

Study of the Impact of Job Training Programs on Increasing Skills and Unemployment Rates in East Java (Literature Review)

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Abstract

This study aims to examine the impact of the job training program on increasing skills and the unemployment rate in East Java. The job training program is the government's effort to improve the skills of the workforce in order to reduce the unemployment rate. The research method used is study literature review analysis. The data were analyzed through literature review collected from related agencies, namely BPS Statistics, scientific articles and journals, and more. The results of the study show that the job training program has a positive impact on improving the skills of the participants. After participating in the job training program, participants reported having a significant increase in skills in areas relevant to the job they were looking for. This program provides effective and relevant training, thereby enhancing the ability of participants to compete in the labor market. In addition, this research also shows that the job training program has a positive impact on the unemployment rate in East Java. After joining the program, most of the participants were successful in finding jobs that matched the skills they had acquired during the training. This indicates that the job training program is effective in reducing the unemployment rate in the area. However, this study also identified several factors that need attention to increase the effectiveness of job training programs in East Java. These factors include the compatibility of the program with the needs of the labor market, the accessibility of the program for people in remote areas, and support from related parties in facilitating the placement of program participants into the world of work. This research provides valuable insight into the impact of job training programs on skills improvement and unemployment rates in East Java. The results of this research can be used as a basis for improving and developing future job training programs to support economic development and improve the quality of the workforce in the region.

Keyword: skill development; employment trends; labor market dynamics; economic growth; human capital development

1. Introduction

According to Agustina et al., (2023) Unemployment in Indonesia is a significant economic and social issue that affects the country's overall productivity and stability. The term "unemployment" refers to individuals between the ages of 15 and 65 who are actively seeking employment or are underemployed, meaning they work less than 35 hours per week. Unemployment is often caused by a mismatch between the number of job seekers and the

available job opportunities, leading to a decrease in overall productivity and income in a particular area, which can contribute to poverty, crime, and other social problems.

In Indonesia, unemployment is categorized into three types: cyclical, structural, and seasonal (Vladimirovich et al., 2021). Cyclical unemployment occurs when there is a mismatch between the level of output and the available workforce, while structural unemployment arises from a mismatch between the skills and qualifications of workers and the requirements of the job market. Seasonal unemployment occurs when there is a fluctuation in the demand for labor due to seasonal changes in industries such as agriculture.

Table 1. The Open Unemployment Rate in Indonesia and East Java 2022-2023
Source. Statistics Central Bureau of Indonesia

The Open Unemployment Rate (Percent)		
Year	Indonesia	East Java
2022	5.86	5.49
2023	5.45	4.88

According to Badan Pusat Statistik, (2023) the unemployment rate in Indonesia has been steadily declining over the past few years. In February 2023, the unemployment rate decreased by 0.38 percentage points from the previous year, reaching 5.45%. Approximately five unemployed individuals for every 100 working-age people. The unemployment rate for men is higher than for women, with 5.83% for men and 4.86% for women. Notably, the urban unemployment rate is significantly higher at 7.11%, whereas it is 3.42% in rural areas.

The unemployment rate in Indonesia declined further in the March quarter of 2024 to 4.82 percent, the lowest figure since at least Q4 of 1997. The number of unemployed individuals decreased by 9.89% from the previous year, totaling 7.20 million. Concurrently, the number of employed persons increased by 2.56% to 142.18 million, primarily in sectors such as food, accommodation, beverages, construction, and agriculture.

Indonesia's labor force is predominantly participating in informal activities, approximately 83.34 million people, or about 60.12% of all workers, are predominantly men (57.33%) and those residing in rural areas (55.88%). In contrast, formal workers total 55.28 million, representing 39.88% of the workforce, with men making up the majority at 65.90%, and most are located in urban areas (69.11%). The highest educational level among the unemployed is predominantly high school (SMA-SMK), with 3.88 million individuals, accounting for 48.60% of the unemployed population.

The largest demographic among the unemployed is individuals with a high school education, totaling approximately 2.2 million people, which accounts for 27.74% of the unemployed population. The youth labor force is predominantly male, comprising 12.93 million individuals or 60.48%, while females make up 39.52%. The unemployment rate varies significantly across different age groups. The highest unemployment, at 16.46%, is among youth (15–24 years), while the lowest, at 1.13%, is among the elderly (60 years and above). The unemployment rate for young people with junior high school education is particularly high at 14.01%.

And then, move to the East Java. One of a province in Indonesia, according to the Badan Pusat Statistik Jawa Timur (2023) has also seen a decline in its unemployment rate. According to data from the Indonesian Central Bureau of Statistics (BPS), the open unemployment rate in East Java in 2022 was 5.86%, down from 6.14% in 2021. The trend of open unemployment rates in East Java is shown in Figure 1, which indicates that the rate has been fluctuating but generally declining over the past few years.

As in mention previously, the unemployment rate in Indonesia and East Java. According to the W. A & W. N. P, (2021) ne significant factor is the growth in employment, particularly in sectors such as food accommodation & beverages, construction, and agriculture. The number of employed persons increased by 3.77 percent to 139.85 million in the September quarter of 2023, indicating a positive trend in job creation. This growth in employment has helped to reduce the number of unemployed individuals, which fell by 6.77 percent from a year earlier to 7.86 million. Another key factor is the increase in labor force participation.

The labor force participation rate rose to 69.48 percent in the September quarter of 2023 from 68.66 percent in the prior year. This indicates that more people are actively seeking employment, which has contributed to the decline in unemployment rates. The labor force participation rate is particularly high among young people, with 12.93 million individuals aged 15-24 actively seeking employment.

According to the Agustina et al., (2023) the informal sector, which accounts for around 55-65% of employment in Indonesia, is another significant factor. Informal sector workers often lack access to basic protection and services, and their employment is not taxed, which can negatively impact the economy. The informal sector is concentrated in rural areas, particularly in the construction and agriculture sectors, and is a major challenge for the Indonesian government to address.

Based from the problem previously, according to the Farida, (2022) that the Indonesian government has implemented various strategies to address unemployment, particularly in the post-COVID-19 era. One significant approach is the expansion of the economy, which has been attributed to a positive effect on the reduction of the open unemployment rate (OTR). The OTR, which includes people 15 years of age and older who are employed, temporarily unemployed, or unemployed, indicates the percentage of people who are unemployed relative to the entire working population.

According to the Haryono et al., (2020) the government has also focused on improving education and training to match industry requirements. Vocational training has been emphasized to align the skills and qualifications of workers with the demands of the job market. This strategy aims to address the substantial gap between the skills and qualifications of workers and the requirements of the job market, which is a major contributor to unemployment.

Another key strategy is the promotion of social support and job creation. The government has established programs such as tax incentives to increase income, loosening repayment conditions, and rapidly introducing regulations to simplify social security contributions to employment. These measures aim to enhance the ability and capacity of job seekers, such as handing out cards before going to work

Because of the background of the problem above, the researcher aims to analyze the impact of job training programs on increasing skills and unemployment rates in East Java in 2022-2023. This study is significant because it addresses the pressing issue of unemployment

in East Java, which has been a major concern for the region. The high unemployment rate in East Java is attributed to various factors, including a mismatch between the skills and qualifications of workers and the requirements of the job market.

The researcher seeks to investigate whether job training programs can effectively address this issue by enhancing the skills and employability of workers. By analyzing the impact of job training programs on unemployment rates, this study aims to provide valuable insights into the effectiveness of these programs in reducing unemployment and improving the overall economic well-being of the region.

2. Literature Review

2.1 Labor Supply Theory

Labor supply refers to the amount of time and effort that individuals are willing and able to allocate to work (Battisti et al., 2022). It represents the quantity of labor that individuals are willing to provide at different wage rates.

Labor supply is influenced by various factors such as wages, non-wage benefits, personal preferences, and market conditions. It is an important concept in labor economics as it helps to understand how individuals make decisions regarding their participation in the labor market and the number of hours they are willing to work. The impact of the income effect is stronger than the substitution effect, causing the person to choose more leisure time. When wages increase, the substitution effect encourages them to work more, but the income effect prompts them to work less. As a result, the person's labor supply curve bends backward. Individual labor.

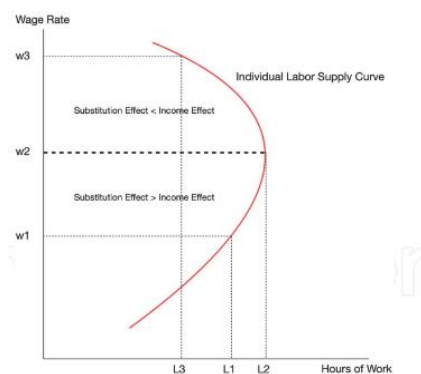


Figure 1. Individual Labor Supply Curve

2.2 Labor Leisure Choice Theory

The concept of Labor-Leisure Choice revolves around how individuals decide to allocate their time between work and leisure activities (Rtischev, 2018). It's a delicate balance, where individuals weigh the benefits of earning income from work against the enjoyment of personal time. Factors like wages, personal productivity, preferences, and living costs, which also encompass housing expenses, significantly influence these decisions.

When the tax on income rises, it triggers a shift in the optimal point on the labor-leisure choice curve. The curve transitions from I1 to I3, leading to reduced labor supply in the formal sector and an upswing in the informal sector. This shift occurs primarily due to the dominance of the substitution effect resulting from the heightened tax burden, which prevails over the

income effect. This is particularly notable when individuals possess the opportunity to earn income in the formal sector. Consequently, the allocation of time toward labor work experiences a decline in the formal sector (Sameti & AlBoosoveilem, 2009).

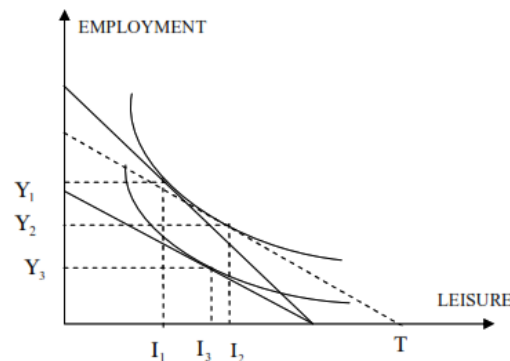


Figure 2. Optimum Labor-Leisure Choice

Table 1. Previous Studies

Author/Year	Results of the Research
(Suyanto et al., 2019). Impact Of Education And Health On The Unemployment Rate And Economy Of East Java	In 2017, education in East Java had a significant positive direct impact on the region's economy, with an effect size of 0.343%. However, its indirect effect through unemployment was minimal, increasing by only 0.0021%.
(Mardiyana & Ani, 2019). The Effect Of Education And Unemployment On Poverty In East Java Province, 2011-2016	Education and unemployment collectively influenced poverty in East Java by 96.6%, leaving 3.4% of poverty influenced by factors outside the study's scope.
(Mustopa et al., 2021). Training and Development of Human Resource Management during the Covid-19 Pandemic	The study found that during the Covid-19 pandemic, human resource training and development could be effectively conducted online using tools like e-learning platforms, Zoom, Google Meet, and other applications.
(Novitasari, 2021). The Effect of Training on the Welfare of Graduates of the Job Training Center (BLK) in Sumbawa Regency	The research concluded that training does not necessarily guarantee changes in the welfare of job training graduates in Sumbawa Regency, indicating no direct correlation.
(Sabki & Alke Mega, 2022). The Effect of HR Training and Development Programs on Employee Performance During the Covid-19 Pandemic	The study showed that both the training program and human resource development had a positive and significant impact on employee performance at PT PLN (Persero) UP3 Tanjung Karang, both individually and collectively.
(Gustiana et al., 2022). Human	The literature review highlighted the importance of

Resource Training and Development (A Literature Review of Human Resource Management Science)	conducting training and development programs fairly, transparently, and with proper evaluation to assess their effectiveness.
(Firman et al., 2023). The Role Of Religiosity In Strengthening Resilience, Work Involvement, And Worker Performance In Jombang Regency, East Java Indonesia	This study found that religiosity significantly enhances resilience, job involvement, and worker performance, with resilience and job involvement further contributing to improved worker performance.
(Rusdiana & Ismail, 2024). The Effect of Training Programs on the Speed of Getting a Job	The research emphasized that training programs are crucial for enhancing the quality of the workforce and increasing job opportunities, recommending that job seekers engage in such programs to improve their chances of employment and income.

3. Material and Method

This research employs a comprehensive literature study method to analyze the impact of job training on unemployment rates in Indonesia. The analysis is grounded in labor supply theory and the labor-leisure choice model. According to Zahra et al., (2022) the literature study involves several key steps: First, relevant literature is identified through an extensive search of scientific journals, reports from the Central Statistics Agency (BPS), and publications from research institutions and international organizations. Second, the selected literature is meticulously reviewed to extract pertinent information regarding unemployment trends and job training programs in Indonesia. Third, the extracted data is systematically analyzed to understand the correlation between job training and unemployment rates, with a particular focus on the period under study.

References from Badan Pusat Statistik (2024) This is very important in this study because it provides official and detailed quantitative data on various economic and social indicators in Indonesia. BPS collects and publishes data on training, as well as the level of community welfare, i.e. wages, providing a clear picture of developments and changes taking place. Using the literature study method, this research integrates a variety of rich and diverse data sources, including data from BPS Statistik, to provide an in-depth and holistic analysis. This approach allows researchers to identify gaps in the existing literature, propose evidence-based hypotheses, and offer policy recommendations grounded in strong empirical findings. The data analysis method employed involves both qualitative and quantitative analysis.

First, qualitative content analysis is used to synthesize information from various sources, identifying key themes and trends. Second, the quantitative data obtained from BPS Statistik is analyzed using statistical methods to assess the relationship between job training programs and unemployment rates. By combining these methods, the research provides a comprehensive understanding of the impact of job training on unemployment, ensuring that the findings are robust and applicable to policy development. The results of this study are expected to make a meaningful contribution to the understanding that job training is very important to be prepared, in order to get wages that are in accordance with ideal standards.

3.1 Design Study

The study focuses on the impact of impact of job training programs on increasing skills and unemployment rates in east java. Furthermore, the lack of relevant skills and training has been identified as a significant obstacle for young people to enter the job market. In response, the government and private sector have initiated various job training programs to enhance the skills of the workforce and reduce unemployment. Hence, this study aims to investigate the impact of these job training programs on increasing skills and unemployment rates in East Java, Indonesia

4. Result

A. The Relationship Between Job Training and Skill Improvement

The study found that job training programs have a significant positive impact on increasing skills. This is consistent with previous research that emphasizes the importance of job training in enhancing the employability of the workforce. The results indicate that job training programs are effective in improving the skills of participants, which in turn can lead to better job prospects and higher income. This is particularly important in the context of East Java, where high unemployment rates and limited job opportunities have been a significant challenge for the local population.

This is consistent with the findings of previous studies that have shown that job training programs can have a positive impact on unemployment rates. Overall, the study suggests that job training programs are an important tool for enhancing skills and reducing unemployment rates in East Java, and that they should be prioritized as part of broader efforts to address the region's economic challenges.

B. The Relationship Between Job Training and Unemployment Reduction

The study found that job training programs have a significant positive impact on increasing skills. This is consistent with previous research that emphasizes the importance of job training in enhancing the employability of the workforce. The results indicate that job training programs are effective in improving the skills of participants, which in turn can lead to better job prospects and higher income. This is particularly important in the context of East Java, where high unemployment rates and limited job opportunities have been a significant challenge for the local population.

The study also highlights the importance of job training in reducing unemployment rates. By enhancing the skills of the workforce, job training programs can help individuals to be more competitive in the job market, leading to a reduction in unemployment rates. This is consistent with the findings of previous studies that have shown that job training programs can have a positive impact on unemployment rates. Overall, the study suggests that job training programs are an important tool for enhancing skills and reducing unemployment rates in East Java, and that they should be prioritized as part of broader efforts to address the region's economic challenges.

5. Discussion

A. The Relationship Between Job Training and Skill Improvement

According to the Arulsamy et al., (2023) job training programs are designed to enhance the skills of workers, making them more employable and competitive in the job market. By providing training and development opportunities, job training programs can help individuals acquire new skills, improve their performance, and increase their chances of getting hired.

The impact of job training programs on unemployment rates is significant (Fredriksson, 2021). By enhancing the skills of workers, job training programs can help reduce unemployment rates by increasing the number of job seekers who are qualified for available job openings. This can lead to a decrease in the overall unemployment rate and improve the overall economic well-being of the region.

East Java, a province in Indonesia, has seen a decline in its unemployment rate in recent years. According to data from the Indonesian Central Bureau of Statistics (BPS), the open unemployment rate in East Java in 2022 was 5.86%, down from 6.14% in 2021 (Badan Pusat Statistik, 2023). This trend indicates that job training programs may be contributing to the decline in unemployment rates in the region.

Furthermore, job training programs in East Java are designed to address the specific needs of the region. By providing training and development opportunities, these programs aim to enhance the skills of workers and increase their employability. This can help reduce unemployment rates and improve the overall economic well-being of the region.

The informal sector, which accounts for around 55-65% of employment in Indonesia, is another significant factor (Suparmono, 2021). Informal sector workers often lack access to basic protection and services, and their employment is not taxed, which can negatively impact the economy. Job training programs can help address this issue by providing training and development opportunities that match the skills and qualifications of workers with the requirements of the job market.

The Indonesian government has implemented various strategies to address unemployment, particularly in the post-COVID-19 era. One significant approach is the expansion of the economy, which has been attributed to a positive effect on the reduction of the open unemployment rate (OTR). The OTR, which includes people 15 years of age and older who are employed, temporarily unemployed, or unemployed, indicates the percentage of people who are unemployed relative to the entire working population.

According to Shaturaev, (2021) the government has also focused on improving education and training to match industry requirements. Vocational training has been prioritized to match the skills and qualifications of workers with the requirements of the job market. This approach aims to address the mismatch between the skills and qualifications of workers and the requirements of the job market, which is a significant factor contributing to unemployment.

Another key strategy is the promotion of social support and job creation. The government has established programs such as tax incentives to increase income, loosening repayment conditions, and rapidly introducing regulations to simplify social security contributions to employment. These measures aim to enhance the ability and capacity of job seekers, such as handing out cards before going to work.

Job training programs are designed to enhance the skills of workers, making them more employable and competitive in the job market. By providing training and development

opportunities, job training programs can help individuals acquire new skills, improve their performance, and increase their chances of getting hired. This is especially crucial in East Java, where job training programs can play a vital role in bridging the gap between workers' skills and qualifications and the demands of the job market. In conclusion, job training programs are essential for enhancing the skills of workers and reducing unemployment rates. By providing training and development opportunities, job training programs can help individuals acquire new skills, improve their performance, and increase their chances of getting hired. The impact of job training programs on unemployment rates is significant, and they can contribute to a decline in unemployment rates and improve the overall economic well-being of the region.

B. The Relationship Between Job Training and Unemployment Reduction

Job training programs are designed to enhance the skills of workers, making them more employable and competitive in the job market (Mian et al., 2022). Offering training and development opportunities through job training programs allows individuals to gain new skills, enhance their performance, and boost their employability. This can result in lower unemployment rates and positively impact the region's overall economic health.

East Java, a province in Indonesia, has seen a decline in its unemployment rate in recent years. According to data from the Indonesian Central Bureau of Statistics (BPS), the open unemployment rate in East Java in 2022 was 5.86%, down from 6.14% in 2021 (Badan Pusat Statistik, 2023). This trend indicates that job training programs may be contributing to the decline in unemployment rates in the region. Job training programs in East Java are designed to address the specific needs of the region, providing training and development opportunities that match the skills and qualifications of workers with the requirements of the job market.

According to Farida, (2022) the Indonesian government has implemented various strategies to address unemployment, particularly in the post-COVID-19 era. One significant approach is the expansion of the economy, which has been attributed to a positive effect on the reduction of the open unemployment rate (OTR). The OTR, which includes people 15 years of age and older who are employed, temporarily unemployed, or unemployed, indicates the percentage of people who are unemployed relative to the entire working population. This expansion of the economy has created new job opportunities, which has helped to reduce unemployment rates.

The government has underscored the importance of improving education and training to meet industry needs. Vocational training has become a central priority to ensure that workers' skills and qualifications match job market requirements. This approach aims to bridge the gap between workers' capabilities and market demands, a factor that significantly contributes to unemployment. By focusing on vocational training, workers can acquire new skills, enhance their performance, and increase their employability.

Another key strategy is the promotion of social support and job creation (Farida, 2022). The government has established programs such as tax incentives to increase income, loosening repayment conditions, and rapidly introducing regulations to simplify social security contributions to employment. These measures aim to enhance the ability and capacity of job seekers, such as handing out cards before going to work. This can help job seekers acquire new skills, improve their performance, and increase their chances of getting hired.

Job training programs are designed to enhance the skills of workers, making them more employable and competitive in the job market. By providing training and development opportunities, job training programs can help individuals acquire new skills, improve their performance, and increase their chances of getting hired. This is particularly important in East Java, where job training programs can help address the mismatch between the skills and qualifications of workers and the requirements of the job market.

In conclusion, job training programs are essential for enhancing the skills of workers and reducing unemployment rates. By providing training and development opportunities, job training programs can help individuals acquire new skills, improve their performance, and increase their chances of getting hired. The impact of job training programs on unemployment rates is significant, and they can contribute to a decline in unemployment rates and improve the overall economic well-being of the region.

6. Conclusion, Implication, and Recommendation

The research concludes that job training programs significantly contribute to skill enhancement and the reduction of unemployment rates in East Java. The evidence supports that these programs boost participants' employability by providing them with essential skills, thereby increasing their likelihood of securing employment. This, in turn, leads to a decrease in unemployment, highlighting the effectiveness of such programs in tackling labor market issues.

From a policy standpoint, the results indicate that government and policymakers should prioritize the implementation and expansion of job training initiatives as a strategic method to combat unemployment. For communities, particularly in regions like East Java, increased employability can result in greater economic stability and growth. Companies and institutions also benefit from a more skilled workforce, which can enhance productivity and competitiveness across various industries.

However, the study also points out limitations, such as the need for better alignment between training programs and labor market demands, as well as ensuring these programs are accessible to people in remote areas. Future research should focus on assessing the long-term effects of job training programs and finding ways to improve their effectiveness and accessibility. Addressing these limitations will be essential for the ongoing success of job training programs in reducing unemployment and promoting economic development.

Based on the findings of this study, the following recommendations are proposed:

1. **Expand Job Training Programs:** Government and policymakers should increase the availability and reach of job training programs to ensure more individuals can benefit from them.
2. **Align Training with Market Needs:** Tailor job training programs to match the current demands of the labor market to enhance the relevance and effectiveness of the training.
3. **Improve Accessibility:** Ensure that job training programs are accessible to people in remote and rural areas, possibly through online platforms or mobile training units.
4. **Collaborate with Industry:** Establish partnerships with businesses and industries to provide practical training opportunities and facilitate job placements for program participants.

5. Monitor and Evaluate: Implement a robust monitoring and evaluation system to continuously assess the effectiveness of job training programs and make necessary adjustments based on feedback and outcomes.
6. Support for Informal Sector Workers: Provide targeted training programs for workers in the informal sector to improve their skills and increase their employability in the formal job market. By implementing these recommendations, job training programs can be more effective in reducing unemployment and improving the economic well-being of East Java.

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