

The Impact of Education Level on Unemployment

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Abstract

Unemployment is still a major challenge for economic development in Indonesia. Although education is believed to be one of the main solutions in reducing the unemployment rate, the reality is that many secondary and higher education graduates have not been able to be absorbed by the job market. This is due to the mismatch between the competencies of graduates and the needs of the industry that continues to grow. Education that is too theoretical and lacks practice is the main obstacle in producing a ready-to-use workforce. As a solution, vocational education is considered more effective in preparing graduates who are in accordance with the demands of the world of work. With a practical skills-based approach and cooperation with the industrial world, vocational education is able to bridge the gap between education and employment. Therefore, education reform is needed that not only increases access, but also quality and relevance in order to be able to reduce the unemployment rate in a sustainable manner.

Keywords: *Education, Unemployment, Vocational*

Abstrak

Pengangguran masih menjadi tantangan besar bagi pembangunan ekonomi di Indonesia. Meskipun pendidikan diyakini sebagai salah satu solusi utama dalam menurunkan angka pengangguran, kenyataannya banyak lulusan pendidikan menengah dan tinggi yang belum mampu terserap oleh pasar kerja. Hal ini disebabkan oleh ketidaksesuaian antara kompetensi lulusan dengan kebutuhan industri yang terus berkembang. Pendidikan yang terlalu teoritis dan minim praktik menjadi hambatan utama dalam mencetak tenaga kerja yang siap pakai. Sebagai solusi, pendidikan vokasional dinilai lebih efektif dalam menyiapkan lulusan yang sesuai dengan tuntutan dunia kerja. Dengan pendekatan berbasis keterampilan praktis dan kerja sama dengan dunia industri, pendidikan kejuruan mampu menjembatani kesenjangan antara pendidikan dan ketenagakerjaan. Oleh karena itu, diperlukan reformasi pendidikan yang tidak hanya meningkatkan akses, tetapi juga kualitas dan relevansi agar mampu menekan angka pengangguran secara berkelanjutan.

Kata Kunci: *Pendidikan, Pengangguran, Vokasional*

Introduction

One important measure for evaluating the economic health of a country is the unemployment rate. The higher the unemployment rate, the more difficult it is for the government to provide jobs and improve the welfare of the community. In this case, education is often considered the key to reducing unemployment because it is

believed to enhance a person's skills and ability to adapt to the workforce. Competitive and high-quality human resources require education. Education helps people acquire the knowledge, skills, and attitudes necessary to adapt to the dynamic world of work (Aji & Aravik, 2023). Therefore, low levels of education are often associated with high unemployment rates, as individuals with low levels of education tend to have difficulty obtaining decent jobs. (Todaro & Smith, 2020). However, unemployment does not only occur among those with low education. College graduates also sometimes face difficulties in finding jobs that match their education.

This raises important questions about the relationship between labor market needs and formal education. (Bank, 2019). One of the main causes of unemployment in Indonesia is the mismatch between graduate competencies and industry needs. This condition is worse because the education system is not fully adjusted to industrial progress and the lack of business involvement in education programs. In addition, the difference in employment opportunities between urban and rural areas is getting wider. (BPS-Statistics, Indonesia, 2023) Data from the Central Statistics Agency shows that the productive age group is dominated by open unemployment, especially high school and college graduates. This shows that the problem of unemployment is not only quantitative, but also related to the quality of education received. Therefore, a comprehensive evaluation of the education system and workforce absorption strategies is needed. An alternative solution to reduce the unemployment rate is vocational training and skills-based training. This method emphasizes more on practical aspects and work skills that can be applied directly in the field. The vocational education system integrated with industry has helped developed countries such as Germany and South Korea reduce unemployment. (Dasgupta, 2022)

In addition to formal and vocational education, mastery of technology and digital literacy are important factors in the competition for jobs in the Industrial Revolution 4.0 era. Due to digital transformation, many new jobs require technical skills. Therefore, the education system must be able to produce students who understand technology and are able to adapt to change. (Asiva Noor Rachmayani, 2015)

The government, educational institutions, and the private sector must work together to address the problem of education-related unemployment because this problem has various aspects. This cooperation can strengthen the national employment ecosystem and accelerate sustainable unemployment reduction. As a conclusion of the explanation, the purpose of this study is to evaluate the extent to which the level of education affects the unemployment rate in Indonesia. The results of this study are expected to assist in making better education and employment policies through the use of quantitative approaches and statistical data analysis.

Research Methods

This study uses a qualitative approach with a library research method to examine various literature sources relevant to the topic being studied. This approach was chosen because it allows researchers to conduct in-depth exploration of existing literature in order to gain comprehensive insights.

Results and Discussion

Education is one of the main components that determines the quality of human resources and has a significant influence on a person's employment status (Noviani, et.al, 2024). Many economic development theories link education to increased productivity and competitiveness of the workforce. Higher education tends to have greater access to formal jobs that offer higher salaries and better working conditions. This is due to the fact that education provides people with the knowledge, skills, and attitudes needed to enter the workforce and adapt to changes that occur there.

But there is a rather ironic phenomenon in Indonesia. High School (SMA) and Diploma graduates have the highest unemployment rates, according to the 2023 report by the Central Statistics Agency (BPS). This condition raises big questions about how effective the education system is in preparing a workforce that is in accordance with market needs. One of the main factors causing this condition is the mismatch, or mismatch, between the education received and the skills needed by the world of work.

One of the main obstacles to workforce absorption is the education system

which is still very theoretical and does not emphasize practical skills aspects. On the contrary, technological advances and industrial dynamics around the world are changing how and what is available for work. In the era of the Industrial Revolution 4.0, more technical skills, critical thinking, digital literacy, and effective communication are needed than just a degree. As a result, education that does not adapt to changing times has the potential to produce graduates who are not in accordance with the needs of the job market. This is a big challenge for the government and educational institutions to create a curriculum and learning strategies that are more responsive to change.

One strategic solution to bridge the gap between education and the needs of the world of work is vocational or vocational education. Vocational education can produce graduates who are ready to work and can be directly absorbed by the market through a practice-based learning approach and direct collaboration with the industrial world. Experience in developed countries such as Germany and South Korea shows that combining vocational education with the industrial system can significantly reduce unemployment rates, especially among teenagers.

However, vocational education still faces many challenges, including lack of facilities, limited number of teachers, and lack of student interest in vocational education. In addition, there are separate obstacles to the development of vocational education as a whole because the mentality of society continues to consider academic education more important. Multi-sector policy updates must also be carried out to address unemployment caused by educational mismatches. More flexible and inclusive education and employment policies must be created by governments, educational institutions, and businesses. Improvements in internship programs, job training, competency certification, and the development of technology-based education are important steps to prepare graduates who are competitive and relevant in the global market. To ensure that people continue to learn and adapt throughout their careers, education must also instill a spirit of lifelong learning. Overall, while education has great potential to reduce unemployment, it can only be achieved if it is able to provide the skills that society needs. Education reform that focuses not only on increasing access, but also on quality and relevance will be critical to reducing unemployment sustainably.

1. Relationship Between Education Level and Unemployment

As the relationship between education level and unemployment shows, education plays a significant role in determining a person's chances of getting a job. In general, more education means more skills and abilities that a person has, which increases competitiveness in the job market. Education also helps people become better prepared for job demands and helps increase labor productivity, which in turn can reduce the total unemployment rate.

Educated unemployment, however, is a reality that must be considered. Compared to elementary school graduates or those who have not finished school, graduates of secondary education and above, such as high school or college, sometimes face higher unemployment rates. This is due to two things: the skills learned in university do not match the needs of the job market and the number of jobs that match their qualifications. (Mahdi, 2020) Education is an important component in this relationship. Good education, which emphasizes not only theory but also practical skills, can help reduce unemployment by training graduates to adapt to the requirements of the world of work. For example, high literacy rates and high expected years of schooling are important factors in reducing unemployment rates because they reflect the basic skills needed to find and maintain employment. In addition, the relationship between education and unemployment is also influenced by access to labor market information. Many young graduates have difficulty obtaining accurate information about job vacancies, which hinders their job search process. As a result, some graduates rely on less effective sources of information, such as talking to friends or family, which reduces their chances of finding a suitable job. Although overall, education levels have a significant effect on unemployment rates, this relationship is also influenced by the quality of education, the relevance of skills to market needs, economic conditions, and the availability of jobs. Therefore, in order for unemployment to be effectively reduced, improving education must be accompanied by improving the quality, relevance, and policies for creating jobs. (Paramita, 2023).

2. Mismatch between Education and Job Market Needs

In recent years, the mismatch between education and job market needs has become a serious problem in Indonesia. This condition occurs when the workforce's skills or education do not match the available job requirements. This mismatch is divided into two main categories, according to the ILO classification: workers with lower education than required and workers with higher education than required. This phenomenon is very common especially in cities, where education is easier, but the right jobs are not always available proportionally. According to data from the National Labor Force Survey (Sakernas), the mismatch between education and jobs is very high in Indonesia. More than half of the workforce experiences a mismatch between education and work, which has an impact on worker productivity and welfare. For example, horizontal mismatches reach around 60.52% and vertical mismatches reach 53.33%.

This mismatch is caused by an education curriculum that is not relevant to the demands of the industry and the ever-evolving job market. Many educational institutions focus on theoretical learning, while the world of work requires practical skills and high adaptability. In addition, educational institutions often do not collaborate with businesses and industries, which leaves graduates less prepared for real-world jobs, especially in the era of the Industrial Revolution 4.0, which demands technological and innovation skills. The Indonesian Minister of Manpower stated that one of the main causes of high unemployment among the younger generation, especially high school and college graduates, is the mismatch between education and job market needs. Vocational high school and high school graduates often have difficulty finding jobs that match their educational background. In addition, this mismatch causes employee dissatisfaction and large differences in wage levels. Compared to those who work in their fields of expertise, workers who have jobs that do not match their education tend to receive lower salaries and are less satisfied with their jobs. This can affect overall economic growth by reducing work enthusiasm and productivity. To address this mismatch, the government and educational institutions must take various planned steps. One important step is adjusting the curriculum to be more in line with job market needs, developing vocational education and practical skills training, and improving the relationship

between education and industry. In addition, graduates can gain work experience that matches market needs through internship programs and competency certification. Thus, it is hoped that graduates will be better prepared to face the demands of a dynamic world of work. (Lulu Mahdiyah, 2019).

3. The Role of Vocational Education and Skills in Overcoming Unemployment

Developing countries like Indonesia face major problems related to high unemployment rates, especially among the productive age group. It is considered that vocational education has a strategic role in overcoming this problem. This type of education instills work skills that are in accordance with industry needs, so that graduates can enter the workforce without having to study again. This vocational education method increases the competitiveness of the national economy and makes students work-ready. (UNESCO, 2022)

Vocational education is beneficial because it offers the ability to build applicable work skills. Vocational education differs from more theoretical academic education because it combines internships, project-based learning, and technical training that focuses on industry practices in the OECD report, countries with strong education systems such as Austria and Switzerland have low youth unemployment rates. This is due to the fact that these countries educate students for the world of work from an early age. (Kuczera & Field, 2018)

In addition, it has been proven that skills training also known as vocational training is very effective in reducing unemployment, especially in the informal sector, short and targeted skills training can increase productivity and employment opportunities for micro-entrepreneurs in developing countries. This shows how important it is to support community-based and non-formal training to reach more levels of society. (McKenzie, 2017)

However, vocational education faces a number of quite challenging problems. Many vocational schools do not have adequate facilities and infrastructure, and their curriculum does not meet all industry requirements. In addition, there is no collaboration between the education and business sectors, resulting in few internship opportunities and knowledge transfer from industry players to students., a

comprehensive approach is needed involving the participation of the private sector, policies, and funds. (Rezasyah et al., 2018)

Digitalization is changing the world of work, which requires changes in vocational education. Digital skills, technological knowledge, and critical thinking skills are new skills that are in great demand. Therefore, vocational education must not only improve technical aspects, but also include 21st century skills such as communication, collaboration, and adaptation. (Putri & Supriansyah, 2021)

Conclusion

Education plays a central role in determining a person's employment status. In general, the higher a person's level of education, the greater their chances of getting a decent job. However, the facts on the ground show that higher education does not always guarantee accessibility to suitable jobs. There are still many high school and college graduates who have difficulty getting jobs, which shows that the challenge of unemployment is not only about access to education, but also the relevance and quality of education itself.

One of the root problems that causes high unemployment among educated people is the mismatch between the education curriculum and the real needs of the world of work. Many educational institutions have not been able to keep up with industrial developments, both in terms of technical skills and non-technical skills such as digital literacy, communication, and adaptation. This makes graduates unprepared for work and must undergo additional training to meet market demands. Vocational education has emerged as a promising alternative to reducing unemployment rates. Through a work practice-based approach, collaboration with industry, and a focus on applied skills, vocational education can equip students with skills that are directly relevant to field needs. However, vocational education in Indonesia still faces a number of challenges such as lack of facilities, low student interest, and limited synergy with the business world. Therefore, improving the quality of education needs to be done comprehensively, both in academic and vocational education. The government, education, and industry need to work together to update the curriculum, expand skills training programs, and open access to wider job market information. With an adaptive, inclusive, and relevant education

strategy, unemployment can be significantly reduced and Indonesia can create a more competitive and globally competitive workforce.

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