must be collaborative and work together (Ouyang et al., 2021). They must also introduce entrepreneurial competencies, optimizing resources, and conceptual understanding which are the keys to completing internships (Beagon et al., 2022).

From the results of the research that has been done, it is found that all schools are fully ready to carry out face-to-face practice directly. Direct face-to-face practice is regulated in capacity and time so as not to cause a crowd. Strict health protocols are also the primary key to implementing face-to-face learning. The importance of replicating real work in this school has been explained through the principles of vocational education according to the first point in Proser, which states that if the environment used for students to be trained a replica of the environment in which they will work, vocational education runs efficiently. Suggestions from the industry are needed in forming a school environment following the replica of the industrial world.

Industry readiness in carrying out internships in question is the readiness to accept students to carry out internships during the pandemic. This readiness can be seen in all industries with industrial supervisors who accompany students during internships from beginning to end. Industry readiness is also seen in the program that experienced supervisors have prepared in carrying out internship programs. A study stated that a promising industry advisor has at least five years of industry experience (Arfandi & Sampebua, 2016). From the research results, all industry supervisors deployed to guide participants in internships have more than five years of experience in the industry. Industry supervisors support learning in the workplace in the form of shared understanding and experience, facilitating students to participate and reflect actively and through direct interaction (Ruoranen et al., 2017). Supervisors demonstrate workplace work to students daily (Ceelen et al., 2021). The facilities and infrastructure owned by the accompanying industry support media for students while carrying out internships. Students can learn new things, use new tools, and use new technologies owned by industry and not owned by schools. Although industry participation in

accepting internship participants declined during the pandemic, this did not reduce the industry's readiness to carry out internships in partnership with schools.

From the results of further research to explore industrial readiness, the school's hope for the industry during this pandemic is to be still able to accept participants in the internship program. The internship program during the pandemic is implemented by implementing strict health protocols while maintaining health between students and workers in the industry. Communication is essential to produce programs that match the expectations of schools and the industry. The industry is ready to collaborate with schools to accept students for internships. The industry does not require students to master expert skill competencies; it only requires students to be equipped with minimal competencies, namely the competence to carry out regular motorcycle maintenance. The minimum competencies explained in the background must be a guideline and reference for schools that will send their students to practice fieldwork. The minimum technical competence must be taught by school teachers to students when they are still in classes X and XI. As educators in schools, teachers must ensure that students master these competencies. Competency tests or exams are required before carrying out internships to determine the extent of the readiness of students' competencies; so that they can be used as evaluations for schools and industry in collaborating in internship programs. If this continues, it will improve the partnership between schools and industry. Readiness in implementing the internship program is influenced by the readiness of students, the readiness of schools, and the readiness of the industry as a companion partner. These three elements must have continuity with one another. Students ready to carry out internship programs must be supported by schools prepared to provide industrial assistants and mentor teachers who will assist students in creating and completing industrial work practice programs. The industry plays a significant role; industrial readiness is not only assessed by the presence of industrial mentors; but also must be seen by the availability of internship programs that are prepared together with schools so that the main objectives of internships can be achieved.

4. CONCLUSION

Based on the results of this research on the readiness to implement internships during the COVID-19 pandemic in Malang City, it can be concluded that student readiness was moderate. Students need more face-to-face learning practice and preparation before going to the industry for internships. Not all schools are doing selection tests for students to be sent to the industry for internships. So the industry feels that students' competence is lacking to carry out internships. Industry advises schools to equip students with essential skills for periodic motorcycle maintenance. This research shows no partnership communication between schools and industry to carry out program planning. Schools with industry must have special programs planning to prepare students' competence for crises. Further research can be carried out to determine the implementation of internships during the COVID-19 pandemic.

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