



Relationship Between Entry Mode and Academic Performance of Social Studies Undergraduates in Tertiary Institutions in Delta State

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Abstract

This study investigated the relationship between entry mode and the academic performance of Social Studies undergraduates in tertiary institutions across Delta State. Guided by four research questions and hypotheses, the researcher employed the ex-post facto design. The target population of 145,870 students admitted into public tertiary institutions in Delta State during the 2022/2023 academic session, from which a sample size of 508 undergraduates was drawn using proportional stratified sampling was used for this study. Data collection was conducted using the Student Performance Assessment Instrument (SPAII), which gave a reliability coefficient of 0.81. The data was analyzed using descriptive statistics, specifically mean and standard deviation, while hypotheses were tested using Analysis of Variance (ANOVA) at 0.05 significance level. The findings revealed significant academic performance disparities based on both institutional affiliation and entry mode. Again, students from Delta State University outperformed their peers from other institutions, emphasizing the impact of institutional support and preparatory programmes. Moreover, pre-degree students exhibited superior academic performance compared to those admitted through pre-NCE and UTME mode, highlighting the efficacy of preparatory programmes in tertiary education. Gender-based performance differences were also observed, with male students, particularly those from the University of Delta, generally outperforming their female counterparts, indicating disparities across different preparatory programmes. The study concludes that admission mode and robust institutional support in enhancing academic outcomes plays a critical role undergraduate performance in social studies. The study recommends that tertiary institutions admitting students into academic programmes such as Social Studies through direct entry, predegree and UTME entry modes should adhere to stipulated admission guidelines, ensuring equitable academic success for all students.

Keyword: Academic Performance; Entry Mode; Social Studies; Tertiary Institution.

INTRODUCTION

Education is conceived as the best development of a person's mind and personality through general acquisitions of values, knowledge, skills and attitudes. Despite its significance in the scheme of things, education as the aggregate of all processes in life continues to witness unprecedented expectations among adults in developing capabilities, attitudes, and other forms of behaviour which are of positive value in the society in which they live (Mohammed, Abel & Philemon, 2019).



The Nigerian Universities Commission (2014) general guidelines for Admission into tertiary institutions outline the minimum requirements for students to be admitted into universities, polytechnics and colleges of education. These include five 'O' level credit passes in relevant subjects, including English and Mathematics, particularly for science and social sciences, and four credit 'O' level passes in relevant subjects for Monotechnics, Polytechnics, and Colleges of Education. It is also required that candidates score the minimum cut-off marks for their desired course of study.

In Nigeria, there are essentially two primary modes of entry into tertiary institutions: the Universities Matriculation Examination (UME), and an alternative pathway commonly known as the Pre-degree and Pre-NCE programmes, which are often perceived as an escape route from the UME conducted by the Joint Admissions and Matriculation Board (JAMB) (Onuoha, 2015). There exists a common belief that students who gain admission through UME perform better academically than their counterparts who enter through Pre-degree and Pre-NCE programmes. Conversely, some argue that Pre-degree and Pre-NCE candidates outperform UME candidates, asserting that the former opts for alternative entry routes due to their perceived inability to succeed in the JAMB-administered UME (Adekoya, 2016). These differing opinions regarding which mode of entry yields better academic performance vary among stakeholders. Therefore, this study seeks to examine the relationship between entry mode and the academic performance of Social Studies students in tertiary institutions within Delta State.

The Remedial Programme (Pre-degree) in the university system is designed to prepare students with difficulty in making the required cut-off mark prescribed by JAMB for their various programmes while at the Colleges of Education Pre-NCE is designed for candidates who are deficient in their Secondary Certificate Examination (SSCE) but have made three to four credits. Successful candidates are admitted by the institution running the program to remedy their deficiency. Candidates who pass the required courses at the end of the internal examination are absorbed to proceed on three years NCE courses without recourse to JAMB and four/five years courses in the University with an acceptable UTME performance.

The National Commission for Colleges of Education (NCCE) established the Non-Direct Entry programme which includes Pre-Degree and Pre-NCE options as a strategy to enhance access to colleges of education. This initiative, officially sanctioned by the NCCE, is designed to equip students who may lack specific academic requirements with the foundational knowledge needed to qualify for admission into 100-level courses. Candidates admitted through the Pre-degree and Pre-NCE programmes had obtained two credit passes and three ordinary passes in a single sitting in Senior Secondary Certificate Examination (SSCE) by West African Examination Council (WAEC) or National Examination Council (NECO), or one credit pass and four ordinary passes at two sittings. English language and Mathematics must be passed.

The Pre-degree and Pre-NCE programme have significantly improved the admission rate in Nigerian colleges of education and academic performance. However, the program's continued existence is threatened due to a lack of interest from candidates seeking admission through the joint matriculation examination. The objectives of the Pre-degree and Pre-NCE programmes include ensuring a steady supply of students into the NCE programme in disciplines experiencing critical shortages, as well as supporting students with academic deficiencies, feeding the NCE programme with student input in language, science and vocational education, and helping students who have previously had academic deficiencies compete favorably with their counterparts on the NCE programme. The objectives of the



programme are not realized in isolation; they depend on the context under which the students are learning, such as the qualifications of program participants, the student-lecturer ratio, the quality of the curriculum, and the degree of congruence of curricula content with the ordinary level syllabus of examining bodies. Akinbote (2017) asserted that those who enroll in teacher training programmes are often not the most academically qualified candidates and that they do so because they cannot cope with other courses.

Academic performance is viewed as a scholastic performance of individual tested during or after a particular program of study. The Nigerian public and educators have little faith in the academic performance of Nigerian students (Onouha, 2015). Direct Entry (DE) students possess five credits as prescribed criteria and meet the cut-off mark in the matriculation examination conducted by the Joint Admission and Matriculation Board (JAMB). Pre-degree and Pre-NCE students typically spend one year at the Pre-degree and Pre-NCE level before transitioning to 100 levels. During the Pre-degree and Pre-NCE programme, students take various courses that are in the main preparatory for 100 levels and the entrance examination into colleges of education conducted by JAMB.

The shortage of qualified Social Studies teachers is a significant issue in Nigeria, hindering the country's goal of becoming a scientifically developed country (Akinbote, 2017). The introduction of Pre-degree and Pre-NCE programs has increased science student enrollment, but women's participation in mathematics and science-related subjects is low (Denir, Ozdemir & Simsek, 2019). In 1989, Nigerian universities had a 21% female participation in these programs. The gender performance gap stems from gender-strew typed choice, with girls performing well in English, history, and language, domestic and commercial subjects. The introduction of Pre-degree and Pre-NCE programs has helped address this issue (Denir, Ozdemir & Simsek, 2019).

Sex refers to the biological and physiological differences between males and females, including reproductive anatomy and genetic composition (WHO, 2022). It is distinct from gender, which encompasses social and cultural roles. In educational research, sex is often considered a moderating variable in academic performance studies, as biological and cognitive differences may influence learning patterns, study habits, and adaptation to academic environments (Voyer & Voyer, 2014). Sex plays a significant role in the relationship between entry mode and academic performance among Social Studies undergraduates. While entry mode determines initial academic preparedness, sex influences adaptability, study habits, and overall achievement.

Voyer and Voyer (2014) conducted a meta-analysis on gender differences in scholastic achievement and found that females generally outperform males across academic settings due to higher intrinsic motivation and better study habits. These traits could affect how female students adapt to entry pathways such as Direct Entry, UTME, or Pre-degree programs, leading to variations in performance. Additionally, Demir et al. (2019), highlighted that females tend to display greater academic motivation than males, positively impacting their performance. This motivation may help female students navigate the challenges associated with different entry modes more effectively, enhancing their academic outcomes. On the other hand, male students may rely more on external motivation, such as competitive learning environments or hands-on experiences, which may be less emphasized in certain entry pathways (Voyer & Voyer, 2014).

In a recent policy update, the Federal Government of Nigeria has reestablished the minimum age requirement for admission into tertiary institutions as 16 years. This decision



was announced by the Honourable Minister of Education, Dr. Tunji Alausa, during an inaugural press briefing at the Federal Ministry of Education Headquarters in Abuja (Federal Ministry of Information, 2024). Dr. Alausa explained that the previous 18-year age limit was based on interpretations within the National Policy on Education, and the reversion aims to make tertiary education more accessible to younger students. Following this announcement, the Joint Admissions and Matriculation Board (JAMB) has provided further clarification regarding the age criteria for the 2024/2025 academic session. JAMB has authorized tertiary institutions to admit candidates who are currently 15 years old, provided they will have attained the age of 16 by August 31, 2025 (Leadership Newspaper, 15th August, 2024). This adjustment is intended to accommodate candidates who may not meet the age requirement at the time of admission but will do so before the conclusion of the academic session.

To be eligible for admission into college of education programmes, applicants must meet specific minimum entry qualifications. These requirements apply to both Pre-degree/Pre-NCE and UTME candidates. Prospective students are expected to have earned credit passes in five (5) relevant subjects including English Language and Mathematics from examinations such as the West African Senior School Certificate Examination (WASSCE), National Examination Council (NECO), National Business and Technical Examinations Board (NABTEB), or other recognized equivalents, all obtained within no more than two sittings.

In Nigeria today, education is regarded as a basic tool for securing a better future and well-being. However, due to the high level of competitive admission processes into these institutions, youths who have attempted admission processes into tertiary institutions through the Joint Admission and Matriculation Examination (JAMB) are no longer given such chances. There exists lots of discrepancies among scholars on the level of admission quota open to most tertiary institutions and the tough criteria for admission. It is even debated widely that those who manage to make high JAMB scores still do not secure admission into the institution of their choice as a result of University test examination (Post UTME) administered by the various tertiary institutions to select the best candidates for admission. When these students who have attempted tertiary examinations and were not successful push to certain levels, they tend to accept any other admission opening accessible to them. In order to get these students into an academic learning environment, tertiary institutions especially colleges of education have developed remedial programmes to help cushion the effects of admission crises into tertiary institutions in Nigeria.

Several reports have indicated that a significant number of students admitted into tertiary institutions, particularly colleges of education, often struggle academically. A considerable portion are either advised to withdraw due to their inability to handle the academic demands of their programmes or barely meet the minimum Cumulative Grade Point Average (CGPA) required to progress through their studies. Additionally, factors such as the use of catchment area policies, educationally disadvantaged considerations, and the quota system have further complicated the education landscape. If these issues remain unaddressed, they could contribute to the continued decline in educational standards, especially within colleges of education, which are responsible for awarding the National Certificate in Education (NCE)—a key qualification for basic education teachers in Nigeria. The concern over the limited flexibility and societal perception of the NCE, particularly with respect to subject specialization, raises questions about the desirability of courses like Social Studies. Often perceived as a fallback option for less academically inclined students and narrowly associated with local content and human-environment relationships, Social Studies has suffered from low prestige. This negative perception can adversely affect students' motivation and academic



aspirations, as they feel their discipline is undervalued in both academic and societal contexts. The question of this study seeks to investigate are; is the choice of Social Studies option a symbol of low academic status of the students? Does the study of Social Studies relegate the student to low life in the society? Does academic excellence in social studies project the student to equal academic rating with their pairs in other programmes within their school? The above problems gave rise to the examination of the relationship between mode of entry and academic performance of social studies students in tertiary institutions in Delta State.

Theoretical Framework

The study is based on Piaget's Cognitive Development Theory. The reason behind selecting this theory is that the theory deals with skills and cognitive abilities such as general reasoning which leads to positive relationship between mode of entry and students' academic performance in Social Studies in Colleges of Education in Delta State, Nigeria. The relationship occurs as a result of social studies involving critical reasoning in solving problems. However, students' performance in social studies depends largely on the level of interest in the subjects indicated by the students.

Jean Piaget suggested that students are viewed as active learners that need to interact with their environment. This interaction with the environment allows students to create their own understanding reason, interest and meaning about the world. Piaget's theories also represent a constructivist view of learning. This view of learning posits that children are not blank slates; rather they interact with their environment as they attempt to learn a subject such as social studies concepts. Learning results when children create their own knowledge as a result of this interaction using counting of numbers better, reading letters alphabetically; this will increase their cognitive reasoning for solving day to day activities (Van de Walle, 2016). The basic foundation of this theory is that children construct their own knowledge. Therefore, social studies concepts cannot be simply presented to students; rather, these learners must be actively involved and able to extract meaning out of social concepts through experience (Moyer, 2016).

Ideally, intermediate-level students from age 12 to 15, should be operating in the Formal Operational stage. However, Hewitt (2015) draws attention to the fact that many adolescents in this age range are actually in transition between the Concrete and Formal Operational stages. Hewitt (2015) cites several studies that indicated 80% or more of young adolescents operate exclusively in the Concrete Operational stage rather than the Formal Operational stage. This has implications for social studies instruction for students in this age range. The highly abstract concepts such as operations with integers, square roots, and solving equations, are all topics covered in Social Studies starting from the age of 12. If students are still thinking in terms of concrete operations, intermediate social studies teachers need to address this by using appropriate instructional materials in order to facilitate learning, and make social studies meaningful to the students.

Lira & Ezeife (2016) reviewed Piaget's development stages in line with the psychological foundations in the teaching and learning of Social Studies. The author explained that in Piaget's research he found that children in the Concrete Operational state were able to "emphasize reversibility." For instance, a student is able to reverse addends in an addition problem and still realize that the sum remains the same. Also, students at this stage are capable of associatively with basic Social Studies operations. For example, students are able to add three or more numbers in any order and come out with the same result, or multiply numbers in any order and the product remains the same. At the stage, it is very important for teachers to



use concrete materials to solidify students' understanding of these concepts as the students prepare to move into the Formal Operations state where they would encounter these concepts in more abstract situations. Without a firm mastery of the concepts using concrete operational tools at the concrete operational stage, it would be difficult for the students to operate at the abstract level associated with the formal operational stage of cognitive development.

One modern extension of Piagetian theory may be found in Donald (2016), who provides an excellent example of research that continues to develop Piaget's original framework. He concurred with Piaget's view that cognitive development occurs in stages, with each stage marked by more advanced structural capabilities. However, he opted to represent these mental structures through the lens of information processing theory. Relying on this model, Donald suggested that as automaticity increases and more structures are developed, new developmental stages could be reached. He focused on the demands on memory for task performance and suggested that at all levels a person's capacity for gaining knowledge is divided between operating space and storage space. This should lead to relevance of the theory to this study as it helps in the improvement of the students' cognition in relation to their performance in social studies in Colleges of Education in Delta State, Nigeria.

Brief History of Tertiary Institutions Admission Mode in Nigeria

During the colonial period, access to tertiary education in Nigeria was tightly controlled by the colonial rulers. The introduction of the Lord Eric Ashby Commission's report in 1962 marked the beginning of efforts to reduce these restrictions and promote broader access to university education in Nigeria. In the 1960s and early 1970s, university enrollment was decentralized across regional institutions, with each student applying to multiple universities to see which one would offer them admission. To gain entry into the University of London (Ibadan College), candidates had to pass the London matriculation exam or the General Certificate Examination (GCE) at the ordinary level, securing at least five credits, including in English, Mathematics, or a Science subject. Additionally, they needed to pass the GCE Advanced Level before being allowed to proceed to the final Bachelor of Arts (B.A.) or Bachelor of Science (B.Sc.) degree program.

Following the English model, the sixth form (Higher School Certificate - HSC) was introduced in Nigeria, and candidates were required to pass three Advanced Level subjects for admission. In the 1956/57 academic year, the University of Ibadan introduced a one-year preliminary science course, which candidates had to complete and pass before being admitted into a three-year degree program. At the same time, the University of Nigeria, Nsukka, began offering a direct four-year degree program. Although this system faced criticism, particularly in the National University Commission's 1963 report, which questioned the equivalency of a four-year degree to a three-year one, other universities adopted the four-year system due to its effectiveness, as evidenced by the quality of their graduates.

Later, the 6-3-3-4 education system was implemented nationwide, and universities were required to offer a four-year degree program. As the school-age population grew and the Universal Primary Education (UPE) program was introduced, the number of candidates seeking admission to universities significantly increased. Between 1972 and 1977, the regional universities were centralized, and seven new universities were established across the country. The National Universities Commission (NUC) and the Joint Admissions and Matriculation Board (JAMB) were also created, with the aim of fostering national unity, peace, progress, and development, particularly in the post-war era.



Entry Mode into UTME and NCE Social Studies Programme

Admission decision is based on academic merit. Admission into the NCE programme is through the Unified Tertiary and Matriculation Examinations (UTME) and PRE-DEGREE AND PRE-NCE programme. Admission is opened to all, irrespective of nationality, ethnic group, sex, physical abilities and religion. The NCE admits candidates into its undergraduates programme based on some qualifications.

Students must have credits at least five credit passes. Also; a candidate must have achieved at least a pass in English language, physics, mathematics and biology. Admission into the school of science and science education vis-à-vis the College of Education through Pre-degree and Pre-NCE or UTME to pursue a 3 or 4 years programme requires that:

- i. The candidates must not be less than 16 years
- ii. The candidates have five (5) credits passes at not more than two sittings.

The required subjects differ for each department of the school. Students can also have qualifications in Higher Science Certificate (HSC) and General Certificate in Education (GCE) (advanced level). Candidates awaiting results of any relevant examination may also apply; however their processing of application is complete until entry requirements are met. The NCE programme lasts for three years for those entering through direct entry (UTME) and four (4) years for those coming through Pre-degree and Pre-NCE. The entire process is electronic and online for 24 hours a day. As many good graduates who complete their programme will be accepted to further their studies to the Bachelor in Education (B.Ed) level and above. (F.C.E Students Handbook, 2016).

Entry Mode and Undergraduate Social Studies Students Academic Performance

Academic performance is commonly used as a benchmark for assessing the quality of graduates from higher education institutions. One important determinant of graduate quality is the calibre of students admitted, with entry qualifications serving as a notable indicator. However, entry credentials alone do not fully account for academic outcomes, as several other factors influence student performance. Numerous studies have explored these contributing variables. For instance, Ali (2015) highlighted a combination of student-related factors such as attitudes, individual differences, health status, preparedness, and expectations; alongside parental, cultural, and institutional influences like school type, population size, discipline practices, faculty interaction, and admission and evaluation policies. Similarly, Flowers (2016) emphasized teacher- and curriculum-based influences, including teacher attitudes, classroom management styles, curriculum content, professional competence, instructional quality, and the application of teaching aids.

Concerns over the deteriorating state of education in Nigeria have become increasingly pronounced. Recent global university rankings revealed the declining position of Nigerian tertiary institutions, with none making it into the top 500 list, in contrast to the University of Cape Town's inclusion (Uniport News, 2017). Additionally, data from NEEDS (2015) disclosed that nearly half (49%) of Nigeria's teaching workforce lacks the necessary qualifications, further reflecting systemic weaknesses. The quality of graduates from Nigerian tertiary institutions has drawn sustained criticism in recent years. Okebukola (2015), in a keynote address during an education summit in Oyo State, lamented the declining competence of recent graduates and expressed concern over the performance of upcoming cohorts. This is particularly disheartening considering Nigeria's historical reputation for producing highly



competent graduates. Daisi (1997) observed that many Nigerian alumni have excelled internationally, even attaining professorial positions in top universities across Europe, America, and Africa. However, Oluwatayo (2017) questioned the possibility of regaining that level of excellence in the current academic climate. Echoing this concern, Osuji (2015) argued that despite significant financial investments in the education sector, the standard of education has yet to be restored and may remain below past benchmarks. These observations served as motivation for the present study.

A wide range of studies has addressed the use of predictive tools for various educational purposes. Some focused on forecasting specific academic behaviours (Bridgeman, McCamley-Jenkins & Ervin, 2015), while others concentrated on developing tests and evaluating their predictive validity (Thorndike & Hagen, 2017). Additional studies have used predictive research to inform theories regarding the factors that influence student performance (Michie, Dormandy, French & Marteau, 2015). Among these, the use of standardized test scores to anticipate student success in academic programmes has gained prominence. Researchers like Camara and Echternacht (2015) and Geiser and Studley (2016) found that reliable standardized assessments are valuable tools for university admissions and academic counselling. However, Nwana (2016) argued that neither the School Certificate Examination nor the Unified Tertiary Matriculation Examination (UTME) can reliably predict undergraduate academic performance. In contrast, Okwilagwe (2016) provided evidence that the Senior School Certificate Examination (SSCE) is a strong predictor of academic achievement at the university level, with a significant and direct impact on students' GPA—suggesting greater predictive consistency over time than the UTME.

Agbonifo and Dimowo (2015) also established a positive and significant correlation between UTME scores and students' first-year performance, indicating that those who scored higher in UTME tended to excel in their university courses. Similarly, WAEC (2016) supported this finding by reporting a strong link between SSCE scores and academic outcomes in higher education. Meanwhile, studies by Abe (2015), Oluwatayo (2015, 2017), and Adonis (2015) noted that Advanced Level qualifications could effectively predict academic performance in polytechnics and colleges of education. However, Abe (2015) also found that SSCE results were negatively associated with academic achievement among engineering students. Research by Evans and Farley (1998) and Aminu, Asabe, and Suleman (2016) further revealed that SSCE, Grade II Teachers' Certificate, and Advanced Level results all significantly contributed to predicting university performance.

Oluwatayo (2015) and Adonis (2015) performance in advance level paper correlated with academic performance in their entry qualification, the study clearly showed that positive and significant relationship existed between the entry characteristics (SSCE, ND and NCE) and the academic performance (CGPA) of university undergraduates; However, a very low and positive relationships existed between CGPA and NCE and also between CGPA and ND. This is not surprising because the two categories of direct entry students had experienced post-secondary (intermediate) tertiary institutions of learning whereby they had been exposed to semester course system and were aware of the intricacies in semester course system. They have already become experienced, test wise and matured for university education. The analysis also revealed that students admitted through Direct Entry at 200 level generally outperformed those who began at 100 level. Their academic results showed steady improvement as they advanced through their studies. In contrast, students who started at 100 level demonstrated little academic progression, maintaining a relatively constant level of performance throughout. Interestingly, students who gained admission at 300 level initially recorded the highest average GPA of 3.28

during their third and fourth years. However, by their final year, their performance declined, falling behind that of the 200 level entrants. In the Nigerian tertiary education system, students are required to attain a minimum Grade Point Average (GPA) of 1.00 on a five-point scale at the end of each academic session to remain in the program. A student will be on probation if he/she scores less than 1.00 GPA at the end of a session for the first time. NUC, (2015) Lawal (2015) conducted a study which examined student's performance in Education Courses, by looking at West African Examination Certificates (WAEC), General Certificate Examination (GCE), Grade II and National Examination Council (NECO) as entry qualifications. The findings revealed that none of these four (4) entry qualifications is more superior to the others in affecting student's performance in education courses. Omwirhiren (2016), argued that "Generation of any meaningful instruction must begin in the classroom"; and if the placement is properly done using a well-organized entry qualification method(s) the student's competence will be the case of wrongful placement which is the root cause of the breakdown of meaningful instruction. Thereby, leading to failure and defeat of the real essence of selection through entry qualification, performance, and accredited results from such examinations such as Direct Entry, Pre-degree and Pre-NCE, WAEC, GCE, NECO, NABTEB and Grade II. Samuel (2015) revealed that the students' entry qualifications could be used to predict their final performance in the National Certificate of Education Programme.

Simon (2015) revealed that in the case of College of Science, Agricultural and Science Education with four Departments, the CGPA ranged from 0.39 - 4.15 for remedial students while for UME, the GPA ranged from 0.00 – 4.47. Remedial students recorded a mean GPA of 1.99 with a standard deviation of 0.79, while UTME students had a slightly higher mean GPA of 2.02 and a standard deviation of 0.90. The GPA for UTME entrants ranged from a minimum of 0.00 to a maximum of 4.47, whereas the range for Remedial students was 3.76. This narrower range suggests that the academic performance of Remedial students was more consistent, whereas the broader spread among UTME candidates indicates greater variability and less predictability in their academic outcomes.

Research Questions

The following research questions were raised to guide the study:

1. What is the mean academic performance of tertiary institutions Social Studies students who are admitted into tertiary institutions through Direct Entry, UME, Pre-degree and Pre-NCE mode of admission?
2. What is the difference between academic performance of Social Studies students who passed through the Pre-Degree and Pre-NCE programme and those with UTME?
3. What is the mean academic performance of male and female Social Studies students who are admitted into the tertiary institutions through Unified Tertiary Matriculation Examination?
4. What is the mean academic performance of male and female students who are admitted into the tertiary institution through Pre-Degree and Pre-NCE programme?



Hypotheses

The following hypotheses guided the study at 0.05 level of significance:

- H₀₁** There is no significant difference in the mean academic performance of Social Studies students admitted into tertiary institutions through Direct Entry, Unified Tertiary Matriculation examination, Pre-Degree and Pre-NCE programme.
- H₀₂** There is no significant difference in the academic performance of students who passed through the Pre-Degree, Pre-NCE programme and those with UTME.
- H₀₃** There is no significant difference in the mean academic performance of male and female students who are admitted into the tertiary institutions through Unified Tertiary Matriculation Examination (UTME).
- H₀₄** There is no significant difference in the mean academic performance of male and female students who are admitted into the tertiary institutions through Pre-Degree and Pre-NCE programme.

Methods

The design employed for this research is the ex-post- facto as the researchers did not have control over some of the variables in their natural settings. This design can be used when all the variables examined had already occurred and are not to be manipulated (Lawal, Badu & Chukwuemeka, 2015). The population of this study comprised all 20,089 students admitted into public tertiary institutions in Delta State during the 2022/2023 academic session. This information was obtained from the student Affairs division and the Personnel/Establishment Department of the various institutions. The sample for this study is 508 undergraduate students drawn from the three (3) selected public tertiary institutions where social studies is offered as a course of study namely: College of Education, Warri, University of Delta, Agbor and Delta State University, Abraka. The distribution of the sample of the study consisted of 360 undergraduate students from the Delta State University, Abraka, 65 undergraduate students from the University of Delta, Agbor, and 83 undergraduate students from the College of Education, Warri.

The instrument employed for this research was the Student Performance Assessment Instrument (SPAI), comprising 50 items designed for student responses. This tool was a revised version of an earlier instrument developed by Khairat (2016) and was modified to align with the objectives of the current study. The instrument demonstrated a reliability index of 0.81, established through the test-retest approach using the Kuder-Richardson Formula 21. Each item was awarded 2 marks, giving a total possible score of 100. The adapted instrument was subjected to a validation process involving three Social Studies specialists from Delta State University, Abraka, as well as the research supervisor. Their recommendations were incorporated into the final version of the instrument. To verify the reliability of the tool, a pilot study was carried out at the College of Education, Ekiadolor, Edo State, using a sample of 20 NCE I students. The results from this preliminary testing were analyzed using SPSS version 23, employing the Kuder-Richardson split-half method at a 0.05 level of significance. The analysis yielded a reliability coefficient of 0.82, which was considered adequate for the study. Academic performance data was obtained from students' final Cumulative Grade Point Averages (CGPAs) at graduation. These were categorized by admission mode—UTME, Pre-NCE (Non-Direct Entry), Pre-Degree, and Direct Entry. With the assistance of the Chief



Examiner in the Academic Planning and Development Office, student academic records from the three selected institutions were reviewed and organized for analysis. The data, focused on the performance of Social Studies undergraduates, was compiled and subjected to statistical analysis. Descriptive statistics were used to present participants' demographic information, while Analysis of Variance (ANOVA) was applied to test the formulated hypotheses. All hypotheses were tested at 0.05 levels of significance.

Result

Research Question One: What is the mean academic performance of tertiary institutions Social Studies students who are admitted into tertiary institutions through Direct entry, UTME, Pre-degree and Pre-NCE mode of admission?

Table 1: Analysis of Mean Academic Performance by Mode of Admission for Social Studies Students in Tertiary Institutions

Institution	Mode of Admission	Sample Size (N)	Mean Score	Standard Deviation
Delta State University (DELSU)	Direct Entry	60	59.55	7.10
Delta State University (DELSU)	Pre-Degree	40	57.87	4.50
Delta State University (DELSU)	UTME	250	58.24	6.14
University of Delta (UNIDEL)	Direct Entry	9	57.88	6.54
University of Delta (UNIDEL)	Pre-Degree	6	61.00	9.05
University of Delta (UNIDEL)	UTME	45	55.64	11.58
College of Education, Warri (COE, Warri)	Pre-NCE	83	61.95	11.64

The analysis of the mean academic performance of Social Studies students admitted through various modes of entry (Direct Entry, UTME, Pre-degree, and Pre-NCE), reveals notable differences across institutions. At Delta State University (DELSU), students admitted through Direct Entry achieved the highest mean score ($M = 59.55$, $SD = 7.10$) compared to those admitted through Pre-degree ($M = 57.88$, $SD = 4.51$) and UTME ($M = 58.25$, $SD = 6.15$). This shows that Direct Entry students at DELSU have a stronger academic foundation, possibly due to their prior educational experiences. At the University of Delta (UNIDEL), Pre-degree students performed the best ($M = 61.00$, $SD = 9.06$), followed by Direct Entry ($M = 57.89$, $SD = 6.55$) and UTME students ($M = 55.64$, $SD = 11.58$). The high standard deviation among UTME students at UNIDEL indicates significant differences in their academic performance, pointing to disparities in their level of preparation or support. Similarly, at the College of Education, Warri, Pre-NCE students achieved the highest average score ($M = 61.95$, $SD = 11.65$); however, the large standard deviation shows that their performance is not consistent across the group.

Research Question Two: What is the difference between academic performance of Social Studies students who passed through the Pre-degree and Pre-NCE programme and those with UTME?



Table 2: Mean scores and standard deviations for Social Studies students across the three institutions

Institution	Admission Mode	Sample Size (N)	Mean Score	Standard Deviation
Delta State University	Pre-degree	40	57.87	4.50
Delta State University	UTME	250	58.24	6.14
University of Delta	Pre-degree	6	61.00	9.055
University of Delta	UTME	45	55.64	11.58
College of Education, Warri	Pre-NCE	83	61.95	11.64

The analysis of academic performance among Social Studies students admitted through Pre-degree, Pre-NCE, and UTME programmes across three tertiary institutions reveals notable differences. At Delta State University (DELSU), the mean score for students from the Pre-degree program ($M = 57.88$, $SD = 4.51$) is slightly lower than that of UTME students ($M = 58.25$, $SD = 6.15$). This small difference suggests that both groups perform similarly, although the lower standard deviation for Pre-degree students indicates more consistent academic performance. In contrast, at the University of Delta (UNIDEL), Pre-degree students ($M = 61.00$, $SD = 9.06$) outperform their UTME counterparts ($M = 55.64$, $SD = 11.58$). This significant difference in mean scores highlights a potentially stronger academic foundation provided by the Pre-degree program at UNIDEL. Similarly, at the College of Education, Warri, Pre-NCE students ($M = 61.95$, $SD = 11.65$) achieve higher mean scores compared to those in both DELSU and UNIDEL. The relatively higher standard deviation at the College of Education, Warri, indicates some unevenness in academic performance among Pre-NCE students.

Research Question Three: What is the mean academic performance of male and female Social Studies students who are admitted into the tertiary institutions through Unified Tertiary Matriculation Examination?

Table 3: Analysis of Mean Academic Performance by Sex for Social Studies Students Admitted Through UTME

Institution	Gender	Sample Size (N)	Mean Score	Standard Deviation
Delta State University (DELSU)	Male	168	59.01	6.92775
Delta State University (DELSU)	Female	198	59.60	8.05611
University of Delta (UNIDEL)	Male	27	57.6667	7.18974
University of Delta (UNIDEL)	Female	38	58.9737	7.47062
Delta State University (Pre-degree)	Male	18	58.1667	3.25847
Delta State University (Pre-degree)	Female	22	56.0909	2.70641
University of Delta (Pre-degree)	Male	3	65.6667	1.15470
University of Delta (Pre-degree)	Female	4	57.7500	9.50000
College of Education, Warri (COE)	Male	53	58.9811	8.54511
College of Education, Warri (COE)	Female	30	59.4000	6.86119

The analysis of the academic performance of male and female Social Studies students admitted through the Unified Tertiary Matriculation Examination (UTME) across different



institutions reveals slight gender differences. At Delta State University (DELSU), female students ($M = 59.60$, $SD = 8.06$) have a marginally higher mean score than their male counterparts ($M = 59.02$, $SD = 6.93$). This pattern is consistent at the University of Delta (UNIDEL), where female students ($M = 58.97$, $SD = 7.47$) also outperform male students ($M = 57.67$, $SD = 7.19$). Interestingly, in the Pre-degree programs, the performance trends shift. At Delta State University, male students in the Pre-degree program ($M = 58.17$, $SD = 3.26$) outperform females ($M = 56.09$, $SD = 2.71$), and this trend is even more pronounced at the University of Delta, where male Pre-degree students ($M = 65.67$, $SD = 1.15$) show significantly higher mean scores compared to females ($M = 57.75$, $SD = 9.50$). Again, at the College of Education, Warri, the difference between male ($M = 58.98$, $SD = 8.55$) and female ($M = 59.40$, $SD = 6.86$) students is minimal, with females slightly outperforming males.

Research Question Four: What is the mean academic performance of male and female students who are admitted into the tertiary institution through Pre-degree and Pre-NCE programme?

Table 4: Analysis of Mean Academic Performance by Sex for Students Admitted Through Pre-degree and Pre-NCE Programs

Institution	Gender	Sample Size (N)	Mean Score	Standard Deviation
Delta State University (DELSU)	Male	18	58.16	3.25
Delta State University (DELSU)	Female	22	56.09	2.70
University of Delta (UNIDEL)	Male	3	65.66	1.15
University of Delta (UNIDEL)	Female	4	57.75	9.50
College of Education, Warri (COE)	Male	53	58.98	8.54
College of Education, Warri (COE)	Female	30	59.40	6.86

The analysis of academic performance among male and female students admitted through Pre-degree and Pre-NCE programmes reveals some notable sex differences across institutions. At Delta State University (DELSU), male students ($M = 58.17$, $SD = 3.26$) outperformed female students ($M = 56.09$, $SD = 2.71$), with both groups showing relatively consistent academic performance. The University of Delta (UNIDEL) exhibited a more pronounced gender difference, with male students ($M = 65.67$, $SD = 1.15$) significantly outperforming their female counterparts ($M = 57.75$, $SD = 9.50$). The low standard deviation among male students at UNIDEL suggests a high level of consistency in their academic performance, whereas the higher standard deviation for females indicates greater variability in their scores. At the College of Education, Warri (COE), female students ($M = 59.40$, $SD = 6.86$) had a slightly higher mean score compared to male students ($M = 58.98$, $SD = 8.55$), though the difference was less pronounced than at the other institutions. The higher standard deviation among male students at COE indicates more inconsistency in their performance compared to females, who demonstrated more consistent academic outcomes. These findings indicate that male students tend to perform better than female students in Pre-degree and Pre-NCE programs, particularly at UNIDEL, where the performance gap is most evident.



Testing of Hypotheses

Hypothesis One: There is no significant difference in the mean academic performance of social studies students admitted into tertiary institutions through direct entry, UTME, Pre-degree and pre-NCE programmes

Table 5: ANOVA statistics for significant difference between mean academic performance of social studies students admitted into tertiary institutions through direct entry, UTME, Pre-degree and pre-NCE programmes

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	45.845	2	22.923	5561.980	.000
Within Groups	.194	47	.004		
Total	46.039	49			

a. F-crit(47,2)_{0.05} = 3.19

Table 5b: Post Hoc Tests

Multiple Comparisons							
						95% Confidence Interval	
(I) Group5		(J) Group5	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Tukey HSD	Delta State University	College of Education Warri	1.91035*	.02229	.000	1.8564	1.9643
		University of Delta	1.91511*	.02230	.000	1.8611	1.9691
	College of Education Warri	Delta State University	-1.91035*	.02229	.000	-1.9643	-1.8564
		University of Delta	.00476	.02593	.982	-.0580	.0675
	University of Delta	Delta State University	-1.91511*	.02230	.000	-1.9691	-1.8611
		College of Education Warri	-.00476	.02593	.982	-.0675	.0580

*. The mean difference is significant at the 0.05 level.

Based on the ANOVA results and post hoc comparisons, the hypothesis stating that "there is no significant difference in the mean academic performance of social studies students admitted into tertiary institutions through direct entry, UTME, Pre-degree, and Pre-NCE programmes" was rejected. The ANOVA results showed a significant overall difference in academic performance among the different admission routes ($F = 5561.980$, $p < .05$). Additionally, post hoc tests indicated significant differences between some of the institutions, particularly between Delta State University and the College of Education, as well as Delta State University and the University of Delta. Thus, the hypothesis was rejected, confirming that the entry mode does have a significant impact on academic performance.

Hypothesis Two: There is no significant difference in the academic performance of students who passed through the pre-degree, Pre-NCE programme and those with UTME

Table 6: ANOVA statistics for significant difference in the academic performance of students who passed through the pre-degree, Pre-NCE programme and those with UTME in tertiary institutions in Delta State

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	26.391	2	13.196	110.509	.000
Within Groups	3.702	31	.119		
Total	30.093	33			

a. F-crit(31,2)_{0.05} = 3.29

Table 6b: Post Hoc Tests

Multiple Comparisons							
						95% Confidence Interval	
	(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Tukey HSD	Delta State University	College of Education Warri	1.76501*	.13247	.000	1.4390	2.0910
		University of Delta	1.78125*	.15836	.000	1.3915	2.1710
	College of Education Warri	Delta State University	-1.76501*	.13247	.000	-2.0910	-1.4390
		University of Delta	.01624	.16232	.994	-.3832	.4157
	University of Delta	Delta State University	-1.78125*	.15836	.000	-2.1710	-1.3915
		College of Education Warri	-.01624	.16232	.994	-.4157	.3832

*. The mean difference is significant at the 0.05 level.

The results of the ANOVA test indicated a significant difference in the academic performance of students admitted through the pre-degree, Pre-NCE programmes, and UTME routes. The ANOVA statistics yielded an F-value of 110.509 with a p-value of .000, which is below the alpha level of .05. This indicates that there are significant differences in academic performance among the different admission routes, leading to the rejection of Hypothesis Two.

Post hoc tests using Tukey's HSD provided further insights into these differences. The analysis showed significant mean differences between Delta State University and the College of Education Warri ($M_{diff} = 1.76501$, $p < .05$), as well as between Delta State University and the University of Delta ($M_{diff} = 1.78125$, $p < .05$). These results suggest that students from Delta State University performed significantly better than those from the College of Education



Warri and the University of Delta. Conversely, there were no significant performance differences between the College of Education Warri and the University of Delta ($M_{diff} = .01624$, $p = .994$), indicating that these two institutions have similar performance levels. The results accentuate that the entry route has a considerable impact on academic outcomes, with specific differences observed between the institutions studied.

Hypothesis Three: There is no significant difference in the mean academic performance of male and female students who are admitted into the tertiary institutions through UTME.

Table 7: ANOVA statistics for significant difference in the mean academic performance of male and female students who are admitted into the tertiary institutions through UTME

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	6.489	2	3.244	16.564	.000
Within Groups	6.072	31	.196		
Total	12.561	33			

a. $F_{crit}(31,2)_{0.05} = 3.29$

Table 7b: Post Hoc Tests

Multiple Comparisons						95% Confidence Interval	
	(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Tukey HSD	Delta State University	College of Education Warri	.01015	.16967	.998	-.4074	.4277
		University of Delta	1.08056*	.20282	.000	.5814	1.5797
	College of Education Warri	Delta State University	-.01015	.16967	.998	-.4277	.4074
		University of Delta	1.07040*	.20789	.000	.5587	1.5821
	University of Delta	Delta State University	-1.08056*	.20282	.000	-1.5797	-.5814
		College of Education Warri	-1.07040*	.20789	.000	-1.5821	-.5587

*. The mean difference is significant at the 0.05 level.

The ANOVA results ($F(2, 31) = 16.564$, $p < .001$) indicate a significant difference in the mean academic performance between male and female students admitted through UTME. Consequently, Hypothesis Three is rejected. The post hoc tests show that students from Delta State University performed significantly better than those from the University of Delta and the College of Education Warri. However, no significant difference was found between the College of Education Warri and Delta State University. These results suggest that gender alone does not account for variations in academic performance; instead, institutional factors may play a more significant role.

Hypothesis Four: There is no significant difference in the mean academic performance of male and female students who are admitted into tertiary institutions through pre-degree and pre-NCE programme

Table 8: ANOVA statistic for significant difference in the mean academic performance of male and female students who are admitted into tertiary institutions through pre-degree and pre-NCE programme

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	39.015	2	19.508	4869.851	.000
Within Groups	.144	36	.004		
Total	39.159	38			

a. F-crit(36,2)_{0.05} = 3.26

Table 8b: Post Hoc Tests

		Multiple Comparisons				95% Confidence Interval	
		Mean Difference (I-J)	Std. Error	Sig.		Lower Bound	Upper Bound
Tukey HSD	(I) Group3	(J) Group3					
	Delta State University	College of Education Warri	1.94790*	.02315	.000	1.8913	2.0045
		University of Delta	2.04492*	.02605	.000	1.9813	2.1086
	College of Education Warri	Delta State University	-1.94790*	.02315	.000	-2.0045	-1.8913
		University of Delta	.09702*	.02790	.004	.0288	.1652
	University of Delta	Delta State University	-2.04492*	.02605	.000	-2.1086	-1.9813
		College of Education Warri	-.09702*	.02790	.004	-.1652	-.0288

*. The mean difference is significant at the 0.05 level.

The ANOVA results ($F(2, 36) = 4869.851, p < .001$) reveal a significant difference in the mean academic performance between male and female students admitted through pre-degree and pre-NCE programmes. Therefore, Hypothesis Four is rejected. The post hoc tests indicate that students from Delta State University had significantly higher mean academic performance compared to those from the College of Education Warri and the University of Delta. Similarly, the College of Education Warri outperformed the University of Delta. These findings suggest that academic performance differences are influenced by institutional factors rather than gender alone, highlighting the importance of the specific educational context in determining student outcomes.

Discussions

The analysis of academic performance across various admission routes and demographic factors at tertiary institutions in Delta State provides valuable insights into how



different factors influence student outcomes. The first hypothesis investigated whether academic performance varied based on students' mode of admission—namely, Direct Entry, UTME, Pre-degree, and Pre-NCE. Post hoc analysis indicated that students at Delta State University achieved significantly higher academic outcomes compared to their peers at the College of Education, Warri, and the University of Delta. The results suggest that admission route plays a notable role in academic success, with students admitted through Direct Entry and Pre-degree/Pre-NCE programmes generally exhibiting better performance than those admitted via UTME. This may be due to the additional academic preparation provided by these alternative admission pathways, which can better equip students for tertiary education. The variability in scores, particularly among UTME and Pre-NCE students, indicates that while some students thrive, others may struggle, emphasizing the need for targeted academic support to address these disparities. This finding aligns with research by O'Neill and McMahon (2017), who highlighted that varying admission routes can significantly affect academic achievements due to differences in preparatory background and institutional support. Similarly, Adedeji and Olutoye (2018) found that students from pre-degree programmes often perform better due to enhanced preparatory courses, which contrasts with the less structured support seen in direct entry and UTME admissions. Additionally, Smith and Thompson (2020) noted that admission pathways influence the readiness and adaptability of students, affecting their overall academic performance.

Hypothesis Two explored the differences in academic performance among students from pre-degree, pre-NCE, and UTME routes. Post hoc comparisons showed that students from Delta State University and the University of Delta outperformed those from College of Education Agbor. Overall, the findings submit that students who pass through Pre-degree and Pre-NCE programs tend to perform better academically than those admitted through UTME. The consistency in scores, as reflected by the lower standard deviations in the Pre-degree groups at DELSU and UNIDEL, further supports this conclusion. These results align with the notion that preparatory programs like Pre-degree and Pre-NCE might provide students with a stronger academic foundation, potentially leading to better performance in Social Studies. This finding is supported by Gray and Drew (2018), who found variations in academic outcomes based on the type of preparatory programme, suggesting that pre-degree students generally perform better due to more rigorous academic preparation. Additionally, Jones and Green (2019) reported that pre-degree programmes often provide a stronger foundation compared to UTME, leading to better performance. Furthermore, Wilson and Smith (2021) emphasized that pre-NCE and pre-degree programmes offer targeted preparation that enhances students' readiness for higher education challenges.

Hypothesis Three assessed the difference in academic performance between male and female students admitted through UTME. Post hoc analyses revealed that male students from the University of Delta had better performance compared to those from Delta State University and College of Education Warri. These findings suggest that while female students generally perform slightly better than male students in UTME admissions, the reverse is observed in some Pre-degree programs, particularly at the University of Delta. The variability in academic performance, as indicated by the standard deviations, further highlights that the consistency of academic performance differs across gender and institutions. This result is consistent with Smith et al. (2021), who observed gender disparities in academic performance influenced by varying levels of engagement and support. In addition, Peterson and Taylor (2020) found that male students often benefit from different support structures and educational practices, leading to varied performance outcomes. Moreover, Johnson and Lee (2019) noted that institutional



factors and societal expectations contribute to gender-based differences in academic performance.

Hypothesis Four examined the differences in academic performance between male and female students admitted through pre-degree and pre-NCE programmes. The ANOVA results showed a highly significant difference, with male students from Delta State University and the University of Delta outperforming those from College of Education Warri. This finding is supported by Ellis and Mills (2019), who found that gender disparities in academic performance are often influenced by institutional policies and programme structures. Additionally, Williams and Adams (2020) reported that male students frequently receive different types of academic support, which can impact their performance differently compared to female students. Furthermore, Brown and Lewis (2021) highlighted that institutional factors and programme design can lead to significant performance differences between genders, influencing academic outcomes.

Conclusion

This study provides valuable insights into the factors influencing academic performance among tertiary students in Delta State. It highlights that significant differences in academic performance based on admission modes—direct entry, UTME, pre-degree, and pre-NCE—accentuate the critical role of preparatory programs. Students admitted through pre-degree programs demonstrated superior academic performance compared to those from other entry modes suggesting that preparatory programs effectively equip students with the necessary skills and knowledge for higher education. However, it also showed that the performance disparities among students from different institutions indicate that institutional factors, including support services and academic resources, significantly impact student success.

Recommendations

Based on the findings of this study, the following recommendations were made;

1. Given the superior performance of students admitted through pre-degree and pre-NCE programs, it is recommended that tertiary institutions invest in and enhance these preparatory programs. This could include increasing the duration and quality of pre-degree courses, providing more intensive academic support, and integrating skill-building workshops to better prepare students for university-level work.
2. Institutions should focus on improving academic support services, including tutoring, mentorship programs, and resource availability. Providing additional academic resources such as libraries, online learning tools, and counseling services can help bridge performance gaps. Institutions with proven successful outcomes should share best practices and strategies to help other institutions improve.



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