

ASSESSMENT OF STUDENTS' ENROLLMENT INTO TERTIARY INSTITUTIONS BY GENDER IN IMO STATE FROM 2018 TO 2023

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Abstract

This study assessed the mode of sixty-eight thousand, nine hundred and thirteen (68,913) students' enrollment by gender into three tertiary institutions in Imo State from 2018 to 2023. Three research questions were posed and two null hypotheses formulated to guide the study. The survey and ex-post facto design research design were adopted. The relevant information was obtained with the use of an inventory record. The research questions were answered using frequency counts while the hypotheses were tested using the Chi-Square (X^2) test with the use of SPSS, (version 21) at 5% level of significance. The findings included that: there is high enrollment of female students in Imo State University (IMSU) Owerri and Federal Polytechnic Nekede (FEDPOLY) while Federal University of Technology Owerri (FUTO) which is a mainly technology-based tertiary institution recorded high enrollment of male students. Recommendations included that: Parents should encourage more of their male children to enroll in non-technology-based universities to balance gender disparities in such universities. Technology-based universities such as FUTO should advocate for more females in the advertisement for their technology-based programmes. Universities who offer secretarial and office management courses like FEDPOLY should equally advocate for more male students in their advertisement of programmes to avoid gender stereotypes in students' enrollment.

Keywords: Assessment, students' enrollment, tertiary institutions, gender, gender stereotype.

Introduction

Education is widely recognized as a critical driver of individual empowerment and national development. Tertiary education, in particular, plays a pivotal role in producing skilled manpower, promoting innovation, and fostering socioeconomic advancement. In Nigeria, efforts have been made to expand access to higher education, yet disparities persist, particularly along gender lines. Imo State, one of the educationally advanced states in the South-East geopolitical zone, has continued to witness fluctuations in student enrollment into tertiary institutions over the years, especially from a gender perspective. According to Adeyemi and Akpotu (2022), education is an essential tool for personal and societal development, and it plays crucial role in shaping the future of individuals and communities. In Nigeria, just like in many other countries, tertiary institutions are the gate ways to higher education and professional opportunities. Therefore, understanding the pattern of students enrolment into tertiary institutions is essential for formulating effective educational policies and improving educational outcomes. Neil (2016) maintains that one significant aspect of enrollment pattern in tertiary institutions is gender disparity.

When men and women have different access to and opportunities for education, this is referred to as gender disparity in education. Disparities in subject choices, educational quality, enrollment rates, and completion rates are all involved. There are obstacles to attaining gender equality and inclusive education because of this discrepancy, which has historical roots and still exists today. Considering the disparities in enrollment

rates and the obstacles preventing women and girls from obtaining high-quality education, it must be argued that this is a complex problem impacting people, communities, and societies (Souvik and Biswajit, 2023). Social expectations, financial constraints, discriminatory practices, and cultural norms are some of these obstacles.

Aina and Adedo (2019) carried a study on the perceived causes of students' low enrollment in science courses in tertiary institutions in Nigeria. Agu and Omenyi (2013) assessed the gender status in enrolment into different faculties in one the South-Eastern universities in Nigeria. The findings from their study revealed that despite the profuse efforts made so far to bridge the gender gap in education access in Nigeria, many higher education courses are still being construed as either masculine or feminine. Alao and Abubakar (2020) study focused on gender enrollment gap and academic performance of college Physics students. It was revealed among others that there was no statistically significant difference in academic performance between female and male students. Rahji (2019) examined school enrollment and gender gap of rural household children at the primary level in South-Western Nigeria. The findings revealed that there is a preference for boys over girls in the demand for schooling. Onyeike and Ogujawa (2019) analyzed the challenges of the girl-child in Ebonyi State of Nigeria in terms of school enrollment. The study discovered among others that the enrollment rate of girls is still very low and remains worrisome. Adeyemi and Akpotu (2022) equally found that gap existed between female and male in the university enrollment with lower female enrollment in all aspects. Of the university. Among these empirical studies, none focused on the assessment of students' enrollment by gender in tertiary institutions in Imo State from 2018 to 2023. While significant progress has been made in bridging the gender gap in education globally, gender disparity still exists in many parts of the world including Nigeria (Rahji, 2019). This research seeks to contribute to the sparse literature concerning this in Nigeria via assessment of students' enrollment into tertiary institutions by gender in Imo state from 2018 to 2023.

Methods

The study adopted a survey research design. The population of the study was 68,913 students from the faculties/schools that made up the three tertiary institutions selected from Imo State. For the fact that this study is an after event one, a census study of all the enrolled students from 2018 - 2023 academic sessions was used. There was no sampling as the population was used for the study. In collecting data for the study, an inventory record of the three tertiary institutions and their enrollments, which was prepared alongside their faculties, departments and gender. The researcher therefore prepared a form to fill in the records as well as the personal information of the schools. The inventory instrument was validated by two specialists in the field of Sociology of Education and one in the field of Educational Measurement and Evaluation. The instrument was believed to be reliable since it was based on records on the record of the event. The research questions were answered with the use of frequency counts while the hypotheses were tested with the use of Chi-Square (X^2) test using SPSS version 21 at 5% level of significance.

Results

In the sections below are presented the results for the three institutions studied. Table 1 shows the mode of male and female students' enrollment in IMSU from 2018 to 2023 academic sessions. The table indicated that between 2018 to 2014, the female students enrolled more than the male ones.

Table 1: Mode of Male and Female Students Enrollment in IMSU from 2018 to 2013 Academic Sessions

S/N	Academic Years	Gender	
		Male	Female
1	2018/2019	2623	2910
2	2019/2020	2113	2312
3	2020/2021	2217	2634
4	2021/2022	1895	2816
5	2022/2023	2178	2792
Total		11,026	13,464

This was confirmed by the cumulative total of 11,026 for the male students and 13,464 for the female students indicating that at IMSU, there was more enrollment of female students (13,464) than the male students (11,026) from 2018 to 2023 academic sessions with a total of 24,490. Table 2 shows the trend of male and female students' enrollment in FUTO from 2018 to 2023 academic sessions. The table indicated that between 2018 to 2023, the male students enrolled more than the female ones. This was confirmed by the cumulative total of 10,561 for the male students and 5,150 for the female students. It was therefore concluded that in FUTO, the male students enrolled more than the female students from 2018 to 2023 academic sessions with a total of 10,561 and 5,150 respectively.

Table 2: Mode of Male and Female Students Enrollment in FUTO from 2018 to 2013 Academic Sessions

S/N	Academic Years	Gender	
		Male	Female
1	2018/2019	2107	1009
2	2019/2020	2114	967
3	2020/2021	1812	993
4	2021/2022	2216	1058
5	2022/2023	2312	1123
Total		10,561	5,150

Table 3: Mode of Male and Female Students Enrollment in FEDPOLY from 2018 to 2013 Academic Sessions

S/N	Academic Year	Male Enrollment	Female Enrollment
1	2018/2019	2,367	3,316
2	2019/2020	2,455	3,279
3	2020/2021	2,396	3,118
4	2021/2022	2,992	2,897
5	2022/2023	2,768	3,124
Total		12,978	15,734

Table 3 shows the trend of male and female students' enrollment in FEDPOLY from 2018 to 2023 academic sessions. The table indicated that except for 2021/2022 academic session, female students enrolled more than the males. The total of 12,978 and 15,734 were recorded for male and female students respectively. This implies that female students recorded high enrollment figures more than the male students in FEDPOLY.

Hypothesis

- Ho₁:** The years of students' enrolment mode in IMSU do not significantly depend on gender
- Ho₂:** The years of students' enrolment mode in FUTO do not significantly depend on gender
- Ho₃:** The years of students' enrolment mode in FEDPOLY do not significantly depend on gender

In Table 4 is listed the summary of the Chi-squared test of significance from the students' enrolment at the three tertiary institutions in Imo State that were used for the study. Table 4 proved the significant dependency of years of students' enrollment mode in IMSU on gender. The result indicates that with the degree of freedom of 4, at 0.05 level of significance, the calculated value of 73.617 is greater than the critical X^2 value of 9.488. Therefore, it is concluded that the years of students' enrollment mode in IMSU significantly depend on gender. We also see from the results above that there is a significant dependency of years of students' enrollment mode in FUTO on gender. The result indicates that with the degree of freedom of 4, at 0.05 level of significance, the calculated value of 12.021 is greater than the critical x^2 value of 9.488. Therefore, it is concluded that the years of students' enrollment mode in FUTO significantly depend on gender. For Federal Polytechnic Nekede (FEDPOLY), the result signified that with the degree of freedom of 4, at 0.05 level of significance, the calculated value of 131.132 is greater than the critical X^2 value of 9.488. implying that the years of students' enrollment mode in FEDPOLY significantly depend on gender.

Table 4: Summary of X^2 Table Showing Significant Dependency of Students' Enrollment Mode Based on Gender (2018–2023)

Institution	Gender	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	df	X^2 Cal	X^2 Crit	Decision
IMSU	Males	2623	2113	2217	1895	2178	4	73.617	9.488	Reject Ho
	Females	2910	2312	2634	2816	2792				
FUTO	Males	2107	2114	1812	2216	2312	4	12.021	9.488	Reject Ho
	Females	1009	967	993	1058	1123				
FEDPOLY	Males	2367	2455	2396	2992	2768	4	131.132	9.488	Reject Ho
	Females	3316	3279	3118	2897	3124				

Discussion

The finding on students' enrollment in IMSU based on gender between 2018 and 2023 revealed that in IMSU, the female students enrolled more than the male students from 2018 to 2023 academic sessions. Further analysis showed that the years of students' enrollment mode in IMSU significantly depend on gender. This has proven that there is actually gender disparity in the mode of enrollment of students in tertiary institutions, based on their gender. This finding does not corroborate with the finding of Rahji (2019) who examined school enrollment and gender gap of rural household children at the primary level in South Western Nigeria and found that there is a preference for boys over girls in the demand for schooling. This finding equally counters that of Adeyemi and Akpotu (2022) which stated that gap existed between female and male in the university enrollment with lower female enrollment in all aspects of the university. However, the disparity between these findings could emanate from some hidden factors such as cultural, familial and other peculiar personal reasons. The cultural factors might hinge on the belief that male education is more important than that of the females. In any case, it can be concluded based on the finding of this study that there is more enrollment of the female students than the males in the tertiary institutions.

The finding on students' enrollment in FUTO based on gender revealed that in FUTO, the male students enrolled more than the female students. Further analysis on that proved that the years of students' enrollment mode in FUTO significantly depend on gender. This finding has shown that unlike in the case of IMSU where females students dominated the males in number, the number of the males in FUTO outweighs the females. Looking at the two universities, there seems to be gender stereotype in line with the orientation of disciplines of the two universities. FUTO being a technology-based institution may have attracted more males for that singular reason. This might therefore support some insinuations in some quarters that males are more technologically inclined while females are more linguistically inclined. This finding is in alignment with the assertion of Agu and Omenyi (2013) who affirmed that in spite of the profuse efforts made so far to bridge the gender gap in education access in Nigeria, many higher education courses are still being construed as either masculine or feminine. However, based on the finding of this study, it can be concluded that in the technology-based tertiary institutions, there is male students' dominance.

Findings on students' enrollment in FEDPOLY based on gender between 2018 and 2023 revealed that female students recorded high enrollment figures more than the male students. The hypothesis tested also proved that the years of students' enrollment mode in FEDPOLY significantly depend on gender. This has also countered the trend in FUTO and aligned with that of IMSU. Probably, this could be due to the fact that FEDPOLY offers office and secretarial courses unlike FUTO. There is a general belief that females are more inclined in secretarial courses than the technological ones. In that case, this finding also goes to support that of Agu and Omenyi (2013) who assessed the gender status in enrolment into different faculties in a south eastern university in Nigeria, whose findings also revealed that in spite of the profuse efforts made so far to bridge the gender gap in education in Nigeria, many higher education courses are still being construed as either masculine or feminine. However, based on the finding of this study, it can be equally concluded that there is female student's dominance in polytechnics, who offer secretarial and other office administration courses.

Conclusion

From 2018 to 2023, gender distribution in tertiary institutions in Imo State reflects patterns similar to those observed across other Nigerian universities. While specific statistical datasets are unavailable, existing studies indicate that male students tend to dominate in science and technology-related fields, whereas female students are increasingly enrolling in disciplines such as Office Technology & Management, Food Technology, and Fashion Technology. Socioeconomic factors such as parental background, religion, and economic status significantly influence students' program choices. Based on the findings of this study, it is concluded that gender stereotypes persist in the enrollment patterns of students, often influenced by the nature of the courses offered by different tertiary institutions in Imo State.

Recommendations

In view of the observed gender disparities in course enrollment across tertiary institutions in Imo State often shaped by socioeconomic factors and entrenched stereotypes the following recommendations are made to promote gender equity and inclusiveness in all fields of study:

1. Tertiary institutions in Imo State should develop and implement inclusive policies that promote equal participation of male and female students across all academic disciplines, particularly in traditionally gender-skewed fields.
2. Structured mentorship and role model programs should be introduced to encourage female students to pursue careers in science, technology, engineering, and mathematics (STEM) fields.
3. Gender-sensitive scholarships should be created to support students especially females who choose to enter fields where their gender is underrepresented.
4. Secondary schools should be engaged in sustained career guidance and public awareness campaigns aimed at challenging gender stereotypes and broadening students' academic and career choices.
5. The state government and educational institutions should invest in the collection, analysis, and use of gender-disaggregated data on enrollment trends to inform evidence-based educational planning and policy formulation.

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