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Perceived Education-Job Mismatch in Nigeria: Prevalence, Moderators and Outcomes

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Abstract

Perceived Education-job mismatch is an individual's subjective belief that their education or degree does not align with the requirements of their job. This research aims to investigate the association between education-job mismatch and two groups of individual and workplace outcomes in Nigeria. A second aim also is to test the extent to which these associations can be moderated by personality traits and employability. A sample of 303 (64.7% male and 35.3% female) graduates from Nigeria were recruited and participants agreed to complete an online surveys which included scales on wellbeing (measured using General health question survey) and job burnout (measured using the Maslach Burnout Inventory-General Survey), which represented the individual variables, and job turnover (the intention to leave the job), job motivation (measured using the work motivation scale), job satisfaction (measured using the overall job satisfaction scale), job performance (measuring using the individual work performance questionnaire), and job insecurity (measured by the job insecurity scale), which represented the workplace variables. The research used a cross-sectional research design where questionnaires constructed using Microsoft forms, were used to collect data and analyze. The results suggested that the education-job mismatch is positively correlated with poor wellbeing and job burnout. Also, the education-job mismatch is positively related to job turnover, job insecurity and negatively related to job satisfaction. The moderation results revealed that some personality traits moderate the link between this mismatch and its individual outcomes. However, employability did not moderate the link between this mismatch and workplace outcomes. The findings suggest that the education-job mismatch is a major issue in Nigeria and further research and interventions are required to reduce it particularly for young populations.

Keywords: Education-Job Mismatch; Individual Outcomes; Workplace Outcomes; Moderators

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Introduction

Education-Job Mismatch (EJM): A growing phenomenon

Education-job mismatch is one of the under-reported research topics in the 21st century currently influencing individuals' lives. Some individuals may have a clear understanding and knowledge of this mismatch within themselves, and others may perceive it as a state of dissatisfaction with their overall life or job domains. This issue may be even more critical in societies where individuals have no or limited options to choose and pursue their favored academic majors. Beyond this, losing interest during studying an academic program at university or lacking realistic knowledge about the future of a job are expected to increase the subjective gap between the job and the education one possesses. Currently there is no sufficient data to conclude the particular stage in life this phenomenon influences individuals. Also, there is no sufficient scientific evidence to conclude that this is a slow or fast or even sudden growing phenomenon within individuals. This highlights the importance of conducting further research to identify the nature, outcomes and moderators of this phenomenon particularly in developing countries where the gap may be larger and more profoundly influence individuals.

Perceived Education-Job Mismatch (PEJM) is an individual's subjective belief that their education or degree does not align with the requirements of their job [45]." This occurs when individuals after their education are not employed with their qualification or in their field study. Some of these individuals may not be able to perform their duties to expectation, and may thus begin to feel misused, underused or overused at their place of employment. For example, a mismatch could be felt first, when an individual likes the job he/she holds but he does not like the education he obtained or it could happen when the person finds that the job obtained is not what he/she expected to get with respect to the type or level education he/she obtained.

Studies show that the job-education mismatch is a worldwide phenomenon. According to [36], the mismatches between education and the job have been reported by a number of countries, including Australia, Italy, Japan, and the United States. For example, according to the data obtained from the Programme for International Assessment of Adult Competencies' Survey of Adult Skills (PIAAC) which involved 20 countries from the European Union, Australia, Japan, South Korea, and the United States, South Korea was shown to have up to a 50% mismatch, with the United Kingdom (England/ North Ireland) coming in second, also with a mismatch percentage of 50%. This high percentage mismatch observed maybe due to economic dynamics stemming from nations with largely diverse occupational sectors where workers may have to accept jobs in which they are mismatched as they search for jobs that best suit their skills and qualifications. Also, transferability of certain skills from particular courses such as humanities and health sciences may contribute to lower percentages in education-job mismatch in certain countries compared to others. For example, chemists or biochemists may work in the health industry, drug industry, food industry, education industry and even in the renewable energy industry, because their skills are transferable and thus may not necessarily feel mismatch.

This kind of mismatch between education and job is also common in Africa. Although the number of studies show that most of the relevant studies were conducted in developed countries, there is evidence that shows the mismatch also exists in Africa. For instance, [37] reported a 17.5% education-job mismatch rate in a study that was conducted in ten African countries, including Benin, Congo, Egypt, Liberia, Madagascar, Malawi, Tanzania, Togo, Uganda, and Zambia. Education-job mismatch was reported to be more widespread in Madagascar (84.0%), Benin (81%) and Uganda (76.3%), while in Zambia (46.5%) and Egypt (47.8%) had least. Although these statistics show that both developed and developing countries may face the job-education mismatch, the causes of this mismatch emerging may be different across developed and developing societies.

Antecedents of Job-Education Mismatch

Workers experiencing education-job mismatch do not choose this situation intentionally. Research suggests that this often happens because suitable jobs matching their education are unavailable or require higher skill levels [14]. Graduates may struggle to find jobs in their field due to limited employer demand or a shortage of relevant positions, as seen in countries like Sri Lanka [50]. As a result, they may be forced to accept jobs below their qualifications.

Studies show that this phenomenon is caused by conditions such as, low levels of education, family's educational background, the pressure from informal sector of the economy comprising of low and unskilled jobs and field of study, among others [5]. Other causes of mismatch could stem from the gap between demand of the labour market and the supply of workers by universities who do not meet the expectations of employers, the quality of curriculum and courses offered in universities. Dabiri (2013) highlighted that most graduates in Nigeria leave the universities without acquiring the skills necessary to function professionally in the labour market thereby increasing the unemployment rate and incidence of various forms of mismatch among the employed.

Types of Job-Education Mismatch

Currently there are different classifications of job-education mismatch. In a sort of classification suggested by [45], terms such as, "overeducation", "overqualification", and "underemployment", and "skills-job mismatch" have often been used to mean education-job mismatch. Although these terms refer to different states or positions a job holder may experience, the perception of dissatisfaction that may arise is conceptually considered as the same in mismatch people may report. For example, "Overeducation" has often been used for studies related to graduates, higher education, and the kind of jobs they work and "Overqualification" is usually employed when talking about the interplay between work and outcomes such as job satisfaction, and job motivation [3]. The term "underemployment" is mostly used concerning employment, organization, and working conditions [2].

A different classification of job-education mismatch is introduced by the International Labour Organization [28]. The first classification defines a type of mismatch where a comparison is made between individuals who are employed and those who are unemployed. However, the second classification is the type of mismatch that involves comparison within the employed population. The term job-education mismatch refers to the second form of mismatch, which is further divided into vertical and horizontal mismatch.

A vertical mismatch, in its simplest form, happens when an individual's initial educational background either meets or does not meet the educational requirements of a position [3]. In other words, it compares the degree of education obtained with the degree of education required to carry out a job, measuring the mismatch in terms of level. Another term for it is a mismatch in study level as opposed to study kind. On the other hand, a horizontal mismatch happens when a person's field of study and their line of work do not align [3]. A medical doctor, for instance, is considered to be in a vertical mismatch if they work as nurses; but, if they work as librarians or media correspondents, they are said to be in a horizontal mismatch.

Vertical mismatch falls into three categories: matched, undereducation, and overeducation. Overeducation occurs when a person works in a field that requires a higher level of education than they have obtained, and undereducation occurs when a person works in a field that requires a lower level of education than they have obtained. Conversely, there is a match when a person's educational experience corresponds with the educational prerequisites of their position [3].

Education-Job Mismatch in the context of Nigeria

Nigeria is located in west part of Africa continent with a population about 250 million people according to the National Bureau of Statistics (2019). Nigeria currently has a total of 274 universities, comprising 62 federal, 63 states and 149 private universities acting executive secretary of National Universities Commission (NUC), Mr Chris Maiyaki (Idoko, 2024). The enrollment of students at Nigerian universities is presented for full-time and part-time undergraduate and postgraduate levels, respectively. Enrolments at the undergraduate level are organized by university, level, programme, discipline, and ownership. Similarly, postgraduate enrollments are organized by university, level, programme, discipline, and ownership.

According to the report by National Bureau of Statistics (2019), a total of 2,159,461 students were enrolled directly by the Nigerian university system at both undergraduate and postgraduate levels through full-time and part-time modes, out of which 43.1% are females [38]. In 2022, the Joint Admissions and Matriculation Board (JAMB), which is the body responsible for providing admissions into the Nigerian tertiary institutions, disclosed that about 600,000

(representing 33.3% of candidates) were admitted into tertiary institutions across the country in its 2022 admission processes (Bolaji, 2023). These students were enrolled usual undergo a rigorous examination process known as the unified matriculation exam and must meet up with certain cut-off marks to be enrolled to the programmes of their choice. Also, the student must have at least five credits in their O'level subjects' general examinations including Mathematics and English language. This could be the West African Secondary School Certificate Examinations (WASSCE) or the National Examination Council general examination (Aminu *et al*., 2023).

The National University commission (2019) reported the percentage enrollment in various disciplines in Nigerian tertiary institutions as follows; Sciences (17.07%), Social Sciences (16.10%), Administration and Management (14.27%), Education (13.48%), Engineering and Technology (6.86%), Arts (6.54%), Agriculture (6.30%), Basic Medical and Health Sciences (5.97%), Computing (5.23%), Law (3.52%), Environmental Sciences (2.42%), Medicine (1.34%), Pharmacy (0.66%), and Veterinary Medicine (0.24%).

While certain disciplines consist of programmes that equip these students with skills that meet the demands of the labour market, others do not. Pitan and Adedeji (2012) highlighted that graduates in health sciences, social sciences and education tend to be more equipped with requisite skills for employment. This also implies that they tend to be less mismatch in terms of skill-job mismatch. However, they reiterated that generally skills such as communication skills, numeracy and computer literacy were still lacking in graduates supplied by Nigerian Universities.

The labour market for the Nigerian graduate is not straightforward. The formal and informal sectors make up the two main segments of the labor market in Nigeria, with the informal sector creating a larger proportion of new jobs overall [2]. The National Bureau of Statistics of Nigeria classifies employment in enterprises with ten or more employees as formal sector employment, whereas employment in organizations with fewer than 10 employees is categorized as informal sector employment [38].

The informal sector is characterized by the lack of proper organization, bookkeeping practices, and registration with government regulatory authorities [1]. It majorly involves unskilled workers (without formal education), such as laborers, craftsmen, street vendors, hawkers, small-scale dealers, micro-entrepreneurs, home-based workers, cobblers, porters, and so forth. This makes the informal sector advantageous because it provides employment to individuals irrespective of background or academic qualifications, since most of the responsibilities involved in this sector do not necessarily need formal education skills. However, the downside is that these jobs do not have fixed wages and job security is rarely guaranteed [19]. The informal sector is responsible for up to 72% of jobs created in the country. The formal sector comprises the public and private sectors both of which collectively are responsible for 38% of the jobs created in the country, even though the private sector accounts for 87% jobs created by the formal sector [2].

Given that the majority of available jobs fall in the informal sector, many individuals, especially tertiary institution graduates, find themselves in jobs that do not correspond to the skills they have acquired from their fields of learning in colleges or universities. Indeed, before they attend university and study in a particular field, they have some basic info that their future job may not align with their academic degree. According to the [38], the unemployment rate and the underemployment rate in Nigeria, in the year 2019, stood at 23.1% and at 16.6% respectively. The number of unemployed individuals in Nigeria was estimated to be over 6.3 million in 2021, an increase from 6 million persons in the previous year (Sasu, 2023). The tertiary institutions in Nigeria are estimated to graduate over 600,000 students annually [4], while according to the [60], the country could only create about 450,000 new jobs in the previous year. These figures imply that there is an annual increase in the difference between the number of new jobs generated and the total number of job seekers in the labor market. This not only leaves the graduates with no choice to choose a job mismatched with their education degree but also to compete for getting the mismatched jobs in the job market. A job seeker is expected to have a better chance of landing a position in this competitive environment if they acquire more certificates to catch the eye of potential employers. This encourages job seekers to use their degrees and certificates to persuade employers that they are better candidates than others.

Employers in this scenario compete with one another to draw in job searchers with more education and experience by giving them occupational positions that are lower than the candidate's academic standing [54]. This could be the case because businesses believe candidates with higher education degrees are more qualified to work in a given position. This notion, however, could not be accurate since they evaluate a candidate's credentials rather than their actual aptitudes and competencies. This may further provoke the job education mismatch after an individual enters a job in such a way that the new employee may perceive his competencies much more than the job requires and he may think to withdraw the job [37], however, the difficulty of finding a job in the competitive job market may demotivate the employee to quite a job and tolerate the unpleasant mismatch feeling. In Nigeria it seems to be a defective cycle of competition, and it requires an intervention to stop or fix the cycle. This perception of mismatch may affect the attitudes of an employee to the job (e.g. job satisfaction, job commitment, etc.) leading to the overall inefficiency of the labor market [2].

Statement of Research Problem

The implications of education-job mismatch on individuals, companies, and the economy in Nigeria cannot be ignored. At the firm's level the education-job mismatch is expected to compromise productivity, and returns [41]. Persistence in education-job mismatch in Nigeria could result in the depletion of the labour force of the country and an increase in emigration as citizens will opt to find job positions abroad, where their skills and knowledge can be well-matched. The perception of a mismatch in Nigeria has been further amplified by increase in technological possibilities in the 20th and 21st century, which has been the propelling force in the ongoing shift of the country's major job opportunities from one which only required manual skills to one related to better service delivery with more emphasis in IT proficiency skills, which was not the case in the 18th and 19th century. The nature of the labor market has been significantly impacted by this, especially in terms of the kinds of occupations and skills that are in demand [43].

There has been a growing body of studies in recent decades evaluating the impact of education-job mismatch on labor market outcomes in developed countries [8, 18, 36, 51, 53]. Several measures of the mismatch perception between education and employment

have been developed, and the educational requirements for a given career have been extensively discussed. However, most of the studies have been conducted in the Europe, the US and Asia but little is known about the relationship between education- job mismatch and its associated outcomes across various occupations in Africa, most especially in Nigeria.

Although some studies have recently attempted to inspect the mismatch between the educational background and the job one holds across private and public organizations in Nigeria [2, 41, 43], more studies are needed to provide a detailed information regarding the prevalence of education-job skills mismatch Nigeria Additionally, the government's capacity to propose appropriate measures to close the gap and enhance linkages between education and job requirements has been severely hampered by the lack of applied information on this issue. The lack of information has also hindered the sharing of knowledge between employers and academic institutions, particularly with regard to current industry developments [55].

This research is an attempt to fill this research gaps and provide some basic information about the prevalence, outcomes and some moderators of job-education mismatch in Nigeria. This is particularly important in Nigeria, because the lack of studies is evident, and there are no systematic data or statistics available to exhibit the hidden dimensions of this phenomenon in Nigeria. To address this issue effectively, it is essential to investigate the underlying causes, consequences, and potential factors that may moderate these effects in Nigerian context.

Research Objectives

One of the objectives of this study is to provide basic information and statistics regarding the prevalence of job-education mismatch in Nigeria based on the demographic information of Nigerian employees. This objective can contribute to the purpose to identify what groups of individuals are more impacted by this phenomenon.

A second objective concerns measuring individual factors that are associated with this education-job mismatch among participants. This objective can contribute to determining the degree to which people who believe that their educational background does not align with the requirements of their job may experience and report negative consequences in terms of wellbeing and burnout. This is considered individual outcomes of job-education mismatch in the target group.

A third objective is to measure the association between the extent to which individuals report job -education mismatch and the workplace-related factors. These factors include job turnover, job performance job satisfaction, and job insecurity, job motivation.

A fourth objective is to examine the impact of two potential moderators, namely perceived personality traits, and second, employability between job education mismatch and a wide range of individual and workplace outcomes. This comprehensive analysis will offer a clear picture of the prevalence rate of education-to-job mismatch in Nigeria.

Gaining insight into these moderating factors and their effects would pave the way for the development of interventions that can explain or mitigate the potential adverse effects of education-job mismatch on producing unfavorable outcomes within the Nigerian context. Figure 1 illustrates a conceptual model of these four presented objectives.

This study is designed to reach the following objectives:

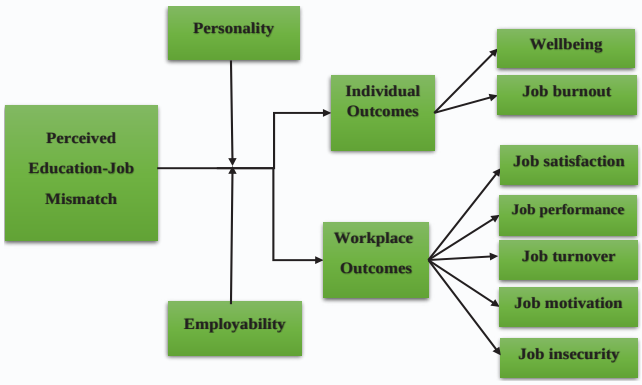

Figure 1: A Conceptual model of the relations between the research variables.

(1) To assess the association between education-job mismatch and individual outcomes including wellbeing and job burnout

(2) To assess the association between education-job mismatch and work-related outcomes including job turnover, job satisfaction, job insecurity, job motivation, and job performance

(3) To evaluate the moderating effects of personality traits on the link between education-job mismatch and wellbeing and job burnout of individuals.

(4) To evaluate the moderating effects of employability on the link between education-job mismatch and organizational outcomes.

Research Questions

(1) Is education-job mismatch associated with wellbeing and job burnout?

(2) Is education-job mismatch associated with workplace outcomes such as job turnover, job motivation, job performance, and job insecurity and job satisfaction?

(3) Do personality traits moderate the link between education-job mismatch and wellbeing and job burnout?

(4) Does employability moderate the link between education-job mismatch and workplace outcomes?

Research hypotheses

(1) Education-Job- mismatch is associated with a) wellbeing of, b). associated with job burnout

(2) Education-Job- mismatch is associated with a) job motivation, b) job performance, c) job satisfaction, d) job insecurity, e) Job turnover

(3) Personality traits moderate the link between a) education-job mismatch and wellbeing outcomes, b) between education-job mismatch and job burnout

(4) Employability moderates the link between education-job mismatch and workplace outcomes

Literature Review

Research Background

Education-job mismatch can be viewed through the lens of different academic fields. In economics, an education-job mismatch occurs when job qualifications do not match the labor force's

educational background. According to Mahuteau *et al.* (2014), an education-job mismatch occurs when an employee's qualifications do not align with the requirements of the position they hold. Education-job mismatch, according to [18], contrasts an employee's educational background with what is needed for their current position. Additionally, [26] defined education-job mismatch as when an employee works in a position that does not align with their level of education, experience, skills, or interests. They also proposed that this kind of mismatch arises from people's needs, values, and expectations interacting with the rewards and characteristics of their jobs. The diversity of the definitions reveals that although this phenomenon influences the individual, but more studies are needed to reveal the strength, and size of these influences on individuals.

Education mismatch is a long-standing problem that was initially noticed in the 1870s [24]. The idea was initially presented by US Commissioner of Education Jarvis in a report titled "Relation of Education to Insanity" [16]. In the report he examined 205 of the 1,741 cases of insanity he found to be the result of "over-study". They saw that there was not much focus on the problem of education mismatch. However, since the 1970s, this idea has received a lot of attention because it seemed that there was a greater supply of educated individuals than there was needed for them in the job market. Freeman (1975) predicted in his book "The Overeducated Americans" that a significant surplus of college graduates would persist for many years [16].

As noted earlier, literature supports two recent types of education-job mismatch [31] that are namely known as Vertical versus Horizontal mismatch. The term "vertical mismatch" refers to the discrepancy between educational attainment and employment status. When a worker's qualification level is below what is needed for the position, there is a vertical mismatch. An example of a vertical mismatch could be overeducation or undereducation. Under-education occurs when a person has less education than what is necessary for work, whereas over-education occurs when a person is hired for a position that requires a lower degree of education [2]. Horizontal mismatch, also known as field-of-study mismatch, occurs when an individual with training in one discipline works in another [36]. On the other hand, it may occur when the workplace and the field of study are out of sync [31]. There may be a horizontal mismatch if an employee's qualification type is inappropriate yet their qualification level is acceptable for the role. For example, a civil engineering graduate may work as a medical sales representative.

Most definitions and uses of the term "education-job mismatch" have been more in line with vertical than horizontal mismatch [9]. The researcher's definition, however, dictates how the terms vertical and horizontal mismatch are used in the literature. Bol *et al.* (2019), for example, categorizes both concepts as "mismatches" and thinks they are equivalent. For example, a doctor who also works as a nurse is considered to be in a vertical mismatch; nevertheless, because it is difficult to discern between the two professions, the doctor and the nurse remain in the same horizontal field of study. Desjardins and Rubenson (2011) explained that there are several reasons why figuring out horizontal mismatch is difficult. To begin with, certain positions—such as those in management and politics—cannot be connected to a certain field of study. Secondly, this concept is vague and unsuitable for the wide field of study that stresses general skills that are more marketable than those learned through specialized training (such as vocational education).

Causes of education-job mismatch

The issue of education-job mismatch can be explained from both a structural level and individual level causes. Education-job mismatch can be seen as a problem resulting from as stated by (Ntemngweh, 2025);

1. Economic weakness
2. Demand and supply imbalances in the labour market
3. The quality of the curriculum and the type of courses offered by the universities
4. The disconnect between universities and the labour market
5. The field of study.
6. Job Search Constraints

Economic weakness: Workers who are mismatched do not consciously seek to be mismatched. According to Montt (2015), mismatch workers are assumed to engage in mismatch jobs either because they cannot find jobs matched with their field of education or because other occupational groups require more skills. Graduates may find it more difficult to get a job in certain professions due to a shortage of employers in such industries if their area of expertise does not match the demand in that market. Robst (2007) states that unlucky people might not be able to find a job that relates to their educational background or area of study because there are not enough positions available on the labor market. For example, Senerath (2012), found that there are not enough jobs in Sri Lanka's formal economy to employ fresh graduates from local universities. Consequently, graduates are forced to take jobs that require less education than they possess if they are unable to locate appropriate career possibilities.

Disconnect between the universities and the labour market: Darkwa and Adu-Gyamfi (2013) claim that the mismatch between the skills taught in higher education institutions and the abilities employers demand is the reason why graduates are unable to get decent positions in the labor market or remain unemployed. The disconnect between the skills that employers value in graduates and those that higher education institutions offer is one factor contributing to this mismatch. Employers have observed that graduates lack the necessary skills to succeed in the workforce [46]. Employers argue that academic standards have declined dramatically over the last ten years and that having a university degree no longer ensures communication or technology competence. University grads are frequently perceived as "half baked" [43]. Despite the graduates' thorough and impressive comprehension of the body of information in technical disciplines, many firms were dissatisfied with their lack of readiness in the applied technical skills needed to solve problems and boost productivity in the workplace. Universities, according to many businesses, place too much emphasis on theory and too little practical training. According to Cedefop (2010), educated youth frequently face difficulties finding job after graduation due to the disparities in the labor market between education and employment. As a result, individuals are compelled to wait for a job that fits their skills or accept any employment without taking into account their degree or area of study.

Demand and supply imbalances in the labour market: Another explanation for the literature-found mismatch between education and job is the relationship between skill supply and demand, as well as the saturated market for graduates with such skills. The labor market is considered saturated when there are more graduates in a given

occupational group than there are jobs available in that occupational group; when there are few opportunities available in a certain occupational group, people are forced to hunt for work elsewhere [36]. According to Green and Zhu (2010), more graduates have entered the workforce in the last few decades. Owing to the increase in graduates, supply now outpaces demand, pushing recent grades into non-graduate roles and raising their unemployment rates [21].

The quality of the university curriculum and the type of courses: The quality of human capital is determined by the type of skills taught, the form of the university curriculum, and the extent to which those talents can be applied. The number of unemployed and mismatched graduates in the labor market rises when university graduates leave without acquiring the skills needed to win profitable jobs in related industries after graduation [12]. According to ILO (2012) research, there is a connection between graduates' poor job fit and inadequate education from outdated curricula and teaching methods. The literature also cites the quality of human capital as an explanation for graduates' employment mismatch (Economist Intelligence Unit research for the British Council, 2014). The quality of human capital in this place is determined by the type of skills taught, the form of the university curriculum, and the extent to which those talents can be applied. The number of unemployed and mismatched graduates in the labor market rises when university graduates leave without acquiring the skills needed to win profitable jobs in related industries after graduation [12].

In the educational systems of developing countries, theoretical knowledge is valued more highly than practical knowledge [42]. This is because many institutions of learning prefer the rote method of learning, which focuses on memorizing facts, figures, or sequences rather than grasping the meaning or application of the material. This method of learning is generally ineffective at training professionals to think critically and creatively about the development needs of their nations. As a result, educated young people struggle to keep up with the changing needs of the contemporary economy.

Paadi (2014) pointed out that graduates of universities generally have theoretical knowledge from textbooks that is not supported by enough practical job experience. Furthermore, graduates must deal with prolonged unemployment and mismatched employment in countries where economic growth is not swift enough to fund large-scale initiatives targeted at producing skilled positions. Employers are reluctant to take on graduates who lack practical skills and experience in the sector. Because of the increased use of technologically advanced industrial procedures, employers now prioritize graduates with more competence and experience above those with theoretical and broad knowledge (Pauw *et al*. 2008). While, most educational institutions in developing countries do not incorporate basic life skills into their courses. Career fairs, industrial talks and internship programmes are rarely implemented in most universities. Programmes such as career fairs, industrial talks and internships, which could help provide more real-world experience to classroom learning, are frequently overlooked by universities (Callanan, 2003).

Field of study: The academic field influences the mismatch between education and employment. A field-of-study mismatch occurs when an individual with training in one discipline works in another. An employee can be matched to a job based on the information-processing skills they possess (skills match) or the amount of education they have received (qualifications match), but not on the type of education they have received (Montt, 2015). For example, a candidate with a Master's degree may be given a job in sales and marketing or banking and finance without necessarily having a degree in the said field. The employers believe these candidates possess better abilities to be trained in the field than other candidates with lesser level of educational qualification. Therefore, graduates in certain fields who tend to experience high risk of unemployment tend look forward to obtain higher qualifications to improve their prospects of employment while risking the probability of a mismatch (Albert *et al*., 2023). According to Robst (2007), graduates of arts programs are most likely to have mismatches, whereas graduates of health-related subjects are least likely to have them. This is because health-related courses equip students with skills specific to their field of study, hence decreasing the likelihood that they will pursue employment outside of it [59].

Job Search Constraints: The mismatch between graduates' education and employment may also be caused by limitations on job searches [35]. People may end up in jobs that are not a good fit for them even though they possess the essential skills to meet their favored job criteria. Incomplete information about job opportunities and labor market demands could be the cause of this (Bassey & Atan, 2012). This could be because job seekers are unaware of the range of options available to them, they might not be able to travel to places where positions that match their qualifications and skill level are situated [6, 26].

Consequences of the education-job mismatch

Senarath and Patabedige (2014) state that a mismatch between education and job has negative consequences for an individual, a company, and society as a whole. It is stated that individuals working in fields unrelated to their degree program will incur a significant wage penalty [39, 44]. There is also a connection between a mismatch in education and work and lower job satisfaction [31]. People who are mismatched report lower levels of job satisfaction [18]. A person's initial objectives are not met, and they feel down by unfulfilled expectations when their profession does not correspond with the field of study they have chosen before [36].

As noted earlier, a worker's education and employment have a detrimental effect on their occupational position. According to Montt (2015), mismatched workers might be the first to be fired by employers in hard times if they are less content with their jobs or less productive—as seen by their lower salary and early lack of job-specific abilities. If the employees themselves are not as satisfied, they may be more likely to quit to reduce unpleasant feeling of this mismatch. Wolbers (2003) asserts that a recession gives businesses a chance to select their most productive employees, who are most often the matched ones or at least the ones who are most likely to be seen as such. Due to this field-of-study mismatch, employers may experience decreased productivity, increased job hunting while an employee is on the job, and possibly increased turnover intentions [59].

Hiring mismatched workers has obvious consequences for employers because it means they have to teach new hires for the field-specific skills they lack [39]. The last aspects of field-of-study mismatch for the economy are the need to train workers for the field-specific skills required for their jobs, the overall productivity losses, and the (expensive) provision of field-specific skills in formal training that will not be used by workers in their mismatched job.

The lost investments by mismatched workers, which eventually impact the economy as a whole, are linked to the consequences of

education-job mismatch for society and the nation as a whole. Mismatched workers who face wage penalties may be less productive than matched workers because they lack the field-specific abilities of their matched counterparts (Sattinger, 1993), at least until they obtain these skills through on-the-job training or work experience. Furthermore, if mismatched professionals stay mismatched throughout their careers, it implies that they are not using the field-specific skills they have learned from training, indicating that their educational costs have already been incurred. For those overqualified and mismatched by the field of study, most of the training that led to their highest qualification can be seen as a sunk expenditure.

Challenges arising from Education-Job Mismatch in Nigeria

There are two interconnected aspects that provide the theoretical foundation for the job-education mismatch in Nigeria. First, there is the propensity for students to choose a course of study that is not a good fit for their skills and talents. Career perception from family stemming from their own career paths or choices they think are not suitable without considering the skills and talents of their children. There is also the tendency for influence from peer pressure with students opting to study courses chosen by their peers without necessarily considering the field of study suitable to their own talents. The lack of sufficient information about different jobs, the course of study as well as other activities are among such reasons students are thus unable to judge whether they would like all that their choices actually entail (Chukwu *et al*., 2022).

According to Bender and Heywood (2009), choosing a university major is a significant precursor to the subjective education-job mismatch because it is a common challenge for students caused by a lack of awareness and the absence of career advisors in most Nigerian institutions. Nigerian students face significant challenges in gaining admission to their preferred universities and programs, which forces them to choose courses that do not suit their interests, skills, or talents. Somers *et al*. (2019) note that opting for a program aligned with a student's profile is essential for future job success and financial independence. However, the reality of not being able to gain admission into programs that fit their profile for a career path has already contributed immensely to the concept of education-job mismatch. This is particularly down to the lack of available slots for certain programs in Nigerian universities which most times are reserved for certain elite in society [40]. It has been observed that graduates with majors in social science, law, business, health, and engineering are less likely than graduates in other fields to experience a mismatch between their education and job [2]. This leads to a competition for these programs and students not wanting to settle for another year of seeking admission for their desired program, might accept to study the available programs leading to a different direction in their desired career path.

Theoretical Approaches Explaining Education-Job Mismatch

According to Witte and Kalleberg (1995), the issue of education-job mismatch has theoretical significance since it clarifies how and why people in the labor market are not a good fit for their jobs. Several theories have been proposed to explain education-job mismatch. Among the theories are:

a) Human capital theory

c) Job competition theory

d) Job-fit theory

The three relevant theories are briefly introduced below.

Human capital theory: According to Becker (1993) human capital theory postulates that those who possess the greatest skills, training, education, experience, and so on, are thought to be most productive and would likely secure jobs that best identify with their education, resulting in higher salaries and relative job satisfaction. The human capital theory supposes a distinct, direct, and linear link between educational attainment and economic growth. According to this theory, individuals who continually discover that their degree and current position are not an ideal match will eventually locate a position that best utilizes their abilities, expertise, and capabilities. In light of this, the human capital theory contends that the gap between education and employment is really a little problem that should be resolved by the market [36].

Job-competition theory: According to the job-competition theory developed by Thurow (1979), the availability of jobs and workers determines how jobs are distributed [18]. Workers may enter mismatched jobs when there is an excess demand for labor or occupations and employers of labour also experience education-job mismatch when there is a shortage of workers in the corresponding field. As a result, employers may need to seek candidates from other fields to fill the vacancies [36]. They may also require academic qualifications for job positions that do not require an academic degree just to reduce the number of applicants for certain vacancies that experience large amounts of applications. In this case, education simply serves to obtain the job for the sake of a salary, not for the sake of human capital and all workers in this given job are paid the same irrespective of their educational attainment [18].

Job-Fit Theory: Job-fit is a sub-concept of the person-environment fit theory. This idea, which is a branch of the person-environment fit hypothesis first put forth by Parson (1909), describes how individual attributes influence behavior, attitudes, actions, and general well-being. The theory states that favorable outcomes are seen when an individual and their workplace are congruent, while negative consequences result when they are not. An employee's fit within the organization significantly influences behavioral outcomes, including job satisfaction, motivation, and performance [56].

This theory is originated from the theory of work adjustments (TWA), which maintains that an employee's abilities are essential to meeting and satisfying work demands and largely depend on the organization's provision of desired conditions [56]. The current literature on the Person-Job fit highlights two essential postulates: Need-supplies fit and demand-abilities fit. Demand-abilities fit results when an employee's skills and knowledge match the requirements of the position (Van-Vianen, 2018). For example, the abilities needed for different vocations may vary in terms of being handy, soft, analytical, and mathematical, thus an English graduate applying for a career in scientific research might not be able to match the requirements. When an employee's needs—such as the requirement for a comfortable workplace—align with the duties they execute on the job, this is known as "need-supplies fit" [56]. In such instances, employees can derive supply from completing set job tasks, enhancing their efficiency [56].

Review on previous studies on education-job mismatch

The topic of job-education mismatch has seen the emergence of several empirical research. (e.g., Bender and Heywood, 2011;

Table 3.1: Descriptive Statistics of Participant Demographics (*n* = 303)*

Variable	Category	Frequency	Percentage (%)	Valid %	Cumulative %
Gender	Male	196	64.7	64.7	64.7
	Female	107	35.3	35.3	100.0
	Total	303	100.0	100.0	
Marital Status	Single	213	70.3	70.3	70.3
	Married	87	28.7	28.7	99.0
	Divorced	3	1.0	1.0	100.0
	Total	303	100.0	100.0	
Education Level	High School	6	2.0	2.0	2.0
	Diploma	25	8.2	8.2	10.2
	Bachelor's Degree	183	60.4	60.4	70.6
	Master's Degree	80	26.4	26.4	97.0
	Doctorate/Higher	9	3.0	3.0	100.0
	Total	303	100.0	100.0	
Job Contract	Private Sector	232	76.6	76.6	76.6
	Public Sector	71	23.4	23.4	100.0
	Total	303	100.0	100.0	

Note. Percentages may not sum to 100% due to rounding. "Valid %" excludes missing data (if any); in this sample, all cases were valid.

Farooq, 2011; Sharaf, 2013; Vermeylen *et al*., 2014; Montt,2015; Taghizadeh, 2017). One of the first to use panel data of scientists in the United States is the study by Bender and Heywood (2009), the authors examined how mismatch arises and how it impacts a person's career. The results indicated that mismatch incidence and its negative effects are significant among individuals in their later phases of their careers. Farooq (2011) also studied Pakistan's employment mismatch rates. According to his research, one-third of the graduates had an education-to-job mismatch, which was very common among women. He faulted the rising enrolment of females in higher education with limited participation in the labour market mainly due to labour market discriminations and social-cultural constraints. Sharaf (2013) demonstrated through a longitudinal survey of immigrants to Canada that two-thirds of the immigrants had overeducation and a high rate of job-education mismatch, which had a detrimental effect on their income. Vermeylen *et al*. (2014) looked at the connection between over-education and educational mismatch. The authors discovered that although undereducation was detrimental to a company's output, overeducation was beneficial.

According to data from the Survey of Adult Skills (PIAAC), Montt (2015) revealed that approximately 40% of workers were mismatched by their field of study; 11% were overqualified in their field; and 12% were overqualified and worked in a different industry.

Similarly, Taghizadeh (2017) used a random sample of 366 graduates from Urmia City, Iran, to investigate the relationship between over-education, educational-job mismatch, and the skills of university graduates and job searchers. The results demonstrated that job-education mismatch was significantly influenced by age and skill sets. He explained that as the age of job seekers grew the possibility of taking jobs that require less education than that of job seekers decreased. The reason for this, he explained, was due to high unemployment among educated young people, and the need to escape unemployment makes them consider this mismatch temporary and apply for jobs with less education than obtained.

On the other hand, literature on job-education mismatch is scanty in Nigeria. Pitan and Adedeji (2012) studied the incidence and extent of skills mismatch among employed university graduates in Nigeria's labour market. The findings from the study showed that there were gross inadequacies in the supply of skills such as analytical skills, entrepreneurial skills, communication skills, decision-making skills, IT skills, interpersonal skills, self-directed learning skills, technical skills, and numeracy skills (except problem-solving skill), as needed by the employers and by extension the labor market. A skill mismatch of 60.6% was identified among recent graduates. Communication skills, IT skills, decision-making skills, critical thinking skills, interpersonal relationship skills, entrepreneurial skills, technical skills, and numeracy skills were found to be critically deficient.

Also, Ogbeide *et al*. (2022) examined the incidence of job-education mismatch in a monopsonist firm located in a rural setting in Nigeria. They reported that nearly 23 percent of 168 employees and allied workers of a monopsonist firm in a rural community in Esan West Local Government, in Edo State, Nigeria, were holding positions far below their qualification or field of study. This, they concluded, was a result of the high rate of unemployment coupled with the high poverty rate prevalent in the country. The authors also found a relationship between the sources of job-education mismatch (e.g., age, gender, marital status, and spouse's jobs) and the incidence of job-education mismatch in Nigeria. According to these studies, the complex interplay of factors contributing to the education-job mismatch in Nigeria, including high unemployment rates, an abundance of graduates, and limited job creation. While there is a dearth of specific research on this topic in Nigeria, insights from studies in other countries suggest that addressing education job mismatch is crucial for improving employment outcomes and economic productivity.

Methodology

Research design

The research utilizes a cross-sectional research design where the quantitative data is collected and analyzed at once. Considering the mature of education-job mismatch, this research is conducted on

the population of university graduates. The education-job mismatch among graduates is represented by both overeducated, undereducated or those individuals whose jobs are different than their field of study in the university.

This research includes three types of research variables. First, independent variable, which is subjective education-job mismatch. Second, individual dependent variables, which are general health and job burnout. Third, workplace dependent variables are job turnover, job motivation, job satisfaction, job performance, and job insecurity. Both personality traits and employability were considered as moderators of these associations.

Procedure

The research started with a literature review and the aim was to identify the possible outcomes and moderators of education-job mismatch. This step led to selection of research variables and theories/models that could support the hypothesized relations among research variables. To recruit participants, the G*Power program (https://www.psychologie.hhu.de/arbeitsgruppen/allgemeine-psychologie-und-arbeitspsychologie/gpower) was used to calculate the sample. In this study, a convenience snowballing sampling methods was used. A questionnaire was made which included questions related to demographic information and the research variables. The questionnaire was created using Microsoft forms and distributed online via social media platforms. Only participants who met the inclusion criteria could participate in this study. The questionnaire included a short introduction by the researcher detailing the research goals of the study. Prior to their participation, they were asked to agree with conditions of the study and show their consent by marking the consent form. Participants were informed about unanimous nature of the study and they were ensured that the data will be treated confidentially.

Given that the questions were not organized with respect to the study hypotheses, there was no need to randomize the question and there was also no probable risk of manipulation of responses. Sensitization was carried out to improve the outreach of the questionnaire. The process of data collection lasted 3 months and overall, 311 filled questionnaires were collected. Of those, 8 were discarded in data cleaning step due to lack of carefulness in responding or a high number of missing responses.

Participants

This research targeted Nigerian workers with formal employment situation in both public and private sectors. The participants were required to be in current employment for at least a year. The information regarding the graduates was obtained from the Nigerian Universities Commission (NUC) in the following fields: science, engineering, arts, administration, education, medicine, agriculture, and social science.

The final number of respondents was 303, of which 64.7% were male while 35.3% were female. Also, 70.3% of the respondents were single, 1% were divorced and 28.7% were married. Of the 303 respondents, 60.4% hold a bachelor's degree, 26.4% hold a master's degree, 8.2% had only national diplomas, 3% had doctorate degrees and 2% had only high school certificates. Also, 76.6% worked in the private sector and 23.4% worked in the public sector. The average age of the respondents ranged from 22 – 68 years with an average age of 31.5 years (SD = 6.92).

Measures

The independent variable:

Subjective Education-job Mismatch Scales: This construct is assessed using the scale developed by Fatykhova and Charkhabi (2022), which includes 5 items and responses are recorded on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). A higher score on this scale represents a higher level of education-job mismatch. The Cronbach's alpha was 0.93. An item example is "If I find a job closer to my educational background, I will certainly leave my current job for it".

Individual dependent variables:

General Health. This construct is measured using the General Health Questionnaire (GHQ-12 survey) developed by Goldberg (1972) and validated by Zhong *et al.* (2022). This scale consists of 12 items using a four-point Likert-type scale scored from 0 (Never) to 3 (Always). An example of an item is "*I lose sleep over worry*". Higher scores will indicate poor wellbeing.

Job Burnout. The Maslach Burnout Inventory-General Survey (MBI-GS) developed by Maslach *et al.* (1996) and validated by Bria *et al.* (2014) is used to measure job burnout. This scale has three components but only the emotional exhaustion component of this scale with five items was used in this study. The responses were recorded on a five-point Likert scale scored from 1 (Never) to 5 (Always). An item example of this scale is "*I feel used up at the end of the workday*". A higher score on this scale represents a higher level of emotional exhaustion.

Workplace dependent variables:

Job Motivation. This construct was measured by the work motivation scale developed by Gagné *et al.* (2010) and validated by Gagné *et al.* (2015). This scale measures overall job motivation using two components of intrinsic (3 items) and extrinsic (13 items) motivation and responses are recorded on a seven-point likert scale ranged from 1 (Not at all) to 7 (Completely agree). The higher score on this scale represents higher levels of motivation. An example of an item is "*I feel very happy working with my colleagues in my current work*".

Job Satisfaction. It is measured by Overall Job satisfaction developed by Brayfield and Rother (1951) and validated by Fields (2002). This scale includes5 items and responses are recorded on a five-point Likert scale ranged from 1 (Strongly disagree) to 5 (Strongly agree). An item example of this scale is "*I feel satisfied with the salary in my current job*". A higher score on this scale represents a higher level of job satisfaction.

Job Performance. The Individual Work Performance Questionnaire (IWPQ) developed by Koopmans *et al.* (2012) and validated by Koopmans *et al.* (2014) is used to measure job performance. The Task performance subscale of this scale was used for data collection. This subscale includes 6 items, and responses are recorded on a five-point Likert scale ranged from 1 (Seldom) to 5 (Always). An item example of this scale is "*I am good at planning*". A higher score on this scale represents a higher level of task performance.

Job Insecurity. This construct is measured using Job Insecurity Scale (JIS) developed by De Witte (2000) and validated by Vander Elst *et al.* (2014). This scale measures the concern of employees about the continued existence of their job in the future This construct includes

4 items scored on a 5-point Likert scale ranged from 1 (Strongly disagree) to 5 (Strongly agree). An item example of this scale is "*I think I might lose my job in the near future*".". A higher score on this scale represents a higher level of job insecurity.

Job Turnover: The two-item work withdrawal scale developed by Hanisch and Hulin (1991) was used to measure turnover intention. Sample items include "How often do you think about quitting your job?" and "How likely is it that you will quit your job in the next several months?"

Respondents were asked to rate the items of this measurement on a scale from 1 (totally disagree) to 5 (totally agree). Higher scores represent higher turnover intention. The scale's Cronbach's alpha was70.

Moderators:

Personality traits. Five major personality traits are measured using the Big Five personality developed by Soto and John (2017). It measures five major personality traits including neuroticism, agreeableness, openness to experience, extraversion and consciousness. This scale includes 21-items scored on a five point-Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). An example of an item is "*I am someone who tends to be disorganized*".

Employability. This is measured using the employability scale developed by Rothwell *et al.* (2008) and validated by Karli (2016). The overall score of this scale is used in this study. Employable employees seek places which can offer them career opportunities and possibilities to improve their skills. The items were measured using a five-point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). An example of an item is "*I have good prospects in this organization because my employer values my personal contribution*". Higher scores will represent higher employability.

Data and procedure for testing

The Data is monitored for outliers and after data cleaning the data analysis is performed using a variety of statistical programs including SPSS-21, JASP, MACRO and R-studio. The descriptive statistics, such as mean and standard deviation were analyzed using SPSS and JASP programs. The relationship between subjective education-job mismatch, individual outcomes, and workplace outcomes including correlation analysis and regression analysis is performed using SPSS and JASP. To determine the extent to which proposed moderators could increase or reduce these relations between independent and dependent variables, a moderation model is constructed and examined using MACRO program.

Results

Introduction

This chapter presents the results of this study aimed at assessing the perception of education-job mismatch of employees working in in Nigeria, its impact on wellbeing and job burnout level of employees, its impact on workplace outcomes and the extent to which these effects are moderated by individual and workplace factors. The results include the descriptive statistics of the sample and research variables, the correlation results among research variables, regression analysis and the results of moderation paths.

Descriptive statistics

Descriptive statistics of sample: The demographic information of the participants is shown in Figure 4.1. According to this figure, the sample is consisted of 64.7% male and 35.3% female participants.

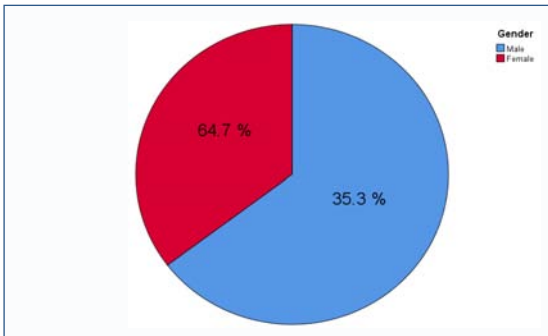

Figure 4.1: Pie chart showing the gender distribution of the respondents of this study.

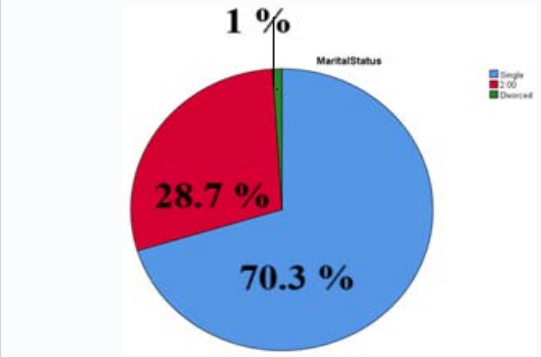

Figure 4.2: Pie chart showing the marital status distribution of the respondents of this study.

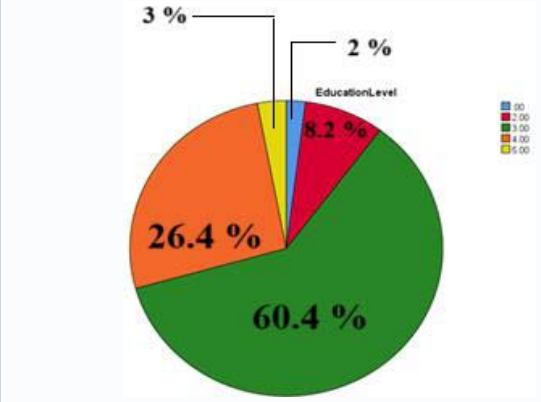

Figure 4.3: Pie chart showing the distribution of education of the respondents of this study.

Figure 4.2 illustrates the distribution of marital status of participants. As the figure shows, 28.7% identified as married (2 = married), while 70.3% of the respondents identified as single (1 = single). Only 1.0% of the respondents identified as divorced (3= divorced).

Figure 4.3 illustrates the distribution of education levels of participants. As the figure shows, 2% of the respondents had only high school certificates (High school certificates = .00), 8.2% of the respondents had only diploma certificates (2.00 = diploma certificates), and 60.4% of the 303 respondents were Bachelor degree holders (3.00 = Bachelor degree). A percentage of 26.4% were found to be Master degree holders (4.00 = Master degree), while a percentage

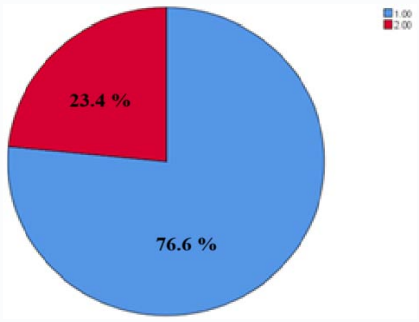

Figure 4.4: Pie chart showing the job contract associated with the respondents of this study.

of 3.0% had a doctorate degree (5.00 = doctorate degree).

Figure 4.4 illustrates the distribution of job contracts of participants. As the figure shows, 76.6% work in the private sector (Private sector = 1), while 23.4% (Public sector = 2) work in the public sector.

Descriptive statistics of research variables: The descriptive statistics results regarding the research variables are presented in Table 4.1.

As the table tabulates, the age of respondents ranged from 22 to 68 years with an average age of 31.5 years (*SD* = 6.92). The daily working hours ranged from 2 to 24 hours, while the average daily working hours obtained from the study is approximately 8.58 (SD = 2.89). The working experience observed among the respondents in this study ranged from 1 to 40 years, while the average working experience was observed to be approximately 5.34 years (*SD* = 5.14).

Among individual factors the mean scores of wellbeing (*M* = 41.98, *SD* = 4.17) was higher than job burnout (*M* = 22.48, *SD* = 6.27). Also, as the table shows, among the workplace factors the highest mean score is related to job motivation (*M* = 75.99, *SD* = 17.35) and the lowest is reported for job satisfaction (*M* = 6.03, *SD* = 2.02).

Correlational Analysis

The results of correlation analysis are presented in Table 4.2. The correlation results between demographic information and education mismatch are presented in Table 4.2.1. From the results presented in Table 4.2.1, it was observed that only job contract had a positive correlation with education mismatch (*r = 0.127, p = .05*), which is significant at 95% confidence interval.

Table 4.2.2 presents the results of correlation between education-job mismatch and individual factors. As shown in Table 4.2.2, there is a positive correlation between education-job mismatch and job burnout (*r = 0.264, p = 0 .001*). Also, the table suggests that there is a positive association between education-job mismatch and poor wellbeing (*r = 0.236, p = 0 .001*). It was also found that there is a positive association between education-job mismatch and personality traits such as extraversion (*r = 0.129, p = 0 .05*), agreeableness (*r = 0.238, p = 0 .001*), conscientiousness (*r* = 0.179, *p* = 0.01) and neuroticism (*r* = 0.301, *p* = 0.001). A negative association was found between education-job mismatch and openness (*r* = -0.078), which was however not significant at 95% (p = 0.05), 99% (p = 0.01) and 99.9% (p = 0.001) confidence interval.

The results of the correlation between education-job mismatch and a wide range of work-related outcomes are demonstrated in Table 4.2.3. As the table shows, there is a statistically positive relationship between education-job mismatch and job turnover (r=.388, p< .001), job insecurity (r= .428, p< .001), Also, education-job mismatch is negatively associated with job dissatisfaction (r= -0.298, p< .001). Additionally, the correlation between education job mismatch scale used in this study was positively associated with the horizontal job-education mismatch (*r*= .257, *p*< .001) which shows the convergent validity of this scale.

Table 4.1: Descriptive statistics of research variables.

Variable	N	Minimum	Maximum	Mean	S.D
Age	303	22.00	68.00	31.5017	6.92145
Work Experience	302	1.00	40.00	5.3361	5.13865
Working Hours	302	2.00	24.00	8.5795	2.88863
Education-Job Mismatch	303	5.00	25.00	15.0627	4.51847
Job Burnout	303	9.00	45.00	22.4818	6.26714
Wellbeing	303	27.00	70.00	41.9802	4.17414
Extraversion	303	8.00	20.00	14.3234	1.90877
Agreeableness	303	4.00	19.00	11.9076	2.35255
Conscientiousness	303	4.00	20.00	13.0363	1.79089
Neuroticism	303	4.00	20.00	11.9406	2.45956
Openness	303	3.00	51.00	11.4191	2.84696
Job Motivation	303	22.00	119.00	75.9934	17.34897
Employability	303	38.00	107.00	62.5314	8.69259
Job Satisfaction	303	2.00	10.00	6.0330	2.01950
Job Insecurity	303	4.00	20.00	11.1914	2.56498
Job Turnover	303	2.00	10.00	6.0330	2.01950
Job Performance	303	7.00	25.00	19.4620	3.33619
Valid N (listwise)	303				

Table 4.2.1: Correlation results of demographic information and education-job mismatch (*n* = 303).

Variable	Age	Gender	Marital Status	Education Level	Job Contract	Daily Working Hour	Work Experience	Job Education Mismatch
Age	—							
Gender	-0.152**	—						
Marital Status	0.584***	-0.079	—					
Education Level	0.267***	-0.092	0.139*	—				
Job Contract	-0.138*	-0.099	-0.074	-0.129*	—			
Daily Working Hr	-0.065	0.025	-0.043	-0.007	-0.090	—		
Work Experience	0.705***	-0.080	0.456***	0.103	-0.155**	0.072	—	
Job Edu Mismatch	-0.107	-0.052	-0.064	-0.022	0.127*	-0.017	-0.065	—

Notes: *p < .05, **p < .01, ***p < .001, N = 303

Table 4.2.2: Correlation results between individual factors and education-job mismatch (*n*= 303).

Variable	Job Burnout	Wellbeing	Anxiety-Depression	Social Dysfunction	Openness	Extraversion	Agreeableness	Conscientiousness	Neuroticism	Job Edu Mismatch
Job Burnout	—									
Wellbeing	0.150**	—								
Anxiety-Depression	0.410***	0.732***	—							
Social Dysfunction	-0.318***	0.472***	-0.255***	—						
Openness	-0.041	0.179***	0.024	0.223***	—					
Extraversion	0.023	0.313***	0.141*	0.261***	0.177**	—				
Agreeableness	0.223***	0.254***	0.338***	-0.077	-0.013	0.207***	—			
Conscientiousness	0.214***	0.302***	0.290***	0.054	0.093	0.266***	0.394***	—		
Neuroticism	0.273***	0.313***	0.444***	-0.130*	0.074	0.163**	0.437***	0.321***	—	
Job Edu Mismatch	0.264***	0.236***	0.292***	-0.042	-0.078	0.129*	0.238***	0.179**	0.301***	—

Notes: *p < .05, **p < .01, ***p < .001, N = 303

Table 4.2.3: Correlation results between work-related outcomes and education-job mismatch (*n*= 303).

Variable	Job Motivation	Employability	Job Turnover	Job Insecurity	Job Performance	Job Satisfaction	Job Edu Mismatch
Job Motivation	—						
Employability	0.152**	—					
Job Turnover	0.043	-0.123*	—				
Job Insecurity	-0.069	-0.175**	0.470***	—			
Job Performance	0.062	0.393***	-0.174**	-0.094	—		
Job Satisfaction	0.075	0.218***	-0.385***	-0.304***	0.284***	—	
Job Edu Mismatch	0.010	-0.076	0.388***	0.428***	-0.043	-0.298***	—

Notes: *p < .05, **p < .01, ***p < .001, N = 303

Table 4.3: Results of regression analysis of education-job mismatch and individual factors (*n*= 303).

Outcome	B	SE	β	t	p	95% CI Lower	95% CI Upper
Wellbeing	0.218	0.052	0.236	4.217	< .001	0.116	0.320
Job Burnout	0.367	0.077	0.264	4.753	< .001	0.215	0.518

Note: EDM = Education-Job Mismatch

Regression Analysis

To assess the extent to which the education-job mismatch can predict individual outcomes, a regression model was constructed and the results are presented in Table 4.3. As the table shows, the education-job mismatch positively predicted poor wellbeing (β = 0.236, p< .001). Table 4.3 represents the results of regression analysis of education-job mismatch in predicting job burnout. As the table shows, education-job mismatch significantly predicted job burnout (β = 0.264, p< .001).

Table 4.4. presents the results of regression analysis between education-job mismatch and work-related outcomes. As shown in the table, job turnover (β = 0.388, p =<0.001, CI = 95%) positively predicted education-job mismatch. Also, job insecurity (β = 0.428, p =<0.001, CI = 95%) positively predicted education-job mismatch. The table also indicated that job performance (β = -0.043, p =<0.001, CI = 95%) negatively predicted education-job mismatch. And job satisfaction (β = -0.298, p =<0.001, CI = 95%) also negatively predicted the education-job mismatch.

Moderation results

A series of moderation analyses was conducted to assess the influence of personality on the link between education-job mismatch and individual factors as well as to assess the influence of employability

Table 4.4: Regression analysis of education-job mismatch and workplace factors (*n*= 303).

Outcome	B	SE	β	t	p	95% CI Lower	95% CI Upper
Motivation	0.039	0.221	0.010	0.177	0.860	-0.396	0.475
Employability	-0.147	0.111	-0.076	-1.326	0.186	-0.364	0.071
Job Turnover	0.173	0.024	0.388	7.297	< .001	0.127	0.220
Job Insecurity	0.243	0.030	0.428	8.205	< .001	0.184	0.301
Job Performance	-0.032	0.043	-0.043	-0.747	0.456	-0.115	0.052
Job Satisfaction	-0.203	0.038	-0.298	-5.423	< .001	-0.277	-0.130

Note: EDM = Education-Job Mismatch

Table 4.5: Summary of moderation results.

Predictor	Moderator	Outcome	Result
Job-Education Mismatch	Extraversion	Wellbeing	Non-Significant
	Agreeableness	Wellbeing	Significant
	Conscientiousness	Wellbeing	Significant
	Neuroticism	Wellbeing	Significant
	Openness to Experience	Wellbeing	Significant
Job-Education Mismatch	Extraversion	Job Burnout	Non-Significant
	Agreeableness	Job Burnout	Non-Significant
	Conscientiousness	Job Burnout	Non-Significant
	Neuroticism	Job Burnout	Significant
	Openness to Experience	Job Burnout	Non-Significant
Job-Education Mismatch	Employability	Job Turnover	Non-Significant
	Employability	Job Insecurity	Non-Significant
	Employability	Job Satisfaction	Non-Significant

Note: EDM = Education-Job Mismatch

on the relationship between education-job mismatch, and workplace related factors. A summary of the results is presented in Table 4.5.

Testing moderating role of personality traits: Table 4.6 presents the results of the moderating effect of significant personality traits between education-job mismatch and individual outcomes. As the table shows, agreeableness, consciousness, and neuroticism moderated the link between education-job mismatch and wellbeing, Also, only neuroticism moderated the link between education-job mismatch and job burnout.

The conditional effects of personality traits between education-job mismatch and individual factors are presented in Table 4.7. As the table shows, a high, a low and sometime a low and a high level of different personality traits could moderate these associations.

Test of Hypotheses

See Table 4.8.

H1 - Education-Job- mismatch affect the wellbeing and burnout of the individual: According to correlation results presented in Table 4.2.2, positive correlation was observed between wellbeing and education-job mismatch, therefore the hypothesis H1a is accepted. Also, a positive correlation was observed between job burnout and education-job mismatch, thus hypothesis H1b is also accepted.

H2 – Job burnout, job motivation, performance, satisfaction, job insecurity, are linked to education-job mismatch: From the correlation analysis results presented in Table 4.2.3, only job turnover, job insecurity and job satisfaction were observed to be significantly correlated to education-job mismatch. Thus, hypotheses H2c, H2d, H2e are accepted, while H2a, and H2b are rejected. In other words, the hypothesis that outcomes such as job motivation and job performance are linked to education-job mismatch is accepted, while the hypothesis that job satisfaction, job security, and job burnout are linked to education-job mismatch is rejected.

H3 - Personality traits moderate the link between education-job mismatch and wellbeing and job burnout: From the moderation results presented in Table 4.5 and 4.6, evidence suggests that personality traits such as agreeableness, neuroticism, conscientiousness, and openness to experience moderate the link between education-job mismatch and wellbeing. However, the size n=and direction of these effects are not the same. Thus, hypothesis H3a, is accepted. Also, from moderation results presented in Table 4.5 and 4.6, it was observed that personality traits such as, neuroticism moderated the link between education-job mismatch and job burnout, Thus, hypothesis H3b is also accepted.

H4 - The link between education-job mismatch and work-related outcomes is moderated by employability: From the results of moderation results presented in Table 4.5 and 4.6, it was observed that employability did not significantly moderate the link between education-job mismatch and organizational outcomes, thus hypothesis H4 is rejected.

Discussion and Conclusion

This chapter presents the interpretation of the study's findings through the lens of established labor market and organizational theories.

Discussion

This study examined the prevalence of perceived education–job

Table 4.6: Main and Interaction Effects for All tested Models.

Model (Predictor → Moderator → Outcome)	Predictor / Moderator	B	SE	t	p	95% CI (Lower, Upper)	Model Summary (R^2, F, df, p)
a) JEM → Agreeableness → Wellbeing	Constant	50.92***	4.30	11.85	< .001	(42.46, 59.37)	R^2 = .141, F(3,299) = 16.32, *MSE = 15.12, $R^2\Delta$ = .043, FΔ(1,299) = 15.09*
	Agreeableness	-0.98**	0.36	-2.71	.007	(-1.69, -0.27)	
	EDM	-0.82**	0.26	-3.15	.002	(-1.33, -0.31)	
	Agree × JEM	0.08*	0.02	3.89	< .001	(0.04, 0.12)	
b) JEM → Conscientiousness → Wellbeing	Constant	46.34***	5.57	8.33	< .001	(35.39, 57.29)	R^2 = .149, F(3,299) = 17.38*, MSE = 14.99, $R^2\Delta$ = .023, FΔ(1,299) = 8.14
	Conscientiousness	-0.54	0.43	-1.26	.208	(-1.38, 0.30)	
	EDM	-0.74*	0.32	-2.28	.023	(-1.38, -0.10)	
	Consc × EDM	0.07	0.02	2.85	.005	(0.02, 0.12)	
c) JEM → Neuroticism → Wellbeing	Constant	43.74***	3.91	11.18	< .001	(36.04, 51.44)	R^2 = .138, F(3,299) = 16.01, *MSE = 15.16, $R^2\Delta$ = .018, FΔ(1,299) = 6.27*
	Neuroticism	-0.34	0.33	-1.03	.306	(-0.99, 0.31)	
	EDM	-0.45	0.24	-1.85	.065	(-0.93, 0.03)	
	Neuro × EDM	0.05*	0.02	2.50	.013	(0.01, 0.09)	
d) JEM → Openness → Wellbeing	Constant	39.71***	2.58	15.41	< .001	(34.64, 44.78)	R^2 = .107, F(3,299) = 11.97, *MSE = 15.71, $R^2\Delta$ = .012, FΔ(1,299) = 4.10*
	Openness	-0.10	0.21	-0.48	.635	(-0.51, 0.31)	
	EDM	-0.19	0.21	-0.89	.376	(-0.61, 0.23)	
	Open × EDM	0.04*	0.02	2.03	.044	(0.001, 0.07)	
e) JEM → Neuroticism → Job Burnout	Constant	-3.18	5.90	-0.54	.591	(-14.78, 8.43)	R^2 = .132, F(3,299) = 15.10*, MSE = 34.45, $R^2\Delta$ = .021, FΔ(1,299) = 7.15
	Neuroticism	1.81***	0.50	3.65	< .001	(0.83, 2.79)	
	EDM	1.23***	0.37	3.37	.001	(0.51, 1.95)	
	Neuro × EDM	-0.08	0.03	-2.67	.008	(-0.14, -0.02)	

Note: JEM = Job-Education Mismatch; EDM = Education-Job Mismatch, *p < .05, **p < .01, ***p < .001

mismatch among Nigerian workers and its moderators and outcomes. The findings indicate that a substantial proportion of respondents perceive a misalignment between their educational qualifications and job requirements. This high prevalence suggests inefficiencies in the Nigerian labor market which has led many graduates poorly trained and unproductive on their job (Dabalen, Oni, & Adekola, 2000). In other words, many employers report that university degrees no longer guarantee relevant skills. These observations are consistent with previous reports that a significant share of African graduates lack necessary soft and technical skills (Boateng & Ofori-Sarpong, 2002) and that formal qualifications may no longer fully signal job readiness.

Education-Job- mismatch and Theoretical Framework: This study's results are best understood through a Job-Fit (person–environment fit) lens. Van Vianen (2018) emphasizes that individual outcomes are most optimal when personal attributes (e.g., skills, education) and job characteristics (e.g., demands, tasks) are compatible. Conversely, misfit leads to unpleasant outcomes. In our results, individuals perceiving mismatch consistently reported poorer well-being and job attitudes, in line with this fit perspective. For instance, employees who felt overqualified (education exceeds job demands) expressed greater frustration and turnover intent, reflecting poor person–job fit. As Van Vianen notes, when "personal attributes ... and environmental attributes" are not aligned, stress and negative outcomes ensue. Thus, the Job-Fit theory directly explains why mismatched employees report higher strain and dissatisfaction: their abilities exceed workplace requirements, leaving them under-stimulated and misaligned with the job.

Discussion of research variables

Outcomes of Education–Job Mismatch: A key finding is that perceived education–job mismatch has clear negative outcomes for employees. Workers with education-job mismatch reported lower job satisfaction, higher job burnout, and greater turnover intentions. These results align with existing literature. Maslach burnout model (Maslach et al., 2001) characterizes burnout as a "prolonged response to chronic emotional and interpersonal stressors on the job," defined by exhaustion, cynicism, and reduced professional efficacy. In our study, employees experiencing mismatch exhibited key burnout symptoms with feeling of exhaustion by underutilization, cynical about career prospects, and less efficacious at work. In fact, Maslach et al. note that burnout leads to "negative effects on job performance and personal well-being", which we also observed in the form of decreased

Table 4.7: Conditional Effects (Simple Slopes) for All Models.

Model (Moderator → Outcome)	Moderator Level (±1 SD)	Effect (b)	SE	t	p	95% CI (Lower, Upper)
a) Agreeableness → Wellbeing	Low (-1 SD: 9.56)	-0.03	0.07	-0.38	.706	(-0.17, 0.12)
	Mean (11.91)	0.17**	0.05	3.27	.001	(0.07, 0.27)
	High (+1 SD: 14.26)	0.36***	0.07	5.13	< .001	(0.22, 0.50)
b) Conscientiousness → Wellbeing	Low (-1 SD: 11.25)	0.04	0.07	0.66	.510	(-0.09, 0.18)
	Mean (13.04)	0.17***	0.05	3.39	.001	(0.07, 0.27)
	High (+1 SD: 14.83)	0.30***	0.07	4.49	< .001	(0.17, 0.42)
c) Neuroticism → Wellbeing	Low (-1 SD: 9.48)	0.02	0.07	0.26	.795	(-0.12, 0.16)
	Mean (11.94)	0.14**	0.05	2.70	.007	(0.04, 0.24)
	High (+1 SD: 14.40)	0.26***	0.07	3.73	< .001	(0.12, 0.40)
d) Openness → Wellbeing	Low (-1 SD: 8.57)	0.12	0.07	1.68	.094	(-0.02, 0.27)
	Mean (11.42)	0.23***	0.05	4.51	< .001	(0.13, 0.33)
	High (+1 SD: 14.27)	0.33***	0.07	4.70	< .001	(0.19, 0.47)
e) Neuroticism → Job Burnout	Low (-1 SD: 9.48)	0.48***	0.11	4.41	< .001	(0.27, 0.69)
	Mean (11.94)	0.28***	0.08	3.62	< .001	(0.13, 0.44)
	High (+1 SD: 14.40)	0.09	0.11	0.83	.406	(-0.12, 0.30)

Note: JEM = Job-Education Mismatch; EDM = Education-Job Mismatch, *p < .05, **p < .01, ***p < .001

Table 4.8: A summary of accepted and rejected research hypotheses.

Hypothesis	Statement	Result
H1a	Education-Job mismatch affects wellbeing	Accepted
H1b	Education-Job mismatch is linked to Job burnout	Accepted
H2a	Education-Job mismatch is linked to Job motivation	Rejected
H2b	Education-Job mismatch is linked to Job performance	Rejected
H2c	Education-Job mismatch is linked to Job satisfaction	Accepted
H2d	Education-Job mismatch is linked to Job security	Accepted
H2e	Education-Job mismatch is linked to Job turnover	Accepted
H3a	Personality traits moderate the link between education-job mismatch and wellbeing outcomes	Accepted
H3b	Personality traits moderate the link between education-job mismatch and job burnout outcomes	Accepted
H4	Employability moderates the link between education-job mismatch and organizational results	Rejected

productivity and well-being among mismatched respondents. Thus, the Job-Fit theory (Van Vianen, 2018) and burnout theory converges at this point, which implies that poor fit creates chronic stress leading to burnout.

Similarly, our findings are in consonance with the study of Feldman (1996) on the characterization of underemployment. Feldman defined underemployment (education–job mismatch) as situations where jobs require less education or skill than the employee has. He noted that underemployment contributes to job dissatisfaction and turnover. Consistent with this, we found that mismatched workers reported significantly lower job satisfaction and a stronger desire to leave. Prior research has indeed linked perceived overqualification to dissatisfaction with compensation and greater withdrawal behaviors (Mas & Pallais, 2017; Feldman, 1996). Our findings align with those findings that individuals who could not fully use their education felt frustrated and undervalued, confirming Feldman's view of underemployment as psychologically stressful.

More broadly, the literature identifies several adverse outcomes of mismatch that match our results. Empirical studies show that overqualification and underemployment are associated with stress, depression, lower self-esteem, and turnover. For example, Jones-Johnson and Johnson (1992) and others found that subjective underemployment correlates with stress and depressive symptoms, while Dooley et al. (2000) documented links to lower job satisfaction and self-esteem. Our respondents reported just these issues with higher stress levels, emotional exhaustion, and diminished job commitment. Even objective outcomes like income were lower for mismatched individuals in our sample, suggesting a wage penalty as predicted by mismatch theory (McGuinness & Wooden, 2009). Although we did not specifically analyze wages here, the pattern of career stagnation and compensation dissatisfaction among mismatched workers is consistent with the literature on wage effects of overeducation.

Hence, the outcomes we observed – burnout, dissatisfaction, and turnover intent – are fully consistent with the combined insights of Job-Fit theory and the cited literature. Job-Fit theory predicts that persons in poor fit situations will experience distress and suboptimal outcomes, and Maslach et al. (2001) directly link work stress to burnout. Our findings confirm these expectations: the more education–job misfit individuals reported, the worse their psychological and job-related outcomes became.

Workplace-related Outcomes and Education-job mismatch: The influence of education-job mismatch on job performance,

satisfaction, motivation, insecurity, job turnover and job burnout were evaluated using correlation analysis. From the correlation results, job insecurity, job turnover was observed to be positively correlated to education-job mismatch and job satisfaction was negatively associated with education-job mismatch. These results were consistent with the results of studies that examined the association between education-job mismatch and job attitudes. For example, Win (2019) reported a negative correlation (r= -0.422) between vertical education-job mismatch and job satisfaction and a negative correlation (r = -0.397) between horizontal education-job mismatch and job satisfaction. He concluded that education-job mismatch leads to job dissatisfaction. Allen and van der Velden (2001) reported that while overeducation has a negative effect on the job occupant's satisfaction, the effect is not significant. And also, that undereducation has no significant effect on job satisfaction. In this regard, skill-job and major-job mismatches account for a comparatively larger percentage of the effects of education-job mismatch on job satisfaction. Maria *et al*. (2016) also pointed out that while education aspirations are significant, the negative association between education and life satisfaction for the happiest individuals does not respond to their greater aspirations.

On the other hand, results from this study found no relationship between education-job mismatch and job performance, and job motivation. Srisirisup (2016) highlighted that the probability of education-job mismatch significantly decreases when students select their degree according to self-determine forms of motivation and vice versa. This implies that perceived education-job mismatch can be traced to educational background and choice of courses studied and job motivation is improved when employees find themselves working in their desired fields of study or in jobs that they initially desire even when they are obviously mismatched. Forson *et al*. (2021) also explained that compensation package, job design and environment and performance management system happen to be positively significant factors in improving job motivation and performance.

Moderating role of Personality traits between EDM and individual factors: The significant associations between education-job mismatch and personality suggest that personality of individuals have a role in perception of education-job mismatch in Nigeria. In other words, the perception of education-job mismatch may vary from one to another because of different levels of personality traits individuals possess. Conscientiousness as a personality trait may drive the person to withdraw from a situation where he experiences an unpleasant feeling of mismatch. This study found no relationship between openness and education-job mismatch, however Esposito and Scicchitano (2022) explained higher openness may lead to voluntary overqualification. This is because individuals with high scores in openness might be inclined to acquire new knowledge and experiences not related to a specific job. This also implies that they might have no perception of education-job mismatch as they might not seek a perfect match between occupation and skill endowment.

This study also reported no relationship between extraversion and education-job mismatch. Extraversion among professionals is an important feature for reducing the danger of overeducation among graduates, particularly those with poor skill levels and has been reported to significantly increase employment probability (Wichert and Pohlmeier, 2010; Blázquez and Budría, 2017; Egan *et al*., 2017). However, the perception of education-job mismatch can easily be perceived with overqualification and overeducation.

Moderating role of employability between EDM and workplace factors: From the result, no correlation was observed between employability, external and internal employability and education-job mismatch. Also, employability did not significantly predict education-job mismatch. And from the moderation results, it was observed that employability did not successfully moderate the link between education-job mismatch and work-related outcomes. Employability largely depends on the skills and competencies of the job seekers. Competency development, which refers to those activities carried out by an organization and its employees to maintain or enhance employees' functional, learning, and career competencies (Forrier and Sels, 2003), may result in higher earnings and better chances of promotion (Bernston *et al*., 2006). Competency can positively impact job performance while it can also negatively impact job satisfaction and insecurity. Most workers after being trained and developed by their organizations may seek better offers with higher pays and status elsewhere.

Salahuddin *et al*. (2023), in their study to assess the relationship between employability skill and job mismatch towards graduates' unemployment, reported a relationship between employability and unemployment. They explained that a lack of employability skills had an impact on graduates' unemployment and that requisite skills are required to develop graduates who are employable in the job market. They also reported that unemployment is also significantly impacted by job mismatch since there are many essential skills in the job market and an imbalance occurs between skill demand and skill supply.

Limitations and suggestions: The first limitation of this study was using surveys where participants may not correctly respond to the questions. We suggest future studies include interviews with participants as well. A second limitation was measuring only subjective mismatch. We suggest future studies to measure the objective education-job mismatch as well. A third limitation was that we only sampled individuals from one or two cities in Nigeria. We recommend future studies to use larger sample size and a more diverse range of participants.

Conclusion

This study reveals that perceived education–job mismatch is a serious issue in Nigeria, with significant negative effects on workers' well-being and attitudes. Integrating Job-Fit Theory as our primary framework, we show that mismatched workers suffer reduced satisfaction, increased burnout, and higher turnover intentions. These findings are supported by classic theories: education as human capital should yield returns, but credential competition (and poor fit prevent those returns, leading to the outcomes. The consistency of our results with literatures underscores the importance of aligning education and jobs. It then implies that Nigerian society must work on closing the gap between education and employment. This involves reforms in education, workplace practices, and labor policies to ensure a better match of skills and jobs. By enhancing the fit – through updated training, realistic career guidance, and supportive work environments – employers and policymakers can mitigate the damaging effects of mismatch. In doing so, Nigeria can better capitalize on its human capital investments, improve worker well-being, and strengthen the economy.

References

1. Adesugba M & Mavrotas G. Youth employment, agricultural transformation, and rural labor dynamics in Nigeria. Adesugba, *IFPRI Discussion Paper*, 2016, *1579*, Available at SSRN: https://ssrn.com/abstract=2884934

2. Alarudeen A. Characterizing Graduate Unemployment in Nigeria as Education-job Mismatch Problem. *African Journal of Economic Review*, 2019, *7*(2), 113-130.
3. Asnida Shahidan, Russayani Ismail & Siti Norliza Jumali. Job Mismatch and Overeducation among Graduates in Malaysia. *Indian-Pacific Journal of Accounting and Finance*, 2019, *3*(4), 14-24
4. Babalobi B. Nigeria: Why graduates are unemployed and unemployable. *Vanguard column, All Africa*, 2019, *17*. Retrieved from https://allafrica.com/stories/201912240618.html.
5. Balogun M. Informal Economy Sector as a Catalyst for Nigerian Economy Development and Sustainability: A Review. *International Journal of Economic Policy*, 2022, *2*(1), 44-53.
6. Beck U & Beck-Gernsheim E. *Institutionalized individualism and its social an political consequences*. Ann Arbor: University of Michigan Press. 2002.
7. Becker G. S. *Human capital: A theoretical and empirical analysis with special relevance to education*. New York: Columbia University Press. 1993.
8. Bender K. A & Heywood J. Educational Mismatch among PhDs: Determinants and Consequences. In R. Freeman, and D. Goroff (Eds.), *Science and Engineering Careers in the United States: An analysis of markets and employment*. pp. 2009, 229-255.
9. Betti G, Agostino A.D and Neri L. Education Mismatch of Graduates: a Multidimensional and Fuzzy Approach. *Working paper*, 2007.
10. Bol T, Eller C. C, Van de Werfhorst H. G & DiPrete T. A. School-to-Work Linkages, Educational Mismatches, and Labor Market Outcomes. *American Sociological Association*, 2019, *84*(2), 275-307.
11. Bria M, Spânu F, Băban A & Dumitrașcu D. L. Maslach burnout inventory–general survey: factorial validity and invariance among Romanian healthcare professionals. *Burnout Research*, 2014, *1*(3), 103-111.
12. Dabiri S. Human Capital Development and Graduate Employability in Post-war Liberia. In: *Association of African Universities general conference*. Accra: Association of African Universities. 2013,
13. De Witte H. "Work ethic and job insecurity: assessment and consequences for wellbeing, satisfaction and performance at work," In, *From Group to Community*, eds Bouwen R, De Witte K, De Witte H and Taillieu T. (Leuven: Garant), 2000, 325–350.
14. Draissi Z & Rong Y. Estimating the determinants and extent of Morocco's education and skill mismatch through the STEP survey. *Sage Open*, 2023, *13*(2), 21582440231181325.
15. Edwards J. R. *Person-job fit: A conceptual integration, literature review, and methodological critique*. John Wiley & Sons. 1991.
16. Edwin L and Osterbeek H. *Over education and Mismatch in the Labor Market.* Institute for the Study of Labor (IZA) DP No. 5523. 2011.
17. Enfield S. Gender Roles and Inequalities in the Nigerian Labour Market. K4D Helpdesk Report. Brighton, UK: Institute of Development Studies. 2019.
18. Farooq S. Mismatch between education and occupation: A Case Study of Pakistani graduates. *The Pakistan Development Review*, 2011, *50*(4), 531-552.
19. Fasanya I. O & Onakoya A. B. Informal sector and employment generation in Nigeria: an error correction model. *Research on Humanities and Social Sciences*, 2012, *2*(7), 48-55.
20. Fatykhova R & Charkhabi M. *Relationship between job–education mismatch and individual and organizational outcomes in the public sector* (Master's thesis). HSE University, Moscow, Russia. 2022.
21. Foley B & Brinkley I. Unemployed and overqualified? Graduates in the UK labour market. *Work Foundation,* London*, 2015. http://www.theworkfoundation.com/Reports/395/Unemployed-and-overqualified-Graduatesin-the-UK-labour-market*
22. Forrier A & Sels L. The concept employability: a complex mosaic. International Journal Human Resources Development and Management, 2003, 3(2), 102-124.
23. Freeman R. Overinvestment in college training? *Journal of Human Resources*, 1975, *10*, 287-311.
24. Gladwell M. *Outliers; the story of success*. Little, Brown and Company. 2008.
25. Gosling S. D, Swann Jr. W. B & Rentfrow P. J. A very brief measure of the Big-Five personality domains. *Journal of Research in personality*, 2003, *37*(6), 504-528.
26. Graham J. R & Graham S. M. Literature Review Exploring Job Mismatch and Income. *Human Resources and Skills Development Canada (HRSDC): Ottawa, ON, Canada*. 2013.
27. Green F & Zhu Y. Overqualification, job dissatisfaction, and increasing dispersion in the returns to graduate education. *Oxford economic papers*, 2010, *62*(4), 740-763.
28. ILO. *Decent Work Indicators in Africa. A first assessment based on national sources*, Geneva. 2012.
29. Kanyip, Bakwaph Peter, "Admission Crisis in Nigerian Universities: The Challenges Youth And Parents Face In Seeking Admission". *Seton Hall University Dissertations and Theses (ETDs)*. 1908. https://scholarship.shu.edu/dissertations/1908
30. Karli U. Adaptation and validation of self-perceived employability scale: An analysis of sports department students and graduates. *Educational Research and Reviews*, 2016, *11*(8), 848-859.
31. Kim H. K, Ahn S. C & Kim J. *Vertical and horizontal education-job mismatches in the Korean youth labor market: a quantile regression approach*. Working Papers 1201, Research Institute for Market Economy, Sogang. 2012.
32. Koopmans L, Van der Beek A. J, Bernaards C, Hildebrandt V & De Vet H. C. Construct validity of the individual work performance questionnaire. *Journal of occupational and environmental medicine*, 2014, *56*(3), 331-337.
33. Koopmans L, Van der Beek A. J, Bernaards C, Van Buuren S, Hildebrandt V & De Vet H. C. Development of an individual work performance questionnaire. *International journal of productivity and performance management*, 2012, *62*(1), 6-28.
34. Maslach C, Jackson S. E and Leiter M. P. *MBI: The Maslach Burnout Inventory: Manual*. Palo Alto, CA: Consulting Psychologists Press. 1996.
35. McGuinness S. Overeducation in the Labour Market. *Journal of Economic Surveys*, 2006, *20*(3), pp.387-418.
36. Montt G. The causes and consequences of field-of-study mismatch: An analysis using PIAAC, *OECD Social, Employment and Migration Working Papers,* No. 167, OECD Publishing, Paris. 2015.
37. Morsy H & Mukasa A. Youth Jobs, Skill and Educational Mismatches in Africa. *Working Paper Series*, No. 326, African Development Bank, Abidjan, Côte d'Ivoire. Series N° 326, African Development Bank, Abidjan, Côte d'Ivoire. 2019.
38. National Bureau of Statistics. *Labour force statistics Volume 1-Unemployment and underemployment*. Available at nigerianstat.gov.ng. 2019.
39. Nordin M, Persson I & Rooth D. O. Education–occupation mismatch: Is there an income penalty? *Economics of education review*, 2010, *29*(6), 1047-1059.
40. Odia J. O & Odia A. A. Accessibility to higher education in Nigeria: the pains, problems, and prospects. In *Accessibility and Diversity in Education: Breakthroughs in Research and Practice* (pp. 80-100). IGI Global. 2020.
41. Ogbeide E. N, Ola K. O, Babajide A. A & Ikubor J. O. Job-Education Mismatch in Nigerian Labour Market: Empirical Evidence from a

Monopsonist Firm in a Rural Area. 2022.

42. Paadi K. Perceptions on employability skills necessary to enhance human resource management graduates' prospects of securing a relevant place in the labour market. *European Scientific Journal*. 2014.

43. Pitan O.S, Adedeji S.O. Skills Mismatch Among University Graduates in the Nigeria Labor Market. *US-China Education Review A1*, 2012, 90-98.

44. Robst J. Education and job match: The relatedness of college major and work. *Economics of Education Review*, *2007, 6*(4), 397-407.

45. Rudakov V, Teixeira P and Roshchin S, Figueiredo H. *The Impact of Horizontal Job-Education Mismatches on the Earnings of Recent University Graduates in Russia. 2021.*

46. Saint W, Hartnett T. A & Strassner E. Higher education in Nigeria: A status report. *Higher education policy*, 2003, *16*, 259-281.

47. Salahuddin N. F. M, Mahpar N. S & Ishak M. F. The relationship between employability skill and job mismatch towards graduates' unemployment. *Information Management and Business Review*, 2023, *15*(3), 96-104.

48. Sasu D. D. Total unemployed population in Nigeria 2010-2021. *Economy and Politics: Statista*. https://www.statista.com/topics/9043/employment-in-nigeria/#topicOverview

49. Senarath C. *Issue of graduate employment in Sri Lanka: A study based on the concept of education mismatch with special reference for management graduates*. Master's thesis. University of Colombo, Colombo. 2012.

50. Senarath S and Patabendige S. Job-education mismatch among the graduates: A Sri Lankan Perspective. *Ruhana Journal of Management and Finance*, 2014, *1*(2), pp.1-16.

51. Sharaf M. F. Job- education mismatch and its impact on the earnings of immigrants: evidence from recent arrivals to Canada. *ISRN Economics* ArticleID452358, 2013, 1- 14.

52. Somers M. A, Cabus S. J, Groot W and van den Brink H. M. Horizontal mismatch between employment and field of education: Evidence from a systematic literature review. *Journal of Economic Surveys*, 2019, *33*(2), 567–603.

53. Taghizadeh R. Over-education, Educational-job Mismatch, and Skills of Job seekers with Tertiary Education in the Labor Market of Iran. *Journal of the Faculty of Economics and Administrative Sciences*, 2018, *8*(2), 61-73.

54. Thurow L. *Generating inequality*. New York: Basic Books. 1975.

55. Uzor E & Nwabuikwu O. Skills Mismatch In Nigerias Labour Market: What Are The Drivers and How Can Government Bridge the Gap? *Centre for the study of economies in Africa*. 2016. https://cseaafrica.org/skills-mismatch-in-nigerias-labour-market-what-are-the-drivers-and-how-can-government-bridge-the-gap/

56. Van Vianen A. E. Person–environment fit: A review of its basic tenets. *Annual Review of Organizational Psychology and Organizational Behavior*, 2018, *5*, 75-101.

57. Vander Elst T, De Witte H, Richter A, Näswall K, Sverke M and De Cuyper N. Threat of losing valued job features: the role of perceived control in mediating the effect of qualitative job insecurity on job strain and psychological withdrawal. *Work Stress*, 2014, *28*, 143–164.

58. Witte J. C & Kalleberg A. L. Matching training and jobs: The fit between vocational education and employment in the German labour market. *European Sociological Review*, 1995, *11*(3), 293-317.

59. Wolbers M. Job Mismatches and their Labour-Market Effects among School-Leavers in Europe. *European Sociological Review*, 2003, *19*(3), pp.249-266.

60. World Bank (2019). Nigeria on the road to recovery with a need to focus on job creation, new World Bank report says. Press Release No: 2019/042/AFR. Retrieved from https://www.worldbank.org/en/news/press-release/2019/12/02/nigeria-on-the-road-to-recovery-with-a-need-to-focus-on-job-creation-new-world-bank-report-says.

61. Zhong X, Jin X, Yan L, Yang L, Long H, Wang J ... & Ji P. Reliability and validity of general health Questionnaire-12 in Chinese dental healthcare workers during the COVID-19 pandemic. *Frontiers in psychiatry*, 2022, *12*, 792838.