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Bridging the Gap: Addressing the Disparity between Higher Education Knowledge and Industry Needs

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ABSTRACT

Job mismatch, which has been described as a discrepancy between skills possessed by individuals and those demanded by the labor market, has become a prevalent issue with significant implications for individuals, organizations, and society at large. This paper explores the causes and consequences of job mismatch and proposes strategies to address this challenge. Drawing on existing literature and personal experiences, the paper highlights the role of technological advancements, inadequate education and training systems, and changing job requirements in contributing to job mismatch. It discusses the adverse effects of job mismatch on individuals' job satisfaction, productivity, overall well-being, and its impact on organizations' performance and the economy. To mitigate job mismatch, the paper suggests collaborative efforts between training institutions and employers, increased investment in employee training and development, and the use of comprehensive skills assessment tools. By implementing these strategies, individuals can acquire the necessary skills, organizations can optimize their workforce, and societies can foster inclusive and sustainable economic growth. This paper provides insights into the complex issue of job mismatch and offers practical recommendations for policymakers, employers, and individuals to tackle this challenge and create a better-aligned labor market.

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KEYWORDS:

Mismatch, Employability skills, Higher education, Industry, Curriculum development

INTRODUCTION

Finding the right people for the right jobs is becoming more difficult for employers. The challenge of job mismatch is at the centre of concerns faced by managers, human resource specialists as well as strategists in training and development. The problem is not having a good number of skilled employees, but rather what is critical for organizations is to perform and be competitive in allocation of resources (Mwamba, Musonda and Daka; 2021).. According to Velciu (2017), job mismatch is a situation in which workers' skills and/or qualifications are not properly aligned with the competences required for the available jobs. A mismatch can occur when skills of the work-force are not keeping up with the skills required for the available jobs, or when the qualifications required for a job are too high or too low (Mwamba, Musonda, Daka and Mulenga; 2021).

This phenomenon can have severe consequences for both the employee and the company, since it can affect outputs and productivity. Velciu (2017) adds that there could be vertical mismatch when inadequacy exists at the level of skills or competences or education (the level of skills is higher or lower) and horizontal mismatch when inadequacy exists due to the type of skills, competences or education is different from the desired one. And Jonbekova (2015) indicates that educational and skills mismatches are the most frequently studied field among other types of job mismatch, they dominate the debate within the literature. Although the two

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appear as distinctive types of mismatches, they are actually interrelated, with the educational mismatch sometimes leading to skills mismatch. This problem can be seen in both the private and public sectors. However, the central focus of this paper is the identification of a mismatch in knowledge and skills between what is attained in the learning institution and what is found in the workplace. The paper will discuss the causes, consequences, and strategies for addressing the situation.

According to Jonbekova (2015), educational mismatch refers to the correspondence between the level of education possessed and the level of education required for a given job, which may occur when the attained level of education exceeds or falls below the level required for a job. While skills mismatch is a situation in which workers' skills exceed or lag behind those employers seek. The mismatch can be caused by several factors. Existing research suggests that to a certain degree skills mismatch is found in all types of economies and is related to educational, employment, and economic factors. It has been reported that skills mismatch would seem to be related to employment, educational, and socioeconomic factors (Musonda, Trinity, Mulenga and Daka; 2023).

It is indicated by Velciu (2017) that skills mismatch might be related to employment, education, and socioeconomic factors. The consequences of job mismatch can have severe implications for employees and companies, impacting outputs and productivity. This review article explores the causes, consequences, and strategies for addressing the mismatch between the knowledge gained in higher education and the industry.

Purpose

This paper aims to investigate and address the mismatch between the knowledge and skills gained in higher education and the industry, focusing on identifying the causes, consequences, and strategies for resolving this issue.

Research Questions

1. What are the primary causes of job mismatch between the skills and qualifications of workers and the requirements of available jobs?
2. What are the consequences of job mismatch on individuals and organizations in terms of job satisfaction, productivity, and turnover?
3. What strategies or interventions can effectively address job mismatch and improve the alignment between individuals' skills and the needs of the labor market?

METHODOLOGY

To conduct this review, a comprehensive search was conducted to identify relevant literature on job mismatch, specifically focusing on the discrepancy between knowledge gained in higher education and industry requirements. Various databases, including academic journals, research papers, and reputable online sources, were utilized for data collection. Keywords such as job mismatch, skill gap, education-employment mismatch, and knowledge-industry discrepancy were employed to ensure a comprehensive search. Only studies published since 2000 were included to ensure the relevance of the findings. The selected literature was critically reviewed and analyzed to extract key insights, identify common themes, and provide a comprehensive understanding of the issue. The collected data was then synthesized and organized thematically to present a coherent overview of the topic.

The review covered the causes of job mismatch, including employment, educational, and socioeconomic factors. It explored the consequences of job mismatch on pay, job satisfaction, turnover intention, and productivity. Furthermore, strategies for preventing and reducing job mismatch were discussed, including reforms in the education system, fostering industry-academia collaboration, on-the-job training programs, upskilling and reskilling initiatives, and the use of assessments and tests in the selection process.

This review aimed to provide a deeper understanding of the challenges and implications associated with the mismatch between knowledge gained in higher education and industry requirements. By examining the causes, consequences, and strategies, this review intends to contribute to the ongoing discussions on bridging the gap between education and employment, thereby facilitating better workforce allocation and enhancing organizational performance.

FINDINGS

A. Primary causes of Mismatch

i. Employment factors

Discrepancies between the employer requirements and expectations and new employee skills, differences in skills and attributes that are valued by employers, shifts in employers' requirements as a result of technological advancement, and specialisations specific to different sectors and/or types of institutions are some of the employment factors that cause the mismatch (Jonbekova, 2015). In this regard, employers usually complain that their new employees (especially university graduates) only possess theoretical knowledge and principles acquired from formal schooling and need to undergo on-job intensive training in order to acquire appropriate skills before becoming useful to their organizations. As a result, employers tend to look for personal and intellectual attributes to go beyond the subject matter knowledge and skills that are embedded in higher education. Employers prefer "transferable skills," which include analytical and critical thinking, problem-solving abilities, interpersonal skills, working under pressure, teamwork, leadership skills, and recognition of lifelong learning.

Furthermore, advances in technological development appear to be another cause of skills mismatch. Due to rapid technological changes, certain skills may lose their value and

relevance over time; and as the value of some skills diminish, the value of others may increase. However, the degree of skills mismatch also appears to be influenced by the type of job (Jonbekova, 2015). An example would be jobs like teaching or health care, which require specific educational credentials, hence having the lowest incidence of skills mismatch, while sectors such as trade and hospitality that do not require specialized education are found to be more susceptible to job and skills mismatches.

ii. Educational factors

In addition, education-related factors are also the causes of skills mismatch. According to Jonbekova (2015), graduates from more specific disciplines face fewer mismatches than graduates with degrees that embody a general focus. For instance, graduates from the social sciences, arts, and language programmes are more likely to be overeducated than engineering, technical, or science graduates.

iii. Socioeconomic factors

Apart from educational and employment factors, the degree of skills match is also influenced by socioeconomic factors. It is indicated that individuals are more likely to accept jobs that do not fit their field of education during periods of high unemployment. Moreover, skills mismatch also seem to be related to geographical location in that those living in far areas sometimes face difficulties commuting to places where suitable jobs are located and in such cases, individuals cannot use their qualifications and skills (Ibid). This leads to informality, as it impacts individuals' decisions to accept mismatched employment where people would be willing to take informal jobs, mainly because they had no other employment choices (Palmer, 2017).

One of the authors of this article went through a similar situation of mismatch when she joined the public service/government from a higher learning institution (University). She lacked soft skills which the organization place value on. The challenge here is that the recruiters place significant value on the acquisition of people focusing on managerial capabilities. However, during the recruitment process, employers' actions deliver a different message as they tend to make selection decisions based on the possession of technical skill. Although the first author's qualification matched the needs of the organization, the skills did not match the needs of the job because she lacked soft skills such as leadership, communication, and interpersonal skills. The technical skills she formally acquired during university education did not necessarily translate into skills that could be utilized in employment until she was awarded a training opportunity. Here the problem was largely attributable to the training institution (University) which focused much on academic orientation and not enough to apply theory into practice. In other words, the employee was not fully prepared for the corporate world ahead. The following section therefore looks at the effects /consequences of the mismatch.

B. Consequences of job Mismatch

The mismatch between university acquired skills and the demands of industry have significant implications and negative effects on the quality of employment and in decreasing productivity as well as organization's competitiveness. These consequences can be very serious since they have a significant effect on overall pay, job satisfaction, performance and labour turnover. Palmer (2017) argues that if employees are under-utilized by employers in the workplace, and the skills they possess are not used effectively to support product and market innovation, typically their earning power and productivity is lowered, their job satisfaction is lower, they tend to change jobs more frequently and all this represents a cost for businesses. Some of the consequences from the review done in this article are discussed below.

i. Effects on Pay

Regarding effects on pay, overeducated workers suffer a pay penalty relative to their matched counterparts with similar levels of education. Because each job level comes with corresponding expectations and compensation, these workers find themselves taking on more than their actual job. Yet somehow, their salary has stayed the same. This may result in frustration and low performance and may further quit the job (Palmer, 2017).

ii. Effects on job satisfaction

Over-education has a negative effect on worker's job satisfaction in such a way that workers who were mismatched are not only more likely to endure wage penalties, but also tend to have lower job satisfaction (Cha, 2010). It has established that over-education is inversely related to job satisfaction which, in turn, is positively and significantly related to firm out-put. Additionally, workers who have lower level of education than the required, are more likely to be dissatisfied with their job than those who are educationally matched. Similarly, skill mismatches have stronger influence on job satisfaction rather than education mismatches (Cha, 2010). Both studies (Park, 2014 and Palmer, 2017) agree that skill surplus has negative effect on job satisfaction.

On the other hand, skill deficits have significantly positive effect on job satisfaction. However, the skill deficits are not always bad, in themselves. One possible explanation is the opportunity for skill development caused by job on training and learning opportunities. For instance, the working environment demanded the employee (Palmer, 2017) at the start of her job to demonstrate some more skills and she was motivated to participate in training and being engaged in learning-on-the-job-activities from her supervisors and co-workers. This resulted in an increase in skill development and further job satisfaction

iii. Effects on turnover intention

It is indicated that over-education causes high labour turnover (Park, 2004). Here employees who feel like their educational level is higher than the required level do not tend to consider

their current job as their permanent job. Therefore, they make every effort to look for other jobs that will match their own educational level (Velciu, 2017) .

Apart from over-education, over-skilling also has a significant positive impact on turnover intention (Cha, 2010). People working in an environment that demands lower skill levels than their own are more likely to seek other jobs. This is because having a skill surplus works as an incentive for them to find a job that would make use of their skills more. On the other hand, a skill deficit has no significant effect on turnover intention.

iv. Effects on productivity

In addition, the job mismatch has negative effects on work productivity. Obviously, if employees have a high level of education and skills and do not use them, they represent a loss of resources and work potential. This is to say that over-skilling directly relates to lower labor productivity due to less efficient allocation of resources (Velciu, 2017).

In the case of workers with fewer skills than required, there is less productivity on average compared to those working at their own level. Allen (2001) states that it is not because their job imposes limitations on productivity but because they have less human capital on average.

All in all, job mismatch brings about huge negative effects whose impact is seen through stress and depression, and unhappiness of employees who are less productive and more likely to leave their jobs.

C. Interventions of job mismatch

Preventing skills mismatch requires policy-guided collaborations between higher education institutions and industry. However, most countries do not have strict policies which ensure compliance between partners regarding such collaborations. Additionally, in cases where skills mismatch forms part of policy recommendations, the policy advice is either vague or addresses the areas of mismatch for which there is the least available evidence (McGuinness et al., 2018). For policies to be responsive to the skill needs of the industry, they must contain contextualised solutions on university-industry collaborations, upskilling and reskilling, industry-driven curriculum development and employability skills and recruitment strategies.

i. **University- industry collaborations**

Velciu (2017) states that managing job mismatch requires reforms to be carried out in order to facilitate the transition of young people between education and work and increasing a better response of offers to labour market needs, and enhancing work – based learning. One of the reforms, as indicated by Habito (2013) is that training institutions should be in regular contact and close coordination with the potential employers of their graduates so that they are well-guided on the nature and content of their course offerings in order to be most responsive to the requirements of the firms. And the most common way this contact can happen is through on-the-job training (OJT) programs. In this way, linkages between industry and academia are strengthened to foster relevant courses and curriculum design, thereby helping the schools address the problem of job-skills mismatch. However, most organizations do not take OJTs seriously, because they see them as a burden, and they also do not want to meet supervision costs.

ii. **Industry – driven curriculum Development focusing on Employability Skills**

Mostly, higher learning institutions have failed to instill in graduates the appropriate skills and dispositions that enable them to add value to the labour market. Labour markets are currently in a phase of cyclical recovery and undergoing structural transformation due to globalisation, demographic trends, advancing digital technologies and automation and changes in labour market institutions (Brunello & Wruuck, 2019). Since employability rates are often connected to the level of skills and competencies that higher education graduates have acquired (Asonitou, 2015), resolving skill mismatches will require that graduates possess generic skills that will enable them to secure employment in addition to their core skills. Institutions must thus ensure that employability skills are well-researched and incorporated into their curricula (Changwe, Mwanza, Daka and Ng'onomo (2023).

iii. **Upskilling or reskilling**

The other way to address a job mismatch is by upskilling or reskilling to close any skills gap required for the role. This is also a way to expand one's professional expertise without starting all over again (Merez, 2022). It is indicated that there is still a need for continued professional training and development well beyond graduation as this appears to be a response to increased competition and flexibility in the labour market. Thus, continued training and lifelong learning is one way of staying fit in a job market context with shifting and ever-increasing employer demand (Tomlinson, 2012; Mulenga-Hagane, Daka and Kanchebele - Sinyangwe 2020). In addition, the training schools should also play a key role in teaching the skills that are required for jobs in order to reduce the skill gap between tertiary education and industry. Moreover, the school should offer various internship opportunities to students in order to help them find the field of work that they are interested in, and get a hands-on experience.

In the case of one of the author (new employee), it was unfair for the organization to expect her (who had been equipped with only the theoretical aspect of the job) to perform in the absence of an orientation. Therefore, the organization resorted to invest in employee training whereby they arranged an induction training for all new recruits, including graduates, so as to equip them with relevant skills as part of efforts to deal with the mismatch.

iv. **Recruitment strategies**

In addition, the mismatch can be prevented by using tests to assess a person's skills and personality, and by matching

them with jobs that are a good fit. They can include psychometric analysis of the candidate in their selection process (Attri, 2018). The panel for the interviews should not only include the human resource personnel but also the specialists in the field of the job applied for. Employers should also include the required skills for the job in the advert for the job.

CONCLUSION

Overall, the main purpose of this paper was to identify the mismatch between what the author of this essay attained at the University and what she found at the workplace. As already indicated, a mismatch can occur when the skills of the workforce are not keeping up with the skills required for the available jobs or when the qualifications required for a job are too high or too low. It can take many forms and can be used to refer to a variety of situations. Thus, it can be manifested at an individual, organizational, or national economic level. The paper has examined the causes, consequences /effects of the mismatch, and strategies for addressing the mismatch. Lack of attention from public training providers to the needs of the organizations or employers, technological advancements, and information asymmetry, which is a lack of information to match jobs with job seekers, and shifts in employers' requirements are some of the causes of the mismatch. Specifically, the cause of the mismatch that occurred when the employee (one of the authors) started a job was lack of soft skills that she did not acquire at the University, which were required by the organization. The mismatches typically result in a number of consequences, and the implications have a particular significance in the national economy. Considering that the mismatch eventually has a negative impact on performance/productivity pay, job satisfaction, and turnover, it is necessary to promote strategies to utilize advanced talent, which includes economic incentives, such as salaries, psychological compensation, such as job satisfaction, and training opportunities. There is also a need to give the graduates exposure to work life while studying so that they build generic skills of communication, leadership, and teamwork. Therefore, training institutions need to integrate their curriculum with opportunities for students to work on short industry projects and, at the same time, have opportunities to participate in co-curricular activities.

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