SITUATIONAL ANALYSIS OF EDUCATIONAL WASTAGE RATES IN PUBLIC UNIVERSITIES PROGRAMMES IN ANAMBRA STATE

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Abstract
The study investigated the situations of educational wastage rates in public universities programmes in Anambra State. Eight research questions guided the study and four null hypotheses were tested at 0.05 level of significance. Descriptive survey research design was adopted for the study. The population of the study consisted of 18,636 respondents (14,674 undergraduates, 3,767 postgraduates and 195 administrators) in public universities in Anambra State. The sample size for the study was 9,978 respondents (8,809 undergraduates, 1,087 postgraduates and 82 administrators) drawn using two-stage sampling procedure involving purposive and simple random sampling techniques. Researcher-developed instrument titled 'Inventory Proforma for Educational Wastage (IPEW)' was used for data collection. The instruments were face validated by three experts who were lecturers from the Faculty of Education, Nnamdi Azikiwe University, Awka. The instrument was not subjected to test of internal consistency due to the fact that it was just employed for gathering existing data. The researcher together with four research assistants collected data for the study using the direct approach method and 100% return was recorded. Percentage was used to answer research questions, whereas chisquare was used to test hypotheses. The finding of the study revealed among others that students recorded low rate of dropout and high completion rate of **undergraduate programme** in public universities in Anambra State. It was also found that students recorded moderate rates of dropout and completion of postgraduate programme in public universities in Anambra State. Based on the findings, it was recommended among others that university management should inaugurate a committee to sensitize both undergraduates and postgraduate students on the need to avoid dropping out from their programme.

Keywords: Educational Wastage Rates, University, Dropout, Completion

Introduction

University is the highest tertiary education institution that engages in teaching, learning, research and community services to train and supply high level skilled manpower to contribute to the development of the society. Ezeobi and Ikediugwu (2023) asserted that university is an institution of higher learning where people study to acquire knowledge, shape their character and obtain degrees in different disciplines. Furthermore, Ezeobi and Ikediugwu posited that universities offer opportunity for people to study at an undergraduate level for first degrees and at postgraduate level for advanced degrees. The awards at undergraduate programme are Bachelor's degree and Diploma certificate, while post-graduate diploma, masters' and doctoral degrees are awarded at postgraduate level in public universities in Nigeria.

Public universities are established, funded and managed by either Federal or State Government in Nigeria. Onyali and Nnebedum (2021) opined that the public universities are funded by State or Federal Government to provide a platform for students to acquire specialized skills and knowledge to immensely contribute to national development. Every undergraduate or postgraduate programme in public universities in Nigeria has a stipulated duration of study before graduation. Thus, a student who enrolls and fails to complete their programmes at the appropriate time is deemed to constitute

educational wastage. To buttress this, Nwosu (2023) averred that any student who receives education at any stage is expected to complete the education within the prescribed period but if he or she withdraws from the course before completion, it results in educational wastage.

Educational wastage is a situation where students either drop out or spend more than the expected year of graduation to complete a programme in institution of learning. Obuegbe and Egboka (2021) described educational wastage as the failure of students to successfully complete academic programme within the stipulated duration. They added that educational wastage indicates that the input, time, energy, facilities and fund expended in teaching the students yielded no positive outcomes or outputs in terms of ensuring high rate of school completion. Students enroll in universities with the intention of completing their various programmes to obtain academic degrees at a given time but fail to achieve their plan and this constitutes educational wastages. Educational wastage is described by Omenyi and Chukwunonye (2023) as failure of students to complete their school programmes at stipulated period which depicts inefficiency in the use of the available resources. The students who enroll for four years programme and have carryovers without passing the courses at final year will spend more four years which will bring additional cost to the students and universities. In the context of this study, educational wastage is a condition in which students leave university or spend extra years prior to completion of their academic programmes. The more students leave university or spend extra years prior to completion of study, the higher the educational wastage rate.

Educational wastage rate is determined through critical analysis of a group of students who enroll for university programmes in a particular year and tracing them through the completion of their final year. Educational wastage rate is obviously high if the students' enrolment figures extremely exceed that of their programme completion at the expected year of graduation. According to Owhondah and Nwosu (2022), educational wastage rate is the total number of years that are misused or wasted by students due to failures, repetition (stagnation) and dropouts (withdrawal). Operationally, educational wastage rate is the percentage of students who fail to meet all the requirements for graduation within the allotted time for their programmes in institutions of learning. Educational wastage rate is the ratio of enrolment, completion and dropout rate of students in learning institutions. The commonly used parametres for measuring educational wastage rates in higher institutions of learning are dropout/withdrawal and completion/progression rates (Adu and Adigun, 2021, Edeki and Idehen, 2022,). The components of educational wastages investigated in this study are dropout and completion rates for 2019/2020 – 2022/2023 academic sessions. The justification for the academic sessions was because they are the most recent sessions of university programmes during the period of this study.

Dropout rate is the percentage of students who withdrew from universities before the completion of programme in which they enrolled. Obuegbe and Egboka (2021) asserted that drop out before completing is wastage of resources because the parents' financial expenditures and government budgetary allocation to education for that session the student was in school is wasted. Lorenzo-Quiles, Galdón-Lopez and Lendinez-Turon (2023) stated that when a student drops out of university programme, he or she suffers psychological problem and waste limited resources of the family. In addition, the authors stressed that, the university institution is also affected, as the failure of its student could casts doubt on the effectiveness of the teaching staff, the organization of the curriculum and the available resources. The dropout rate is determined by comparing the percentage of enrollment and completion figures in the particular cohort. Students who drop out left university before completion of their progammes.

Completion rate is the number of students who consistently progress to the next level until they finish the educational programme at the stipulated time. It is the percentage of students who graduated at the expected year. Esenam and Onyali (2023) noted that completion rate is the number of students who successfully finish their academic programme in a particular cohort. Completion rate is the number of student enrolled in year one and finished their final year at the stipulated time without dropping out. The completion rate is determined by comparing enrollment and drop out figures in the particular cohort. Udo and Eni (2019) asserted that the students who fail to complete the cycle of education has wasted the time, money and energy expended on them. They further said that leaving school before completing is wastage of resources because the investment by the government for that period of years that the student was in school is wasted irrespective of their gender.

Gender is the behavioral characteristics, cultural roles and social expectations that distinguish males and females. In the same vein, gender is viewed by Melekeowei (2024), as the social attributes

and characteristics of being male or female. The cultural belief and role expectations of male and female students could be associated with educational wastage rate. Sambo, Abubakar and Abdullahi (2016) asserted that it is believed in Africa and of course in some parts of Nigeria that most parents give preferential treatment to males especially in matters concerning education. Some people tend to have the mindset that females are to be married into other families that could reap the benefits of their education and which could induce preference to support male education that can exert influence on the rate of educational wastages. Researches undertaken on the basis of gender-related differences in educational wastages yielded inconsistent results. For instance, Obuegbe (2022) reported that the difference in the educational wastage rates of male and female students was not significant. On the contrary, Edeki and Idehen (2022) found that there was a significant difference in the wastage rate among students based on gender in favour of the males. The possible explanation for these controversial findings might be probably because the studies were carried out in different geographical locations with varying cultural roles and social expectations from male and female students which could influence the rate of educational wastages. The need arises for this study to further take gender into consideration.

There seems to be educational wastage which could probably be the reason for the disparity between enrolment and completion rates of students in public university programmes in Anambra State. Some students appear to spend more than the required years to obtain academic degrees for the various programmes in which they enrolled to study in public universities in Anambra State, Nigeria. To buttress this, Onyali and Nnebedum (2021) noted that some undergraduates fail or spend extra years to complete their universities education probably due to failure in examinations which accumulate carry-over courses and eventually contribute to temporary or permanent withdrawal from public universities in Anambra State, Nigeria. Ogunode, Ndubuisi and Jegede (2022) confirmed that high rate of dropout; expulsion and carry-over in tertiary institutions constitute educational wastages in Nigeria.

The high rate of dropout and failure to complete university programmes have negative consequences to individuals and the society. Students who fail to complete their programmes or drop out of university are more likely to engage in illegal activities, drug abuse, gambling, hawking, prostitution, unwanted pregnancies and early marriages. Onyali and Nnebedum (2021) asserted that students who drop out and fail to complete their university programmes engage in criminal activities such as cultism and drug abuse which thereby slowing down the development of Anambra State. Some students who fail to complete their university programmes tend to go into apprenticeship or trading at various markets in Anambra State. Educational wastages seem to contribute to shortage of manpower for the development of Anambra State, Thus, educational wastages have become a great source of worrisome situation that requires ascertaining the status, in public universities programmes in Anambra State.

Purpose of the Study

The purpose of the study was to determine the situational analysis of educational wastage rates, causative factors and managerial preventive interventions in public universities programmes in Anambra State. Specifically, the study sought to determine:

1. The status of students' dropout in various undergraduate programmes in public universities in Anambra State.
2. The status of students' completion in various undergraduate programmes in public universities in Anambra State.
3. The status of students' dropout in various postgraduate programmes in public universities in Anambra State.
4. The status of students' completion in various postgraduate programmes in public universities in Anambra State.
5. The status of male and female students' dropout in various undergraduate programmes in public universities in Anambra State.
6. The status of male and female students' completion in various undergraduate programmes in public universities in Anambra State.
7. The status of male and female students' dropout in various postgraduate programmes in public universities in Anambra State.
8. The status of male and female students' completion in various postgraduate programmes in public universities in Anambra State.

Research Questions

The following research questions guided the study:

1. What is the students' dropout rate in various undergraduate programmes in public universities in Anambra State?
2. What is the students' completion rate in various undergraduate programmes in public universities in Anambra State?
3. What is the students' dropout rate in various postgraduate programmes in public universities in Anambra State?
4. What is the students' completion rate in various postgraduate programmes in public universities in Anambra State?
5. What is the male and female students' dropout rate in various undergraduate programmes in public universities in Anambra State?
6. What is the male and female students' completion rate in various undergraduate programmes in public universities in Anambra State?
7. What is the male and female students' dropout rate in various postgraduate programmes in public universities in Anambra State?
8. What is the male and female students' completion rate in various postgraduate programmes in public universities in Anambra State?

Research Hypotheses

The following hypotheses were tested at 0.05 level of significance:

1. There is no significant difference in male and female students' dropout rates in various undergraduate programmes in public universities in Anambra State.
2. There is no significant difference in male and female students' completion rates in various undergraduate programmes in public universities in Anambra State.
3. There is no significant difference in male and female students' dropout rates in various postgraduate programmes in public universities in Anambra State.
4. There is no significant difference in male and female students' completion rates in various postgraduate programmes in public universities in Anambra State.

Methods

Descriptive survey research design was adopted for a situational analysis of educational wastage rates, causative factors and managerial preventive interventions in public universities programmes in Anambra State. The study was carried out in public universities in Anambra State located in the South eastern part of Nigeria. The population of the study comprised 18,636 respondents (14,674 undergraduates, 3,767 postgraduates and 195 administrators) in public universities in Anambra State. The sample size for the study was 9,978 respondents (8,809 undergraduates, 1,087 postgraduates and 82 administrators) drawn using two-stage sampling procedure involving purposive and simple random sampling techniques. Researcher-developed instrument titled 'Inventory Proforma for Educational Wastage (IPEW) was used for data collection. The instrument was subjected to face validation by three experts, while their suggestions were used to produce the final version of the instrument. IPEW was not subjected to test of internal consistency due to the fact that it was just employed for gathering existing data. The researcher together with four research assistants who are undergraduates and postgraduate students of the public universities in the state collected data for the study through a direct approach of which 100% return rate was recorded. Percentage was used to answer research questions and chi square to test hypotheses 1-4 In decision making for research questions, the percentage of 70 and above was regarded as high dropout rate, between 69-30 was regarded as moderate dropout rate and those below 29 were regarded as low dropout rate and vice versa for completion rates. For decisions on all the hypotheses, where p-value is equal to or less than level of significant value of 0.05 ($P \leq .05$), the null hypothesis was rejected but where p-value is greater than level of significant value of 0.05 ($P > .05$), the null hypotheses was not rejected.

Results

Research Question 1: What is the students' dropout rate in various undergraduate programme in public universities in Anambra State?

Table 1: Percentage of Students' Drop Out of **Undergraduate Programme** in Public University from 2019/2020-2022/2023 Academic Sessions

Year	Academic Session	Enrolment	Drop Out	Drop out Rate	Remark
Year 1	2019/2020	8,809	15	0.17	Low Dropout
Year 2	2020/2021	8,794	23	0.26	Low Dropout
Year 3	2021/2022	8,771	13	0.15	Low Dropout
Year 4	2022/2023	8,758	9	0.10	Low Dropout
	Total	**35,132**	**60**	**0.17**	**Low Dropout**

The result in table 1 showed that undergraduates had low rate of dropout for all the years of study. The students recorded lower dropout rate in year final years and highest dropout rate in second year than other years. Thus, the students' recorded low rate of drop out from **undergraduate programme** in public universities in Anambra State, Nigeria.

Research Question 2: What is the students' completion rate in various undergraduate programme in public universities in Anambra State?

Table 2: Percentage of Students' Completion Out of **Undergraduate Programme** in Public University from 2019/2020-2022/2023 Academic Sessions

Year	Academic Session	Enrolment	Completion	Completion Rate %	Remark
Year 1	2019/2020	8,809	8,794	99.83	High Completion
Year 2	2020/2021	8,794	8,771	99.74	High Completion
Year 3	2021/2022	8,771	8,758	99.85	High Completion
Year 4	2022/2023	8,758	8,749	99.90	High Completion
	Total	**35,136**	**35,080**	**99.83**	**High Completion**

Table 2 showed that undergraduates had high rate of completion for all the years of study. The students recorded higher completion rate in third and final year. The students recorded lower completion rate in second year than other years. Thus, the students' recorded high completion rate from undergraduate programme in public universities in Anambra State, Nigeria.

Research Question 3: What is the students' dropout rate in various postgraduate programme in public universities in Anambra State?

Table 3: Percentage of Students' Dropout of Postgraduate Programme in Public University from 2019/2020-2020/2021 Academic Sessions

Year	Academic Session	Enrolment	Dropout	Dropout Rate %	Remark
Year 1	2019/2020	1,087	351	32.29	Moderate Dropout
Year 2	2020/2021	736	342	46.47	Moderate Dropout
	Total	**1,823**	**693**	**38.01**	**Moderate Dropout**

As shown in table 3, postgraduates had moderate rate of dropout for all the years of study. The postgraduate students recorded more dropout in the second year than the first year. Thus, the students' recorded moderate rate of drop out from postgraduate programme in public universities in Anambra State, Nigeria.

Research Question 4: What is the students' completion rate in various postgraduate programme in public universities in Anambra State?

Table 4: Percentage of Students' Completion Out of Undergraduate Programme in Public University from 2019/2020-2020/2021 Academic Sessions

Year	Academic Session	Enrolment	Completion	Completion Rate %	Remark
Year 1	2019/2020	1,087	736	67.71	Moderate Completion
Year 2	2020/2021	736	394	53.53	Moderate Completion
	Total	**1,823**	**1,130**	**61.99**	**Moderate Completion**

Table 4 showed that postgraduates had moderate rate of completion for all the years of study. The students recorded lower completion rate in the second year than first year. Thus, the students' recorded moderate completion rate from postgraduate programme in public universities in Anambra State, Nigeria.

Research Question 5: What is the male and female students' dropout rate in various undergraduate programme in public universities in Anambra State?

Table 5: Percentage of Male and Female Students' Drop Out of Undergraduate Programme in Public University from 2019/2020 -2022/2023 Academic Sessions

Year	Male					Female			
	Academic Session	Male Enrolment	No of Drop Out	Dropout Rates	Remark	Female Enrolment	No. of Drop Out	Drop Out Rates	Remark
Year 1	2019/2020	3,662	6	0.16	Low	5,147	9	0.17	Low
Year 2	2020/2021	3,656	10	0.27	Low	5,138	13	0.25	Low
Year 3	2021/2022	3,646	7	0.19	Low	5,125	6	0.12	Low
Year 4	2022/2023	3,639	3	0.08	Low	5,119	6	0.12	Low
	Total	**14,603**	**26**	**0.18**	**Low**	**20,529**	**34**	**0.17**	**Low**

The results on Table 5 showed that male and female undergraduates had the lower dropout rates for all the years of study. However, male undergraduates' drop out of 0.18% for undergraduate programme in academic sessions understudy was slightly higher than their female counterparts which recorded 0.17%.

Hypothesis 1: There is no significant difference in male and female students' dropout rate in various undergraduate programme in public universities in Anambra State.

Table 6: The Summary of Chi-square of no Significant Difference of Male and Female Students' Dropout Rates in Undergraduate Programme of Public University from 2019/2020 - 2022/2023 Academic Sessions

Gender	N	p-value	Df	α	Remark
Male	3,662	4.89	3	0.05	Not Significant
Female	5,147				

Data presented in Table 6 revealed that the p-value of 4.89 is greater than 0.05 level of significance and 3 degree of freedom. Thus, the null hypothesis is not rejected. Therefore, there is no significant difference in male and female students' dropout rate in various undergraduate programme in public universities in Anambra State.

Research Question 6: What is the male and female students' completion rate in various undergraduate programme in public universities in Anambra State?

Table 7**:** Percentage of Male and Female Students' Completion of Undergraduate Programme in Public University from 2019/2020 -2022/2023 Academic Sessions

Year	Male					Female			
	Academic Session	Male Enrolment	No of Completion	Completion Rates %	Remark	Female Enrolment	No. of Completion	Completion Rates %	Remark
Year 1	2019/2020	3,662	3,656	99.84	High	5,147	5,140	99.83	High
Year 2	2020/2021	3,656	3,646	99.73	High	5,138	5,127	99.75	High
Year 3	2021/2022	3,646	3,639	99.81	High	5,125	5,121	99.88	High
Year 4	2022/2023	3,639	3,636	99.92	High	5,119	5,115	99.88	High
	Total	**14,603**	**14,577**	**99.83**	**High**	**20,529**	**20,503**	**99.84**	**High**

Table 7 showed that male and female undergraduates had high completion rates for all the years of study. However, male undergraduates' completion of 99.83% for undergraduate programme in academic sessions understudy was slightly lower than their female counterparts which recorded 99.84%.

Hypothesis 2: There is no significant difference in male and female students' completion rate in various undergraduate programme in public universities in Anambra State.

Table 8: The Summary of Chi-square of no Significant Difference of Male and Female Students' Completion Rates in Undergraduate Programme of Public University from 2019/2020-2022/2023 Academic Sessions

Gender	N	p-value	Df	α	Remark
Male	3,662				
		4.11	3	0.05	Not Significant
Female	5,147				

As shown in table 8, the p-value of 4.11 is greater than 0.05 level of significance and 3 degree of freedom. Thus, the null hypothesis is not rejected. Therefore, there is no significant difference in male and female students' completion rate in various undergraduate programme in public universities in Anambra State.

Research Question 7: What is the male and female students' dropout rate in various postgraduate programme in public universities in Anambra State?

Table 9: Percentage of Male and Female Students' Drop Out of Postgraduate Programme in Public University from 2019/2020 -2020/2021 Academic Sessions

Year	Male					Female			
	Academic Session	Male Enrolment	No of Drop Out	Dropout Rates	Remark	Female Enrolment	No. of Drop Out	Drop Out Rates	Remark
Year 1	2019/2020	487	158	32.44	Moderate	600	193	32.16	Moderate
Year 2	2020/2021	329	144	43.77	Moderate	407	198	48.65	Moderate
	Total	**816**	**301**	**38.11**	**Moderate**	**1,007**	**391**	**40.41**	**Moderate**

The result in table 9 showed that male and female postgraduates had moderate dropout rates for all the years of study. However, male postgraduate students' dropout of 38.11% for undergraduate programme in academic sessions understudy was slightly lower than their female counterparts which recorded 40.41.

Hypothesis 3: There is no significant difference in male and female students' dropout rate in various postgraduate programme in public universities in Anambra State.

Table 10: The Summary of Chi-square of no Significant Difference of Male and Female Students' Dropout Rates in **Postgraduate Programme** of Public University from 2019/2020-2020/2021 Academic Sessions

Gender	N	p-value	Df	α	Remark
Male	487				
		10.81	3	0.05	Not Significant
Female	600				

Table 10 revealed that the p-value of 10.81 is greater than 0.05 level of significance and 3 degree of freedom. Thus, the null hypothesis is not rejected. Therefore, there is no significant difference in male and female students' dropout rate in various postgraduate programme in public universities in Anambra State.

Research Question 8: What is the male and female students' completion rate in various postgraduate programme in public universities in Anambra State?

Table 11: Percentage of Male and Female Students' Completion of Postgraduate Programme in Public University from 2019/2020 - 2020/2021 Academic Sessions

Year	Male					Female			
	Academic Session	Male Enrolment	No of Completion	Completion Rates %	Remark	Female Enrolment	No. of Completion	Completion Rates %	Remark
Year 1	2019/2020	487	329	67.56	Moderate	600	407	67.84	Moderate
Year 4	2020/2021	329	185	56.23	Moderate	407	209	51.35	Moderate
	Total	**816**	**514**	**61.89**	**Moderate**	**1007**	**616**	**59.59**	**Moderate**

Table 11 showed that male and female undergraduates had moderate completion rates for all the years of study. However, male postgraduate students' completion of 61.89% for postgraduate programme in academic sessions understudy was slightly higher than their female counterparts which recorded 59.59%.

Hypothesis 4: There is no significant difference in male and female students' completion rate in various postgraduate programme in public universities in Anambra State.

Table 12: The Summary of Chi-square of no Significant Difference of Male and Female Students' Completion Rates in Postgraduate Programme of Public University from 2019/2020-2020/2021 Academic Sessions

Gender	N	p-value	Df	α	Remark
Male	487	11.41	3	0.05	Not Significant
Female	600				

As shown in table 12, the p-value of 11.41 is greater than 0.05 level of significance and 3 degree of freedom. Thus, the null hypothesis is not rejected. Therefore, there is no significant difference in male and female students' completion rate in various postgraduate programme in public universities in Anambra State

Discussion of Findings

The finding of the study showed that students' recorded low rate of dropout from undergraduate programme in public universities in Anambra State, Nigeria. This disagreed with the finding of Adu and Adigun (2021) which indicated that there was high dropout rate of students in Colleges of Education. The disagreement with the finding could be attributed to difference in time span and institutions of the study. This finding is presumably due to the efforts of university management and staff to create students-friendly learning environment and their constant encouragement of students with carryovers to continue their programmes without dropping out. One could attribute the low rate of dropout of students in undergraduate programme to the desire to obtain degrees that prepare and lead them to successful career.

Male undergraduates' dropout rate of 0.18% for undergraduate programme in academic sessions understudy was slightly higher than their female counterparts which recorded 0.17%. This is in line with the finding of Edeki and Idehen (2022) which revealed that dropout rates among male fresh undergraduates were higher than that of their female counterparts. The possible explanation for this finding could be attributed to the fact that the studies were conducted in higher institution of learning in the same country whose mode of operations that influence dropout rate of students are similar. Male undergraduates tend to record slightly higher dropout rate than their female counterparts probably because they appear to engage in drug abuse, cultism and have more desire to make quick money. Some

of the male students who desire to make quick money appear to dropout of public universities and engage in menial jobs and apprenticeship. Also, the recent efforts to promote girl-child education all over the world could contribute to lower dropout rate of female undergraduates than their male counterparts. There is no significant difference in male and female students' dropout rate in various undergraduate programme in public universities in Anambra State. This agreed with the finding of Iwuagwu, Iwuagwu and Akuta (2018) there was no significant difference in dropout rate of male and female science students in senior secondary schools. This disagreed with the finding of Arowolo, Arowolo and Adaja (2016) which indicated that there were significant higher dropout rates of males over females in primary schools. The difference in maturity of level of primary pupils and undergraduates could explain the disagreement with the finding.

The result of the study showed that students' recorded high completion rate of undergraduate programme in public universities in Anambra State, Nigeria. This disagreed with the finding of Mohammad, Jahan, slam and Ratna, (2015) who reported that students' completion rate in programme at Bangladesh Open University was low and unsatisfactory. The disagreement between the findings could be attributed to time span of 9 differences which is associated modification in government policies and higher education reforms that could promote university completion rates. Most undergraduates in Anambra State tend have good educational backgrounds that prepare them for tasks of university programmes till completion. There is probably low rate of dropout among undergraduates probably due to value attached to university certificates. The high rate of completion of undergraduate programme is probably due to quality teaching, enabling learning environment, frequent counselling services and workshops/seminars organized for staff and students by the management of public universities.

Male undergraduates' completion of 99.83% for undergraduate programme in academic sessions understudy was slightly lower than their female counterparts which recorded 99.84%. This agreed with the finding of Nnebedum and Onyali (2021) which indicated male students' completion rate of undergraduate programme in academic sessions understudy was slightly lower than their female counterparts. This similarity in participants and institutions in which the studies were carried out could contribute to the agreement with the finding. The noticeable slight difference in the completion rates of male and female undergraduates could be explained by their distinctive attitude and behaviour towards their studies. There is no significant difference in male and female students' completion rate in various undergraduate programme in public universities in Anambra State. Nnebedum and Onyali (2021) showed that there was no significant difference in the male and female students' completion rates of undergraduate programme in public universities. The similarity in geographical location and public university of the study could be responsible for the agreement with the finding. Male and female students are offered equal learning opportunities which could be connected to the finding of no significant difference in their completion rate in various undergraduate programme in public universities in Anambra State.

It was found that students' recorded moderate rate of dropout from postgraduate programme in public universities in Anambra State, Nigeria. This is contrary to the finding of Arowolo, Arowolo and Adaja (2016) which showed that there were high dropout rates of primary pupils over the years. The 8 years of time span differences in major changes might have taken place to enhance completion rate of postgraduate programme could contribute to the disagreement with the finding. One is suspecting that the 18 months' duration for masters' programme is too short to experience higher dropout rates in public universities in Anambra State. This finding is probably due to postgraduate students temporarily dropout of the programme until they have financial resources to fund the rising cost of higher education. The moderate rate of students' dropout of from postgraduate programme in public universities could be linked to pressures combining academic, work and family obligations.

Male postgraduate students' dropout rate of 38.11% for undergraduate programme in academic sessions understudy was slightly lower than their female counterparts which recorded 40.41%. This agreed with the finding of Obuegbe and Egboka (2021) which showed that male students have lower dropout rates than their female counterparts in public secondary schools. This also supported the finding of Onyali and Esenam (2023) which showed that male students recorded a slightly lower dropout rates than their female counterparts in secondary schools. The similarity in the time span of the study could be responsible for the agreement with the finding. Some female postgraduate students who get married during their programme tend to relocate to their husband in another environment which partly contributes to the slight high dropout rate than their male counterparts. There is no significant difference

in male and female students' dropout rate in various postgraduate programme in public universities in Anambra State. This agreed with the finding of Obuegbe and Egboka (2021) which indicated that there is no significant difference in male and female students' dropout rate. This finding could be explained by the probation of gender-based discrimination in public universities in Anambra State.

It was indicated that students' recorded moderate completion rate of postgraduate programme in public universities in Anambra State, Nigeria. This is contrary to the finding of Eyangu, Bagire and Kibrai (2014) which revealed that the completion rate of postgraduate programme was still very low. This disagreed with the finding of Sambo, Abubakar and Abdullahi (2016) which revealed the aggregate completion rate is very less compared to the enrolment in senior secondary education for the period under study. The difference in the findings could be explained by dissimilar school environment and policies of different countries where the studies were conducted. Changes in priorities and opportunities of students could also account for moderate rate of students' completion of postgraduate programmes in public universities in Anambra State. Also some students struggle more with their coursework and research than they are necessarily prepared for and this contribute to moderate completion rates.

Male postgraduate students' completion rate of 61.89% for postgraduate programme in academic sessions understudy was slightly higher than their female counterparts which recorded 59.59%. This agreed with the finding of Tusiime, Otara, Kaleeba, Kaviira and Tsinda (2017) which revealed that male students' completion of public university programme outnumbered that of females with small margin. This similarity in the level of education in which the study was conducted could contribute to the agreement with the finding. The female students have slight lower completion rate than their male counterparts they combine motherhood that is very high demanding with their studies which adversely affect time for their academic activities. There is no significant difference in male and female students' completion rate in various postgraduate programme in public universities in Anambra State. This refuted the finding of Othman (2018) which showed that there was a significant difference in completion rates of male and female students in favour of female students. The contradiction with the finding is associated with difference in time span and geographical locations. The gender-inclusive learning environment that exists in public universities in Anambra State could be responsible for the finding of this no significant difference in male and female students' completion rate in various postgraduate programmes.

Conclusion

Based on the findings, it is concluded that educational wastage rates were low in undergraduate programmes and moderate in postgraduate programmes in public universities in Anambra State. Most of the students complete their undergraduate programme at the stipulated period of four years, while post graduate spends more year(s) to complete their programme. Postgraduate students take longer time to complete their programme. There is a slight but insignificant difference in educational wastage rates of male and female students in both undergraduate and postgraduate programmes.

Recommendations

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

1. University management should inaugurate a committee to sensitize both undergraduates and postgraduate students on the need to avoid dropping out during their programme.
2. Academic staff union of universities through the medium of public campaigns and publications should encourage its members to engage in training programmes to improve the quality of teaching that will enhance the completion rates of both undergraduates and postgraduate programmes in universities.

References

Adu, E.T. and Adigun, J.T. (2021). Educational wastage in Colleges of Education in Nigeria: Situational report. *International Journal of Innovative Research & Development, 10*(2), 152-157.

Arowolo, A.A., Arowolo, A.E., and Adaja, I.J. (2016). Trend analysis of students' dropout rate and the effects on the social and educational systems in Nigeria. *International Journal of Latest Research in Engineering and Technology, 2*(4), 8-16.

Edeki, O.M. and Idehen, K.O. (2022). Demographic determinants of wastage rate among fresh

undergraduates in South-South Nigerian Public Universities. *Ilorin Journal of Education, 42*(2), 36-42. Esenam, P.A. and Onyali, L.C. (2023).

Comparative analysis of internal efficiency of education in public and private secondary schools in AkwaIbom State between 2014/2015 and 2019/2020.*International Journal of All Research Education and Scientific Methods, 11*(6), 134-1349.

Eyangu, S., Bagire, V. and Kibrai, N. (2014). An examination of the completion rate of Masters Programmes at Makerere University Business School.*Creative Education, 5*(1), 1913-1920.

Ezeobi, B.C. and Ikediugwu, I. (2023). Communication patterns and leadership styles of administrators as correlates of organizational climate in South East, Universities, Nigeria. *International Journal of Research, 10*(6), 340-361.

Iwuagwu, G.C., Iwuagwu, F.O. and Akuta, F.O. (2018). Assessment of dropout rate among senior secondary school science students in Federal Capital Territory (F.C.T) Abuja, 2011-2016.*The Educational Psychologist, 12*(1), 15-26.

Lorenzo-Quiles, O., Galdon-Lopez, S. and Lendinez-Turón, A. (2023). Factors contributing to university dropout: A review. *Frontier in Education, 8*(1), 1-13.

Melekeowei, P.D. (2024). Self-Esteem and gender as correlates of secondary school teachers' effectiveness in South-West, Nigeria.*Ilorin Journal of Education, 44*(1), 164-177.

Mohammad, M.R., Jahan, M., Islam, A. and Ratna, M.M. (2015). Students' enrolment and dropout: A evaluation study of DCSA program at Bangladesh Open University. *International Review of Research in Open and Distributed learning, 16*(4), 45-51.

Nnebedum, C. and Onyali, L.C. (2021). Determination of the completion rates of undergraduate programme in public universities in Anambra State, Nigeria. *International Journal of Advanced Academic Research, 7*(2), 15-21.

Nwosu, L.K. (2023). Managing education wastage for optimal output in the development of public secondary schools in Orlu LGA of Imo State. *International Journal of Management and Social Sciences, 9*(2), 136-145.

Obuegbe, A.S. and Egboka, P.N. (2021). Determination of educational wastage rates for budget planning in public secondary schools in Imo State. *International Journal of Research, 8*(8), 48-62.

Obuegbe, A.S. (2022). *Determination of educational wastage rates for budget planning in public secondary schools in Imo State.*Unpublished masters' thesis, Department of Educational Management and Policy, NnamdiAzikiwe University Awka.

Ogunode, N.J., Ndubuisi, A.G. and Jegede, D. (2022). Resource wastages in public tertiary institutions in Nigeria: Effects and way forward. *European Multidisciplinary Journal of Modern Science, 5*(1), 16-25.

Omenyi, A.S. and Chukwunonye, M.N. (2023). Comparative analysis of academic staff professional development mechanism adopted by university management for managing education wastages in state and private universities in South East of Nigeria. *African Journal of Educational Management, Teaching and Entrepreneurship Studies, 8*(2), 131-143.

Onyali, L.C. and Nnebedum, C. (2021). Determination of internal efficiency rates of undergraduate programme in public universities in Anambra State, Nigeria. *International Journal of All Research Education and Scientific Methods, 9*(8), 1813-1821.

Othman, A. (2018). Factors affecting the rate of completion of undergraduate students. *Journal of Education and Practice, 9*(36), 37-46.

Owhondah, S.N. and Nwosu, K.L. (2022). Administrative strategies for managing students' wastage in public senior secondary schools in Imo State. *International Journal of Economics,*

Environmental Development and Society, 3(4), 411-428.

Sambo, U., Abubakar, M. and Abdullahi, I. (2016). A study of girls' enrolment and completion in senior secondary school in Bauchi State, Nigeria. *Frontiers of Library, Information and Computer Sciences, 2*(2), 145-149.

Sharma, L.R., Jha, S., Koirala, R., Aryal, U. and Bhattarai, T. (2023). Navigating the research landscape: A guide to the selection of the right research design. *International Research Journal of MMC, 4*(1), 64-77.

Tusiime, M., Otara, A., Kaleeba, A., Kaviira, A. and Tsinda, A. (2017). Gender differences in enrollment and graduation rates in private and public higher learning institution in Rwanda.*Rwanda Journal of Social Sciences, 4*(1), 5-32.

Udo, N.N. and Eni, B.E. (2019). Factors responsible for educational wastages among senior secondary school science students in Cross River State, Nigeria.*African Journal of Social Sciences and Humanities Research, 2*(1), 1-10.