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Mitigating the Risk of High Student Attrition in Open and Distance Learning Institution: A Study of National Open University of Nigeria

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Keywords

Mitigating, High Student Attrition, Open and Distance learning

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Abstract

The study examined ways of mitigating the consequences of the upsurge student attrition in National Open University of Nigeria. Three research questions and three hypotheses guided the study. This study adopted the descriptive survey design to examine the study variables. Descriptive survey design allows the researcher to gather information, summarize, present and construe for the purpose of clarification. The study population consists of all students of National Open University of Nigeria. 600 National Open University of Nigeria students constituted the sample size. Purposive sampling technique was used to select 6 study centres in the 6 geographical regions of Nigeria while the random sampling technique was employed in choosing 100 students each from the six geographical zones. The instrument for the study was the questionnaire titled: Student Attrition in Open and Distance Learning Institution Inventory (SAODLII). The data collected were analyzed with frequency distribution, descriptive statistics, the independent sample test (IST), PPMC and the one-way ANOVA. Hypotheses were tested at 0.05 significant levels. The findings revealed that there are many causes of student attrition among students in National Open University of Nigeria. The consequences

	of student attrition to Nigerian developmental aspirations are numerous. There are several ways to mitigate the upsurge of attrition among students in National Open University of Nigeria. There are significant differences between male and female, undergraduate and post graduate, and age variations on the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated. Conclusion was drawn and useful recommendations were made which included that Administrators of National Open University of Nigeria should focus on implementing policies that can sustain, increase retention and completion rates.

Background to the Study

The emergence and proliferation of COVID 19 has cast great light on the need for Open and Distance Learning as the most suitable mode of learning. The structure of Open and Distance Learning gives learners the control over time, place and pace of learning thereby reducing to the lowest minimal face-to-face contact. This comes with its challenges too as online courses continue to show high student attrition rates (Bawa. 2016). The situation is not different at National Open University of Nigeria as a study of Ibadan Study Centre reveals that the number of registered students declined from 94% in 2003/2004 to 35% in 2010 in all the programmes offered by the University. Ofole (2018) argued that Open and Distance Education (ODE) has become a crucial approach to addressing educational access issues in Nigeria. Despite the increasing prevalence and advantages of ODE, records show that many students drop out due to feelings of isolation and disconnection. This high attrition rate in ODE is a significant concern in Nigeria, as student retention is vital for advancing human capital formation, which is essential for national development in the global knowledge economy. According to Rotar (2022), online learning technologies have significantly enhanced higher education, providing greater flexibility and accessibility for students juggling various life and work responsibilities. However, graduation rate data indicates that a large majority of online learners fail to complete their programs.

There are many causes of attrition in ODL institutions. Bennett (2003) pointed out that higher education attrition is triggered by poor self-esteem or low self-worth, teaching quality, relationships, dissatisfactions with course and poor course organization. Hirschy, Bremer and Castellano (2011) related education attrition to student characteristics. They differentiated student characteristics as stable or malleable. Stable characteristics include socio-demographic attributes, parental education level, ability to pay, and domestic partner status, precollege academic preparation and academic placement and student commitments. On the other hand, malleable student characteristics include those that the program or setting is likely able to influence such as student dispositions and skills (e.g., motivation, self-efficacy, locus of

control, coping skills, resilience, and study skills) and educational and employment goals and intentions" (Hirshy *et al*., 2011, p. 311).

Maher and Macallister (2013) delineated several program-related reasons for discontinuing which included course schedule and pacing, insufficient feedback, quality of learning materials, lack of interaction between students and instructors, inexperienced instructors, lack of social integration, and lack of student support (2006, p.77). Furthermore, students also frequently find that their expectations of what a program will entail do not match up with what they actually experience once in the program and this type of disillusionment has been found to be a contributing factor to student attrition (Wells, 2007). One characteristic of educational program that invariably influences its student attrition rate is the program's admissions process and criteria (Dodge, Mitchell & Mensch, 2009; 2009; Glossop, 2002; Newton & Moore, 2009). Thomas (2012) postulates that the creation of a sense of belongingness and engagement are critical to promoting retention. Ogude, *et al* (2012) averred that using an institutional module proved very effective in resolving the problem of attrition that bedeviled the institution, especially among 'black students.' Consequently, models that emphasize social integration within institutions of higher education have been found to be potent in reducing student's attrition. Schreiner & Nelson (2013) has found that a student's level of satisfaction with an educational institution will determine whether the student will withdraw or persist. Similarly, for other allied health disciplines, Gillis (2007) suggested more stringent admissions criteria for one institution's health sciences undergraduate programs and claimed that changes to the recruitment and admissions process may help decrease attrition rates (Monroe, 2009). Literature suggests that positive relationships between students and faculty are crucial to student retention and success in nursing programs (Wells, 2007).

Often times, the costs of student attrition can be a formidable problem for any type of educational program and society as fewer graduating professionals will be entering the workforce (Gillis, 2007). The consequences associated with student attrition in certification and licensure programs are also problematic in that expectations from human capital have changed and employers expect job applicants to possess certain skills and knowledge that are often only acquired through certification training (Yukselturk & Inan, 2006).

Motivational theories of self-determination and self-efficacy are pertinent to examining learners within online environments. Self-determination is defined as action generated by one's own mind or free will, with no influence from outside situations or entities (Wehmeyer, Abery, Mitaug, & Stancliff, 2003). Motivational theories are necessary in the study as they will help to discover how both voluntary and compulsory student attrition pressures may be curbed. Chen and Jang (2010) discuss how in the context of online learners, self-determination theory prescribes three needs, namely, a sense of control, feelings of competency for tasks, and sense of inclusion or affiliation with others. Just as the satisfaction of these needs fosters better performance, the absence may actually produce highly negative results.

Several works have been done on university student attrition, and meaningful research on this concept can be of great use to educational administrators who wish to increase the graduation rates of their students. Cavalier's study has shown that forty-seven percent (47%) of students drop out of online educational programs before completing their first course (2009). The National Open University of Nigeria as the major online institution in Nigeria is not left out of the challenge as Ofole (2018) and Rotar (2022) have also revealed. The National Open University of Nigeria runs both undergraduate and postgraduate programmes. Many external and internal issues detract online learners from completing their degree programs. High attrition rate in ODL programmes could be due to accidents, sicknesses, financial constraints, inadequate facilitation, missing results, poor policies etc. Therefore, if the National Open University of Nigeria must maintain relevance in the post-COVID era, she must as matter of urgency identify, analyse and resolve the issues associated with high attrition rates.

According to Ramani (2024), the proliferation of technology in higher education has fostered the expansion of online learning platforms. Nonetheless, there is considerable concern about the high dropout rates in online higher education (OHE). In this dynamic environment, student attrition presents a multifaceted challenge that requires thorough examination. Inadvertent drop out of ODL has resulted in learner becoming disillusion, disenchanted and confused in life without accomplishing career aspirations. It has also swelled the statistic of illiteracy and unemployment as well as accelerated social unrest in the country. By identifying and understanding the detracting factors, the administrators of National Open University of Nigeria can then focus on implementing actions to sustain, increase retention and completion rates

For the purpose of this research paper, both degree categories were utilized. However, postgraduate students tend to exhibit higher level of motivation and are more likely to strive towards completion. Thus, this study therefore examined the ways of mitigating the risk of high student attrition from an open and distance institution, using the National Open University of Nigeria as a case study.

Specifically, the study intends to:

i. Examine the causes of student attrition among students in National Open University of Nigeria.
ii. Determine the consequences of student attrition to Nigerian developmental aspirations.
iii. Explain the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated.
iv. Verify the difference between male and female on the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated.
v. Establish the difference between male and female on the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated.

vi. Substantiate the difference between students' age variations on the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated

Research Questions

i. i.. What are the causes of student attrition among students in National Open University of Nigeria?
ii. What are the consequences of student attrition to Nigerian developmental aspirations
iii. In what ways can the upsurge of attrition among students in National Open University of Nigeria be mitigated?

Hypotheses

The following hypotheses were formulated to guide the study:

Ho_1. Gender does not significantly influence the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated

Ho_2 Degree types do not significantly influence the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated

Ho_3. Age variations do not significantly influence the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated

Literature Review

Attrition according to Tinto is "a longitudinal process of interactions between the individual and the academic and social systems of the college during which a person's experiences in those systems…continually modify his goals and institutional commitments in ways which lead to persistence and/or to varying forms of dropout" (1975, p. 94). This definition goes beyond the simple view of student attrition as withdrawal or dropout from an academic programme to the contributive factors that make continuation impossible. The need for retaining students till graduation calls for greater understanding of why they attrite. It is equally true as Stanford-Bowers observe that a higher retention in online programmes will benefit students, faculty, and institutions (Stanford-Bowers, 2008).

Writing on the causes of student attrition, Levy (2007) demonstrates that students at a lower learning level at college areat a higher risk of dropping out than upper level students. Most students dropped out of a program due to personal, job-related and program-related reasons (Willging and Johnson, 2009). The reasons so far can be summarized in what Bennett has classified in two broad headings – voluntary and compulsory pressures. Voluntary attrition pressures describe enrollment withdrawals resulting from students' various consciously calculated decisions such as lack of interest in subjects, dislike of fellow students or faculty, feelings of boredom, or feelings of insufficient academic challenge that result in attrition in favour of the pursuit of other more beneficial interests (Bennett, 2003). Compulsory pressures describe 'push 'conditions that force a student to withdraw even if the student may wish to retain his/her enrollment. Such pressures may include, among others, serious illness, family

obligations, poor academic performance (failing too many courses) or financial challenges. Other descriptions of compulsory pressures may include what has been disclosed as institutional problems, pattern of facilitation schedule, non-availability of course materials, poor tutorial facilitation and poor academic and administrative support (Adewale & Inegbedion, 2010).

Motivational theories of self-determination and self-efficacy are also pertinent to examining learners within online environments. Self-determination is defined as action generated by one's own mind or free will, with no influence from outside situations or entities (Wehmeyer, Abery, Mitaug, & Stancliff, 2003). Motivational theories are necessary in the study as they will help to discover how both voluntary and compulsory student attrition pressures may be curbed. Chen and Jang (2010) discuss how in the context of online learners, self-determination theory prescribes three needs, namely, a sense of control, feelings of competency for tasks, and sense of inclusion or affiliation with others. Just as the satisfaction of these needs fosters better performance, the absence may actually produce highly negative results.

Makgopa (2023) asserted that numerous challenges in Open Distance Learning (ODL) prevent face-to-face tutors from effectively supporting students to achieve successful outcomes. The study explored the barriers faced by face-to-face tutors in providing student support within the ODL environment and to offer recommendations for mitigating these challenges to improve student performance. A qualitative research approach was adopted, with content analysis applied to the primary data. The findings revealed that face-to-face tutors encounter many obstacles, such as a lack of equipment and facilities. The study providds recommendations to ODL learning institutions on addressing these barriers to tutor support and suggests directions for future research.

Method

This study adopted the descriptive survey design to examine the study variables. Descriptive survey design allows the researcher to gather information, summarize, present and construe for the purpose of clarification. The study populations consist of all students of National Open University of Nigeria. 600 National Open University of Nigeria students constituted the sample size. Purposive sampling technique was used to select 6 study centres in the 6 geographical regions of Nigeria while the random sampling technique was employed in choosing 100 students each from the six geographical zones in Nigeria. The instrument for the study was the questionnaire titled: Student Attrition in Open and Distance Learning Institution Inventory (SAODLII). The questionnaire was designed by the researchers to measure the incidents of student Attrition in Open University of Nigeria and was divided into four sessions. Section A sought data about the demographic data of the respondents; Section B looked for information relating to the causes of student attrition among students in National Open University of Nigeria, Section C focused on the consequences of student attrition to Nigerian

developmental aspirations while Section D was concerned with ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated. The questionnaire was administered to 600 students of National Open University of Nigeria (100 students each from the six geographical zones in Nigeria). The questionnaire adopted the Likert type format of Strongly Agreed (SA), Agree (A), Disagree (D), and Strongly Disagree (SD) with the scores of 4, 3, 2 and 1 points for positively worded items and reversed for negatively worded items. The weighted mean score of 2.5 was used as the bench mark for assessing the instrument.

Validity and Reliability of the Instrument

The instrument passed through some research experts in National Open University of Nigeria who modified it and ensured that the instrument measured the variables it purported to measure and improve the face validity. The face validation took care of items relevance, sentence structure, clarity and statutory of the item to the objectives of the study. Due to the experts' contributions and corrections that were made, the instrument was considered valid to measure what it tends to measure for the study.

The reliability of the instrument will be determined by administering it on a sample of 30 Open and Distance learning students of other Universities in Nigeria, which are not part of the original sample population. Based on the data obtained from the respondents, the reliability was calculated using Cronbach's Alpha. The Cronbach's Alpha, analysis gave the reliability scale to be 0.82, which was found adequate for the study.

Procedure for data collection and Data Analysis

The researchers administered the questionnaire with online and physical contact. The instrument was disseminated online to students to respond. In some cases, researchers directly administered the instrument to students. The questionnaire was administered to 600 students of National Open University of Nigeria (100 students each from the six geographical zone of Nigeria). Out of 600 students that were administered with the questionnaire, 537 were retrieved, which accounted for 89.5 %.

The data collected were analyzed with frequency distribution, descriptive statistics, the independent sample test (IST), PPMC and the one-way ANOVA. The statistics were chosen for the analysis because of its robust nature of comparing both the variances and means of two or three independent samples. Hypotheses were tested at 0.05 significant levels.

Results

Research Question1: What are the causes of student attrition among students in National Open University of Nigeria?

Table 1: Descriptive statistics on the causes of student attrition among students in National Open University of Nigeria

	Causes of attrition among students of National Open University of Nigeria	**N**	**Sum**	**Mean**	**Std. Deviation**	**Remark**
Q1	Low students' intellectual capacity	536	1511.00	2.8190	.76053	Accepted
Q2	Course schedule and pacing	536	1274.00	2.3769	1.01196	Accepted
Q3	Student's level of satisfaction with an online programme	536	1461.00	2.7257	.86108	Accepted
Q4	Financial challenges	536	1459.00	2.7220	.88135	Accepted
Q5	Quality of learning materials	536	1477.00	2.7556	.87219	Accepted
Q6	Poor tutorial facilitation	536	1444.00	2.6940	.87949	Accepted
Q7	poor administrative support	536	1447.00	2.6996	.89091	Accepted
Q8	Lack of interaction between students and instructors	536	1442.00	2.6903	.92786	Accepted
Q9	Lack of social integration	536	1477.00	2.7556	.83943	Accepted
Q10	- demographic attributes	536	1412.00	2.6343	.95539	Accepted
	Total	5360	14404	2.69	.89	

Table 1 revealed the Descriptive statistics on the causes of student attrition among students in National Open University of Nigeria. The analysis indicated a total sum of 144044, an average mean of 2.69 and standard deviation of .89. The average mean of 2.69 is higher than weighted mean of 2.5.
The implication is that there are many causes of student attrition among students in National Open University of Nigeria.

Research Question 2: What are the consequences of student attrition to Nigerian developmental aspirations?

Table 2: Mean rating on the consequences of student attrition to Nigerian developmental aspirations

S/N	**Consequences of student attrition in National Open University of Nigeria**	**N**	**Sum**	**Mean**	**Std. Dev.**	**Remark**
Q11	Amplified the statistics of unemployment in Nigeria	536	1448.00	2.7015	.85843	Accepted
Q12	Higher illiteracy level in the society that negatively affect the economy	536	1407.00	2.6250	1.05159	Accepted
Q13	Increased in crime rate	536	1473.00	2.7481	.95994	Accepted
Q14	Poor self-concept that affects production	536	1212.00	2.2612		Not Accepted
Q15	Disillusion in life that affect national development	536	1429.00	2.6660	1.02239	Accepted

Q16	Obstruction of career aspirations	536	1400.00	2.6119	.96798	Accepted
Q17	High social unrest in the society	536	1428.00	2.6642	.98924	Accepted
Q18	Deprived human capital development	536	1441.00	2.6884	1.00184	Accepted
Q19	Inadequate skill development	536	1486.00	2.7724	.94546	Accepted
Q20	Low per capita income	536	1444.00	2.6940	1.03925	Accepted
	Total	5360	14168	2.64	.94	

Table 2 revealed the Mean rating on the consequences of student attrition to Nigerian developmental aspirations. Inadequate skill development tops the list with an average mean of 2.7724, following by increased in crime rate (2.7481), amplified the statistics of unemployment in Nigeria (2.7015), low per capita income (2.6940), deprived human capital development (2.6884) and disillusion in life that affect national development (2.6660). The least but very vital is poor self-concept that affects production as shown in the above table with mean scores of 2.2612. The average mean of 2.64 is higher than bench mean was above 2.5. The implication is that the consequences of student attrition to Nigerian developmental aspirations are numerous.

Research Question 3: In what ways can the upsurge of attrition among students in National Open University of Nigeria be mitigated?

Table 3: Descriptive statistics on the ways to mitigate the upsurge of attrition among students in National Open University of Nigeria

	Ways to mitigate the upsurge of attrition among students in National Open University of Nigeria	**N**	**Sum**	**Mean**	**Std. Dev.**	**Remark**
Q21	Provision of e library	536	1436.00	2.6791	.95585	Accepted
Q22	Creation of a sense of belongingness and engagement	536	1493.00	2.7854	.88426	Accepted
Q23	Provision of accessible loans to students	536	1460.00	2.7239	.85285	Accepted
Q24	Provide students with high-quality resources and interactive instruction to support learning	536	1573.00	2.9347	.76453	Accepted
Q25	offer opportunities for students to socialize and connect with fellow students	536	1538.00	2.8694	.75981	Accepted
Q26	Making course material available and accessible	536	1483.00	2.7668	.81096	Accepted
Q27	Improve tutorial facilitation	536	1541.00	2.8750	.78850	Accepted
Q28	Enhance academic and administrative supports	536	1474.00	2.7500	.83666	Accepted
Q29	set up admissions criteria that best meet the standards for the desired student population	536	1533.00	2.8601	.72924	Accepted
Q30	provide students with sufficient and realistic information concerning the program earlier to enrollment	536	1436.00	2.6791	.95585	Accepted
	Total	5360	14967	2.79	.83	

Table 3 exposed the Descriptive statistics on the ways to mitigate the upsurge of attrition among students in National Open University of Nigeria. The analysis indicated a total sum of 14967, an average mean of 2.79 and standard deviation of .83. The average mean of 2.79 is higher than weighted mean of 2.5. The implication is that there are several ways to mitigate the upsurge of attrition among students in National Open University of Nigeria.

Test of Hypotheses

Ho:1 Gender does not significant influence the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated

Table 4: T-test Statistics on the difference between male and female on the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated

Gender	N	Mean	Std. Deviation	Std. Error Mean	Dt	T	Sig.
Male	249	1.3454	.47645	.03019	534	-23.280	.000
Female	287	2.0000	.00000	.00000			

At 0.05 confidence level

The result in Table 4revealed a t-test statistics on the difference between male and female on the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated, at t (-23.280), df= 534, P>05. Hypothesis 1 which states that gender does not significantly determine the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated was rejected. The implication is that there is a significant difference between male and female on the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated as indicated in their mean scores differences of 1.3454and 2.0000.

Ho:2 Degree types do not significant influence the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated

Table 5: T-test Statistics on the difference between undergraduate and post graduate on the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated

Degrees	**N**	**Mean**	**Std. Deviation**	**Std. Error Mean**	**dt**	**T**	**Sig.**
Undergraduate	163	1.0000	.00000	.00000	534	-35.234	.000
Post Graduate	373	1.7694	.42176	.02184			

At 0.05 confidence level

The result in Table 5 revealed a t-test statistics on the difference between undergraduate and post graduate on the ways that the upsurge of attrition among students in National Open

University of Nigeria can be mitigated, at t (-35.234), df= 534, P>05. Hypothesis 1 which states that a degree type does not significantly determine the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated was rejected. The implication is that there is a significant difference between undergraduate and post graduate on the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated as indicated in their mean scores' differences of 1.0000 and 1.7694.

Hypothesis 3: Age variations do not significant influence the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated

Table 6: Descriptive statistics on the influence of age variations on the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated

					95% Confidence Interval for Mean			
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
20-30 years	110	1.0000	.00000	.00000	1.0000	1.0000	1.00	1.00
31-40 years	176	1.2102	.40863	.03080	1.1494	1.2710	1.00	2.00
41 and above Years	250	2.0000	.00000	.00000	2.0000	2.0000	2.00	2.00
Total	536	1.5354	.49921	.02156	1.4931	1.5778	1.00	2.00

Table 6 above is a descriptive statistic on the age variations on the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated. The table gives categories of the subjects into 20-30 years, 31-40 years and 41 and above Years. A total of 536respondents participated in the study. Out of this figure, 110 were 20-30 years, 176 were 31-40 years and 250 of 41 and above Years. The mean scores for the 20-30 years, 31-40 years and 41 and above Years are 1.0000, 1.2102and 2.000066.85 respectively; with a total mean score of 1.5354.

Table 7: One way ANOVA statistics on the influence of age variations on the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated.

	Sum of Squares	**Df**	**Mean Square**	**F**	**Sig.**
Between Groups	104.105	2	52.052	949.433	.000
Within Groups	29.222	533	.055		
Total	133.326	535			

At .05 level of significant.

The one-way statistics revealed a significant difference between and within groups as shown in Table 6 above with F (949.433= df, 2/535, p = .000. The hypothesis which states that age variations do not significant influence the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated in the study was therefore rejected. In

order to determine the actual differences between the three social status subsets (20-30 years, 31-40 years and 41 and above Years) of respondents involved in the study, a posteriori test was conducted. The Turkey HSD post hoc test in Table 8 below revealed that 41 and above Years view on the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated has a higher mean difference of (1.00000), followed by 31-40 years (.78977) and 20-30 years (210233.900) respectively. All the mean differences were significant at (p=.000).

Post Hoc Tests

Table 8: Multiple Comparisons statistics on the influence of age variations on the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated

		Mean Difference (I-J)			95% Confidence Interval	
(I) Age	(J) Age		Std. Error	Sig.	Lower Bound	Upper Bound
20-30 years	31-40 years	-.21023*	.02846	.000	-.2771	-.1433
	41 and above Years	-1.00000*	.02679	.000	-1.0630	-.9370
31-40 years	20-30 years	.21023*	.02846	.000	.1433	.2771
	41 and above Years	-.78977*	.02304	.000	-.8439	-.7356
41 and above Years	20-30 years	1.00000*	.02679	.000	.9370	1.0630
	31-40 years	.78977*	.02304	.000	.7356	.8439

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

Discussion of findings

Research question one sought to determine the causes of student attrition among students in National Open University of Nigeria. The study revealed that there are many causes of student attrition among students in National Open University of Nigeria. The outcome of the study agreed with Bennett (2003) who uncovered that higher education attrition is triggered by poor self-esteem or low self-worth, teaching quality, relationships, dissatisfactions with course and poor course organization. Hirshy et at. (2011) related education attrition to student characteristics (Hirshy et al., 2011, p. 311). Maher and Macallister (2013) delineated several program-related reasons for discontinuing which included course schedule and pacing, insufficient feedback, quality of learning materials, lack of interaction between students and instructors, inexperienced instructors, lack of social integration, and lack of student support (2006, p.77).

Research question two sought to evaluate the consequences of student attrition to Nigerian developmental aspirations. The outcome was that the consequences of student attrition to Nigerian developmental aspirations are numerous. Gillis (2007) acknowledged that often times, the costs of student attrition can be a formidable problem for any type of educational program and society as fewer graduating professionals will be entering the workforce. The

consequences associated with student attrition in certification and licensure programs are also problematic in that expectations from human capital have changed and employers expect job applicants to possess certain skills and knowledge that are often only acquired through certification training (Yukselturk & Inan, 2006).

Research question three stated thus: In what ways can the upsurge of attrition among students in National Open University of Nigeria be mitigated? The study revealed that there are several ways to mitigate the upsurge of attrition among students in National Open University of Nigeria. The finding agreed with Thomas (2012) who postulates that the creation of a sense of belongingness and engagement are critical to promoting retention. Ogude, Kilfoil, and Du Plessis (2012) observed that using an institutional module proved very effective in resolving the problem of attrition that bedeviled the institution, especially among 'black students.' Consequently, models that emphasize social integration within institutions of higher education have been found to be potent in reducing student's attrition. Schreiner & Nelson (2013) has found that a student's level of satisfaction with an educational institution will determine whether the student will withdraw or persist.

Implication of the Findings

The study examined ways of mitigating the consequences of the upsurge student attrition in National Open University of Nigeria. By identifying and understanding the detracting factors, the administrators of National Open University of Nigeria can then focus on implementing actions to sustain, increase retention and completion rates. The outcome of the study would help can give them focus on implementing actions to sustain, increase retention and completion rates of undergraduate students.

Conclusion

The findings revealed that there are many causes of student attrition among students in National Open University of Nigeria. The consequences of student attrition to Nigerian developmental aspirations are numerous. There are several ways to mitigate the upsurge of attrition among students in National Open University of Nigeria. There are significant differences between male and female, undergraduate and post graduate and age variations on the ways that the upsurge of attrition among students in National Open University of Nigeria can be mitigated. However, administrators of National Open University of Nigeria should focus on implementing policies that can sustain, increase retention and completion rates.

Recommendation

The following recommendations are made based on the findings of this study:

1. Administrators of National Open University of Nigeria should focus on implementing policies that can sustain, increase retention and completion rates.
2. National Open University of Nigeria should increase advocacy to educate students on the need to complete their programme of study.

3. Directorate in charge of examinations in National Open University of Nigeria should reduce cases of missing scores and prompt graduation of qualified students to minimize demotivation issues.

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