

The Effectiveness of the Online Bootcamp Program on Job Readiness of Students of the Faculty of Economics and Business, Universitas Wahid Hasyim

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Abstract. In the rapidly evolving digital era, the workforce is undergoing a significant transformation, requiring college graduates to have relevant skills. There is a marked skills gap between academic education and industry demands, leading to rising unemployment rates among educated graduates. Online bootcamp programs have emerged as a solution to improve employability by offering intensive, industry-aligned training with mentorship. The effectiveness of these online bootcamps in preparing students for the job market remains to be fully researched, with various factors influencing work readiness. This study aims to analyze how online bootcamp programs contribute to students' work readiness. The study was conducted quantitatively using linear regression analysis with data obtained from 38 respondents. Based on the results of the study, it shows that Online Bootcamp (X) is consistently a significant factor and has a positive influence on Work Readiness (Y). Additionally, the analysis's findings indicate that the independent variables contribute 47.3% to the dependent variable being studied.

Keywords : Bootcamp Online; Work Readiness

INTRODUCTION

In this rapidly evolving digital era, the world of work is undergoing a significant transformation. The skills required are changing rapidly, requiring university graduates to have relevant and up-to-date competencies. However, there is often a gap between the skills acquired in college and the real needs in the industrial world. The Badan Pusat Statistik (BPS) reported that the open unemployment rate (TPT) in August 2024 was 4.91 percent (bps.go.id, 2024), this is because many graduates have difficulty finding jobs that are in accordance with their fields, thus increasing the number of educated unemployed.

Recognizing the gap, various efforts have been made to improve student work readiness. One innovation that has emerged is the online bootcamp program, which is a program that focuses on short and intensive learning and training, the bootcamp education curriculum is relatively dense and reflects the latest industry needs (Supriyanta et al., 2023). Online bootcamps also have mentors who always support and guide participants to achieve their learning or training goals. The ultimate goal of the bootcamp program is to produce people who are ready to work in their field. Online bootcamp offers high flexibility and accessibility, the usability of the chat box on the bootcamp platform allows them to engage more directly (Monday et al., 2020). Students can learn anywhere and anytime, according to their own schedules. In addition, because the program often features instructors who are experienced in their fields, the material presented is very relevant to industry needs. Previous research states that online bootcamps have produced quality human resources in the world of work, as evidenced by the 95% of graduates who successfully obtained employment after attending this program (Salao Biantong & Krisnadi, 2022).

Companies that recruit employees will certainly select according to what they need. Not only the skills possessed, but also the harmony between physical maturity, mental maturity and learning experience, so that individuals have the ability to carry out certain activities or behaviors in relation to work (Fitrianto (2006: 9)) in (Putri & Suhartini, 2021). According to Achmad (2003) in (Muspawati & Lestari, 2020) "Work readiness is a set of skills and behaviors needed to work in any job. Work readiness skills are sometimes called soft skills, work skills, or work readiness skills".

However, how effective online bootcamps are in preparing students for employment still needs further research. In previous research, it was stated that there are many factors that influence students' work readiness for the industrial world. According to Robbins and Judge (2014) in (Asmahani & Suhana, 2022) there are two aspects of work readiness, namely: (1) Having the ability, is the degree to which a person has the skills, is able, can, and can complete a task that becomes a job and becomes his authority and responsibility so that it can produce results and achieve his work goals; (2) The existence of will, is a maturity in the psychological aspect or maturity of soft skills associated with responsibility, commitment, integrity, and motivation to do a job.

According to Prianto et al., (2020) in (Prasasti et al., 2024) provides an explanation of work readiness indicators including: individuals have a responsible attitude, individuals who have the ability to think critically and act flexibly, have various skills, are able to establish good communication and are able to evaluate themselves. Various factors that can affect student work readiness are the skills they have. We can get these skills through the online bootcamp program. However, the success of this program needs to be measured based on appropriate training indicators, such as material quality, teaching methods, and interaction with instructors (Anisah et al., 2023).

Although similar research has been conducted, there are research gaps. This research gap refers to previous research conducted by (Wandasari, 2019) found that there is a lack of significant relationship between training effectiveness and work readiness. However, from research (Astuti et al., 2024) found that it shows the importance of relevant training in work readiness. Previous research did not refer specifically to online bootcamp programs, but training and online bootcamp have similarities as a form of learning to improve skills. From this description, it further strengthens the researchers' reasons for conducting this research to further examine the relationship between online bootcamp and student work readiness.

Therefore, this study aims to analyze the effectiveness of online bootcamp programs on student work readiness. The results of this study are expected to help in creating online bootcamp programs that are more efficient and in accordance with the requirements of the world of work. In addition, this research is also expected to provide insight for students in choosing the right training program to improve their work readiness so as to reduce the skills gap and increase competitiveness in the job market for college graduates.

Based on the description above, the hypotheses formulated for research at this time are:

H1: Online Bootcamp has an effective effect on student work readiness.

METHOD

This study uses a quantitative approach method, according to Sugiyono (2018, p.14) in (Yani Balaka & Aryan, 2022) argues that the quantitative approach is research based on the philosophy of positivism to research a particular population or sample and random

sampling using instruments, statistical data analysis. The data in this study were taken from the population of final students of the 2021 batch of the Faculty of Economics and Business, Universitas Wahid Hasyim Semarang who had / were currently participating in the online bootcamp program, with a sample size of 38 respondents. The data collection technique used purposive sampling which was collected through a questionnaire with a Likert scale of 1 to 5.

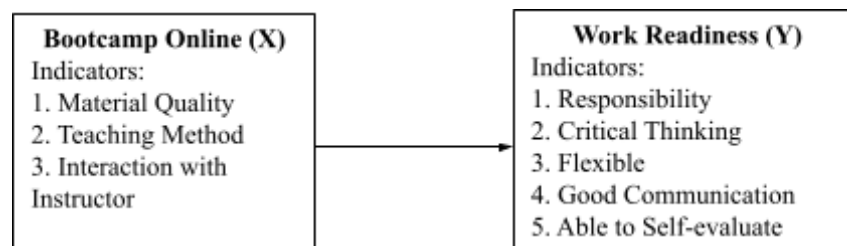


Figure 1 : Framework

Data processing in this study was carried out through:

1. Validity Test

A validity test determines if a measuring device is accurate in measuring what needs to be measured (Sanaky et al., 2021). This Validity Test evaluates whether the survey is valid.

2. Reliability Test

The reliability test of the research instrument is carried out to determine whether the questionnaire used to collect research data is truly reliable. (Dewi & Sudaryanto, 2020) in (Rosita et al., 2021) in this research reliability test was carried out using Alpha Cronbach.

3. Classical Assumption Test

The classical assumption test is an important step in regression analysis, as it ensures that the resulting model meets the required statistical criteria. A good regression model must be able to pass this test. The classical assumption test aims to ensure that the regression model developed can accurately describe the relationship between the variables being analyzed (Silalahi et al., 2024).

4. Regression Test

This analysis is applied as a prediction of when the values of two or more independent variables change, the value of a dependent variable will also change. as predictor variables is increased, decreased, or manipulated. So, this analysis is carried out if there are at least two independent variables (Sugiyono, 2019) in (Rahayuningsih et al., 2024).

5. Determination Coefficient Test

In essence, the coefficient of determination (R^2) gauges how well the model can account for variations in the dependent variable. While the remaining % indicates other independent factors not included in this study, the larger the percentage, the greater the contribution or involvement of the independent variable (X) in influencing the dependent variable. In contrast, a lower percentage indicates a reduced role or contribution of the independent variable (X) to the dependent variable (Sehangunaung & Mandey, 2023).

RESULTS AND DISCUSSION

1. Validity Test

According to (Rosadi et al., 2022) the validity test is said to be valid if $r_{count} > r_{table}$ at a significant level of 0.05. From the results of the variable X validity test, it shows that each $r_{count} > r_{table}$ 0.329. So, this shows that each Online Bootcamp item is declared valid. While in variable Y there are two invalid items, namely Y1.6 and Y1.7, so that in the next test these two Work Readiness items are deleted and not used for other tests.

2. Reliability Test

According to (Anggraini et al., 2022) states that the data is reliable if Cronbach's $\alpha > 0.6$ or Cronbach's $\alpha > r_{tabel}$.

Reliability Statistics	
Cronbach's Alpha	N of Items
.637	6

Table 1 : Reliability test Bootcamp Online (X) result

Based on the X Reliability test results, the Cronbach's Alpha result shows 0.637 that is consistent with the hypothesis that if Cronbach Alpha > 0.60 it is declared reliable.

Reliability Statistics	
Cronbach's Alpha	N of Items
.681	8

Table 2 : Reliability test Work Readiness (Y) result

Based on the Y Reliability test results, it shows the results of Cronbach's Alpha 0.681 that is consistent with the hypothesis that if Cronbach Alpha > 0.60 it is declared reliable.

3. Classical Assumption Test

a. Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		38
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.35085226
Most Extreme Differences	Absolute	.140
	Positive	.140
	Negative	-.094
Test Statistic		.140
Asymp. Sig. (2-tailed)		.059 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

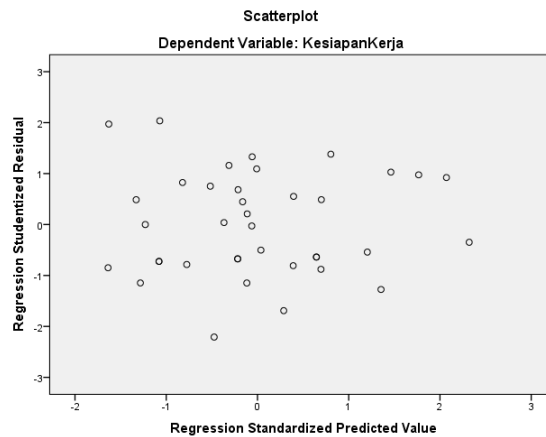
Table 3 : One-Sample Kolmogorov-Smirnov test result

From the normality test above, we get Asymp. Sig. of 0.059 > 0.05 which means it passes the normality test.

b. Heteroscedasticity Test

From the graph below, it can be seen that the residual distribution is random and

does not form a certain pattern, indicating that the residual variance is constant or homoscedastic. This means that the assumption of homoscedasticity is met, so the regression model fulfills one of the key assumptions to obtain unbiased and efficient



results.

Table 4 : Heteroscedasticity result

4. Regression Test

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.689	.366		4.617	.000
X1	.554	.097	.688	5.681	.000

a. Dependent Variable: KesiapanKerja

Table 5 : Coefficients result

Based on the data above, it can be described as follows:

$$Y = a + bX$$

$Y = 1.689 + 0.554X$, from this equation shows that:

- 1) The positive constant value (a) of 1.689 has a positive influence on Online Boochamp.
- 2) Online Bootcamp Regression Coefficient (X) of 0.554 states that if Online Bootcamp (X) increases by one unit, then Job Readiness (Y) will increase by 0.554 or 55.4%.

5. T test

Based on the coefficients table above, it shows that variable X (Online Bootcamp) has a partial influence on variable Y (Job Readiness), because the significance value is $0.000 < 0.05$.

6. F Test

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.083	1	4.083	32.271	.000 ^b
	Residual	4.555	36	.127		
	Total	8.637	37			

a. Dependent Variable: KesiapanKerja

b. Predictors: (Constant), X1

Table 6 : Anova test result

From the results of the data processing, it can be seen that there is a significant influence between X (Online Bootcamp) on Y (Job Readiness), namely the sig value. $0.000 < 0.05$ and $F \text{ count } 32.271 > F \text{ table } 4.11$.

7. Coefficient of Determination Test

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.688 ^a	.473	.458	.35569

a. Predictors: (Constant), X1

b. Dependent Variable: KesiapanKerja

Table 7 : Model Summary test result

The R square value is 0.473. The R Square score of 0.473 is calculated by squaring the R value: 0.688×0.688 . The magnitude of the R square number is 0.473 or an amount of 40.73%. This means that X (Bootcamp Online) partially affects Y (Job Readiness) by 40.73%, and the remaining ($100\% - 40.73\% = 59.27\%$) gets other influences outside X (Bootcamp Online).

Discussion

Before conducting regression analysis, the quality of the research instruments was confirmed through validity and reliability tests. The validity test showed that all items were valid. This was proven by the calculated r value of each item being $> r \text{ table}$, which is 0.320. This validity ensures that each question in the questionnaire for variable X truly measures what it is intended to measure, namely indicators related to the Online Bootcamp. However, for the Work Readiness variable (Y), there were two invalid items, namely items Y1.6 and Y1.7. This invalidity indicates that both items are inconsistent in accurately measuring the concept of Work Readiness. Therefore, these two items were removed and not included in further analysis to maintain the quality and accuracy of the research results. After the invalid items were removed, the reliability of the Work Readiness variable (Y) was tested. The test results showed a Cronbach's Alpha value of 0.681. This figure is greater than 0.60, which aligns with the theoretical criterion stating that an instrument is considered reliable if the Cronbach's Alpha value is above 0.60.

After ensuring data quality, regression analysis was conducted to test the effect of the Online Bootcamp on Work Readiness. Based on the Coefficients table, the T-test results showed that the Online Bootcamp (X) variable had a significant partial effect on Work Readiness (Y). This was based on a significance value of $0.000 < 0.05$. This finding statistically proves that participation in the Online Bootcamp program individually contributes significantly to improving individual work readiness. From the data analysis results, the F test confirms that there is a significant influence between Online Bootcamp (X) and Work Readiness (Y) simultaneously. This evidence is evident from the significance value of $0.000 < 0.05$, as well as the calculated F value of 32.271, which is greater than the table F value of 4.11. This means that, overall, the existence and quality of the Online Bootcamp have a strong and significant impact on an individual's level of work readiness.

The extent of the contribution of the Online Bootcamp (X) variable to Job Readiness (Y) is explained by the coefficient of determination (R^2) value of 0.473. This value is obtained by squaring the R value of 0.688 ($0.688 \times 0.688 = 0.473$). In percentage terms, this means that 47.3% of the variation in Job Readiness can be explained by the Online Bootcamp variable. This implies that 47.3% of the changes or variations in an individual's level of job readiness are influenced by the extent to which they participate in or engage with the Online Bootcamp. Meanwhile, the remaining 52.7% ($100\% - 47.3\%$) of the variation in Job Readiness is influenced by other factors outside the Online Bootcamp variable that are not included in this research model. These external factors can vary, such as previous work experience, formal education level, non-technical skills, personal motivation, or labor market conditions.

CONCLUSION

Overall, the results of this analysis consistently show that Online Bootcamp (X) is a significant factor that positively influences Work Readiness (Y). Although there are other variables that also play a role (contributing 52.7%), Online Bootcamp has been proven to have a significant contribution (47.3%) in shaping work readiness. This finding underscores the importance of training programs such as Online Bootcamp as an effective means of enhancing individuals' competencies and readiness to face the challenges of the workplace. However, it should be noted that there are other factors that also play an important role in determining Job Readiness, and further research could explore these variables to build a more comprehensive model.

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