

THE EXAMINATION OF THE STRATEGIES AND SOLUTIONS TO THE PROBLEM OF UNEMPLOYMENT

Parveen Kumar Garg¹, Ashwani Sethi²
^{1,2}Guru Kashi University, Talwandi Sabo

ABSTRACT

Investments in training and education are one of the most important things that can help people acquire the required skills and knowledge for employment. However, in this changing environment, with a lot of emerging technologies, the major challenges facing many people is keeping up with the needed market skills and investing in upskills. This paper presents a comprehensive literature review using a content analysis approach to investigate the reasons for the unemployment problem across many countries and identifies proposed solutions and suggestions to handle this problem and particularly the problem of skills mismatch. The results indicated that the previous solutions were inadequate as they used reactive strategies, thus, people cannot respond quickly to change in the market and acquire the required skills immediately.

Keywords Mismatch, skills gap, skills mismatch, unemployment.

I. Introduction

The 21st century workplace is unique, thus, people who have both adequate and demanded skills can easily get appropriate jobs. On the other hand, many people still do not have jobs due to a lack of the needed skills or the impact of a skills mismatch problem, which leads to unemployment in many countries. The numbers of unemployed vary from one country to other. Table 1 shows the unemployment rate in various countries Moreover, in the study of, the concept of unemployment is defined based on a standard and a national definition. The standard definition defines it as the number of the labor force who are without work, but seeking employment. While the national definition refers to it as the total of individuals not working. It is also defined as the people who are not working, but are willing and able to work. Further, it is defined as the number of people from ages 15 to 65 years which are unemployed and seeking work. Regardless of the specific definition, all definitions of

unemployment agree that seeking jobs and the ability to work are the main characteristics of unemployed people. Since unemployment leads to negative economic, social, and security outcomes, this paper aims to identify the causes of this problem, the impact of skills mismatch problem on the rate of unemployment, and the proposed solutions and suggestions to tackle it across many countries.

II. Method

For the systematic literature review, inclusion and exclusion criteria are set to narrow the research to a set of studies for comprehensive analysis. The inclusion criteria were: 1) They are published between 2000 and 2019, 2) they were published in peer-reviewed academic journals, 3) they were written in the English language, 4) they were original or empirical studies, and 5) the studies are focused on the unemployment problem. The exclusion criteria were as the followings: 1) excluding the duplicated studies. 2) Excluding non-peer reviewed studies. 3) Excluding non-English studies. 4) Excluding theoretical and conceptual studies. 5) Excluding studies that did not focus on unemployment. The literature search was limited to 2000-2019 since the technology became a big issue after 2000 as a result of the sudden rise of it. Consequently, this resulted in an increasing unemployment rate, and the relationship between inflation and unemployment followed the Phillips curve. Furthermore, the systematic review is limited to publications in English due to a lack of facilities for translation. Moreover, only original or empirical studies that published in peer-reviewed academic journals were considered. Finally, studies that did not mainly concentrate on the unemployment problem were excluded, such as employment mismatch studies as these studies do not

III. The main causes of the unemployment problem

The literature discusses unemployment as being caused by many things. Regarding the educational dimension, one of the causes of unemployment is the field of study. The student should know what the careers of their field of study are and what the market needs in relation to their study. Without doing that, this will lead to market saturation in some fields and a lack of skilled labor in others. For example, the study of, in South Africa, found that specific majors of graduated students were affected the time to find employment, and therefore, may cause unemployment problems. Consequently, it demonstrates that graduated students in the areas of human resources, industrial psychology, labor relations management, public administration, public management, and politics must wait a long time

before finding a job after graduation. In particular, the wait time is about 19 months for graduated students in the fields of public management, public administration, and politics, compared to only 10.5 months in human resources, industrial psychology, and labor relations. On the other hand, graduated students in the fields of accounting, math, education, and health have the shortest average wait periods. Apart from the field of study, job skills mismatch is also mainly related to unemployment problem based the educational dimension. While an increasing number of universities have greater enrolment than in past decades, less attention is paid to their output quality in terms of balancing acquired skills with demanded skills. This has led to increasing the unemployment rate of graduated students, especially since the recession, as only a few graduated students possess required market skills. For example, this mismatch contributed to approximately one-third of the recent rise in US unemployment, as the greater number of mismatches happen at the educational level. Moreover, when the unemployment rate increases by 3%, the percentage of mismatch is expected to increase by 30% in Norway. In addition, one-ninth of the causes of unemployment during the great recession was due to skills mismatch in the Netherlands. On the other hand, the study of showed that a small rate of mismatch was related to both education and skills, while a larger rate was related to either education or skills only. In addition, it found that the relationship between education and skills mismatch was negative, which plays an important role in tackling this labor skills inefficiency. Further, the studies of pointed out the competence level of graduated students as one of the causes of unemployment. Thus, the students might believe they have the required skills to satisfy the needed market skills, but the employers do not. In terms of individual dimensions, the studies of showed that age was negatively related to unemployment. Thus, young people between 21 and 25 years have the highest unemployment rate. Therefore, for every one unit increase in age, unemployment is expected to be lower, for example, by 0.2% in Pakistan. Thus, the unemployment rate for adults is less than for the young. The reason behind this is the lack of acquired skills and experience in young people. Moreover, gender is another cause of unemployment. It contributes to 39.5% of unemployment in educated females, compared to only 25.8% of educated males in Iran. Unemployment among females is also higher in urban than in rural areas. In addition, the study of pointed out that single people are more unemployed than married, because married people often accept lower wages to do their liabilities after marriage. Furthermore, demographic youth bulges and housing discrimination have played roles in unemployment, especially among blacks in the central cities. Additionally, a lack of confidence and poor English communication

skills are considered other factors that lead to unemployment, especially in countries that do not use English as a native language. This cause supported by many studies. As for the market dimension, supply and demand are pointed out as other important factors that affect unemployment. Consequently, an increasing number of universities graduates do not match the jobs available. Moreover, the decrease in demanded skills causes an increase in the unemployment rate, especially when this decrease is more than the increase in qualified labor. In addition, the people who possess specific outdated qualifications and skills are also unemployed as there is no demand for their expertise and they have not acquired new skills. This resulted from an inability to predict future market demand and a fast response to change. Finally, being excluded from the labor market for many years was cited as the biggest barriers to work that is faced by long-term unemployment, as mentioned in study. Regarding the economic dimension, there are a few studies, such as pointed out that poor economic growth is one of the causes of unemployment, and the gross domestic product (GDP) is related to the unemployment rate, which results in an increase in poverty and low foreign investment.

IV. Mismatch definitions and measurement

The match between the labor supply and labor demand is necessary for society from one side, and companies as well as economy from the other side. The problem of mismatches may produce a lot of consequences on the level of the individuals, which leads to unemployment problem. Moreover, its consequences are extended to include wage penalties, job dissatisfaction, and so on. Mismatch has many types and measurements; this section describes them. Mismatches defined in study as an imbalance between the job performed by people and their education and skills. Moreover, there are many types of mismatch that mentioned in the literature review. For example, the studies of defined skills mismatch as an imbalance between the acquired skills from education and the needed market skills. Moreover, this mismatch measures the level of skill which classified into two categories; over-skilled and under-skilled. Over-skilled means a person's skills are under-utilized in their job. However, under-skilled means the current work requires more skills from a person than their current skills.

V. Discussion

The most obvious findings to emerge from the analysis of literature reviews are that some causes of the unemployment problem are similar across many countries such as job skills

mismatch, supply and demand, and the competence level of the graduated students. Whereas other causes are related to a few numbers of countries, such as ineffective labor market information system, gaps in the employment policy, and poor economic growth. Moreover, it is interesting to note that the job skills mismatch still makes a large contribution to the unemployment problem in many countries. Therefore, based on authors' knowledge, if this cause is solved by using effective methods, perhaps this will lead to a decrease in other causes of unemployment, or at least partially tackle some of them, since they believe other causes are interwoven with job skills mismatch and dependent on some others. Furthermore, contrary to expectations, all the previous solutions and suggestions which presented in the mentioned literature reviews did not invest the advanced technologies to solve this unemployment problem. Based on that, those solutions may have a long-term impact than short-term, since they may solve this problem reactively. On the other hand, advanced technologies may contribute to solve this problem proactively, and then they have a short-term impact.

VI. Conclusion and future work

We conclude from the comprehensive literature review that the unemployment problem still exists in many countries across the world. This unemployment problem results from many causes, and some those causes have existed in many countries, while other causes are related to a few countries. Additionally, the mismatch problem was considered as one of the main causes of unemployment problem, since it contributed to unemployment in many countries as mentioned. Therefore, Section 4 concentrated on mismatch by defining its types and measurements. To answer the research questions, the studies from 2000 to 2019 were reviewed. Obviously, all those studies did not use advanced technologies such as machine learning to solve the unemployment problem; they used reactive solutions than proactive. As we live in circumstances, market fluctuation, and unforeseen conditions, such as economic fluctuation, inflation fluctuation, and so on, the authors believe that the reactive solutions are not suitable tools to solve this problem, as they cannot predict the market demand and response to change quickly. Based on that, further research should be undertaken to investigate the impact of using such advanced technologies as machine learning algorithms on unemployment rates

VII. References

- Blustein, D. L., Duffy, R., Ferreira, J. A., Cohen-Scali, V., Cinamon, R. G., & Allan, B. A. (2020). Unemployment in the time of COVID-19: A research agenda. *Journal of Vocational Behavior, 119*, 103436.
- Smed, S., Tetens, I., Lund, T. B., Holm, L., & Nielsen, A. L. (2018). The consequences of unemployment on diet composition and purchase behaviour: a longitudinal study from Denmark. *Public health nutrition, 21*(3), 580-592.
- Alzoubi, F. A., Al-Smadi, A. M., & Gougazeh, Y. M. (2019). Coping strategies used by Syrian refugees in Jordan. *Clinical nursing research, 28*(4), 396-421.
- Ali, A., & Zulfiqar, K. (2018). An assessment of association between natural resources agglomeration and unemployment in Pakistan.
- Peters, M. A., Jandrić, P., & Hayes, S. (2019). The curious promise of educationalising technological unemployment: What can places of learning really do about the future of work?. *Educational Philosophy and Theory, 51*(3), 242-254.
- Soylu, Ö. B., Çakmak, İ., & Okur, F. (2018). Economic growth and unemployment issue: Panel data analysis in Eastern European Countries.
- Apostolopoulos, N., Newbery, R., & Gkartzios, M. (2019). Social enterprise and community resilience: Examining a Greek response to turbulent times. *Journal of Rural studies, 70*, 215-224.
- Axelrad, H., Malul, M., & Luski, I. (2018). Unemployment among younger and older individuals: does conventional data about unemployment tell us the whole story?. *Journal for labour market research, 52*(1), 1-12.
- Adelowokan, O. A., Maku, O. E., Babasanya, A. O., & Adesoye, A. B. (2019). Unemployment, poverty and economic growth in Nigeria. *Journal of Economics & Management, 35*, 5-17.
- Goli, A., Tirkolae, E. B., Malmir, B., Bian, G. B., & Sangaiah, A. K. (2019). A multi-objective invasive weed optimization algorithm for robust aggregate production planning under uncertain seasonal demand. *Computing, 101*(6), 499-529.