

***Virtual vs. Conventional Internship:  
Its Impact on University Students and Fresh Graduate's Employability Level***

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**Abstract**

The COVID-19 pandemic impacted various aspects of people's life. In the education aspect, the COVID-19 pandemic has changed learning methods from face-to-face to online via Zoom or similar platforms (Feldman, 2021). At the same time, there is a need for students and recent university graduates to develop skills to enter the workforce despite the pandemic challenges. This study aimed to explore students' employability in different internship programs. Through a quantitative approach, this research had two groups of participants who had joined virtual internships and conventional internship programs. The characteristics of virtual apprentice participants are university students or fresh graduates who have attended a virtual internship program at least once. Meanwhile, conventional internships are students who have participated in a conventional internship program at least once in any company or institution. Employability in this study consisted of four aspects: independent study, problem-solving, creativity, and communication. These four aspects are taken based on the employability aspects developed by Orji (2013). The situational Judgment Test (SJT) format minimizes social desirability. This study recruited 67 participants data from two groups with virtual and conventional internships. Results showed no significant employability score difference between participants who joined virtual and conventional internship programs. This result implied that virtual internship programs might be as effective as conventional ones in developing employability.

Keywords: Employability, University Students, Virtual Internship

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## Introduction

The COVID-19 pandemic impacted various aspects of people's life. In the education aspect, the COVID-19 pandemic has changed learning methods from face-to-face to online via Zoom or similar platforms (Feldman, 2021). Employees have also experienced this change in various circumstances; before the pandemic, employees generally worked from the office face to face. However, after the pandemic, many companies have implemented policies to work remotely or what is known as remote working.

At the same time, there is a need for students and recent university graduates to develop skills to enter the workforce. Students commonly use various ways recent graduates of tertiary institutions to improve their skills, including attending training, short courses, and apprenticeship programs. In Indonesia, the government has implemented *Magang Merdeka*, an internship program that college students should take as one of the requirements to graduate from college (Ministry of Education Culture Research and Technology, Republic of Indonesia, 2022). In addition, many universities in Indonesia have also implemented internships as a requirement to earn a bachelor's degree. Therefore, the demand for internship experience has increased as policies are implemented in most local universities.

On the other hand, many challenges are also faced by students and new graduates to gain internship experience. Many companies cannot survive after the COVID-19 outbreak, so the number of available internships is limited. Besides, job opportunities at companies are limited in big cities such as Jakarta. Students in other cities must compete and do more to attain internship experience relevant to their career aspirations.

However, the Adult Education and Human Resource Development (AEHRD) field sees the prospect of changing apprenticeship activities from conventional apprenticeships to virtual internships online and remotely. The exciting thing is that the virtual internship program was implemented before the COVID-19 pandemic. On the other hand, the implementation of virtual internships before the COVID-19 pandemic was not because of physical workplace closures and mobility restrictions (Feldman, 2021).

Research from Mihali (2006) found that internship programs can help students who are still in college to develop essential skills needed in the world of work, such as communication, time management, self-confidence, and self-motivation, which are very important for getting and keeping a job—employability. One of the literature's most widely used definitions of employability (Bridgstock 2009; Jackson 2013) focuses on identifying the "right" combination of skills, attitudes, and individual characteristics that may improve graduate employment opportunities.

This initiative is crucial because virtual internships can help apprentices gain work experience with employees as desired, regardless of location, people with disabilities, or other responsibilities such as family (Jeske & Axtell, 2014). On the other hand, the effectiveness of the virtual internship program in developing the skills needed in the world of work has yet to be widely studied, especially in Indonesia. AlGhamdi (2022) found that virtual apprenticeship programs that are carried out effectively with the right program and adequate infrastructure can provide the same benefits as traditional apprenticeships. On the other hand, the apprentice's desire to learn and the supervisor's role become important during the internship. If this is done, virtual apprentices can obtain similar benefits to their career development from the experience gained during virtual apprenticeships (Jeske, 2022).

With various types of internships, exploring how effective internship programs are on employability in Indonesia's student population has become more crucial for today and the future. Therefore, this research aims to answer whether internship programs can provide effective output in improving the skills of prospective workers.

## **Participants**

This study had two participant groups: virtual apprentices and convention apprentices. The characteristics of virtual apprentice participants are university students or fresh graduates who have attended a virtual internship program at least once. Meanwhile, conventional apprentices are students who have participated in a conventional internship program at least once in any company or institution.

The controlled variables are age (minimum age 18 years old) and working experience (should not have prior working experience). The recruitment of apprentices was carried out using the accidental sampling method. Meanwhile, virtual apprentices were recruited using a purposive sampling method of apprentices at various institutions providing virtual internships.

## **Instruments**

The employability instrument used in this study was developed by Geshica and Zhafira (2023). This scale consists of four aspects: independent study, problem-solving, creativity, and communication. These four aspects are taken based on the employability aspects developed by Orji (2013). Researchers only used four of the ten aspects of employability due to these four aspects being the most relevant to conventional apprenticeship conditions and virtual internships. The situational Judgment Test (SJT) format minimizes social desirability.

SJT is a test that describes a problem or critical situation to identify whether the individual concerned can overcome it (Patterson et al., 2012). Developing the SJT consists of three stages: item creation, response options, format creation, and answer key selection. This instrument consists of 20 items with a score range of 20-100, where the higher the score represents, the higher the level of employability a person has.

## **Data Collection and Analysis**

Data was collected online due to its effectiveness and reachability. All data were obtained in approximately one month. This process collected 67 participants' data from two groups (virtual and conventional internships). Moreover this study used several analysis techniques, such as descriptive analysis, reliability using internal consistency, and item-rest correlation. Moreover, multivariate statistics were performed to answer the research question: t-tests, ANOVA, and descriptive analysis. These analyses were performed using JAMOVI software version 2.3.21.

### ***Descriptive Analysis***

This study involved 67 participants with various backgrounds in terms of university and major. The description of the participants' characteristics can be seen in Table 1.

**Table 1: The Result of Descriptive Analysis**

Characteristics	F	Percentage	Characteristics	F	Percentage
Age			Student status		
18-22	43	64%	University student	31	46%
23-27	22	33%	Fresh graduate	36	54%
>27	2	3%			
GPA			Field of internship		
3.00-3.50	20	30%	Digital	32	48%
3.51-4.00	47	70%	Non-digital	35	52%
Age			Student status		
18-22	43	64%	University student	31	46%
23-27	22	33%	Fresh graduate	36	54%
>27	2	3%			
GPA			Field of internship		
3.00-3.50	20	30%	Digital	32	48%
3.51-4.00	47	70%	Non-digital	35	52%
Frequency of internship			Total duration		
Once	47	70%	1-3 months	55	82%
Twice	18	27%	4-6 months	10	15%
Three times	2	3%	7-12 months	2	3%

From the table above, the majority of participants' age range was 18-22 years old, had GPA more than 3.50, and currently pursuing a bachelor's degree. A score categorization was also computed to get a holistic view of participants' employability levels. The score categorization used was hypothetic categorization from Azwar (2012). Hypothetical categorization was chosen due to the relatively small number of participants. The computation can be seen in Table 2.

**Table 2: The Score Interpretation and Categorization**

Categorization Reference	Score Categorization	Interpretation	F (%)
$\mu \leq -1.5\sigma$	>64	Very low	5 (7%)
$-1.5\sigma < \mu \leq -0.5\sigma$	64-70	Low	6 (9%)
$-0.5\sigma < \mu \leq +0.5\sigma$	71-76	Average	31 (46%)
$+0.5\sigma < \mu \leq +1.5\sigma$	77-85	High	25 (37%)
$+1.5\sigma < \mu$	>85	Very high	0 (0%)

To calculate the score categorization, firstly the computation of mean and standard deviation were performed. According to these analyses, the mean employability score was 74, and the standard deviation of 7. After obtaining these scores, the calculation of score categorization

showed that most participants had average employability levels. However, none of the participants had a very high score in employability.

### ***Inferential Analysis***

Inferential analysis using ANOVA was performed to explore the factors contributing to employability. The result of the t-test can be seen in Table 3.

**Table 3: *The Result of the t-test***

		Statistic	df	p
TOTAL	Student's t	-1.50 <sup>a</sup>	65.0	0.139

Note.  $H_a \mu_1 \neq \mu_2$

<sup>a</sup> Levene's test is significant ( $p < .05$ ), suggesting a violation of the assumption of equal variances

However, the mean group comparison can be seen in Table 4.

**Table 4: *Mean Group Comparison***

	Group	N	Mean	Median	SD	SE
TOTAL	1	32	72.4	75.0	8.32	1.47
	2	35	74.8	75.0	4.33	0.731

Results showed no significant employability score difference between participants who joined virtual ( $M = 72.4$ ,  $SD = 8.32$ ) and conventional internship programs ( $M = 74.8$ ,  $SD = 4.33$ ),  $t(65) = -1.50$ ,  $p = 0.139$ . This result implied that virtual internship programs might be as effective as conventional ones in developing employability.

### **Discussion**

Previous research has proven how internship experiences helped students and graduates obtain the necessary skills to enter the workplace. On the other hand, the government encourages college students to earn internship experience before graduation. Therefore, internship experience becomes more necessary. However, internships are limited in bigger cities and not enough compared to the number of college students who want to become interns.

Therefore, there is a need to fill the gap between available internship opportunities and college students who need to gain internship experience. Before the COVID-19 pandemic, many companies implemented remote working options for employees to enable employees from other cities, even countries, to work. Moreover, remote working has become more popular even after the endemic pandemic. Hence, more companies have engaged with interns and entry-level employees virtually. As virtual work becomes more common, virtual internships could be considered an option to fill the gap in internship opportunities for students and fresh graduates.

This research also proved that there is no significant employability score difference between participants who joined virtual and conventional internship programs. This implied that virtual internship programs might be as effective as conventional ones in developing

employability. Hence, students, fresh graduates, and universities might consider virtual internships an option to enhance employability and become more work-ready.

Although the result is quite important for enriching the knowledge about both types of internships, this current study has several limitations. Firstly, the sample size was relatively small, so it might not be adequate to generalize the results. Secondly, it is crucial to randomly select participants to ensure that the employability score before the internship is comparable.

### **Conclusion**

Internship experience is a necessary experience for college students and graduates before entering the workplace. There are also many ways to sharpen skills and enhance employability to become well-rounded individuals. Virtual internships could be seen as an opportunity to develop employability to increase students' and fresh graduates' work readiness.

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