

PROMOTING ENTREPRENEURSHIP THROUGH A GENDER- INFLUENCED ENTREPRENEURIAL MINDSET AMONG TERTIARY STUDENTS IN NORTH CENTRAL NIGERIA

Ofoegbu Jude Uzodinma

Department of Educational Foundations
Faculty of Educational Foundations Studies,
University of Calabar, Calabar Cross River State
ofoegbujudeu@gmail.com

Gbande, Ahemen Phoebe

Department of Educational Foundations
Faculty of Educational Foundations Studies,
University of Calabar, Calabar
Cross River State
pheobegbande@gmail.com

&

Otu, Bernard Diwa

Otubernard76@gmail.com/Otu_bernard @yahoo.com/
Bernardotu@unical.edu.ng
<https://orcid.org/0000-0001-6072-9619>
Phone no: 07061034000/08053164780
Department of Educational Foundations
University of Calabar
Cross River State – Nigeria

Abstract

This study investigated the impact of a gender-influenced entrepreneurial mindset on fostering entrepreneurship among tertiary students in North Central Nigeria. It explored how gender perceptions shape students' entrepreneurial intentions and abilities, while examining the differences in entrepreneurial attitudes between male and female students. A descriptive research design was employed, with two research questions and two hypotheses formulated to be tested at a significance level of 0.05. The sample comprised 500 respondents selected from a total population of Ten Thousand (10,000) tertiary

students. Data were collected using a self-developed questionnaire. The collected data were analyzed using both descriptive and inferential statistics, with simple percentages employed to address the research questions and chi-square statistics used to test the hypotheses at the 0.05 significance level. The study's findings indicated no significant difference in the level of entrepreneurial mindset between male and female tertiary students in North Central Nigeria. Additionally, the hypothesis that gender does not significantly influence entrepreneurial attitudes and intentions among tertiary students in North Central Nigeria was rejected. The study concluded with a recommendation that tertiary institutions should implement programs that specifically address gender biases and promote female entrepreneurship through workshops, mentorship, and role modeling.

Keywords: Entrepreneurship, Gender-influenced entrepreneurial mindset, Tertiary students, North Central Nigeria, Student perceptions on entrepreneurship

Introduction

Entrepreneurship is acknowledged as a vital force behind economic growth, innovation, and job creation globally (Nabi *et al.*, 2020). Higher education plays a crucial role in fostering an entrepreneurial culture, as universities and colleges are key in providing students with the skills and mindset needed to face entrepreneurial challenges (Fayolle and Gailly, 2015). However, despite initiatives to promote entrepreneurship in educational environments, numerous students demonstrate low levels of entrepreneurial intention and readiness (Zhang *et al.*, 2022).

Mindset is defined as a fixed collection of attitudes, behaviors, beliefs, and inclinations. In this context, the Entrepreneurial Mindset (EM) pertains to the traits and attitudes that entrepreneurs typically display. Literature identifies several key characteristics associated with entrepreneurs, including the pursuit of opportunities, a strong drive for achievement, adaptability, risk tolerance and management, creativity, resilience in the face of setbacks, an understanding of people's needs, and a commitment to lifelong learning.

Researchers have investigated various dimensions of the Entrepreneurial Mindset (EM) over the years, leading to a range of definitions (Kuratko, 2021; Pidduck, 2023). One definition

characterizes the EM as "the ability to swiftly sense, act, and mobilize, even in uncertain circumstances." Zappe *et al.* (2018) pointed out that the definition by McGrath and MacMillan is the most widely acknowledged, describing the Entrepreneurial Mindset (EM) as "a growth-oriented perspective that fosters flexibility, creativity, continuous innovation, and renewal."

The entrepreneurial mindset, which encompasses a set of cognitive traits, attitudes, and skills that empower individuals to recognize and seize opportunities, is essential for developing successful entrepreneurs (Dyer *et al.*, 2021). Again, according to Iheanacho, et al, (2023) a close loving partner, supportive family and friends, fulfilling work or retirement activities, and good health are typical characteristic of those who score highly on life satisfaction. However, research has shown that gender significantly influences entrepreneurial attitudes and intentions. Studies reveal that male students tend to exhibit greater confidence and a higher propensity for risk-taking, whereas female students face societal barriers and stereotypes that obstruct their entrepreneurial ambitions (Arenius and De Clercq, 2019; Echols *et al.*, 2023). Furthermore, Njoku et al (2020) posited that gender determines the different power and control men and women have over socio economic determinants.

Comprehending the levels of entrepreneurial mindset among tertiary students and the effects of gender on their attitudes is essential for developing targeted educational interventions that encourage inclusive entrepreneurship. This study aims to investigate these dynamics through a sample of 500 students from various tertiary institutions, providing insights into the current landscape of entrepreneurial mindsets and the influence of gender on entrepreneurial intentions.

Statement of the Problem

Although there is growing recognition of entrepreneurship as a vital driver of economic development and job creation, considerable challenges persist in cultivating an entrepreneurial mindset among tertiary students in North Central Nigeria. Gender differences have been identified as significant factors affecting entrepreneurial intentions and attitudes; however, the specific elements of these differences remain insufficiently explored in higher education contexts. Preliminary

observations suggest that male and female students exhibit varying levels of confidence, risk tolerance, and societal support, which can influence their entrepreneurial aspirations and abilities.

A lot of existing entrepreneurship education programs do not incorporate a gender sensitive approach, potentially resulting in the marginalization of female students and the under-utilization of their entrepreneurial potential. This lack of inclusivity raises doubts about the effectiveness of these programs in equipping all students with the skills and mindset needed to tackle the challenges of entrepreneurship. Therefore, it is vital to investigate how gender influences the entrepreneurial mindset among tertiary students in North Central Nigeria and to develop targeted interventions that encourage inclusive entrepreneurship. Understanding these dynamics is essential for enhancing the entrepreneurial ecosystem and ensuring that all students can thrive as entrepreneurs, ultimately promoting economic growth in the region.

Objectives of the Study

The primary objectives of this study are:

1. To assess the level of entrepreneurial mindset among tertiary students.
2. To examine the influence of gender on entrepreneurial attitudes and intentions among tertiary students.

Research Questions

To guide this study, the following research questions are posed:

1. What is the level of entrepreneurial mindset among tertiary students?
2. How does gender influence entrepreneurial attitudes and intentions among these students?

Research Hypotheses

The following hypotheses will be tested in this study:

1. There is no significant difference in the level of entrepreneurial mindset between male and female tertiary students.
2. Gender does not significantly influence entrepreneurial attitudes and intentions among tertiary students.

Methodology

This study employed a correlational design, utilizing a structured questionnaire to collect data from a sample of 500 tertiary students selected from a total population of 10,000 tertiary students. The questionnaire was designed to measure the level of entrepreneurial mindset and assess the impact of gender on entrepreneurial attitudes and intentions. A 5-point Likert scale was used to capture students' responses, ranging from "strongly agree" to "strongly disagree." Data analysis was conducted using descriptive statistics and chi-square analysis to test the null hypotheses at an alpha level of 0.05.

The data were analyzed using version 25 of the Statistical Package for Social Sciences (SPSS). Descriptive statistics were employed and Pearson correlation coefficients were calculated to evaluate the relationships for entrepreneurship through a gender influenced entrepreneurial mindset among tertiary students. Simple percentages were used to answer research questions and chi-square statistics was used to test the research hypotheses.

Results

The results were analyzed and presented based on research questions and hypotheses as follows;

Research Question 1: What is the level of entrepreneurial mindset among tertiary students in North Central Nigeria?

To answer the research question, data was collected, analyzed and presented in the table below.

Table 1: Percentage Scores of the Level of Entrepreneurial Mindset among Tertiary Students in North Central Nigeria

S/no	Item	Agree	%	Disagree	%
1	Students believe they can start their own businesses	350	70	150	30
2	Students are willing to take risks to achieve their goals	320	64	180	36
3	Students have the skills necessary for entrepreneurship	290	58	210	42
4	Students are confident in their abilities to solve problems creatively	370	74	130	26
5	Students are motivated to pursue entrepreneurial opportunities	330	66	170	34
	Average	-	66		37

From the table (1), 350 respondents representing 70% of students indicated that they believe they can start their own businesses. This belief is a critical foundation for fostering entrepreneurship, as self-efficacy can lead to increased motivation and initiative among aspiring entrepreneurs. On item (2), 320 respondents representing 64% of students are willing to take risks to achieve their goals. While 64% of students expressed a readiness to take risks in pursuit of their goals, 36% did not share this view. This indicates a general willingness to engage in risk-taking, an important characteristic for entrepreneurs, yet a significant number of students appear hesitant to move beyond their comfort zones. This difference may require further investigation into the underlying factors that contribute to this reluctance. On item (3), 290 respondents representing 58% of students have the skills necessary for entrepreneurship. Only 58% of students felt they had the skills needed for entrepreneurship, whereas 42% disagreed. This reveals a possible gap in either skill acquisition or self-assessment among students, indicating that educational programs might need to place greater emphasis on developing skills and boosting confidence in entrepreneurship. On item (4), 370 respondents representing 74% students are confident in their abilities to solve problems creatively. A significant majority (74%) of students expressed confidence in their

capacity for creative problem-solving, reflecting a positive outlook on innovation and adaptability—essential qualities for successful entrepreneurship. The 26% of students who disagreed may benefit from focused training in creative thinking and problem-solving techniques. On item (5), 330 respondents representing 66% students are motivated to pursue entrepreneurial opportunities. Nonetheless, the 34% who disagreed may signify a group that requires further encouragement and support to nurture their entrepreneurial interests. The overall agreement rate across the items stands at 66%, reflecting a generally positive attitude toward entrepreneurship among students. However, the 37% average disagreement indicates that there are specific areas where students may feel unsure or lack confidence, especially regarding their skills and willingness to take risks.

Research Question 2: How does gender influence entrepreneurial attitudes and intentions among these students in North Central Nigeria? To answer the question above, data has been presented and analyzed as shown below;

Table 2: Percentage Scores on Gender Influence on Entrepreneurial Attitudes and Intentions among Tertiary Students in North Central Nigeria

S/no	Item	Agree	%	Disagree	%
1	Students believe men are more suited for entrepreneurship	180	36	320	64
2	Female entrepreneurs are less successful than males	150	30	350	70
3	Gender does not affect entrepreneur capabilities	270	54	230	46
4	Students feel encouraged to pursue entrepreneurship as a female	200	40	300	60
5	Male rolemodelsinspire students entrepreneurial intentions	350	70	150	30
Average		-	98		27

From the table (2), 180 respondents representing 36% of students believe men are more suited for entrepreneurship. The findings

reveal that 64% of students reject the idea that men are naturally more suited for entrepreneurship. This trend indicates an increasing awareness among students that gender does not determine entrepreneurial abilities, which is a promising development for advancing gender equality in the field. Additionally, 70% of students disagree with the claim that female entrepreneurs are less successful than their male counterparts, while only 30% support this notion. This change in perception suggests that many students recognize the potential for success among women in entrepreneurship. However, the fact that 30% still agree highlights the persistence of certain stereotypes, underscoring the necessity for ongoing advocacy and the promotion of success stories featuring female entrepreneurs.

Furthermore, 54% of students feel that gender does not impact entrepreneurial capabilities, whereas 46% hold the opposite view. This nearly balanced perspective indicates that while a majority lean towards the belief that entrepreneurial skills are not determined by gender, a significant number still adhere to traditional views. This discrepancy emphasizes the need for educational initiatives aimed at challenging these stereotypes in entrepreneurship.

The data also shows that 60% of students feel discouraged from pursuing entrepreneurship as females, with only 40% expressing encouragement. This is concerning as it implies that female students may not feel adequately supported in their entrepreneurial endeavors. Additionally, 70% of students agree that male role models have a positive impact on their entrepreneurial intentions, while only 30% disagree. This suggests that male role models are perceived as key sources of inspiration, reflecting traditional gender norms that can overshadow female role models. Thus, it is important to promote female entrepreneurs as role models to provide balanced representation and inspire all students, regardless of gender.

Overall, the average percentages in the table indicate that, on average, 98% of students oppose traditional gender stereotypes in entrepreneurship, while 27% agree. This trend demonstrates a significant shift toward acknowledging the entrepreneurial capabilities of both genders, although it also points to the need for continued efforts to eliminate existing biases and foster an inclusive entrepreneurial environment.

Hypothesis One: There is no significant difference in the level of entrepreneurial mindset between male and female tertiary students in North Central Nigeria.

Table 3: Chi-square Analysis for Hypothesis 1

Response	Observed	Expected	df	X^2_{cal}	X^2_{tab}	\square Remarks
Strongly Agree (SA)	120	100	3	6.4	7.81	0.05 Not significant
Agree (A)	210	200				
Disagree (D)	100	120				
Strongly Disagree (SD)	70	80				

$$X^2_{cal} = 6.4, df = 3, X^2_{tab} = 7.81, \square = 0.05$$

The calculated chi-square statistic (6.4) is lower than the critical value (7.81) at a significance level of 0.05. This indicates that the differences between the observed and expected frequencies are not statistically significant. As a result, we do not reject the null hypothesis, which posits that there is no significant difference in the level of entrepreneurial mindset between male and female tertiary students in North Central Nigeria.

In summary, although there are noticeable trends suggesting a change in student attitudes towards gender and entrepreneurship, these trends do not attain statistical significance. This implies that while awareness and acceptance may be increasing, the perceptions have not yet become strong enough to reflect a significant shift away from traditional views.

Hypothesis Two: Gender does not significantly influence entrepreneurial attitudes and intentions among tertiary students in North Central Nigeria.

Table 4: Chi-Square Analysis for Hypothesis 2

Response	Observed	Expected	df	X^2_{cal}	X^2_{tab}	α	Remarks
Strongly Agree (SA)	70	50	3	9.5	7.81	0.05	Rejected (Significant)
Agree (A)	120	110					
Disagree (D)	60	80					
Strongly Disagree (SD)	50	60					

$$X^2_{cal} = 9.5, df = 3, X^2_{tab} = 7.81, \alpha = 0.05$$

Table 4 indicated that chi-square calculated value (X^2_{cal}) = 9.5, degree of freedom = 3, X^2_{tab} = 7.81 at 0.05. The calculated chi-square statistic (9.5) is greater than the critical value (7.81) at a significance level of 0.05. This indicates a statistically significant result, allowing us to reject the null hypothesis, which posits that there is no significant relationship between the analyzed variables that gender does not significantly influence entrepreneurial attitudes and intentions among tertiary students in North Central Nigeria. This significant outcome suggests that the responses are not merely a product of random variation; instead, they reveal meaningful differences in student perceptions regarding gender and entrepreneurship. The observed frequencies in the Strongly Agree and Agree categories, which are higher than expected, indicate a significant shift towards the acceptance and promotion of gender equality in entrepreneurial capabilities.

Discussion of Findings

Drawing on the data collected and analyzed in this study, the following findings are presented, arranged according to each hypothesis. This study sought to investigate the hypothesis that "There is no significant difference in the level of entrepreneurial mindset between male and female tertiary students in North Central Nigeria." To test this hypothesis, a chi-square analysis was conducted using data from a sample of 500 students. The responses were categorized into four groups: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). The observed frequencies for each category were compared to the expected frequencies, assuming that no relationship exists.

The study revealed that the null hypothesis which stated that there is no significant difference in the level of entrepreneurial mindset between male and female tertiary students in North Central Nigeria was not significant since X^2_{cal} was lesser than X^2_{tab} . Therefore, there is no significant difference in the level of entrepreneurial mindset between male and female tertiary students in North Central Nigeria.

Based on the chi-square analysis for Hypothesis 2, the calculated chi-square value $X^2_{Cal} = 9.5$ is significantly greater than the tabulated value $X^2_{tab} = 7.81$, with degrees of freedom $df = 3$ and a significance level $\alpha = 0.05$. This suggests that the null hypothesis (H_0), which states that gender does not significantly influence entrepreneurial attitudes and intentions among tertiary students in North Central Nigeria, is rejected.

In summary, the chi-square analysis demonstrates a significant shift in student perceptions related to gender and entrepreneurship. The findings align with previous studies that emphasize the rejection of traditional stereotypes, highlighting that many students recognize the potential for success in entrepreneurship for individuals of all genders. This is in line with the works of Cohen and Gorman (2021); Smith *et al.* (2023). The significance of these results reinforces the need for continued efforts to challenge and eliminate outdated beliefs about gender roles in entrepreneurship which is in line with the works of Ahl (2020) and Terjesen *et al.* (2016).

Conclusion/Recommendations

This study highlights the significance of cultivating an entrepreneurial mindset among tertiary students while recognizing the impact of gender on entrepreneurial attitudes and intentions. The findings reveal that although many students demonstrate positive entrepreneurial characteristics, obstacles associated with gender perceptions remain, indicating a need for strategic interventions in educational programs.

In view of the research findings, the researcher wished to make the following recommendations:

1. Campaigns should be designed to educate students on the importance of diversity in entrepreneurship and the abilities of all genders, promoting an inclusive entrepreneurial atmosphere.

2. Mentorship networks should be created to connect female students with successful entrepreneurs, providing inspiration and guidance for their entrepreneurial journeys.
3. Tertiary institutions should implement programs that specifically address gender biases and promote female entrepreneurship through workshops, mentorship, and role modeling.

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