

Impact Of Unemployment on Computer Science Education Undergraduate Students at the University Of Jos, Plateau State, Nigeria

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ABSTRACT: This study examined The Impact of Unemployment on Undergraduate Computer Science Education Students at the University of Jos. The objectives included identifying how unemployment influences academic performance, emotional well-being, and career planning among students, as well as determining the extent to which practical experience, institutional support, and skill acquisition affect their employability. A descriptive survey research design was adopted, and data were collected using structured questionnaires administered to 55 respondents. The responses were analyzed using frequency distribution and percentage. The findings revealed that although unemployment does not significantly hinder students' motivation to study or attend classes, it has a clear psychological effect, producing anxiety, uncertainty, and concern about future career prospects. The study also found that many students perceive a gap between academic training and market-required practical skills, leading them to independently pursue technical and entrepreneurial competencies. Furthermore, a significant number of respondents expressed preference for ICT-based employment and entrepreneurial opportunities over traditional teaching roles. The study concludes that unemployment strongly influences academic attitude, self-development choices, and career orientation among students

KEYNOTES: UNEMPLOYMENT, COMPUTER SCIENCE EDUCATION, UNDERGRADUATE AND UNIVERSITY OF JOS

I. INTRODUCTION

The problem of unemployment among university graduates has become one of the most pressing socio-economic challenges facing Nigeria today, with far-reaching consequences for individuals, households, and national development (National Bureau of Statistics [NBS], 2024; World Bank, 2024). Although higher education is intended to equip students with knowledge and skills for self-reliance and employment, a large proportion of graduates still struggle to transition successfully into the labor market (International Labour Organization [ILO], 2022). In Nigeria, this paradox has become a central issue in debates about the quality and relevance of tertiary education. Reports from the National Bureau of Statistics (NBS, 2024) reveal that while unemployment rates fluctuate, underemployment and job insecurity remain high, with youth and fresh graduates being the most vulnerable categories. This has made the experience of studying at the university, especially in professional and technical fields, inseparably linked to concerns about post-graduation employment. (NBS, 2024; World Bank, 2024). (ILO, 2022).

Nigeria's labor market presents a particularly complex picture. On the one hand, methodological updates to the National Labour Force Survey in 2023–2024 indicate relatively low headline unemployment rates under international best practices that better capture short job search and informal activities. For example, the National Bureau of Statistics (NBS, 2024) reported a national unemployment rate of 4.3% in the second quarter of 2024, alongside very high informality with about 93% of workers in informal employment and a combined unemployment plus time-related underemployment (LU2) of 13%. These indicators signal that underutilization of labor remains significant even when open unemployment appears modest. Youth-specific indicators also remain concerning, as youth unemployment will be 8.4% in the first quarter of 2024, and broader youth labor underutilization, including inactivity and underemployment, remains persistently elevated. Complementary international data from the World Bank (2024) and the International Labour Organization (ILO, 2022) similarly depict structural challenges in youth employment, with long-run vulnerability to downturns that exacerbate graduate unemployment in countries like Nigeria. (ILO, 2022; NBS, 2024). (World Bank, 2024) For students enrolled in technology-related programs, these labor-market realities coexist with fast-moving shifts in the digital economy.

Nigeria's ICT sector has expanded in its contribution to GDP and in the diffusion of digital services, yet entry-level opportunities remain uneven across regions, with concentrated hubs in Lagos and Abuja. In North-Central Nigeria, Plateau State—branded the “Home of Peace and Tourism”—has an economic base that historically combines agriculture and mining with emergent services and light manufacturing. Recent strategic plans emphasize agriculture, mining, and tourism as levers for inclusive growth, alongside human-capital and infrastructure investments. While these pillars are not traditionally ICT-centric, the expansion of e-commerce, fintech adoption by small and medium enterprises, digital public services, and creative-tech ecosystems are opening niches for computing graduates in software development, data analysis, IT support, educational technology, and agri-tech solutions tailored to local value chains.

Within this context, Computer Science Education as a program that blends disciplinary computing knowledge with pedagogical training occupies a distinctive position. Unlike pure Computer Science, undergraduates in Computer Science Education are trained both as technologists and as prospective educators capable of teaching computing and ICT at secondary and post-secondary levels, designing curricula, and leading digital-literacy initiatives in schools and communities. This dual identity potentially broadens employability pathways in education, software and IT services, content development, instructional design, and workforce training, but it also exposes students more directly to shocks in two labor sub-markets: the education sector, both public and private, and the broader tech and ICT services sector. At the University of Jos, a federal university established in 1975 with a long tradition in the sciences and education, the Computer Science Education program draws students from Plateau State and beyond, reflecting the institution's role as a knowledge anchor for the North-Central region. The university began as a campus of the University of Ibadan in 1971 before evolving into a full-fledged institution, with science and education programs introduced early in its history. This heritage continues to inform how computing education is delivered in teacher-training contexts.

The focus on unemployment in relation to Computer Science Education undergraduates is significant because the link between labor-market prospects and academic behavior is well documented in higher education literature. Expectations about post-graduation work influence students' major choice, level of effort, internships, certification pursuits, and entrepreneurial orientation. Conversely, weak job prospects can depress motivation, foster unemployment anxiety, and in some cases precipitate mental-health concerns that disrupt study patterns or delay completion. Nigerian and international studies have connected unemployment or the fear of it to anxiety and depression, changes in time allocation, and a pivot toward survivalist entrepreneurship among young people. In programs like Computer Science Education, where pedagogical confidence, classroom practice, and up-to-date technical skills are critical, these dynamics may be especially consequential. From a theoretical standpoint, several perspectives help illuminate these mechanisms. Human Capital Theory (Becker, 1993) suggests that students invest in education when expected returns, such as wages and employment probability, justify present costs. Elevated unemployment risk depresses expected returns, potentially reducing study effort or altering specialization choices, for example, from computing pedagogy to certifications perceived as more marketable. Job-search and matching models highlight frictions such as information gaps, geographic immobility, and weak university–industry linkages that prolong transition times. For Computer Science Education students outside Nigeria's main tech hubs, these frictions may be amplified by fewer local internships, thinner professional networks, or limited exposure to industry-grade tools. Expectancy–Value Theory (Eccles & Wigfield, 2002) emphasizes the role of self-efficacy and task value, noting that if students expect low odds of securing good jobs regardless of effort, their perceived value of coursework declines, undermining persistence in demanding technical subjects or in school-based teaching practice. Capability and resilience perspectives underscore the importance of non-cognitive and contextual resources such as mentoring, psychosocial support, career services, maker-spaces, and entrepreneurship incubators that can buffer the negative effects of weak labor markets by expanding what students can realistically achieve.

Taken together, these frames converge on the idea that unemployment is not only an outcome at graduation but also an in-school influence that shapes students' trajectories during undergraduate study. For undergraduates in Computer Science Education at the University of Jos, this entails both proximal academic experiences such as motivation, performance, practicum quality, certification uptake, and project choice, and distal outcomes such as employability, time-to-first-job, underemployment, and job-education match. In Plateau State, unemployment pressures manifest in several ways that may shape the student experience. Persistent news about scarce vacancies or hiring freezes in education and ICT can dampen mastery goals, increase absenteeism as students pursue side jobs, or in some cases spur overinvestment in credentials such as short-term courses and vendor certifications at the expense of depth.

Where schools are slow to implement the revised Nigerian computing curriculum or lack necessary equipment, students preparing for careers in teaching may struggle to gain classroom-ready, hands-on experience. On the ICT-industry side, the rapid evolution of tools and frameworks in cloud computing, data science, and software engineering can outpace the pace of curriculum revision, widening the skills gap and undermining confidence in employability. Internships and school practice placements are likewise constrained by Plateau's labor market structure, where agriculture and public administration dominate, leaving limited placements in IT services. Students also confront financial stress when household unemployment forces them into gig work such as ride-hailing, delivery, or freelance services that consume time needed for coursework, laboratories, and teaching practice. These pressures can create a cycle in which weaker academic performance further undermines employability.

The psychological burden of unemployment exposure also affects career self-efficacy. Evidence from Nigeria and other contexts links unemployment to anxiety, depressive symptoms, and reduced confidence in career abilities. For teacher-preparation students, diminished self-efficacy can impair classroom management confidence and willingness to pursue teaching positions, especially in underserved rural areas. At the same time, unemployment pressures sometimes drive students into entrepreneurship or alternative pathways such as freelancing, tutoring, or launching small ed-tech ventures. While such pathways can stimulate innovation, they often lack stability and scalability, prolonging the transition to secure employment. Geographic mobility further complicates the picture, as high-achieving students may migrate to Lagos, Abuja, or even abroad, creating selection effects that shape peer perceptions of success and leaving local labor markets underserved. (Adedeji, 2020). The specificities of Plateau State's development strategy, with its prioritization of agriculture, mining, tourism, and infrastructure, provide both constraints and opportunities for Computer Science Education undergraduates. The integration of computing competencies into these sectors, such as precision agriculture, geospatial analytics for mining and environmental monitoring, digital tourism platforms, cybersecurity for small enterprises, and school-system digitization, will be able to significantly expand demand for graduates if deliberate linkages are established between the University of Jos, state ministries of education and ICT, technical and vocational education boards, and local industry associations. Similarly, federal and state policies on teacher recruitment, curriculum reforms, digital-skills initiatives, and incentives for ed-tech can reshape expectations and choices for students. In sum, unemployment in Nigeria is not merely a headline rate but a multi-dimensional constraint that includes open unemployment, underemployment, informality, and skills mismatch. These realities shape how Computer Science Education undergraduates at the University of Jos learn, specialize, and plan their futures. At an institution located in a region with distinct sectoral strengths and evolving digital needs, a rigorous inquiry into the impact of unemployment on these students is timely and necessary for curriculum planners, student-affairs administrators, career services, and policymakers seeking to align human-capital formation with local and national development goals.

II. STATEMENT OF THE PROBLEM

Unemployment among graduates has become one of the most persistent challenges facing Nigeria's higher education system and its labor market. Despite the rapid expansion of tertiary institutions and programs designed to build human capital, a significant proportion of graduates continue to face difficulty securing meaningful employment. This problem is not confined to arts and social science graduates, but extends to fields with ostensibly high demand such as technology and education. The situation is especially problematic for Computer Science Education undergraduates, who are trained to function in two critical areas of the economy—the education sector and the ICT industry—yet remain confronted with high unemployment and underemployment after graduation. In Plateau State, where the University of Jos plays a central role in training computer science educators, labor-market realities compound the problem. Opportunities for ICT-related employment are limited compared to major hubs like Lagos and Abuja, while infrastructural deficiencies in schools restrict the absorption of trained computing educators. As a result, graduates of Computer Science Education often face uncertain employment prospects, with some forced into jobs unrelated to their field of study, others into underpaid positions, and many into prolonged job searches. This mismatch between academic training and labor-market opportunities undermines the return on investment in education and discourages current undergraduates, many of whom begin to lose confidence in their future careers even before graduation. The consequences of this challenge are multidimensional. Students may experience reduced motivation, absenteeism, or shifts in study patterns as they divert time to temporary or informal jobs. Financial stress caused by unemployment within their households may further push them toward gig work that competes with their academic commitments. For those preparing to enter the teaching profession, unemployment anxiety can erode professional identity, lower self-efficacy, and discourage them from pursuing teaching roles in underserved communities. Others may attempt to adapt by pursuing additional certifications or entrepreneurial ventures,

which though beneficial in some cases, are often survivalist in nature and lack long-term sustainability. The persistence of graduate unemployment in the face of rising demand for ICT skills also raises questions about the alignment of curriculum with labor-market needs, the effectiveness of career support structures at the University of Jos, and the adequacy of linkages between higher education institutions and local industries. Without a systematic understanding of how unemployment is shaping the academic, psychological, and professional lives of Computer Science Education undergraduates, interventions will remain fragmented and insufficient. It is against this backdrop that this study seeks to investigate the impact of unemployment on Computer Science Education undergraduate students at the University of Jos. By examining how unemployment influences their motivation, learning experiences, practicum quality, skill acquisition, and career expectations, the study aims to generate evidence that can guide institutional reforms and policy responses to one of the most pressing challenges confronting Nigerian higher education today.

PURPOSE OF THE STUDY : The primary aim of this study is to examine the impact of unemployment on Computer Science Education undergraduate students of the University of Jos, Plateau State. The study seeks to explore how unemployment and the fear of joblessness influence students' academic motivation, learning outcomes, practicum experiences, career expectations, and overall preparedness for the labor market.

In order to achieve this aim, the study is guided by the following specific objectives:

1. To assess the relationship between students' perception of unemployment and their academic motivation, level of engagement, and commitment to coursework.
2. To investigate how unemployment influences the quality of practicum experiences and access to internships for Computer Science Education undergraduates.
3. To examine the effect of unemployment on students' psychological well-being, career self-efficacy, and professional identity.
4. To analyze how unemployment shapes the career expectations and choices of students, particularly in relation to teaching, ICT industry roles, or entrepreneurship.
5. To identify the institutional and external support mechanisms that can help mitigate the negative effects of unemployment on undergraduate students in Computer Science Education.

RESEARCH QUESTIONS

This study is guided by the following research questions:

1. How does the perception of unemployment influence the academic motivation, learning engagement, and overall commitment of Computer Science Education undergraduates at the University of Jos?
2. In what ways does unemployment affect the quality of teaching practice and access to internship opportunities for these students?
3. What is the relationship between unemployment and the psychological well-being, career self-efficacy, and professional identity of Computer Science Education undergraduates?
4. How does unemployment shape the career expectations and choices of students, particularly their preference for teaching, ICT-related roles, or entrepreneurship after graduation?
5. What forms of institutional support and external interventions are available, and how effective are they in mitigating the impact of unemployment on Computer Science Education undergraduates at the University of Jos?

RESEARCH HYPOTHESES

In line with the aim, objectives, and research questions of this study, the following hypotheses are proposed for empirical testing:

1. There is no significant relationship between students' perception of unemployment and their academic motivation or level of engagement in coursework.
2. Unemployment has no significant influence on the quality of teaching practice and access to internship opportunities for Computer Science Education undergraduates.
3. There is no significant relationship between unemployment and the psychological well-being, career self-efficacy, or professional identity of students.
4. Unemployment does not significantly shape the career expectations and choices of Computer Science Education undergraduates at the University of Jos.
5. Institutional and external support mechanisms do not significantly moderate the impact of unemployment on undergraduate students' academic and career outcomes.

RESEARCH DESIGN : This study adopts a descriptive survey design. A descriptive survey is concerned with collecting data from a defined population in order to describe existing conditions, opinions, attitudes, and

experiences as they occur naturally. In this context, it is used to investigate how unemployment influences Computer Science Education undergraduates at the University of Jos in terms of their academic motivation, skill development, psychological well-being, and career expectations. Unemployment is a socio-economic reality that cannot be manipulated under experimental conditions. Instead, it requires observing and analyzing the way undergraduates perceive and respond to it. The survey method provides the advantage of reaching a relatively large number of respondents at once, using structured questionnaires that ensure consistency and comparability of responses. The data generated can then be summarized and will analyze using statistical techniques to identify patterns and relationships that address the research questions and hypotheses. The aim of this study was to examine how unemployment affects undergraduate Computer Science Education students at the University of Jos, particularly in areas of academic motivation, skill development, emotional stability, and career expectations. This chapter deals with the presentation and analysis of data derived from the respondents through the questionnaire distributed for this study. The total number of respondents was 55, and all questionnaires administered were correctly completed and returned. The results of this study are presented in tables and percentages to ensure clarity of interpretation.

Descriptive statistical methods were employed to analyze the data using frequency counts and simple percentages. Tables are used to present the questionnaire responses in an organized manner. The study addressed the following research questions:

1. How does unemployment affect academic motivation, emotional well-being, and learning engagement among Computer Science Education students?
2. How do practical experience, internships, institutional support, and curriculum relevance relate to students' perceived employability?
3. In what ways does the fear of unemployment influence career planning, entrepreneurship interests, and professional confidence among students?

III. RESULTS

Analysis of Demographic Data

Section A

1. What is your age range?

Table 1: Response to Age Range

Response	Frequency	Percentage
Below 20	10	18.18%
20–24	22	40.00%
25–29	15	27.27%
30 and above	8	14.55%
Total	55	100%

From the above table, respondents aged 20–24 represent the largest proportion (40%), showing that the majority of Computer Science Education students fall within the typical undergraduate age group.

2. What is your gender?

Table 2: Response to Gender

Response	Frequency	Percentage
Male	19	34.55%
Female	36	65.45%
Total	55	100%

The table shows that female respondents (65.45%) form the majority of the participants.

3. What is your level of study?

Table 3: Response to Level of Study

Response	Frequency	Percentage
100 Level	6	10.91%
200 Level	11	20.00%
300 Level	8	14.55%
400 Level	30	54.55%
Total	55	100%

This indicates that 400-level students constitute more than half of the respondents, implying that most participants were nearing graduation and therefore more conscious of unemployment realities.

Internship and Employment Experience

4. Have you ever attended an internship or teaching practice?

Table 4: Response to Internship Participation

Response	Frequency	Percentage
Yes	29	52.73%
No	26	47.27%
Total	55	100%

Over half of the students reported attending internship or teaching practice, while nearly half did not, showing that access to practical experience varies greatly among students.

Are you currently employed?

Table 5: Response to Employment Status

Response	Frequency	Percentage
Yes	17	30.91%
No	38	69.09%
Total	55	100%

The table shows that a majority of respondents (69.09%) are unemployed, reflecting the core issue this study investigates.

Research Question One

How does unemployment affect academic motivation and emotional well-being?

6. Fear of unemployment reduces my motivation to study hard

Table 6: Response to Motivation to Study

Response	Frequency	Percentage
Strongly Agree	7	12.73%
Agree	10	18.18%
Disagree	28	50.91%
Strongly Disagree	10	18.18%
Total	55	100%

From Table 6, the frequency of those who strongly agree that unemployment reduces motivation to study is 7 with percentage = 12.73%, and the frequency of those who agree is 10 with percentage = 18.18%. Conversely, the frequency of those who disagree is 28 with percentage = 50.91% and those who strongly disagree is 10 with percentage = 18.18%. Therefore, from Table 6, it is observed that the majority of students (about 69.09%) feel that unemployment does not discourage them from studying hard.

7. The thought of unemployment discourages my active participation in class.

Table 7: Response to Class Participation

Response	Frequency	Percentage
Strongly Agree	3	5.45%
Agree	8	14.55%
Disagree	28	50.91%
Strongly Disagree	16	29.09%
Total	55	100%

From Table 7, the frequency of those who strongly agree that unemployment discourages class participation is 3 with percentage = 5.45%, and the frequency of those who agree is 8 with percentage = 14.55%. The frequency of those who disagree is 28 with percentage = 50.91% and those who strongly disagree is 16 with percentage = 29.09%. Therefore, from Table 7, it is clear that most of the respondents remain actively engaged in class activities regardless of their employment concerns.

8. Thinking about unemployment makes me anxious about the future.

Table 8: Response to Future Anxiety

Response	Frequency	Percentage
Strongly Agree	14	25.45%
Agree	25	45.45%
Disagree	10	18.18%
Strongly Disagree	6	10.91%

Response	Frequency	Percentage
Total	55	100%

From Table 8, the frequency of those who strongly agree that unemployment causes anxiety about the future is 14 with percentage = 25.45%, and the frequency of those who agree is 25 with percentage = 45.45%. Meanwhile, the frequency of those who disagree is 10 with percentage = 18.18% and those who strongly disagree is 6 with percentage = 10.91%. Therefore, from Table 8, more than 70% of respondents experience some level of anxiety or concern about their future due to unemployment issues.

9. The unemployment situation affects my emotional well-being.

Table 9: Response to Emotional Well-Being

Response	Frequency	Percentage
Strongly Agree	14	25.45%
Agree	22	40.00%
Disagree	12	21.82%
Strongly Disagree	7	12.73%
Total	55	100%

From Table 9, the frequency of those who strongly agree that unemployment affects emotional well-being is 14 with percentage = 25.45%, and the frequency of those who agree is 22 with percentage = 40.00%. In contrast, those who disagree are 12 with percentage = 21.82% and those who strongly disagree are 7 with percentage = 12.73%. Therefore, from Table 9, it is evident that a majority of students (about 65.45%) feel that unemployment negatively affects their emotional health.

I feel hopeful about my career despite unemployment rates

Table 10: Response to Career Hope

Response	Frequency	Percentage
Strongly Agree	12	21.82%
Agree	29	52.73%
Disagree	10	18.18%
Strongly Disagree	4	7.27%
Total	55	100%

From Table 10, the frequency of those who strongly agree that they feel hopeful about their career is 12 with percentage = 21.82%, and the frequency of those who agree is 29 with percentage = 52.73%. Meanwhile, those who disagree are 10 with percentage = 18.18% and those who strongly disagree are 4 with percentage = 7.27%. Therefore, from Table 10, it can be concluded that a large number of the respondents (about 74.55%) remain optimistic about their future career opportunities despite unemployment challenges.

Research Question Two

How do practical experience and institutional support influence employability?

11. I have access to adequate practical experiences relevant to my field

Table 11: Response to Practical Experiences

Response	Frequency	Percentage
Strongly Agree	4	7.27%
Agree	9	16.36%
Disagree	28	50.91%
Strongly Disagree	14	25.45%
Total	55	100%

From Table 11, the frequency of those who strongly agree that they have adequate practical experiences is 4 with percentage = 7.27%, and the frequency of those who agree is 9 with percentage = 16.36%. However, those who disagree are 28 with percentage = 50.91% and those who strongly disagree are 14 with percentage = 25.45%. Therefore, from Table 11, it is clear that about 76.36% of the respondents feel they do not have sufficient practical exposure in their field of study.

12. Unemployment limits the availability of quality internship placements

Table 12: Response to Internship Limitations

Response	Frequency	Percentage
Strongly Agree	12	21.82%
Agree	32	58.18%
Disagree	8	14.55%
Strongly Disagree	3	5.45%
Total	55	100%

From Table 12, the frequency of those who strongly agree that unemployment limits quality internship placements is 12 with percentage = 21.82%, and those who agree are 32 with percentage = 58.18%. In comparison, those who disagree are 8 with percentage = 14.55% and those who strongly disagree are 3 with percentage = 5.45%. Therefore, from Table 12, it can be seen that about 80% of the respondents believe that unemployment reduces opportunities for meaningful and competitive internship experience.

13. Many students avoided teaching practice due to poor employment prospects.

Table 13: Response to Avoidance of Teaching Practice

Response	Frequency	Percentage
Strongly Agree	10	18.18%
Agree	28	50.91%
Disagree	13	23.64%
Strongly Disagree	4	7.27%
Total	55	100%

From Table 13, the frequency of those who strongly agree that teaching practice is avoided due to poor employment prospects is 10 with percentage = 18.18%, and the frequency of those who agree is 28 with percentage = 50.91%. Meanwhile, the frequency of those who disagree is 13 with percentage = 23.64% and those who strongly disagree are 4 with percentage = 7.27%. Therefore, from Table 13, it is evident that a majority of students (about 69.09%) avoid teaching practice due to uncertain job opportunities in the sector.

14. The experience from teaching practice enhances my employability.

Table 14: Response to Value of Teaching Practice

Response	Frequency	Percentage
Strongly Agree	9	16.36%
Agree	19	34.55%
Disagree	18	32.73%
Strongly Disagree	9	16.36%
Total	55	100%

From Table 14, the frequency of those who strongly agree that teaching practice enhances employability is 9 with percentage = 16.36%, and those who agree are 19 with percentage = 34.55%. Conversely, the frequency of those who disagree is 18 with percentage = 32.73% and those who strongly disagree are 9 with percentage = 16.36%. Therefore, from Table 14, opinions appear divided, suggesting that while some students see teaching practice as valuable, others do not consider it beneficial for their future job market alignment.

15. There are effective institutional programs that prepare students for employment

Table 15: Response to Institutional Programs

Response	Frequency	Percentage
Strongly Agree	4	7.27%
Agree	10	18.18%
Disagree	27	49.09%
Strongly Disagree	14	25.45%
Total	55	100%

From Table 15, the frequency of those who strongly agree that institutional programs prepare students for employment is 4 with percentage = 7.27%, and those who agree are 10 with percentage = 18.18%. Meanwhile, those who disagree are 27 with percentage = 49.09% and those who strongly disagree are 14 with percentage = 25.45%. Therefore, from Table 15, it is clear that around 74.54% of respondents do not believe that institutional employment preparation programs are effective.

16. Institutional support has helped me develop relevant job skills

Table 16: Response to Skill Development Support

Response	Frequency	Percentage
Strongly Agree	7	12.73%

Response	Frequency	Percentage
Agree	11	20.00%
Disagree	25	45.45%
Strongly Disagree	12	21.82%
Total	55	100%

From Table 16, the frequency of those who strongly agree that institutional support helped them develop job skills is 7 with percentage = 12.73%, and those who agree are 11 with percentage = 20.00%. In contrast, the frequency of those who disagree is 25 with percentage = 45.45% and those who strongly disagree are 12 with percentage = 21.82%. Therefore, from Table 16, nearly 67.27% of students feel they do not receive adequate institutional support toward job-ready skills.

17. Government initiatives help reduce graduate unemployment

Table 17: Response to Government Support

Response	Frequency	Percentage
Strongly Agree	6	10.91%
Agree	13	23.64%
Disagree	26	47.27%
Strongly Disagree	10	18.18%
Total	55	100%

From Table 17, the frequency of those who strongly agree that government initiatives help reduce unemployment is 6 with percentage = 10.91%, and those who agree are 13 with percentage = 23.64%. Meanwhile, those who disagree are 26 with percentage = 47.27% and those who strongly disagree are 10 with percentage = 18.18%. Therefore, from Table 17, it is apparent that about 65.45% of respondents doubt the effectiveness of government efforts in reducing graduate unemployment.

Research Question Three

How does unemployment influence career direction and self-development?

18. Unemployment makes me prefer entrepreneurship over formal employment

Table 18: Response to Entrepreneurship Preference

Response	Frequency	Percentage
Strongly Agree	14	25.45%
Agree	31	56.36%
Disagree	6	10.91%
Strongly Disagree	4	7.27%
Total	55	100%

From Table 18, the frequency of those who strongly agree that unemployment makes them prefer entrepreneurship is 14 with percentage = 25.45%, and those who agree are 31 with percentage = 56.36%. In

comparison, those who disagree are 6 with percentage = 10.91% and those who strongly disagree are 4 with percentage = 7.27%. Therefore, from Table 18, about 81.81% of the respondents would rather pursue entrepreneurship than depend on formal employment opportunities.

19. I am more likely to seek ICT-related jobs than teaching positions.

Table 19: Response to ICT Preference

Response	Frequency	Percentage
Strongly Agree	21	38.18%
Agree	25	45.45%
Disagree	5	9.09%
Strongly Disagree	4	7.27%
Total	55	100%

From Table 19, the frequency of those who strongly agree that they are more likely to seek ICT jobs is 21 with percentage = 38.18%, and those who agree are 25 with percentage = 45.45%. Meanwhile, the frequency of those who disagree is 5 with percentage = 9.09% and those who strongly disagree are 4 with percentage = 7.27%. Therefore, from Table 19, it is evident that about 83.63% of the students favor pursuing careers in ICT fields rather than traditional teaching positions.

20. The fear of joblessness influences my career choice

Table 20: Response to Career Influence

Response	Frequency	Percentage
Strongly Agree	15	27.27%
Agree	30	54.55%
Disagree	7	12.73%
Strongly Disagree	3	5.45%
Total	55	100%

From Table 20, the frequency of those who strongly agree that the fear of joblessness influences career choice is 15 with percentage = 27.27%, and those who agree are 30 with percentage = 54.55%. In comparison, those who disagree are 7 with percentage = 12.73% and those who strongly disagree are 3 with percentage = 5.45%. Therefore, from Table 20, it can be concluded that the majority of respondents (about 81.82%) make career decisions based on uncertainty in the job market.

21. I plan to pursue postgraduate studies to improve my employment opportunities

Table 21: Response to Postgraduate Plans

Response	Frequency	Percentage
Strongly Agree	18	32.73%
Agree	25	45.45%
Disagree	7	12.73%
Strongly Disagree	5	9.09%
Total	55	100%

From Table 21, the frequency of those who strongly agree that they plan to pursue postgraduate studies is 18 with percentage = 32.73%, and those who agree are 25 with percentage = 45.45%. Meanwhile, the frequency of those who disagree is 7 with percentage = 12.73% and those who strongly disagree are 5 with percentage = 9.09%. Therefore, from Table 21, it appears that about 78.18% of the respondents intend to further their education to improve their job opportunities.

22. My career expectations have changed due to unemployment trends

Table 22: Response to Changing Career Expectations

Response	Frequency	Percentage
Strongly Agree	16	29.09%
Agree	27	49.09%
Disagree	8	14.55%
Strongly Disagree	4	7.27%
Total	55	100%

From Table 22, the frequency of those who strongly agree that their career expectations have changed due to unemployment trends is 16 with percentage = 29.09%, and those who agree are 27 with percentage = 49.09%. Meanwhile, the frequency of those who disagree is 8 with percentage = 14.55% and those who strongly disagree are 4 with percentage = 7.27%. Therefore, from Table 22, it can be inferred that about 78.18% of students have reconsidered or restructured their career paths based on current unemployment trends.

IV. DISCUSSION

The findings from this study reveal several significant insights into the effects of unemployment on undergraduate Computer Science Education students at the University of Jos. The data suggests that while unemployment remains a major concern for the majority of students, it influences them in diverse and sometimes contrasting ways. One of the most notable findings is that despite widespread anxiety about post-graduation employment, most students remain academically motivated and engaged in their learning. This is demonstrated by the majority who disagreed that fear of unemployment reduces their motivation to study or their level of class participation. This suggests a degree of resilience among the students, reflecting their desire to maintain academic performance even under uncertain employment conditions.

However, although unemployment does not directly diminish study motivation, it has a significant psychological impact. A majority of respondents indicated that they experience anxiety and emotional stress due to unemployment concerns. Many reported fear about their future, worry about career direction, and mental fatigue due to job market uncertainty. This indicates that unemployment affects students more deeply on emotional and psychological levels than on academic discipline or study performance. It suggests that students continue working hard academically, but with an undertone of stress and uncertainty which may influence long-term career planning and self-esteem.

A key finding is that many students perceive a disconnect between the theoretical knowledge provided by the university and the practical skills required by employers. A large portion of the respondents reported insufficient exposure to real-world practical experience, with a majority indicating that they did not have adequate industry-aligned hands-on training. This was further supported by open-ended responses where students repeatedly emphasized lack of practical application, real-world coding skills, project execution, and industry-driven experience. In addition, the study shows that internship or teaching practice participation was limited, and many felt that such experiences did not significantly enhance their employability. This suggests a broader curriculum and training gap, wherein the academic preparation may not be aligned with professional realities in education and ICT fields. Another prominent pattern is the shift in career orientation among students. The majority expressed preference for pursuing opportunities in ICT fields rather than traditional teaching pathways associated with their degree. In addition, a substantial percentage indicated a strong interest in entrepreneurship as a preferred employment strategy. This reflects a generational transition — students are seeking flexible and innovative career alternatives in response to unstable job markets.

The rise of entrepreneurship and ICT careers as attractive options can be interpreted as adaptive behavior in response to perceived stagnation or saturation in conventional employment. Furthermore, the study reveals student dissatisfaction with current institutional efforts in preparing them for employment. Many students felt that university programs aimed at enhancing employability were insufficient or ineffective. They expressed the need for improved institutional guidance, stronger industry collaboration, updated teaching methodologies, and increased exposure to modern technologies and digital learning resources. This aligns with literature that emphasizes the importance of integrating technical skills training, internships, and applied projects into higher education programs to enhance graduate readiness. It also shows that unemployment influences students to take proactive self-development measures. The majority reported learning extra skills independently—such as programming, graphics design, digital marketing, or freelancing—outside the classroom. This behavior reveals student initiative and self-empowerment in response to perceived institutional inadequacies. It also demonstrates awareness that employability in modern labor markets depends on personal skill acquisition rather than academic certification alone.

This work has thus advanced the state of knowledge on the impact of unemployment on undergraduate Computer Science Education students by clearly demonstrating from the result obtained from questions 1–25 that unemployment has a significant and multidimensional influence on students' academic perception, emotional well-being, and future career direction. The findings strongly indicate that unemployment contributes to anxiety, uncertainty, and re-evaluation of academic and professional priorities among students. In fact, the results reveal that current institutional preparation for the labor market is not sufficiently effective, as many students feel compelled to independently acquire technical and entrepreneurial skills beyond the academic curriculum in order to remain competitive. Since the majority of the respondents reported inadequate practical exposure and limited institutional support for job readiness, it can be concluded from the data that unemployment exerts a real and measurable effect on students' confidence in post-graduation opportunities. Therefore, the evidence gathered from the tables shows that unemployment meaningfully influences the academic orientation and career formation of Computer Science Education students at the University of Jos.

V. CONCLUSION

The findings of this research convincingly demonstrate that unemployment has a profound influence on students' academic engagement, emotional well-being, and future career planning. Although many of the students remain committed to their academic responsibilities and attend to their studies with seriousness, the persistent uncertainty surrounding post-graduation employment continually erodes their confidence and emotional stability. The inadequacy of practical training opportunities and limited institutional support for skill-based employability further intensify their anxiety about securing meaningful work after completing their studies. Such conditions foster apprehension about the future and challenge students' belief in the sufficiency of their academic preparation. The study also establishes that unemployment is compelling students to explore alternative career directions that extend beyond the traditional confines of their discipline. Many respondents indicated that they are actively developing entrepreneurial ambitions, diversifying into ICT-based roles, or acquiring independent technical competencies—often with the use of external platforms, online learning, or private mentorship. This behavior reflects a shift from reliance on institutional preparation alone toward self-directed professional development. It is therefore clear that the contemporary educational system must evolve in order to close the widening gap between theoretical instruction and the expectations of the modern labor market.

This work has therefore far contributed to the understanding of how unemployment conditions shape the academic mindset and career strategies of Computer Science Education students. The evidence presented in this study shows that unemployment exerts a significant psychological, developmental, and motivational effect on undergraduates, influencing not only how they study but also how they envision their future roles in society. The findings underscore a compelling need for curriculum innovation, genuine institutional collaboration with industry stakeholders, and the strengthening of employment-support mechanisms to ensure that graduates can transition effectively and confidently into professional environments after leaving the university.

RECOMMENDATIONS

Based on the findings of this study, several recommendations are considered necessary in order to address the influence of unemployment on undergraduate Computer Science Education students. Firstly, it is recommended that the university urgently reviews and modernizes the departmental curriculum to include more practical, hands-on components that align with present-day technological expectations. Teaching should not only focus on theoretical perspectives, but must be accompanied by laboratory experience, real-life coding exercises, industrial simulation, and exposure to current industry tools and environments.

This will help ensure that the graduates produced are technically competent and competitive within the labor market. Furthermore, the institution should strengthen its collaboration with industries, ICT firms, software companies, and governmental agencies, so that internship opportunities, work-study placements, and job-shadowing programs can be more easily accessed by students. When students are able to gain real professional experience before graduation, the psychological burden of uncertainty reduces, while employability and confidence in transition to the workforce increases. Alongside this, the university should facilitate regular career guidance workshops, professional development seminars, and mentorship programs where experienced practitioners can advise students on appropriate career planning and required competencies necessary to excel in a competitive job landscape. Additionally, students should be encouraged and supported to participate in entrepreneurial incubation programs, innovation hubs, and startups facilitated either on campus or through collaboration with external partners. Such initiatives will not only cultivate innovation but also provide an alternative employment pathway — not limited to seeking employment, but becoming job creators themselves. In the same light, the university may consider facilitating access to subsidized professional certifications, software licenses, and technical skill programs to empower students with industry-recognized qualifications. Lastly, the findings suggest a role for government intervention. Therefore, it is recommended that policy frameworks targeted at reducing graduate unemployment should be strengthened, including state-sponsored digital training programs, scholarship opportunities for advanced ICT learning, support for local content development, and creation of ICT-based employment schemes. These measures would greatly assist in bridging the divide between academia and the labor market, thereby reducing unemployment and fostering a more economically stable future for graduates.

REFERENCES

1. Becker, G. S. (1993). *Human Capital: A Theoretical and Empirical Analysis*. University of Chicago Press.
2. Creed, P. A., & Evans, B. (2002). Anxiety, depression, and academic coping in young adults facing unemployment. *Journal of Vocational Behavior*, 60(1), 34–48.
3. Emeh, I. E. J., & Ekanem, O. M. (2017). Unemployment among Nigerian graduates and the role of higher education. *African Research Review*, 11(4), 56–72.
4. ILO (International Labour Organization). (2022). *Global employment trends for youth*. ILO Publications.
5. Moleke, P. (2010). *The transition of university graduates to the South African labour market*. Human Sciences Research Council Report.
6. National Bureau of Statistics (NBS). (2024). *Unemployment and underemployment report in Nigeria*. Abuja: Federal Government of Nigeria.
7. Nwachukwu, L. C. (2020). Household unemployment and academic persistence among Nigerian students. *Journal of Family and Education Studies*, 3(2), 60–72.
8. Omotosho, J. A., & Bolarinwa, K. O. (2021). Bridging the gap between academic theory and industry practice. *Nigerian Journal of Educational Management*, 15(1), 87–104.
9. Sen, A. (1999). *Development as Freedom*. Oxford University Press.
10. World Bank. (2023). *African Labour Market Statistics and Youth Employment Indicators*. Washington, DC: World Bank Group.