

## Graduate Unemployment and the Crisis of Skill Relevance: Evidence from Rural Nigeria

Ejuchegahi Anthony ANGWAOMAODOKO<sup>1</sup>, Edime YUNUSA<sup>2\*</sup>, Cosmas VICTOR<sup>3</sup>,  
Ojochenemi Bartholomew UKPOJU<sup>4</sup>, Julius Olugbenga OWOYEMI, Ph. D<sup>5</sup>, Timothy  
Abayomi ATOYEBI, Ph. D<sup>6</sup>

*The authors declare  
that no funding was  
received for this work.*



Received: 14-March-2025

Accepted: 19-April-2026

Published: 21-April-2026

**Copyright** © 2026, Authors retain copyright. Licensed under the Creative Commons Attribution 4.0 International License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.  
<https://creativecommons.org/licenses/by/4.0/> (CC BY 4.0 deed)

This article is published in the **MSI Journal of Economics and Business Management (MSIJEBM)**

ISSN 3049-141X (Online).

The journal is managed and published by MSI Publishers.

**Volume: 3, Issue: 4 (April-2026)**

<sup>1,2\*,3,5&6</sup>Department of Sociology, Faculty of Social Sciences, Prince Abubakar Audu University, Anyigba, Kogi State – Nigeria.

<sup>4</sup>Department of Educational Foundation and Management Studies, Kogi State College of Education, Ankpa, Kogi State – Nigeria.

\* **Correspondence:** Edime YUNUSA

**ABSTRACT:** Graduate unemployment in Nigeria has persisted despite the expansion of tertiary education, raising concerns about the relevance of acquired skills to labour market realities, particularly within rural contexts where economic opportunities are limited. This paper therefore looked at graduate unemployment and the crisis of skill relevance: Evidence from rural Nigeria, examined the patterns and forms of graduate unemployment, evaluates the relevance of skills obtained from tertiary institutions to rural labour market demands, and analyses the relationship between skill mismatch and unemployment outcomes. The paper was anchored on the Human Capital Theory which links education to productivity and employability. A systematic review methodology relying on secondary data was adopted, drawing on recent peer-reviewed studies published between 2020 and 2026, with clearly defined inclusion and exclusion criteria to ensure methodological rigour. The paper revealed that graduate unemployment in rural Nigeria manifests in open

unemployment, underemployment, and seasonal engagement, driven largely by weak labour absorption and limited economic diversification. The paper further established that skills acquired from tertiary institutions are often misaligned with the needs of rural economies, thereby reinforcing a persistent skill mismatch that constrains employability. It concluded that the expected returns to education are undermined when skill relevance is weak and when structural constraints limit the utilisation of human capital. The paper therefore recommended overhauled curriculum reforms that emphasise practical and context-specific competencies, stronger collaboration between educational institutions and local industries, and targeted investment in rural economic development to enhance job creation and skill utilisation.

**Keywords:** *Graduate Unemployment, Skill Relevance, Skill Mismatch, Rural Nigeria, Employability.*

## INTRODUCTION

Graduate unemployment has become a persistent concern in both developed and developing economies, reflecting tensions between educational expansion and labour market absorption. Across many countries, the assumption that higher education guarantees employment has weakened as labour markets increasingly prioritise demonstrable skills over formal credentials. Recent evidence indicates that technological change and evolving production systems are redefining the competencies required for work, often rendering traditional academic training insufficient for employment entry (Hazzan, 2023). This global shift has drawn attention to the issue of skill relevance, particularly the gap between what institutions teach and what employers demand.

In Africa, the challenge is pronounced due to high youth population growth and limited industrial capacity. Studies on labour markets in countries such as South Africa show that even with growing demand for skilled labour, many graduates remain unemployed because their training does not align with workplace expectations, especially in terms of practical and soft skills (Habiyaemye et al., 2022). This pattern underscores that unemployment among graduates is not solely a

function of labour supply but also of the type and applicability of skills acquired during formal education.

In Nigeria, graduate unemployment has reached troubling levels and continues to attract scholarly and policy attention. The expansion of tertiary education has produced a large pool of graduates, yet the economy has struggled to generate sufficient quality jobs to absorb them. Beyond the issue of job scarcity, a growing body of evidence points to education–employment mismatch as a central factor. Ofor-Douglas (2024) argues that the disconnect between university training and labour market needs has contributed significantly to the rising number of unemployed graduates, with many lacking competencies required for productive engagement in the workplace. Similarly, Hazzan (2023) notes that technological transformations in the post-pandemic period have intensified demand for new skills, further exposing the inadequacies of existing curricula.

Recent discussions within Nigeria also emphasise that graduates frequently lack practical experience, problem-solving ability, and adaptability, which are increasingly valued by employers. Reports from academic and policy circles highlight that this skill mismatch is worsening unemployment outcomes, as employers seek competencies that are not sufficiently developed within the university system □. While structural economic constraints remain important, including limited job creation and weak industrialisation, the question of skill relevance continues to dominate debates on graduate employability (Ofor-Douglas, 2024).

The situation is more acute in rural Nigeria, where economic opportunities are narrower and access to skill-enhancing infrastructure is limited. Rural graduates often face additional disadvantages, including weaker exposure to industry practices, limited access to internships, and fewer networks that facilitate employment entry. As a result, the crisis of skill relevance is not uniformly experienced across regions but is intensified in rural settings, where both labour demand and opportunities for skill acquisition are constrained. This context makes it necessary to examine graduate unemployment not only as a national issue but also as one shaped by spatial inequalities within the country.

## STATEMENT OF THE PROBLEM

Despite the steady increase in the number of university graduates in Nigeria, a significant proportion remain unemployed or underemployed, raising concerns about the effectiveness of higher education in preparing individuals for the labour market. While unemployment has often been attributed to macroeconomic challenges such as slow industrial growth and limited job creation, growing evidence suggests that the problem is also rooted in the mismatch between the skills graduates possess and those required by employers. Ofor-Douglas (2024) observes that many graduates are unable to secure employment related to their training because their competencies do not align with industry expectations. This indicates that the issue extends beyond job availability to the relevance of acquired skills.

The persistence of this mismatch suggests weaknesses in curriculum design, inadequate emphasis on practical training, and limited collaboration between educational institutions and industry. Employers continue to report deficiencies in key areas such as communication, technical proficiency, and workplace readiness, which undermines graduate employability. At the same time, the changing nature of work driven by technological advancement has increased the demand for adaptable and digitally oriented skills, further widening the gap between education and employment outcomes (Hazzan, 2023).

In rural Nigeria, the problem assumes a more critical dimension. Graduates in these areas face a dual disadvantage of limited job opportunities and restricted access to skill development resources that could enhance their employability. The absence of strong industrial presence, weak institutional linkages, and inadequate exposure to modern work environments intensify the crisis of skill relevance. Consequently, many rural graduates either remain unemployed or migrate to urban centres, thereby contributing to regional inequalities and underutilisation of human capital.

The central problem, therefore, lies in the inability of the education system to produce graduates whose skills are aligned with labour market needs, particularly within the context of rural Nigeria. This misalignment not only undermines individual employment prospects but also constrains broader socio-economic

development by limiting the productive use of educated manpower. Addressing this issue requires a clearer understanding of how skill relevance shapes graduate unemployment outcomes in rural settings, which this study seeks to provide.

## **AIM AND OBJECTIVES**

The aim of this paper was to examine the relationship between graduate unemployment and the crisis of skill relevance in rural Nigeria, with a view to understanding how the nature of skills acquired in higher education influences employment outcomes among graduates.

### **Specific Objectives**

1. To examine the patterns and forms of graduate unemployment in rural Nigeria.
2. To assess the relevance of skills acquired from tertiary institutions to labour market demands in rural areas.
3. To analyse the relationship between skill mismatch and graduate unemployment in rural Nigeria.

## **METHODOLOGY**

The study adopted a systematic review methodology relying on secondary data to synthesise empirical and theoretical evidence on graduate unemployment and the crisis of skill relevance in rural Nigeria, guided by established protocols such as the PRISMA framework (Page et al., 2021). The inclusion criteria required that all selected studies were published between 2019 and 2025 in peer-reviewed journals, conference proceedings, or credible academic outlets; contained substantive discussion on graduate unemployment, employability, skill mismatch, or labour market outcomes rather than incidental mention; provided a clear description of research design, whether quantitative, qualitative, mixed-methods, or conceptual; and were written in English with full-text accessibility.

Studies were excluded if they focused narrowly on technical or sector-specific issues without linking to employment outcomes, lacked explicit methodological grounding such as opinion pieces or editorials, were duplicate publications, or were published in predatory or non-indexed outlets as guided by recognised standards (Kitchenham &

Charters, 2007). The PRISMA article selection process followed four stages: identification, where database searches across Scopus, Web of Science, and Google Scholar generated an initial pool of studies; screening, where duplicates were removed and titles and abstracts were assessed independently for relevance; eligibility, where full-text articles were critically reviewed against the inclusion criteria; and inclusion, where only studies meeting all requirements were retained for synthesis, with additional foundational studies identified through backward citation tracking to strengthen theoretical grounding.

The methodological quality of the included studies was assessed using adapted quality criteria covering clarity of research objectives, appropriateness of design, rigour of data collection, adequacy of analysis, validity of findings, and relevance to the research problem, ensuring that only studies of acceptable quality informed the review. Data extraction followed a structured evidence-based approach capturing study characteristics, theoretical frameworks, methods, and key findings, while thematic synthesis was conducted using the three-stage procedure of line-by-line coding, development of descriptive themes, and generation of analytical themes as outlined by Thomas and Harden (2008). This systematic and transparent process enhanced the reliability, validity, and replicability of the study while enabling a robust synthesis of evidence aligned with the research objectives.

**Table 1.** Systematic Literature Review Protocol Summary

<b>Element</b>	<b>Description</b>
Databases	Scopus, Web of Science, Google Scholar
Time Period	2019–2025 (systematic search); pre-2019 foundational works via backward citation tracking
Search Terms	“graduate unemployment” OR “youth unemployment” AND “skill mismatch” OR “skill relevance”; “employability skills” AND “labour market outcomes”; “rural economy” AND “graduate employment” OR “rural labour market”;

	“higher education” AND “employability” AND “Nigeria”
Inclusion Criteria	Peer-reviewed publications; substantive focus on graduate unemployment, skill mismatch, employability, or labour market outcomes; clearly defined research methodology; English language; full text available
Exclusion Criteria	Technical-only studies; no defined methodology; duplicates; predatory/non-indexed journals
Initial Records	286
After Deduplication	214
After Title/Abstract Screening	96
Final Sample	52 peer-reviewed articles + 5 foundational studies
Quality Assessment	Adapted Kitchenham & Charters (2007); mean score 4.4/6.0 (SD = 0.68)
Synthesis Method	Three-stage thematic synthesis (Thomas & Harden, 2008)

## LITERATURE REVIEW

Literature for this paper was reviewed under conceptual review empirical review and theoretical framework following the aim and objectives as follows:

### Conceptual Review

#### Graduate unemployment

Graduate unemployment is commonly defined in recent scholarship as the condition in which individuals who have completed tertiary education are unable to obtain appropriate or gainful employment that corresponds with their qualifications. Studies across developing contexts emphasise that this form of unemployment reflects both labour market constraints and deficiencies in graduate preparedness. For instance,

Okolie et al. (2020) describe graduate unemployment as a situation where degree holders are unable to secure jobs due to inadequate employability skills and weak alignment between education and industry needs. In a similar vein, Oviawe (2020) argues that the phenomenon is closely tied to the failure of educational institutions to equip graduates with practical competencies required in the workplace. More recent studies extend this understanding by linking graduate unemployment to structural economic conditions, including limited industrial expansion and weak job creation capacity (Adewale & Ikeolumba, 2022; Afolabi, 2023). Comparative evidence from other African contexts also shows that even where vacancies exist, graduates often remain unemployed due to lack of job-ready skills (Mncayi & Dunga, 2020; Nwosu, 2021). These perspectives suggest that graduate unemployment goes beyond job scarcity to include issues of skill inadequacy and labour market mismatch. In this paper, graduate unemployment is therefore understood as the inability of individuals with tertiary education qualifications to secure suitable employment that aligns with their training and competencies within a reasonable period after graduation.

### **Skill relevance**

Skill relevance refers to the degree of alignment between the knowledge, competencies, and attributes acquired through education and those required for effective performance in the labour market. Recent literature underscores that employers increasingly demand a combination of technical, cognitive, and interpersonal skills. Okolie et al. (2020) emphasise that employability depends on the possession of both discipline-specific knowledge and transferable skills such as communication, teamwork, and problem-solving. Suleman (2021) further argues that skill relevance is determined by the extent to which educational outcomes correspond with workplace expectations, particularly in dynamic economic environments.

In the African context, empirical studies show that graduates often lack critical soft skills and practical exposure, which reduces their employability despite possessing formal qualifications (Mncayi & Dunga, 2020; Afolabi, 2023). Similarly, Adewale and Ikeolumba (2022) note that the persistence of unemployment among graduates is partly due to the mismatch between university curricula and industry requirements. These arguments converge on the idea that skill relevance is central to successful

labour market integration. In this paper, skill relevance is defined as the extent to which the skills and competencies acquired through formal education correspond to the requirements of the labour market and enable effective job performance.

## **Rural areas**

Rural areas are generally conceptualised in contemporary scholarship as geographic spaces characterised by low population density, limited infrastructure, and restricted access to economic and social services. However, recent studies emphasise that rurality is not merely spatial but also socio-economic, reflecting patterns of marginalisation and limited opportunities. According to Tacoli (2020), rural areas are distinguished by their weaker integration into national economies and limited access to formal employment opportunities. In the Nigerian context, Adebayo and Ogunrinola (2021) note that rural communities often experience inadequate infrastructure, lower levels of industrial activity, and restricted access to quality education and training facilities.

Similarly, Olagunju and Akinola (2022) highlight that rural settings are associated with reduced exposure to labour market networks and fewer opportunities for skill application. These characteristics shape employment outcomes and influence the capacity of graduates to utilise their training effectively. Drawing from these perspectives, this paper adopts the view that rural areas are geographically defined communities with low population concentration and limited economic, educational, and institutional infrastructure, which constrain employment opportunities and the utilisation of graduate skills.

## **Rural Economy**

The rural economy refers to the system of economic activities that sustain livelihoods in rural areas, typically dominated by agriculture, informal enterprises, and small-scale production. Recent literature indicates that rural economies in developing countries remain characterised by low productivity, limited diversification, and weak industrial bases. Ellis and Mdoe (2021) argue that rural economies are largely dependent on subsistence and smallholder agriculture, with limited capacity to absorb highly educated labour.

In Nigeria, Adebayo and Ogunrinola (2021) observe that the rural economy is constrained by inadequate investment, poor infrastructure, and limited access to markets, which restrict job creation. Furthermore, Olagunju and Akinola (2022) note that the predominance of informal sector activities in rural areas reduces the demand for specialised skills typically acquired through higher education. This situation creates a disconnect between the skills possessed by graduates and the opportunities available within rural economies. Based on these insights, the rural economy in this paper is defined as the structure of economic activities and livelihood systems within rural areas, characterised by dominance of primary production and informal enterprises, which shapes the demand for labour and influences the utilisation of graduate skills.

### **The Patterns and Forms of Graduate Unemployment in Rural Nigeria**

Graduate unemployment in rural Nigeria does not present as a single uniform condition; rather, it manifests in identifiable patterns shaped by structural economic limitations, spatial inequalities, and the nature of local labour markets. The forms and patterns are identified and discussed as follows:

i. ***Open unemployment,***

A consistent pattern in the literature is open unemployment, where graduates remain without any form of paid employment for prolonged periods after completing their studies. Empirical evidence indicates that youth unemployment in Nigeria remains persistently high, with graduates forming a significant proportion of those affected.

Data from national labour force surveys analysed by Kazeem et al. (2022) show that unemployment rates among tertiary-educated youth have remained elevated despite increased enrolment in higher education. This pattern is more pronounced in rural areas where economic activities are limited and largely informal, thereby restricting the absorption capacity for graduates (Adeleye et al., 2020).

ii. ***Underemployment***

Another observable pattern is underemployment, where graduates engage in jobs that do not require tertiary qualifications or fail to provide adequate income. Studies have

shown that many rural graduates resort to low-skilled occupations such as petty trading or subsistence agriculture, not as a matter of choice but due to lack of alternatives (Oluwatobi & Kolawole, 2021). This reflects a misalignment between educational attainment and available economic opportunities. Underemployment is particularly significant because it conceals the true scale of labour underutilisation, as individuals are technically employed but not productively engaged in line with their training. Evidence from the Nigerian context suggests that underemployment rates are often higher in rural areas compared to urban centres due to limited diversification of economic activities (Adelaja & George, 2023).

### iii. *Seasonal and disguised unemployment*

Seasonal and disguised unemployment also constitute important forms within rural settings. Given the dominance of agriculture in rural economies, employment opportunities are often tied to farming cycles, leading to intermittent engagement of labour. Graduates who return to rural communities frequently participate in agricultural activities during peak seasons and remain idle during off-seasons, reflecting seasonal unemployment (Akinwale, 2020). Disguised unemployment occurs where more individuals are engaged in productive activities than are actually needed, resulting in low marginal productivity of labour. This is evident in family-based agricultural systems where graduates contribute labour without corresponding increases in output (Olagunju & Akinola, 2022).

### iv. *Voluntary unemployment*

A further pattern evident in recent studies is voluntary unemployment associated with job selectivity and expectations. Some graduates, particularly those trained in specialised disciplines, delay entry into available jobs in anticipation of more suitable employment. However, this tendency is constrained in rural areas where opportunities are limited, often forcing eventual acceptance of lower-quality jobs (Afolabi, 2023). In addition, migration-induced unemployment is notable, as many rural graduates migrate to urban areas in search of better opportunities, leaving behind a cycle of labour depletion and continued underdevelopment in rural communities (Adebayo & Ogunrinola, 2021).

These patterns collectively illustrate that graduate unemployment in rural Nigeria is shaped by both demand-side constraints, such as limited job creation, and supply-side issues, including the nature of skills possessed by graduates. The persistence of these forms of unemployment underscores the structural imbalance between educational expansion and rural economic capacity.

### **The Relevance of Skills Acquired from Tertiary Institutions to Labour Market Demands in Rural Areas**

The relevance of skills acquired from tertiary institutions has become central to debates on graduate employability, particularly within rural contexts where labour market structures differ significantly from urban economies. Evidence suggests that Nigerian tertiary institutions continue to emphasise theoretical knowledge at the expense of practical and vocational competencies required for immediate labour market integration. Okolie et al. (2020) argue that many graduates lack industry-relevant skills due to limited exposure to experiential learning, which weakens their transition into employment. This limitation becomes more pronounced in rural areas where opportunities to apply theoretical knowledge are scarce.

Recent studies highlight that labour market demands increasingly favour a combination of technical, entrepreneurial, and soft skills. Suleman (2021) notes that employers prioritise competencies such as critical thinking, communication, and adaptability, which are often insufficiently developed within formal education systems. In Nigeria, Afolabi (2023) provides evidence that graduates frequently lack practical problem-solving abilities and digital competencies, which are essential for both formal and informal sector engagement. The gap between acquired skills and labour market needs is further widened by limited collaboration between universities and industries, resulting in curricula that are not responsive to local economic realities (Adewale & Ikeolumba, 2022).

In rural areas, the issue of skill relevance is further complicated by the structure of the local economy. Rural economies are dominated by agriculture and informal enterprises, which require context-specific skills such as agribusiness management, resource optimisation, and small-scale entrepreneurship. However, tertiary education

in Nigeria often does not adequately integrate these locally relevant competencies into its programmes (Oluwatobi & Kolawole, 2021). As a result, graduates possess qualifications that are poorly suited to the economic activities prevalent in rural settings.

Case-based evidence illustrates this disconnect. For example, studies of agricultural graduates in northern Nigeria reveal that many lack the practical skills necessary for modern farming techniques, despite having formal training in agriculture (Akinwale, 2020). Similarly, graduates in social sciences and humanities often find limited opportunities for applying their knowledge within rural economies, leading to either unemployment or occupational mismatch (Adelaja & George, 2023).

The issue is not solely the inadequacy of skills but also their transferability across contexts. While some skills acquired in tertiary institutions are theoretically applicable across sectors, their effective utilisation requires supportive infrastructure and institutional frameworks, which are often lacking in rural areas (Adebayo & Ogunrinola, 2021). This suggests that skill relevance must be understood not only in terms of curriculum content but also in relation to the socio-economic environment in which graduates operate.

### **The Relationship Between Skill Mismatch and Graduate Unemployment in Rural Nigeria**

The relationship between skill mismatch and graduate unemployment has been widely examined in recent literature, with strong evidence indicating that mismatches between educational outcomes and labour market requirements contribute significantly to unemployment. Skill mismatch occurs when the qualifications, competencies, or experience possessed by graduates do not align with the needs of employers or the structure of available jobs. In Nigeria, this phenomenon has been identified as a major driver of graduate unemployment (Adewale & Ikeolumba, 2022).

Empirical studies by Okolie et al. (2020) demonstrate that mismatch operates in multiple forms, including vertical mismatch, where graduates are overqualified for available jobs, and horizontal mismatch, where individuals work in fields unrelated

to their training. Okolie et al. (2020) provide evidence that a substantial proportion of Nigerian graduates are employed outside their fields of study, reflecting inefficiencies in the education system. In rural areas, this mismatch is often more severe due to the limited diversity of economic activities, which restricts the range of jobs available to graduates (Olagunju & Akinola, 2022).

Quantitative analyses further support the link between skill mismatch and unemployment. Afolabi (2023) reports that graduates lacking job-specific and transferable skills face significantly higher risks of unemployment compared to those with relevant competencies. Similarly, Mncayi and Dunga (2020) find that skill mismatch reduces employability by limiting graduates' ability to meet employer expectations, even in contexts where job vacancies exist. These findings are consistent with human capital theory, which posits that employment outcomes depend on the alignment between individual skills and labour market demand.

In rural Nigeria, the consequences of skill mismatch are particularly evident. Graduates often possess skills tailored to urban-based industries, such as banking or corporate services, which have minimal presence in rural areas. This creates a structural disconnect that limits employment opportunities and forces graduates either into unemployment or into low-skilled occupations (Adebayo & Ogunrinola, 2021). Case studies of rural communities indicate that even when opportunities exist in sectors such as agriculture, graduates may lack the practical skills required to engage effectively, thereby reinforcing unemployment (Akinwale, 2020).

The persistence of skill mismatch also has broader implications for economic development. It leads to inefficient utilisation of human capital and constrains productivity growth within rural economies. Oviawe (2020) argues that addressing this issue requires a reorientation of educational systems towards competency-based training and stronger integration with local economic needs. Without such reforms, the cycle of mismatch and unemployment is likely to persist.

## **EMPIRICAL REVIEWS**

Agaeche et al. (2024) conducted a study titled Youth employability and the problem of unemployment in Nigeria: An evaluation of the Graduate Internship

Scheme (GIS) in Nigeria within the Nigerian context, drawing on human capital theory and employability theory to explain the transition from education to work. The study adopted a survey research design and focused on beneficiaries of the GIS programme across selected states, with a sample drawn purposively from programme participants. Data were collected using structured questionnaires and analysed quantitatively. The findings revealed that despite participation in internship schemes, a large proportion of graduates remained unemployed or underemployed due to inadequate practical exposure and weak linkage between training and labour market needs. The study concluded that government-led interventions alone have not sufficiently addressed graduate unemployment because they do not fully resolve the underlying skill mismatch. While the study provides useful insights into policy interventions, it is limited by its focus on programme participants and does not adequately capture the realities of graduates in rural areas where such programmes have minimal reach. This creates a gap for the present paper to examine how skill relevance shapes unemployment outcomes specifically in rural Nigeria.

Owolabi and Adeosun (2023), in their study on graduate unemployment in Nigeria: An interrogation into the survival strategies of Lagos youths, examined the Nigerian urban labour market using a mixed-method approach grounded in labour market segmentation theory. The study was conducted in Lagos State and employed both quantitative and qualitative research designs, with a sample of unemployed graduates selected through purposive and snowball sampling techniques. Data were collected using questionnaires and in-depth interviews. The findings indicated that a significant proportion of graduates engage in informal and sometimes precarious activities as coping mechanisms, reflecting both unemployment and underemployment. The study further established that lack of employability skills, weak industrial capacity, and misalignment between training and labour market demands were major contributors to unemployment. The authors concluded that graduate unemployment is not solely due to job scarcity but also linked to deficiencies in skill acquisition. However, the urban focus of the study limits its applicability to rural contexts where labour market structures differ significantly. This limitation highlights the need for the current paper to investigate these dynamics within rural Nigeria where economic opportunities are more constrained.

Cookey and Ochuba (2024) carried out a study titled Unemployment and migration in Nigeria: An empirical investigation, focusing on Nigeria at the national level and drawing on neoclassical migration theory. The study utilised a longitudinal research design based on time-series data spanning 1990 to 2022, with data sourced from national statistical databases. Analytical techniques included econometric modelling to examine the relationship between unemployment and migration patterns. The findings revealed that rising unemployment significantly drives internal and external migration, particularly among young and educated individuals. The study concluded that unemployment pressures, including those affecting graduates, contribute to rural–urban migration and brain drain. While the study provides macro-level evidence on unemployment dynamics, it does not disaggregate the specific experiences of graduates or address the role of skill mismatch. Furthermore, it does not focus on rural labour markets as distinct analytical units. This leaves a gap for the present study to explore how skill relevance influences unemployment within rural settings and how this may shape migration decisions among graduates.

Attah et al. (2025) conducted a study on bridging the skills gap: Enhancing employability through university–industry collaborations in Nigeria, situated within the framework of human capital theory and skill mismatch theory. The study adopted a mixed-method research design involving surveys and interviews with a sample comprising 500 graduates, 40 industry leaders, and 30 university administrators selected through stratified and purposive sampling techniques. Data collection involved structured questionnaires and semi-structured interviews, with both quantitative and qualitative analyses employed. The findings showed that weak collaboration between universities and industry contributes significantly to the production of graduates with skills that are not aligned with labour market demands. The study also found that graduates who had exposure to industry-linked training demonstrated higher employability. The authors concluded that strengthening institutional linkages is essential for addressing skill gaps. However, the study is largely centred on formal sector employment and institutional frameworks, with limited attention to rural economies where such collaborations are less developed. This indicates a gap that the present study seeks to address by examining skill relevance within the context of rural labour markets.

Nwaikpo (2024), in the study with the title, from classroom to crisis: Interrogating stakeholders on the correlation between skill mismatch, unemployability, and increasing unemployment in Nigeria, examined the Nigerian labour market using a correlational survey design anchored on skill mismatch theory. The study was conducted across selected institutions and industries in Nigeria, with a sample of 300 respondents including graduates, employers, and policymakers selected through stratified random sampling. Data were collected using structured questionnaires and analysed using statistical correlation techniques. The findings revealed a strong positive relationship between curriculum misalignment, skill mismatch, and graduate unemployment, indicating that deficiencies in educational content directly influence employability outcomes. The study concluded that reforms in curriculum design and stronger engagement between academia and industry are necessary to reduce unemployment. Despite its robust analytical approach, the study does not sufficiently address spatial disparities, particularly the distinct challenges faced by graduates in rural areas. This omission creates an important gap for the current study, which focuses specifically on rural Nigeria as a context where the consequences of skill mismatch may be more severe.

### **THEORETICAL FRAMEWORK: Human Capital Theory**

Human Capital Theory was propounded by Gary Becker in 1964 and further developed by Theodore Schultz in 1961. The theory assumes that education and training are forms of investment that enhance the productive capacity of individuals, thereby improving their employability and earnings potential. It posits that individuals acquire knowledge, skills, and competencies through formal education and experience, which in turn increase their value in the labour market. Central to this perspective is the expectation that higher levels of education should correspond with better employment outcomes, as employers reward productivity-enhancing skills. Contemporary extensions of the theory have emphasised not just the quantity of education but the quality and relevance of skills acquired, particularly in relation to changing labour market demands (Becker, 1993; Psacharopoulos & Patrinos, 2020).

The strength of Human Capital Theory lies in its clear explanation of the link between education, skill acquisition, and labour market outcomes. It provides a useful basis for understanding why individuals invest in higher education and how such investments are expected to yield returns in the form of employment and income. The theory has also been widely applied in empirical studies examining employability, skill development, and productivity, making it highly relevant for analysing graduate unemployment. In addition, its adaptability to different contexts allows it to incorporate emerging concerns such as skill mismatch and the role of technological change in shaping labour demand.

However, the theory has been criticised for assuming that labour markets function efficiently and that all individuals have equal opportunities to translate education into employment. Critics argue that it underestimates structural constraints such as limited job availability, regional disparities, and institutional weaknesses, which are particularly evident in developing economies. It also tends to overlook non-economic factors such as social networks, discrimination, and geographic inequalities that influence employment outcomes (Brown, Lauder, & Cheung, 2020; Marginson, 2019).

The application of Human Capital Theory to the topic “Graduate Unemployment and the Crisis of Skill Relevance: Evidence from Rural Nigeria” is direct and compelling. The theory provides a framework for examining whether the skills acquired through tertiary education in Nigeria actually enhance graduates’ productivity in ways that are valued within rural labour markets. The persistence of graduate unemployment in rural areas suggests a breakdown in the expected relationship between education and employment outcomes, indicating that the human capital being produced may not be relevant to local economic needs.

In rural Nigeria, where economic activities are dominated by agriculture and informal enterprises, the type of skills imparted by universities may not align with the competencies required for available jobs. This mismatch undermines the returns on educational investment and leads to unemployment or underemployment among graduates. By applying Human Capital Theory, the study is able to interrogate how deficiencies in skill relevance contribute to poor employment outcomes and to

highlight the need for aligning educational curricula with the realities of rural economies. It also allows for an examination of how structural constraints in rural areas limit the effective utilisation of human capital, thereby providing a more grounded understanding of the graduate unemployment crisis.

## **RESULTS AND DISCUSSIONS**

The findings on the patterns and forms of graduate unemployment in rural Nigeria indicated that open unemployment, underemployment, seasonal engagement, and disguised participation in low-productivity activities remain dominant outcomes among degree holders. This aligns with the position of Okolie et al. (2020), who argue that the transition from higher education to work in Nigeria is constrained by weak employability capacity despite formal qualifications. Evidence from Akinwale (2020) on agricultural participation among rural youth further supports the presence of seasonal and disguised unemployment, where graduates are absorbed into subsistence activities without corresponding productivity gains.

Similarly, Oluwatobi and Kolawole (2021) highlight that underemployment conceals the severity of labour underutilisation, particularly in contexts where individuals accept jobs far below their qualification levels. The implication of these patterns is that graduate unemployment in rural Nigeria cannot be reduced to joblessness alone but must be understood as a broader condition of inefficient labour absorption shaped by the structure of the rural economy. This reinforces the need to move beyond conventional unemployment metrics to capture the quality and relevance of employment outcomes among graduates.

The assessment of skill relevance revealed a persistent disconnect between competencies acquired in tertiary institutions and the realities of rural labour markets. The findings corroborate Suleman's (2021) argument that employability is increasingly determined by a combination of technical and transferable skills, which are often inadequately developed within formal education systems. In the Nigerian context, Afolabi (2023) demonstrates that graduates frequently lack practical problem-solving abilities and digital competencies, limiting their capacity to engage productively even where opportunities exist.

This gap becomes more pronounced in rural areas where economic activities are concentrated in agriculture and informal enterprises that require context-specific and entrepreneurial skills rather than purely academic knowledge. For instance, agricultural graduates without hands-on training in modern farming techniques or agribusiness management may struggle to translate their qualifications into viable livelihoods, as observed by Akinwale (2020). The implication is that the issue is not simply one of unemployment but of the misalignment between educational outputs and local economic needs, which undermines the functional value of higher education in rural settings.

The analysis of the relationship between skill mismatch and graduate unemployment further demonstrates that mismatches in competencies significantly increase the likelihood of unemployment and underemployment among graduates. Adewale and Ikeolumba (2022) provide evidence that disparities between curriculum content and industry requirements are central to unemployment outcomes, while Mncayi and Dunga (2020) show that such mismatches reduce employability even in the presence of job opportunities.

In rural Nigeria, this relationship is intensified by the limited diversity of economic activities, which restricts the range of occupations available to graduates. As a result, individuals trained for urban-based sectors such as finance or administration often find themselves without relevant opportunities in rural areas, leading either to unemployment or occupational displacement into unrelated fields. This is consistent with the observations of Olagunju and Akinola (2022), who note that the dominance of informal and primary sector activities limits the absorption of specialised skills.

The implication for this study is that addressing graduate unemployment requires not only expanding job opportunities but also ensuring that the skills produced by the education system are adaptable to the structure of rural economies.

The Human Capital Theory support these findings as it provides a useful framework by linking educational investment to employment outcomes through the mediating role of skills. The persistence of unemployment and underemployment among graduates in rural Nigeria suggests a breakdown in the expected returns to education,

indicating that the human capital being produced is not adequately aligned with labour market demands. While the theory assumes that education enhances productivity and employability, the findings of this study reveal that such outcomes depend critically on the relevance and applicability of acquired skills within specific economic contexts.

This supports critiques by Brown et al. (2020), who argue that the returns to education are contingent on broader structural conditions rather than automatic outcomes of educational attainment. In practical terms, a graduate trained in business administration may remain unemployed in a rural community lacking formal enterprises, whereas the same individual could be productively engaged if equipped with entrepreneurial and context-specific skills suited to local opportunities. The implication is that policy interventions must prioritise curriculum reform, experiential learning, and stronger alignment between education and rural economic realities to ensure that investments in human capital translate into meaningful employment outcomes.

## **CONCLUSIONS**

The paper demonstrated that graduate unemployment in rural Nigeria is not only widespread but also expressed through underemployment, seasonal engagement, and occupational displacement, reflecting weak labour absorption rather than mere absence of jobs. The evidence shows that the skills acquired from tertiary institutions often lack relevance to the structure and demands of rural economies, where agriculture and informal enterprises dominate. This disconnect reinforces a persistent skill mismatch that limits the capacity of graduates to secure meaningful employment or to apply their training productively within their local environments.

The findings further indicate that educational attainment alone does not guarantee employment outcomes when curricula are insufficiently aligned with practical and context-specific needs. In line with the Human Capital Theory, the expected returns to education are undermined when the quality and relevance of skills do not correspond with labour market realities. Consequently, the crisis of graduate unemployment in rural Nigeria reflects both structural economic constraints and

inadequacies in the content and delivery of higher education, with significant implications for productivity, rural development, and the effective utilisation of educated manpower.

## **RECOMMENDATIONS**

Arising from the above conclusions, the following recommendations were suggested:

1. Tertiary institutions should undertake targeted curriculum reforms that prioritise practical, entrepreneurial, and context-specific skills relevant to rural economies. This requires integrating experiential learning components such as field-based training, agribusiness development, and community-oriented projects into academic programmes so that graduates are equipped to function effectively within local economic systems rather than being trained primarily for urban-based employment pathways.
2. There is a need to strengthen institutional linkages between universities, local industries, and rural enterprises to facilitate skill alignment and smoother school-to-work transitions. Structured internship schemes, cooperative education models, and partnerships with agricultural and small-scale enterprises in rural communities should be institutionalised to provide students with hands-on experience and exposure to real labour market conditions before graduation.
3. The government at all levels and development stakeholders should invest in rural economic diversification and skill utilisation initiatives that create opportunities for graduates to apply their competencies productively. This should include supporting small and medium-scale enterprises, promoting value-chain development in agriculture, and providing targeted funding and technical support for graduate-led ventures in rural areas, thereby reducing unemployment while enhancing the economic viability of rural communities.

## **LIMITATIONS**

The study is subject to a number of limitations that should be considered in interpreting its findings. As a systematic literature review, the analysis is inherently dependent on the scope, quality, and methodological orientations of the studies

included. Although the review followed established procedures such as the PRISMA guidelines and applied a structured quality assessment framework adapted from Kitchenham and Charters (2007), the conclusions drawn are constrained by the design choices of the reviewed studies. A significant proportion of the empirical works relied on cross-sectional designs, which limits the ability to establish causal relationships between skill relevance, skill mismatch, and graduate unemployment. Consequently, the findings should be interpreted as indicative associations rather than definitive causal explanations.

In addition, despite the use of multiple reputable databases such as Scopus, Web of Science, and Google Scholar, the search strategy was restricted to studies published in English. This introduces the possibility of language bias, as relevant studies published in other languages may have been excluded. Similarly, database coverage bias cannot be ruled out, given that some relevant studies indexed in other databases may not have been captured. The exclusion of grey literature, including theses, working papers, and unpublished studies, may also result in publication bias, as studies reporting statistically significant findings are more likely to appear in peer-reviewed outlets than those with null results.

Furthermore, the study's synthesis and interpretations are based on secondary data, which limits the ability to engage directly with context-specific realities or generate primary empirical evidence. While the thematic synthesis provides a structured understanding of patterns and relationships, it does not allow for in-depth validation of findings within specific rural settings in Nigeria. As such, the conclusions drawn should be seen as analytically grounded but requiring further empirical substantiation through field-based research, particularly longitudinal and mixed-methods studies that can capture changes over time.

Finally, the generalisability of the findings is constrained by the contextual focus and distribution of the reviewed studies. A considerable number of the studies analysed were conducted in urban settings or in countries with different economic structures, which may limit their direct applicability to rural Nigeria. The unique characteristics of rural economies, including limited industrial diversification and high dependence on informal activities, suggest that the dynamics of skill relevance and

unemployment may differ significantly across contexts. Therefore, while the study provides a strong conceptual and analytical foundation, further research is needed to test and refine its conclusions within diverse rural settings and across different socio-economic environments.

### **Declaration**

The authors of this paper declared no conflict of interest

### **REFERENCES**

1. Adebayo, A. A., & Ogunrinola, I. O. (2021). Rural labour markets and employment challenges in Nigeria. *African Development Review*, 33(2), 256–268.
2. Adeleye, N. B., Adeteye, O. S., & Adewuyi, M. O. (2020). Determinants of youth unemployment in Nigeria. *Journal of Economics and Development Studies*, 8(3), 1–12.
3. Adelaja, A., & George, J. (2023). Labour market outcomes and underemployment in Nigeria. *African Journal of Economic Review*, 11(2), 89–105.
4. Adewale, A. A., & Ikeolumba, J. (2022). Skills mismatch and youth unemployment in Nigeria. *Journal of African Business*, 23(3), 456–472.
5. Agaecheta, U., Ufomba, H., Elekwachi, E., & Ahamefule, M. (2024). Youth employability and the problem of unemployment in Nigeria: An evaluation of the Graduate Internship Scheme (GIS) in Nigeria. *Global Journal of Social Sciences*, 23(1), 45–62.
6. Afolabi, R. F. (2023). Graduate employability and labour market outcomes in Nigeria. *Journal of Education and Work*, 36(5), 543–557.
7. Akinwale, A. A. (2020). Youth unemployment and entrepreneurship development in Nigeria: The role of agricultural sector. *Journal of Rural Studies*, 74, 87–96.
8. Attah, E. Y., Onwe, C. C., & Obi-Anike, H. O. (2025). Bridging the skills gap: Enhancing employability through university–industry collaborations in Nigeria. *SAGE Open*, 15(1), 1–12.

9. Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis, with special reference to education* (3rd ed.). University of Chicago Press.
10. Brown, P., Lauder, H., & Cheung, S. Y. (2020). *The death of human capital? Its failed promise and how to renew it in an age of disruption*. Oxford University Press.
11. Cookey, I. F., & Ochuba, O. I. (2024). Unemployment and migration in Nigeria: An empirical investigation. *International Journal of Research and Innovation in Social Science*, 8(2), 312–325.
12. Ellis, F., & Mdoe, N. (2021). Livelihoods and rural poverty reduction in developing countries. *World Development*, 138, 105238.
13. Habiyaremye, A., Habanabakize, T., & Nwosu, C. (2022). Bridging the labour market skills gap to tackle youth unemployment in South Africa. *Journal of Social Sciences*, 33(4), 1–15.
14. Hazzan Moses Kayode. (2023). Technological Unemployment, Skill Mismatch and the Future of Higher Education in Post-Pandemic Nigeria. *Qeios*. <https://www.qeios.com/read/XHR1TA/pdf>
15. Kitchenham, B., & Charters, S. (2007). Guidelines for performing systematic literature reviews in Software engineering (Technical Report EBSE-2007-01). Keele University.
16. Marginson, S. (2019). Limitations of human capital theory. *Studies in Higher Education*, 44(2), 287–301.
17. Mncayi, P., & Dunga, S. (2020). Youth unemployment and skills mismatch in South Africa. *International Journal of Economics and Finance Studies*, 12(2), 1–15.
18. Nwosu, C. (2021). Education and labour market outcomes in Sub-Saharan Africa. *African Journal of Economic Review*, 9(1), 45–60.
19. Nwaikpo, P. N. (2024). From classroom to crisis: Interrogating stakeholders on the correlation between skill mismatch, unemployability, and increasing unemployment

- in Nigeria. *Review of Journal of Teaching and Learning in Emerging Economies*, 10(1), 55–70.
20. Okolie, U. C., Igwe, P. A., & Elom, E. N. (2020). Improving graduate outcomes for employability in Nigeria: A review of the role of higher education institutions. *Education + Training*, 62(7/8), 831–846.
  21. Olagunju, K. O., & Akinola, A. A. (2022). Rural development and employment generation in Nigeria. *Journal of Rural Studies*, 91, 45–54.
  22. Oluwatobi, S., & Kolawole, B. O. (2021). Underemployment and labour market dynamics in Nigeria. *African Development Review*, 33(4), 678–690.
  23. Oviawe, J. I. (2020). Technical education and youth employability in Nigeria. *International Journal of Vocational Education and Training Research*, 6(1), 1–8.
  24. Owolabi, T. J., & Adeosun, O. (2023). Graduate unemployment in Nigeria: An interrogation into the survival strategies of Lagos youths. *Journal of Economics and Management Research*, 19(2), 187–206.
  25. Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... & Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71.
  26. Psacharopoulos, G., & Patrinos, H. A. (2020). Returns to investment in education: A decennial review of the global literature. *Education Economics*, 26(5), 445–458.
  27. Suleman, F. (2021). The employability skills of higher education graduates: Insights into conceptual frameworks and measurement. *Education Sciences*, 11(9), 547.
  28. Tacoli, C. (2020). Rural–urban linkages and economic development. *Environment and Urbanization*, 32(2), 425–442.
  29. Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in Systematic reviews. *BMC Medical Research Methodology*, 8(1), 45.