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*by Agus Prianto*

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# Factors Affecting Employability Achievement of Vocational School Prospective Graduates in the Pandemic COVID-19 Era

Agus Prianto

Department of Economic Education, STKIP PGRI Jombang  
Jl. Patimura III/20 Jombang 61418 East Java, Indonesia  
Tel: +62-321-861-319 E-mail: agustkip@gmail.com

Firman (Corresponding author)

Department of Civic Education, STKIP PGRI Jombang  
Jl. Patimura III/20 Jombang 61418 East Java, Indonesia  
Tel: +62-321-861-319 E-mail: namrif@gmail.com

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## Abstract

The global pandemic that has lasted 1.5 years has caused learning activities in vocational schools carried out from home, except for practical learning which can still be carried out in schools with a certain number of students. Those affect the intensity of student involvement in Practical Learning which, is the main characteristic of learning activities in vocational schools. This study aimed to examine the effects of students' involvement intensity toward Practical Learning on the competitiveness, adaptability, and job performance of prospective vocational school graduates in East Java. This study used descriptive analysis techniques, analysis of variance, and confirmatory factor analysis. This study revealed that the COVID-19 pandemic which, causes restrictions on learning activities, harmed the employability level of prospective graduates. The average employability of prospective graduates is at the upper-moderate level. The mediation of students' competitive readiness and adaptability in practical learning has a positive impact on the employability of prospective graduates. Teachers and parents need to strengthen their awareness of the importance of continuing education despite the pandemic. Students need to be motivated to learn to be more capable of becoming independent learners.

**Keywords:** practical learning, readiness to compete, adaptability, employability

## 1. Introduction

The vocational school is designed to equip students with specific knowledge and skills so they are ready to work in particular jobs after graduation. Pavlova (2009) states that vocational school students are prepared for working after graduation. To implement this goal, the activity of learning in vocational school must involve practical learning activities. Through practical learning activities, students are conditioned to know work procedures and technical matters related to particular work activities.

Therefore, the measures commonly used to assess the success of learning activities in vocational school is by looking at the extent to which graduates are absorbed in the job market after graduation. This is a significant indicator of the success of learning activities. It said that learning activities in vocational schools had succeeded well; vice versa.

The government has high hopes that vocational school function as educational institutions that can prepare graduates who are ready to work. Through practical learning activities, students are to strengthen work skills, especially those related to the steps for implementing work activities and how to operate specific work equipment. Involvement in practical learning will provide opportunities to experience and feel activities and situations as they occur in the world of work. Thus, through practical activities, it is hoped that students will acquire the knowledge, skills, and experience needed as the main provisions to enter the world of work after graduating from school.

Various previous studies have revealed that the lack of work experience in certain fields is the main factor that triggers unemployment in the young age group, including those who has a vocational school background (Ryan, 2001; Görlich et al., January 2013). The provision of work skills possessed by graduates who are not in line with the demands of the world of work (skills mismatch) is another factor that causes unemployment in the young age group (Wang, 2012). This problem is experienced not only by graduates of vocational schools in Indonesia but also as a serious problem in various developed countries and OECD member countries (Manaconda & Petrongolo, 1999).

Researchers have studied various factors that affect the work-readiness of young population groups, especially for those who own a vocational school background. In his study, Prianto, Winardi, & Qomariyah (2019) revealed that the involvement of vocational students in teaching factory-based practical learning had a positive effect on the level of work readiness. But they have not revealed the extent of the intensity of student involvement in practical activities, which is the core of teaching factory-based learning. Therefore, they suggested studying how the impact of the intensity of student involvement in practical activities on the work readiness of prospective vocational school graduates. Meanwhile, a study conducted by Wang (2012) revealed that lack of practical activities caused a mismatch of the skills of vocational school graduates with the skills needed by the world of work.

The global pandemic that has lasted 1.5 years has caused learning activities in vocational schools carried out from home, except for practical, which is possible to be in schools with a certain number of students. This condition affects the intensity of student involvement in

practical learning. Whereas, Practical Learning is the main feature of learning activities in vocational school.

Claxton, Lucas & Webster (2010) stated that studying in vocational schools is not only to develop students' thinking skills but also to strengthen the ability to act. He even claims that firstly we must develop the ability to act because it will reinforce students' thinking abilities. In this regard, vocational school students need to be actively involved in practical learning activities (Calrk & Winch, 2007). Bronowski (2013) since almost 50 years ago has written a book entitled "The Ascent of Man". In his book, he states that "The hand is the cutting edge of the mind". That is, the hand is the spearhead of the mind. Bronowski explained the importance for vocational school students to learn while practicing what they have learned.

Students' involvement in learning needs evaluation <sup>4</sup> to ensure that they are learning (Middle States Commission on Higher Education, 2007). Many parameters used to assess how deep is students' involvement in learning. The primary measure commonly used to assess student involvement in practical learning is the level of participation. It is done by the time students spending their time doing practical assignments. The seriousness of students carrying out practical activities is an affective dimension of student involvement in learning. Learning involvement can also be seen from cognitive aspects, such as: attention, directing oneself to practice independently, thinking deeply, and persistence in carrying out practical tasks (Miller, et al., 1996; Fredricks, et al., 2011).

Students who feel happy and have a positive attitude also reflect deep involvement in practical learning. They will continue to be involved in learning even though they face serious challenges, such as due to various limitations of facilities and demanding that they have to learn independently (Prianto, 2016). Likewise, while students are currently learning practices from home due to the pandemic, this also shows their deep involvement in learning. On the other hand, students who complain a lot, give up and tend to blame the situation are an indication of low learning engagement (Fredricks, Blumenfeld, & Paris, 2004, Fredricks et al., 2010; Prianto, 2016).

<sup>4</sup> Thus, in this study the involvement of students in practical learning will be analyzed from 6 indicators, including: (1) the level of participation in learning, (2) seriousness in carrying out learning tasks, (3) independence in learning activities, (4) interest in learning activities. learning, (5) commitment to carry out learning thoroughly, and (6) level of attention to learning activities.

Now and in the future, students will live in an era of disruption and pandemic that causes the environment to change very quickly, uncertainly. The high level of risk results in a high level of competition as well. The ability to think logically, critically, creatively, and innovatively are the main provisions that must be possessed by everyone in the 21st century (Piirto, 2011; Prianto, Winardi & Qomariyah, 2019). Piirto (2011) explains that critical and creative people are those who are open to the demands of environmental changes, quick to make decisions, risks taker, tolerant of uncertainty, high discipline, and are able to work in team work.

Jackson (2010, 2013) has identified various skills where graduates must be able to compete in the job market, including the ability to use information and communication technology equipment, problem-solving, communication, responsibility, understanding global ethics, lifelong learning, ability to collaborate, interpersonal, creative, and able to work under pressure. Jackson (2010, 2013) recommends that students at the primary and secondary education levels master the various skills needed in the 21st century as mentioned, so learning activities in schools must strengthen basic skills and practical skills. To be able to compete in the future environment, learning activities in schools must be directed at strengthening global skills, applied knowledge, technical skills, critical thinking skills, creativity, and innovation; problem-solving skills, collaboration skills, and independent learning (Council of Chief State School Officers, 2011).

Thus, in this study, readiness to compete is determined by 6 indicators, including: (1) The ability to think logically, critically, creatively, and innovatively; (2) the ability to use information and communication technology equipment; (3) problem-solving ability; (4) communication skills; (5) lifelong learning ability; and (6) the ability to collaborate and team work skill.

An adaptability is a form of competitive advantage in a rapidly changing era. Disruption in various fields of life has changed various frontal activities in a relatively short time. Currently, various economic and business activities are also experiencing anomalies as a result of the global pandemic triggered by Covid-19. Researchers in the field of human resources also pay great attention to adaptability as a key skill to enter the job market (Murphy, 2015). In this regard, individuals who have strong adaptability are needed.

The highly dynamic changing world of work requires adaptive workers or prospective workers, who can quickly follow the challenges of change in their work environment (Park et al., 2020). In today's era, business people, professionals, and workers believe that adaptability is one of the most prominent skills that must be mastered (Society for Human Resource Management, 2008). Researchers in the field of human resources also pay great attention to the importance of adaptability as the main provision for entering the job market (Murphy, 2015).

In this study, adaptability is indicated by a person's ability to change behavior to meet the demands of a new environment, event or situation. The individual's ability to adapt is not only related to the ability to respond to a changing environment, but is also indicated by having a set of abilities to understand and access information, master information technology tools, skills to use technology to support work activities, be resilient in the face of adversity and be able to rise from challenging situations, self-confidence, independence, creative, habitual in dealing with emergencies, accustomed to working under pressure, willingness to continue learning, open to new ideas, multi-skills, motivation, and a proactive attitude to deal with changes in their social environment (Kasali, 2015; Polyhart & Bliese, 2006; Pulakos, Dorsey, & White, 2006; Pavlova, 2009; Levin, 2012; Shoss, Witt, & Vera, 2012; Huang et al., 2014; Park et al., 2020; The Investopedia Team, February 2021).

Learning in vocational schools emphasizes the applicable aspects, focuses on mastering

certain fields, intended to prepare students to work in certain fields of work, such as in industry, business management, health, tourism, and the like (Khurniawan and Haryani, 2016). Vocational schools have the main goal of preparing students to be ready to work and become educated workers. Educated workers are characterized by the ability to continuously update their knowledge and work skills following with the changing demands of the world of work. The ability to keep up with the changing demands of the world of work is what is called employability skills (Harvey, 2000, 2001).

Students are categorized as mastering work skills if they can become independent learners. They used to learn by using higher-order thinking skills, having critical, creative, and innovative thinking skills. They are also able to integrate mastery of concepts, apply, and develop positive values and attitudes following the activities carried out. These skills are believed by students to quickly get a job after graduating from school (Harvey, 2001). Another study conducted by Harvey (2001) states that a person is said to have employability skills if he or she has the knowledge, skills, and competencies that provide employment opportunities, able to develop a career in the workplace, ready to keep up with changing work demands, and quick to get a new job if he left his old job.

From the perspective of Pragmatic measures, employability skills are measured from two aspects. First, the impact after graduation, seen from getting a job in a short time. Second, learning achievement that allows students to have a strong belief that after graduation they will get a job, be able to develop a career, and be called to work seriously after becoming a professional worker. Thus, employability skills go beyond the desire to work after graduating from school, but then he stops to study after getting a job (Harvey, 2001).

In this study, the work skills of prospective graduates are seen from various measures of achievement perceived by students: knowledge and skills obtained from the school, habits to continue learning, critical thinking skills, creativity, innovation, ability to apply knowledge in the real world, mastery of special skills and competencies. All of them will foster confidence in students that after graduation they will get a job they are interested in, be able to develop a career in the workplace, and have a vocation to become professional workers who are ready to keep up with the changing demands of the world of work.

Based on a study of; 1) involvement in practical learning, 2) competitive readiness, 3) adaptability, and 4) achievement of job skills, two propositions can be put forward as follows: 1) Students who are intensively involved in practical learning will be able to develop higher-order thinking skills. It is characterized by the ability to apply concepts in real activities, think critically, creatively, and innovatively. Students who are intensively involved in practical learning are also able to keep up with developments and changes in the world of work. Thus, student involvement in practical learning will strengthen competitive readiness and adaptability. (2) Students who have competitive readiness and the ability to adapt to changing work environments will enable them to continue to develop the knowledge and skills needed by the world of work. Thus, he will be able to develop more employability.

This study aims to examine: (1) How is the employability level of prospective vocational school graduates in the pandemic era? (2) Is there a relationship between involvement in

practical learning, individual readiness to compete, and adaptability to the employability level of prospective vocational school graduates? This research intends to find out: (1) Employability level of prospective vocational school graduates in the pandemic era, (2) The relationship between the intensity of involvement in practical learning, individual readiness to compete, and adaptability to the employability level of prospective vocational school graduates in the pandemic era.

## 2. Method

This research was conducted on 12th grade students in public and private vocational high schools who had implemented a revitalization program. They have entered the final stage of vocational school, and they are in the age range of 18-19 years, so they are considered able to provide feedback and think objectively about what is felt and experienced (Jahja, 2011).

The population in this study were prospective graduates of vocational schools in the cities of Surabaya, Malang, Jombang, Banyuwangi, and Magetan, namely: SMK PGRI 1 Surabaya, SMK PGRI 2 Malang, SMK PGRI 1 Jombang, SMK PGRI 1 Banyuwangi, SMK PGRI 1 Magetan, SMK 1 Jombang, SMK 2 Surabaya, SMK 2 Malang, SMK 1 Banyuwangi, and SMK 1 Magetan. It consisted of 2850 students who will graduate from school in mid-2021. Sampling was done by researchers using the proportionate random sampling technique with a set precision of 5% (Scheaffer et al., 1995; Ryan, 2013), so that the total sample size was 350 people. Until the specified time, it is known that the number of samples who answered the research questionnaire was 205 respondents (59%). The distribution of research respondents is presented in Table 1.

Table 1. Research sample size

Area	Privat school	Public school	Total
Surabaya	18	20	38
Jombang	20	32	62
Malang	15	26	41
Banyuwangi	10	25	35
Magetan	8	21	29
Total	71	134	205

**Sources:** The data summarized by researchers

The research instrument used in this study is a Likert model questionnaire using a scale of 1 - 5 (Soegiyono, 2018). This research instrument was developed based on indicators of student involvement in practical learning, students' readiness to compete, students' ability to adapt, and perceptions of the job worthiness of prospective graduates. The questionnaire developed

by the researcher was then tested for validity and reliability, to ensure that the questionnaire distributed to respondents would provide objective data. The distribution of the questionnaire was carried out using the Google Form tool.

To answer the research questions, this study uses descriptive analysis techniques, analysis of variance, and confirmatory factor analysis. Descriptive was used to describe the level of employability of prospective graduates, with a range of scores as follows: 1.00 – 1.80 (very low), 1.81 – 2.60 (low), 2.61 – 3.40 (moderate), 3.41 – 4.20 (high), and 4.21 - 5.00 (very high). Descriptive analysis was performed using IBM SPSS Statistics version 26 software. Meanwhile, confirmatory factor analysis aims to determine whether the various manifest variables presented in this study can explain the various latent variables that affect the absorption of prospective graduates or not. Data analysis was performed using a structural model with Lisrel for Windows Version 8.8 software. The main parameters used as the basis for evaluating the unity of the specified model are: chi-square (non-significant, < df), df, P-value ( $\geq 0.05$ ), and RMSEA ( $\leq 0.08$ ), GFI (0.90), AGFI ( $\geq 0.90$ ), CMIN (X<sup>2</sup>/ Df) ( $\leq 2.00$ ), IFI ( $\geq 0.95$ ), NNFI ( $\geq 0.95$ ), CFI ( $\geq 0.95$ ) (Ferdinand, 2002).

### 3. Results

This study revealed that the overall employability of graduate candidates, both private and public schools, were at a moderate level, except for prospective vocational school graduates in Malang Regency, which were at a high level (see table 1). The lowest level of employability of graduate candidates was in Surabaya City, followed by Magetan Regency. The city of Surabaya was the provincial capital with the highest number of covid-19 cases, and together with Magetan Regency as the area where the first case of COVID-19 was found in early 2020. This has led to frequent regional closures in these two areas, to prevent the spread of covid-19. This will automatically reduce student learning activities at school.

Table 2. Employability attainment

Area	Privat school	Public school	Mean
Surabaya	2.67 (Lower moderate)	3.26 (Upper moderate)	3.02 (Lower moderate)
Jombang	3.42 (Slightly high)	3.39 (Upper moderate)	3.40(Upper moderate)
Malang	3.56 (Slightly high)	3.69 (Slightly high)	3.61 (Slightly high)
Banyuwangi	3.58 (Slightly high)	3.22 (Upper moderate)	3.34 (Upper moderate)
Magetan	3.14 (Lower moderate)	3.32 (Upper moderate)	3.27 (Upper moderate)
Mean	3.29 (Upper moderate)	3.37 (Upper moderate)	3.34 (Upper moderate)

**Sources:** Researchers' analysis



For the last 1.5 years, students had to do practical activities independently, looking for a place to practice independently, because practical activities in workshops were also limited. It means that the intensity of the involvement of practical learning in schools is very restricted. However, students could carry out practical activities in various institutions in the community or at home. For example, students practice in car repair shops, electronic services, and some small businesses in the area where students live. Students who have a strong commitment and motivation to learn will still be able to optimize practical learning. However, if the discipline and motivation of students were weak, then the pandemic that has lasted for 1.5 years will automatically reduce the intensity of student involvement in practical learning.

The low intensity of student involvement in practical learning seems to affect the employability level of prospective graduates who were only at a moderate level. The pandemic triggered by covid-19 has caused restrictions on community activities, so students can only study from home. The activeness, commitment, and motivation of students to learn are the keys that will ensure that students' involvement in practical learning can remain at a high level. The results showed that the employability level of prospective graduates in Surabaya had the lowest score, followed by prospective graduates in Magetan Regency. Meanwhile, the level of employability of prospective graduates in Jombang and Banyuwangi is at the upper-moderate level. In short; the level of intensity of involvement in practical learning has an impact on the level of employability of prospective graduates.

<sup>1</sup> This study revealed that the higher the students' involvement in practical learning, the higher the employability level of prospective graduates. Likewise, the higher the level of competitive readiness and adaptability, the higher the employability level of prospective graduates (see table 2). This also proved that student involvement in practical learning has a significant impact on the growth of the employability of prospective graduates. The employability level of prospective graduates with low learning involvement is smaller than the employability level of prospective graduates with moderate learning involvement. The employability level of prospective graduates with moderate learning involvement was lower than the employability level of prospective graduates with high learning involvement. And, the employability level of prospective graduates with high learning involvement was smaller than the employability level of prospective graduates with very high learning involvement. Thus, the employability category of prospective vocational school graduates triggered by involvement in practical learning was as follows:

<sup>1</sup> This study also revealed that the higher the involvement of students in practical learning, the higher the employability level of prospective graduates. Likewise, the higher the level of competitive readiness and adaptability, the higher the employability level of prospective graduates (see table 2). This proved that student involvement in practical learning has a significant impact on the growth of the employability of prospective graduates. The employability level of prospective graduates with low learning involvement was smaller than the employability level of prospective graduates with moderate learning involvement. The employability level of prospective graduates with moderate learning involvement was lower than the employability level of prospective graduates with high learning involvement. And, the employability level of prospective graduates with high learning involvement was smaller

than the employability level of prospective graduates with very high learning involvement. Thus, the employability category of prospective vocational school graduates triggered by involvement in practical learning was as follows:

low engage < moderate engage < high engage < very high engage

Table 3. Engagement in practical learning and employability

(I) Engagement in practical learning	(J) Engagement in practical learning	Mean Difference (I-J)	Std. Error	Sig.
	3.00	-1.1225*	.14670	.000
2.00	4.00	-2.3406*	.14945	.000
	5.00	-3.2000*	.18845	.000
3.00	4.00	-1.2181*	.04921	.000
	5.00	-2.0775*	.12490	.000
4.00	5.00	-.8594*	.12812	.000

Dependent Variable: Employability attainment, \*) The mean difference is significant at the .05 level

**Sources:** Researchers' analysis.

This research revealed that the higher the individual readiness to compete, the higher the employability level of prospective graduates (see table 3). This proved that the individual readiness to compete had a significant impact on the growth of the employability of prospective graduates. The employability level of prospective graduates with very low readiness to compete was smaller than the employability level of prospective graduates with low readiness to compete. The employability level of prospective graduates with low readiness to compete was smaller than the employability level of prospective graduates with moderate readiness to compete. The employability level of prospective graduates with moderate readiness to compete is smaller than the employability level of prospective graduates with high readiness to compete. Thus, the employability category of prospective vocational school graduates based on individual readiness to compete can be shown, as follows:

Very low compete < low compete < moderate compete < high compete

Table 4. Readiness to compete and employability

(I) Readiness to compete	(J) Readiness to compete	Mean Difference (I-J)	Std. Error	Sig.
	2.00	-.9180*	.23128	.000
1.00	3.00	-1.0588*	.23024	.000
	4.00	-2.2807*	.23153	.000
2.00	3.00	-.1408*	.05401	.010
	4.00	-1.3627*	.05929	.000
3.00	4.00	-1.2219*	.05510	.000

Dependent Variable: Employability attainment, \*) The mean difference is significant at the .05 level

**Sources:** Researchers' analysis

This study revealed that the higher the adaptability, the higher the employability level of prospective graduates (see Table 4). This proves that adaptability has a significant impact on the employability of prospective graduates. The employability level of prospective graduates with low adaptability was equivalent to the employability level of prospective graduates with moderate adaptability. The employability level of prospective graduates with moderate adaptability was lower than the employability level of graduates with high adaptability. And the employability level of prospective graduates with high adaptability was smaller than the employability level of prospective graduates with very high adaptability. Thus, the employability category of prospective vocational school graduates triggered by adaptability can be shown, as follows:

low adaptability = moderate adaptability < high adaptability < very high

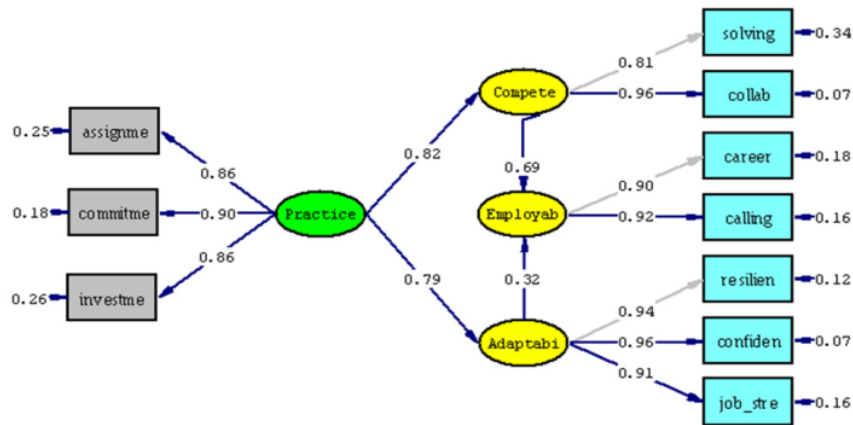
Table 5. Adaptability and employability

(I) Adaptability skills	(J) Adaptability skills	Mean Difference (I-J)	Std. Error	Sig.
	3.00	-.1220	.06745	.072
2.00	4.00	-1.3631*	.07204	.000
	5.00	-2.2069*	.14435	.000
3.00	4.00	-1.2412*	.05095	.000
	5.00	-2.0849*	.13506	.000
4.00	5.00	-.8437*	.13741	.000

Dependent Variable: Employability attainment, \*) The mean difference is significant at the .05 level

**Sources:** Researchers' analysis.

This study succeeded in revealing a structural model that explains the relationship between exogenous and endogenous variables with various manifest variables as a unified model, which describes some construction and the manifest variables that explain them (see Figure 1). The following are the findings of a structural model that explains various factors that affect the employability of prospective vocational school graduates in the pandemic era.



Chi-Square=108.21, df=131, P-value=0.78830, RMSEA=0.007

Figure 1. Structural model of factors affecting employability

The unity of the model found in this study can be seen from the fulfillment of various main

parameters, such as: composite validity, construct reliability, chi-square score, P-Value, RMSEA, RMR (standardized), GFI, AGFI, IFI, NNFI, and CFI (see table 6). Thus, the research findings model as shown in Figure 1 will be used as a basis for discussing various factors forming the employability of prospective vocational school graduates in the pandemic era.

Table 6. Convergent Validity And construct reliability

Construct	Manifest Variable	Loading factor	(1-e)	Description
Engagement in practical learning	Assignment	0,86	0,75	Valid
	Commitment	0,90	0,82	Valid
	Investment	0,86	0,74	Valid
Readiness to compete	Problem solving	0,81	0,66	Valid
	Collaboration	0,96	0,93	Valid
Adaptability	Resilience	0,94	0,82	Valid
	Self-confidence	0,96	0,84	Valid
	Job-stress	0,91	0,88	Valid
Employability attainment	Career	0,90	0,93	Valid
	Calling	0,92	0,84	Valid
	Construct Reliability (CR)	$\Sigma \gamma^2 = 81.36$ $\Sigma \text{ error} = 1.79$	CR= 0,97	Reliable
The main-parameter goodness of fit	Chi-square = 108.21, df = 131, P-value = 0,78830, RMSEA = 0.007, RMR (standardized) = 0.00211, cmin ( $\chi^2$ / Df) = 0.826, GFI = 0.98, AGFI = 0.91, IFI = 0.98, NNFI = 0.99, CFI = 0.98			

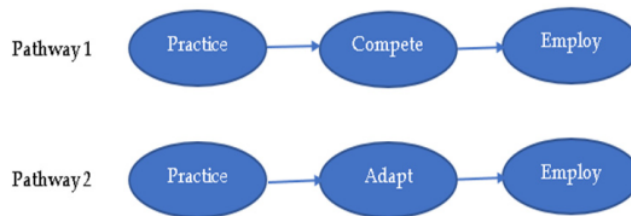
**Sources:** Researchers' analysis

#### 4. Discussion

Based on Figure 1, various research findings can be explained as follows: (1) The construct of engagement in practical learning is explained by the intensity of involvement in carrying out practical tasks, commitment to engage in practical learning, and the attention and time provided by prospective graduates to carry out practical learning; (2) The readiness to

competence construct is explained by the ability to solve problems encountered during the implementation of practical learning and the ability to collaborate to optimize the implementation of practical learning; (3) The construct of adaptability is explained by the resilience and persistence of prospective graduates when facing difficulties during the implementation of practical learning, self-confidence triggered by the possession of knowledge and skills gained from practical learning, and the ability to manage stress caused by various pressures caused by practical learning; (4) The construct of adaptability attainment is explained by students' belief in developing a career and a high vocation to become a professional worker; (5) This study finds two pathways that can be used to strengthen the employability of prospective graduates as shown in Figure 2. The total effect of Path 1 is 0.5658, while Path 2 is 0.2528.

Thus pathway 1 is more effective in increasing the employability of prospective vocational school graduates compared to pathway 2.



**Sources:** Summarized by researchers from Figure 1

Figure 2. Pathways to strengthening the employability of prospective graduates

This research proves that the intensity of involvement in carrying out practical tasks, commitment to complete practical learning tasks, and the attention and time provided for carrying out practical learning have a significant effect on the competitive readiness and adaptability of prospective vocational school graduates. This is in line with studies conducted by Fredricks (2004), Fredricks et al. (2011), and Ferrandez-Berruenco, Kekale, & Devins (2016) which states that prospective graduates who are intensively involved in practical learning activities will master various skills needed to compete in the job market. Practical learning that followed intensively had familiarized students with problems and how to solve them. Practical activities also familiarized them to continue to collaborate with other parties.

Students who were intensively involved in practical learning can develop the ability to adapt to new challenges that occur in the world of work. Practical learning will form a courageous and persistent character when facing difficult situations, such as when the current pandemic is going on and when they will face challenges in the workplace. Practical activities can also build self-confidence and are accustomed to dealing with work pressure, two things that will always be needed later when they work. This is in line with the study of Pulakos, Dorsey & White (2006), Polyhart & Bliese (2006), Huang et al. (2014), and Tentema et al. (2019).

Tentama et al. (2019) revealed that two aspects of personality, namely self-confidence and hardiness, had a significant effect on the readiness to work for vocational school graduates. The occupation in the future require prospective workers who are accustomed to working under pressure, along with the rapidly changing work environment. Prospective workers who are accustomed to working under pressure will have the potential to become productive workers (Polyhart & Bliese, 2006). Those who are accustomed to working under pressure will be encouraged to look for effective and efficient ways of working, so that they will be able to produce output that exceeds the company's target. They are resilient people, and never give up when faced with difficulties at work (Huang et al., 2014). Difficulties at extreme levels such as work disruptions and anomalies triggered by pandemics; will not stop him from continuing his activities, making various breakthroughs and continuing to learn new things as his environment requires.

This study proves that: 1) the ability to solve problems, 2) the ability to collaborate, 3) being resilient dealing with difficult situations, 4) self-confidence, and 5) the ability to work under pressure are the main factors perceived by prospective graduates in forming employability. Prospective workers perceive the achievement of employability as manifested in their readiness to choose a particular job as a way to develop a career. They consider working and being a professional person in the workplace as a calling. In line with research conducted by Harvey (2001), Huang et al. (2014), Pitacho, Palma & Correia (2019), and Park et al. (2020) that prospective graduates who have competitive readiness and adaptability have a strong impact on their employability. Harvey (2001) emphasizes that prospective graduates who are solely looking for work to get a salary, he will not be encouraged to develop skills that enable them to become professionals. He will be the first to be eliminated when the workplace changes.

## 5. Conclusion

Based on the analysis and discussion, some conclusions can be presented as follows:

1. The employability level of prospective vocational school graduates in the pandemic era can be concluded that the average employability of prospective graduates in the 5 research areas, both public and private vocational schools; is at the upper-moderate level. The employability level of prospective graduates, both those with public schools and private schools in the upper moderate category, each has an employability score of 3.37 and 3.29 (scale 1-5). Overall, the average employability level of prospective vocational high school graduates during the COVID-19 pandemic was in the upper moderate category with an employability score of 3.34 (scale 1-5).

2. This study reveals that the higher the involvement of students in practical learning, the higher the competitive readiness and adaptability, which in turn has a positive impact on the employability of prospective graduates; vice versa. The involvement of prospective graduates in practical learning has a positive and significant effect on readiness to compete and ability to adapt; and subsequently have a positive and significant impact on employability. This study also reveals that the involvement of prospective graduates in practical learning is manifested by the variables of seriousness in completing assignments, commitment in

participating in learning activities, and time invested in learning during the pandemic era. Readiness to compete with prospective graduates is manifested by the variables of problem-solving ability and ability to work in a team or collaborate. The adaptability of prospective graduates is manifested by the variables of resilience, confidence in facing environmental changes, and readiness to face pressures in the world of work. Meanwhile, the employability of prospective graduates is manifested by the confidence of prospective graduates to develop a career and an attitude that work is a calling. The involvement of prospective graduates in practical learning mediated by readiness to compete has a positive effect on employability. Likewise, the involvement of prospective graduates in practical learning mediated by adaptability has a positive effect on employability. This research has found 2 pathways to strengthen the employability of prospective graduates. The first path, strengthening involvement in practical learning, strengthening readiness to face competition, and strengthening employability. The second path, strengthening involvement in practical learning, strengthening adaptability, and strengthening employability.

## 6. Recommendation

Based on the conclusions presented, several recommendations are proposed, as follows:

1. The employability level of prospective graduates greatly affects their readiness to enter the workforce after graduation. This research has only revealed 3 variables that are proven to have an effect on employability, namely: student involvement in practical learning, readiness to compete, and adaptability. For this reason, it is necessary to carry out another study to reveal various variables that are assumed to have a strong influence on the employability of prospective graduates.
2. There needs to be another study to reveal various learning strategies that can be applied to strengthen student involvement in learning, especially when students have to study from home due to the pandemic.

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## References

- Bronowski, J. (2013). *The Ascent of Man*. London: BBC Physical audio
- Clark, L., & Winch, C. (2007). *Vocational education international approach, development and system*. New York: Routledge.  
<https://www.routledge.com/Vocational-Education-International-Approaches-Developments-and-Systems/Clarke-Winch/p/book/9780415380614>. Accessed 20/2/2021
- Claxton, G.; Lucas, B., & Webster, R. (2010). *Bodies of knowledge, how new scientific understanding can help practical education*. London: Edge Foundation Retrieved from [https://www.researchgate.net/publication/273454527\\_Bodies\\_of\\_Knowledge\\_how\\_the\\_learn](https://www.researchgate.net/publication/273454527_Bodies_of_Knowledge_how_the_learn)



ng\_sciences\_could\_transform\_practical\_and\_vocational\_education\_

Council of Chief State School Officers. (2011). *InTASC Model Core Teaching Standards: A Resource for State Dialogue*. Retrieved from [https://ccsso.org/sites/default/files/2017-11/InTASC\\_Model\\_Core\\_Teaching\\_Standards\\_2011.pdf](https://ccsso.org/sites/default/files/2017-11/InTASC_Model_Core_Teaching_Standards_2011.pdf)

Ferrandez-Berruoco, R. M., Kekale, T., & Devins, D. (2016). A framework for work-based learning: basic pillars and the interactions between them. *Journal of Higher Education Skills and Work-Based Learning*, 6(1), 35-54. <https://doi.org/10.1108/HESWBL-06-2014-0026>

Ferdinand, A. (2002). *Structural Equation Modelling dalam Penelitian Manajemen*. Semarang: BP Undip.

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. (2004). School engagement: potential of the concept: the state of the evidence. *Review of Educational Research*, 74, 59-119. <https://doi.org/10.3102/00346543074001059>

Fredricks, J., McColsky, W., Meli, J., Montrose, B., Mordica, J., & Mooney, K. (2011). *Measuring student engagement in upper elementary through high school: a description of 21 instruments*. Serve Regional Educational Centre laboratory at UNC, Greensboro. REL2011-No.098. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Centre for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southeast. Retrieved from <http://ies.ed.gov/ncee/adllabs>

Görlich, D., Stepanok, I., & Al-Hussami, F. (Januari 2013). *Youth Unemployment in Europe and the World: Causes, Consequences and Solutions*. Kiel Policy Brief 59. Kiel Institute for The World Economy. Retrieved from [https://www.files.ethz.ch/isn/159334/KPB\\_59.pdf](https://www.files.ethz.ch/isn/159334/KPB_59.pdf)

Harvey, L. (2000). An employability performance indicator? *Perspectives*, 4(4), 105-109. <https://doi.org/10.1080/13603100050145173>

Harvey, L. (2001). Defining and measuring employability. *Quality in Higher Education*, 7(2), 97-109. <https://doi.org/10.1080/13538320120059990>

Huang, J. L., Ryan, A. M., Zabel, K. L., & Palmer, A. (2014). Personality and adaptive performance at work: A meta-analytic investigation, *Journal of Applied Psychology*, 99(1), 162-180. <https://doi.org/10.1037/a0034285>

Jackson, D. (2010). An international profile of industry-relevant competencies and skills gaps in modern graduates. *International Journal of Management Education*, 8(3), 29-58. <https://doi.org/10.3794/ijme.83.288>

Jackson, D. (2013). Business Graduates employability-where are we going wrong. *Higher Education Research & Development*, 32(5), 776-790. <https://doi.org/10.3794/ijme.83.288>

Jahja, Y. (2011). *Psikologi Perkembangan*. Jakarta: PT Kharisma Putra Utama. Retrieved from <https://books.google.co.id/books?id=5KRPDwAAQBAJ&printsec=frontcover&hl=id&source>

=gbs\_atb#v=onepage&q&f=false

Kasali, R. (2005). *Change!*. Jakarta: Gramedia. Retrieved from <https://pingpdf.com/pdf-ebook-change-rhenald-kasalipdf-free-download-freebookkeecom.html>

Khurniawan, A. W., & Hariani, T. (Eds). (2016). *Grand desain pengembangan teaching factory dan technopark di SMK*. Jakarta: Direktorat Pembinaan Sekolah Kejuruan. Direktorat Jenderal Pendidikan Dasar dan Menengah Kementerian Pendidikan dan Kebudayaan. Retrieved from <http://repositori.kemdikbud.go.id/5045/1/DjzUYFjnZL1m58GaC5wH0pK4944YS2JWiOi20Mag.pdf>

Levin, H.M. (2012). *The Importance of Educational Adaptability*, Invitational Research Symposium on Technology Enhanced Assessments. Retrieved from <https://www.ets.org/Media/Research/pdf/session5-levin-paper-tea2012.pdf>

Manaconda, M., & Petrongolo, B. (1999). Skill mismatch and unemployment in OECD countries. *Economica*, 66, 181-207. <https://doi.org/10.1111/1468-0335.00164>

Middle States Commission on Higher Education. (2007). *Student learning assessment options and resources* (2nd ed.). Philadelphia: Author. [www.msche.org](http://www.msche.org). Accessed 21/3/2021

Miller, R. B., Greene, B. A., Montalvo, G. P., Ravindran, B., & Nichols, J. D. (1996). Engagement in academic work: the role of learning goals, future consequences, pleasing others, and perceived ability. *Contemporary Educational Psychology*, 2, 388-422. <https://doi.org/10.1006/ceps.1996.0028>

Murphy, S. L. (2015). Individual adaptability as a predictor of job performance *Dissertation*, Retrieved from <https://digitalcommons.latech.edu/dissertations/209>

Park, L., Balla, B., Hamilton, M., & Chapman, A. (September 2020). *The important of adaptability in an increasing complex world*. Ey.com. Retrieved from [https://www.ey.com/en\\_us/innovation/the-importance-of-adaptability-in-an-increasingly-complex-world](https://www.ey.com/en_us/innovation/the-importance-of-adaptability-in-an-increasingly-complex-world)

Pavlova, M. (2009). *Technology and Vocational Education Empowering Individuals for the Future*. Unesco-Unevoc. International Centre for Technical and Vocational Education and Training, Springer. Retrieved from [http://eksis.ditpsmk.net/uploads/book/file/0BA34019-3C50-4D66-B5D4-1C3389D825DC/TECHNOLOGY\\_AND\\_VOCATIONAL\\_EDUCATION\\_FOR\\_SUSTAINABLE\\_DEVELOPMENT.pdf](http://eksis.ditpsmk.net/uploads/book/file/0BA34019-3C50-4D66-B5D4-1C3389D825DC/TECHNOLOGY_AND_VOCATIONAL_EDUCATION_FOR_SUSTAINABLE_DEVELOPMENT.pdf)

Piirto, J. (2011). *Creativity for 21st skills How to embed creativity into the curriculum*. Rotterdam/Boston/Taipei: Sense Publishers. <https://doi.org/10.1007/978-94-6091-463-8>

Pitacho, L.A., Palma, P., & Correia, P. (2019). Work orientation: Dimensionality and internal model, *Análise Psicológica*, 4 (XXXVII), 479-491. <https://doi.org/10.14417/ap.1667>

Pulakos, E. D., Dorsey, D. W., & White, S. S. (2006). *Adaptability in the workplace: Selecting an adaptive workforce*. In C. S. Burke, L. G. Pierce, & E. Salas (Eds.),

*Understanding adaptability: A prerequisite for effective performance within complex environments* (pp.41-71), Amsterdam Netherlands, Elsevier.  
[https://doi.org/10.1016/S1479-3601\(05\)06002-9](https://doi.org/10.1016/S1479-3601(05)06002-9)

Polyhart, R. E., & Bliese, P. D. (2006). *Individual adaptability (I-ADAPT) theory: Conceptualizing the antecedents, consequences, and measurement of individual differences in adaptability*. In S. Burke, L. Pierce, & E. Salas (Eds.), *Understanding adaptability: A prerequisite for effective performance within complex environments*, Oxford, UK, Elsevier.  
[https://doi.org/10.1016/S1479-3601\(05\)06001-7](https://doi.org/10.1016/S1479-3601(05)06001-7)

Prianto, A. (2016). Students' Engagement in Scientific Approach Based Learning and Its Effect on Students' Readiness to Compete. *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 6(1), 1-12. Retrieved from  
<http://www.iosrjournals.org/iosr-jrme/papers/Vol-6%20Issue-1/Version-1/A06110112.pdf>.

Prianto, A., Winardi, & Qomariyah, U. N. (2019). The Effect of the Implementation of Teaching Factory and Its Learning Involvement toward Work Readiness of Vocational School Graduates. *International Journal of Instruction*, 14(1), 283-302.  
<https://doi.org/10.29333/iji.2021.14117a>

Ryan, P. (2001). The School-to-Work Transition: A Cross-National Perspective. *Journal of Economic Literature*, 39(1), 34-92. <https://doi.org/10.1257/jel.39.1.34>

Ryan, T. (2013). *Sample Size Determination and Power*. John Wiley and Sons.  
<https://doi.org/10.1002/9781118439241>

Scheaffrer, R. L., Mendenhall, W., & Ott, L. (1995). *Elementary Survey Sampling*. Boston: PWN-KENT Publ. Co.

Shoss, M. K., Witt, L. A., & Vera, D. (2012). When does adaptive performance lead to higher task performance? *Journal of Organizational Behavior*, 33, 910-924.  
<https://doi.org/10.1002/job.780>

Society for Human Resource Management. (2008). *Critical Skills Needs and Resources for the Changing Workforce*. Alexandria, VA.  
[https://www.shrm.org/hr-today/trends-and-forecasting/labor-market-and-economic-data/documents/08-0175wv\\_final.pdf](https://www.shrm.org/hr-today/trends-and-forecasting/labor-market-and-economic-data/documents/08-0175wv_final.pdf)

Soegiyono. (2018). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.

Tentama, F., Subardjo, Mulasari, S. A., & Merdiaty, N. (2019). Self-confidence and hardiness towards work readiness: Study on vocational high school students. *International Journal of Research Studies in Psychology*, 8(2), 1-10. <https://doi.org/10.5861/ijrsp.2019.4004>

The Investopedia Team. (Februari 2021). *Gig Economy*. Retrieved from  
<https://www.investopedia.com/terms/g/gig-economy.asp>

Wang, Y. (2012). *Education in a Changing World: Flexibility, Skills, and Employability*. Washington DC: The World Bank. <https://doi.org/10.1596/27092>

## Appendix

### QUESTIONNAIRE ON THE INVOLVEMENT OF PROSPECTIVE GRADUATES IN PRACTICAL LEARNING, READINESS TO COMPETE, ADAPTABILITY, AND EMPLOYABILITY

#### To prospective vocational high school graduates.

The following is a questionnaire that asks you to express your opinion on how involved you are in practical learning, your competitive readiness, your adaptability to new environments, and your employability. We really need your opinion, and we will analyze it to find out various factors that affect the employability of prospective vocational high school graduates in Indonesia. We hope that you can express your opinion honestly. There are no right or wrong answers, and we will keep your answers confidential. Your answers will contribute to the strengthening of vocational high schools in Indonesia.

#### You can choose an answer:

- "Strongly disagree", if you strongly disagree with the questionnaire statement;
- "Disagree", if you do not agree with the statement of the questionnaire;
- "Sufficiently agree", if you quite agree with the statement of the questionnaire;
- "Agree", if you agree with the statement of the questionnaire;
- "Strongly agree", if you strongly agree with the statement of the questionnaire.

Please fill out the questionnaire as you perceive it. Thank you.

#### I. Your Identity

- a. Your initial :
- b. School name :
- c. School status : Public School/Privat School

## II. Questionnaire Statements

### Explain how you are involved in learning during the Covid-19 Pandemic

No Item	Statement	Your Rating				
		1	2	3	4	5
1	The COVID-19 pandemic did not prevent me from being actively involved in learning.					
2	The COVID-19 pandemic has made me an independent learner.					
3	I complete learning assignments with the best results.					
4	Even though I am facing the COVID-19 pandemic, I am committed to completing my learning activities.					
5	The COVID-19 pandemic did not prevent me from completing my learning assignments in the allotted time.					
6	I always follow the schedule of learning activities every day					

### Describe your readiness to compete

No Item	Statement	Your Rating				
		1	2	3	4	5
1	I am able to think rationally to solves problems					
2	I am able to use information and communication technology devices to complete tasks or work					
3	I am able to communicate with other people both in spoken or written language					
4	I am always excited to learn new things					
5	I am motivated to continue learning even though I am declared to have graduated from school					
6	I am able to work in a team					

### Describe your adaptability

No Item	Statement	Your Rating				
		1	2	3	4	5
1	I am able to adapt to the changing environment					
2	I am able to get up if I face failure					
3	I feel capable when I have to face difficulties and challenges in new situations					
4	I am able to deal with strong work pressure					
5	I have the various skills needed to get the job done					
6	I am proactive to learn new things					

**Describe your employability**

No Item	Statement	Your Rating				
		1	2	3	4	5
1	The knowledge and skills that I have learned will make me quickly get a job					
2	I will continue to learn new knowledge and skills needed by the world of work					
3	I am sure that I will be able to develop my career					
4	I think that work is my soul calling					
5	I feel able to keep up with the changing world of work					
6	I'm sure I'll get a job soon after graduation					

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