Industrial Knowledge as a Correlate of Career Certainty of Business Education Students in Public Tertiary Institutions in Anambra State

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Abstract
This study investigated the relationship between industrial knowledge and career certainty of final-year business education students in tertiary institutions in Anambra State. The study was guided by two research questions and two null hypotheses. This study adopted a correlational research design. The population comprised 319 final-year students from public tertiary institutions in Anambra State. The entire population was used as the sample size, as the population was manageable. The instrument for data collection was a structured questionnaire. The instrument was validated by three experts, all from Nnamdi Azikiwe University, Awka. The study utilized a direct method of questionnaire administration. Pearson Product-Moment Correlation was used to analyze the research questions, while Linear regression was used to test hypotheses. The study found that industrial knowledge enhances the career certainty of Business Education students by aligning their skills with industry demands and fostering clarity in career choices. Industrial knowledge, such as how to know where to invest, monitoring trends in business, and identifying risks in project management, solidifies their confidence in career decisions. This bridges the gap between education and employment by ensuring smooth transitions and informed career planning of business education students. The study recommended that governments and educational institutions should foster partnerships with industries to provide students with real-world exposure through internships, industry seminars, and practical training.

Keywords: Industrial knowledge, Career certainty, Business Education, Public tertiary institutions, Anambra State.

Introduction

Business education aims to equip students with both theoretical and practical knowledge necessary for thriving in the business world. It covers accounting, management, marketing, entrepreneurship and office technology (Nwazor, 2012). Given the dynamic nature of business environments, students need to possess up-to-date knowledge of industrial practices to make informed career decisions. The ability to align academic knowledge with industrial knowledge enhances their career certainty and employability. Industrial knowledge helps students to understand workplace realities, reducing uncertainty and boosting their confidence in selecting career paths that match their skills and aspirations (Agu, 2020).

Career certainty is a crucial factor in the professional development of students, including business education students. It represents the confidence students have in making career-related decisions, which is essential for their transition into the workforce (Renn, Steinbauer, Taylor and Detwiler, 2014). However, career certainty does not develop in isolation; it is influenced by multiple factors, including industrial knowledge. Industrial knowledge encompasses the awareness, skills and competencies students acquire about industries relevant to their fields of study. It includes understanding the market trends, workplace expectations, job requirements and emerging opportunities within various sectors (Okoro and Eze, 2017). Industrial Knowledge plays a vital role in shaping the career choices of students and enhancing their employment readiness.

Industrial knowledge encompasses the technical skills and competencies required to operate effectively within a particular industry, including understanding machinery, software, and operational workflow (Fitsilis, Tsoutsa and Gerogiannis, 2018). In addition, industrial knowledge is about market awareness which highlights the importance of understanding the broader economic and market conditions that affect a specific industry, including consumer behavior, supply chain dynamics, and emerging trends. Market awareness enables professionals to make informed strategic decisions and adapt to changing environments. More so industrial knowledge includes staying updated with the latest trends, technologies and innovations within the industry. Industrial knowledge has become important in Nigeria because graduate unemployment remains a pressing issue, with many graduates struggling to secure jobs due to a mismatch between their academic qualifications and industry requirements (Emeh, 2012). This challenge is particularly relevant to business education students, who need practical exposure to enhance their employability status. Tertiary institutions in Anambra State have recognized the importance of bridging this gap by incorporating industrial training, internships and partnerships with businesses into their curriculum. Such initiatives provide students with firsthand experience, enabling them to apply theoretical concepts in real world settings (Onah and Ugwoke, 2019). Despite these efforts, there is still a significant variation in the level of industrial knowledge among male and female final year business education students, leading to differences in their career certainty (Akindahunsi, 2021).

Male students often have higher self-confidence in technical and industrial knowledge due to societal norms that encourage male participation in science and technology fields (Chan, 2022). Conversely, female students frequently excel in soft skills such as communication and teamwork but may face barriers in accessing the same level of technical training and industrial exposure (Nwosu and Uba, 2017). It is therefore pertinent to ascertain emperically industrial knowledge as a correlate of career certainty of male and female business education students to

either support the literature findings or otherwise. Understanding these aspects may provide students with a sense of assurance regarding their career prospects.

Purpose of the Study

The main purpose of the study was to ascertain industrial knowledge as correlate of career certainty of final year business education students in tertiary institutions in Anambra State. Specifically, this study sought to determine:

1. Industrial knowledge as correlate of career certainty of final year male business education students in public tertiary institutions in Anambra State.
2. Industrial knowledge as correlate of career certainty of final year female business education students in public tertiary institutions in Anambra State.

Research Questions

This study was guided by the following research questions:

1. What is the correlation between industrial knowledge and career certainty of final year male business education students in public tertiary institutions in Anambra State?
2. What is the correlation between industrial knowledge and career certainty of final year female business education students in public tertiary institutions in Anambra State?

Hypotheses

The following hypotheses were tested at 0.05 level of significance;

1. There is no significant correlation between industrial knowledge and career certainty of final year male business education students in public tertiary institutions in Anambra State.
2. There is no significant correlation between industrial knowledge and career certainty of final year female business education students in public tertiary institutions in Anambra State.

Methods

This study adopted a correlational research design. The population comprised 319 final year students from public tertiary institutions; universities and colleges of education in Anambra State. The tertiary institutions used are those offering business education. They include Nnamdi Azikiwe University, Awka, Chukwuemeka Odumegwu Ojukwu University, Igbariam, Federal College of Education, Umunze and Nwafor Orizu College of Education, Nsugbe. According to the tertiary institutions' Personnel Office (2024), there are 135 final year undergraduate students in Nnamdi Azikiwe University, Awka, 11 final year undergraduate students in Chukwuemeka Odumegwu Ojukwu University, 106 final year undergraduate students in College of Education, Umunze and 67 final year undergraduate students in Nwafor Orizu College of Education, Nsugbe. The census sampling was used as the population was manageable. The instrument for data collection was a structured questionnaire adopted from Saniter, Schnitzlein and Siedler (2019) for industrial knowledge and Beach (2019) for career certainty. The instrument was modified to suit the study. The questionnaire had two sections; Sections A and Section B. Section A sought information on the demographic variables of the respondents. Section B was divided into two subsections. Subsection I dealt on industrial knowledge. Subsection II dealt on

Career Certainty. Industrial knowledge had 10 items structured on a two (2) point scale ranging from Yes (2) and No (1) while Career certainty has 17 items structured on a four (4) point scale of Strongly Agree (SA) – 4, Agree (A) – 3, Disagree (D) – 2, Strongly Disagree (SD) – 1. Validation of the instrument was carried out by three experts from Nnamdi Azikiwe University, Awka. They were given the title, purpose of study, research questions, hypotheses and the instrument to check if the items were valid and able to measure what they intend to measure. Their suggestions were incorporated before the final production of the instrument. The instrument was subjected to trial test and Cronbach Alpha method was used to determine the reliability and the values ascertained were 0.75 and 0.81 for Industrial Knowledge and Career Certainty respectively. These coefficients indicated that the instrument was reliable. The study utilized a direct method of questionnaire administration. Copies of the questionnaire were distributed and collected with the help of research assistants. Pearson Product-Moment Correlation was used to analyze the research questions while Linear regression was used to test hypotheses.

Results

Research Question One: What is the relationship between industrial knowledge and career certainty of final year male business education students in public tertiary institutions in Anambra State?

Table 1: The relationship between industrial knowledge and career certainty of final year male business education students

Variables	N	Industrial Knowledge	Career Certainty	Remark
Industrial Knowledge	129	1.00	.809**	Strong Correlation
Career Certainty	129	.809**	1.00	

Table 1 shows the relationship between industrial knowledge and career certainty of final year male business education students in public tertiary institutions in Anambra State. The results revealed that the r-value was 0.809 with a sample size of 129 final year male business education students. This indicates that there is strong relationship between industrial knowledge and career certainty of final year male business education students in public tertiary institutions in Anambra State.

Research Question Two: What is the relationship between industrial knowledge and career certainty of final year female business education students in public tertiary institutions in Anambra State?

Table 2: The relationship between industrial knowledge and career certainty of final year female business education students

Variables	N	Industrial Knowledge	Career Certainty	Remark
Industrial Knowledge	190	1.00	.791**	Strong Correlation
Career Certainty	190	.791**	1.00	

Table 2 shows the relationship between industrial knowledge and career certainty of final year female business education students in public tertiary institutions in Anambra State. The results revealed that the r-value was 0.791 with a sample size of 190 final year female business education students. This indicates that there is strong relationship between industrial knowledge and career certainty of final year female business education students in public tertiary institutions in Anambra State.

$H0_1$: There is no significant correlation between industrial knowledge and career certainty of final year male business education students in public tertiary institutions in Anambra State.

Table 3: The correlation between industrial knowledge and career certainty of final year male business education students

Variables	N	Industrial Knowledge	Career Certainty	Sig.	Remark
Industrial Knowledge	129	1.00	.809**	.000	Significant
Career Certainty	129	.809**	1.00		

Table 3 shows the test of hypothesis one on the correlation between industrial knowledge and career certainty of final year male business education students in public tertiary institutions in Anambra State. The results revealed that the r-value was 0.809 with a p-value of 0.000 which is below the 0.05 level of significance. Thus, the null hypothesis was rejected. This indicates that there is a significant relationship between industrial knowledge and career certainty of final year male business education students in public tertiary institutions in Anambra State.

$H0_2$: There is no significant correlation between industrial knowledge and career certainty of final year female business education students in public tertiary institutions in Anambra State.

Table 4: The correlation between industrial knowledge and career certainty of final year female business education students

Variables	N	Industrial Knowledge	Career Certainty	Sig.	Remark
Industrial Knowledge	190	1.00	.791**	.000	Significant
Career Certainty	190	.791**	1.00		

Table 4 shows the test of hypothesis two on the relationship between industrial knowledge and career certainty of final year female business education students in public tertiary institutions in Anambra State. The results revealed that the r-value was 0.791 with a p-value of 0.000 which is below the 0.05 level of significance. Thus, the null hypothesis was rejected. This indicates that there is a significant relationship between industrial knowledge and career certainty of final year female business education students in public tertiary institutions in Anambra State.

Discussion of Findings

The correlation between industrial knowledge and career certainty of final year male business education students in public tertiary institutions in Anambra State

The results of research question one and test of hypothesis one revealed that there is strong relationship between industrial knowledge and career certainty of final year male business education students in public tertiary institutions in Anambra State. In agreement with these findings, Alyoubi, HoqueI, Alharbi, Alyoubi and Almazmomi (2018) found that industrial knowledge, such as awareness of workplace expectations, technological advancements and industry-specific trends provide male students with a comprehensive understanding of their chosen career paths. Ogbuanya, Njoku, Kemi and Ogunkelu (2018) revealed that male students, often socialized to exhibit independence in career decision-making. They benefit from internships and industry-focused training programs, which align their skills with market demands and confidence in career choices.

Conversely, Mir, Abdulkarim and Hussein (2016) revealed that while industrial knowledge is crucial, it is not the sole determinant of career certainty among male students. External factors, such as socio-economic challenges, cultural expectations, and the availability of jobs, can significantly influence career certainty. Additionally, Ikechukwu (2016) found that discrepancies in the quality of industrial exposure across tertiary institutions may result in unequal access to relevant knowledge, thereby diminishing its overall impact on career certainty. In conclusion, while industrial knowledge enhances career certainty among final-year male Business Education students by aligning their skills with industry requirements, its effect is mediated by socio-economic and institutional factors.

The correlation between industrial knowledge and career certainty of final year female business education students in public tertiary institutions in Anambra State

The results of research question two and test of hypothesis two revealed that there is strong relationship between industrial knowledge and career certainty of final year female business education students in public tertiary institutions in Anambra State. In agreement with these findings Ezenwafor and Nwokike (2021) found that industrial knowledge equips female students with insights into workplace dynamics, industry trends and career expectations, which significantly enhance their confidence in career decision-making. Also, Ojokuku, Emeahara, Aboyade and Chris-Israel (2015) found that female students often face societal barriers in the workforce, but a strong grasp of industry-specific knowledge empowers them to navigate these challenges and make informed career choices. Additionally, Edwin, Pulse, Alhiyari, Salvatierra, Martin and Gaglio (2022) found that exposure to internships, industrial visits, and practical components in Business Education curricula strengthens their understanding of job roles and market demands, thus reducing career ambiguity and fostering certainty. This preparation aligns their career paths with industry requirements, making them more confident in pursuing their goals.

Conversely, Okorie, Nwankwo, Iwuala and Okolie (2023) found that while industrial knowledge is valuable, other factors also influence career certainty among female students. Socio-cultural expectations, such as the pressure to prioritize family roles over career aspirations, often affect female students' career decisions, regardless of their industrial knowledge. Puad, Mohamad and Rashid (2023) found that economic constraints and limited access to quality industrial exposure in some tertiary institutions may also hinder the effective acquisition of relevant knowledge, reducing its impact on career certainty. Moreover, intrinsic motivations, such as passion and personal interests, sometimes outweigh industrial knowledge when female students choose careers, leading to uncertainty despite their industry awareness. In conclusion,

while industrial knowledge significantly enhances career certainty for final-year female Business Education students, external socio-cultural and institutional factors play crucial roles in shaping their career certainty.

Conclusion

The study concludes that there is a strong relationship between industrial knowledge and career certainty of business education students in tertiary institutions in Anambra State.

Recommendation

Based on the findings of the study, the following recommendations were made:

1. Governments and educational institutions should foster partnerships with industries to provide students with real-world exposure through internships, industry seminars, and practical training.
2. The government should invest in policies that support industry-academia collaborations, such as creating platforms for students to gain exposure to industry trends that could foster a seamless transition from education to the world of work.

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