

This material is presented to ensure timely dissemination of scholarly and technical work.

Copyright and all rights therein are retained by authors or by other copyright holders. All persons copying this information are expected to adhere to the terms and constraints invoked by each author's copyright. In most cases, these works may not be reposted without the explicit permission of the copyright holder.

This version of the referenced work is the post-print version of the article—it is NOT the final published version. If you would like to receive the final published version, please send a request to e.o.mogaji@greenwich.ac.uk and I will be happy to send you the latest version.

The current reference for this work is as follows:

Adeyanju, S., Mogaji, E., Olusola, J. & Olaniyi, M., 2020. Factors Influencing Students' Choice of a Federal University: A Case Study of a Nigerian Federal University. In: E. Mogaji, F. Maringe & R. E. Hinson, eds. Higher Education Marketing in Africa - Explorations on Student Choice. Cham, Switzerland: Springer.

If you have any questions and/or would like copies of other articles I've published, please email me at e.o.mogaji@greenwich.ac.uk, and I'd be happy to help.

To access any of my published or forthcoming articles, check my profile on

- **ResearchGate** - https://www.researchgate.net/profile/Emmanuel_Mogaji
- **SSRN** - https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=2145935
- **Sage Advance** - https://advance.sagepub.com/authors/Emmanuel_Mogaji/5708444

Chapter 6

Factors Influencing Students' Choice of a Federal University: A Case Study of a Nigerian Federal University.

Samuel Adeyanju
The University of British Columbia, Canada
samuoloadeyanju@gmail.com
0000-0002-7506-1591

Emmanuel Mogaji
University of Greenwich, United Kingdom
e.o.mogaji@greenwich.ac.uk
0000-0003-0544-4842

Johnson Olusola
Federal College of Agriculture, Nigeria.
johnsonolusola5@gmail.com
0000-0002-4913-0063

Muhammed Olaniyi
The University of British Columbia, Canada
oyinlola.ma@gmail.com

Abstract

The factors affecting students' choice of higher education is essential for the university's management. Various research across the world has been carried out to understand how students select their preferred universities for tertiary study; however, there is a shortage of insight from an African perspective. Specifically focusing on a federal university in Nigeria, this study aims to explore factors influencing students' interest in the school and why they selected it as their study location. A structured questionnaire from 282 undergraduate students based on stratified random sampling was used to understand these choice factors. The study found that personal interest greatly influenced students' decisions, followed by parental influence, university reputation, university ranking, and fees. The results provide an understanding of students' choices for universities in a Nigerian context, which is a loose representation of the general influences of students' choice for study sites on the continent. This would enable stakeholders working in the Nigerian education sector including academics, administrators and practitioners and international collaborators to understand the most effective ways to reach out to prospective students and draw useful lessons for universities' marketing strategies, which could be recommended not only in Nigeria but in Africa at large.

Introduction

The factors affecting students' choice of higher education is essential for any university's management admission policies and marketing strategies. Globally, Higher Education Institutions (HEI) are making tremendous contributions in imparting the knowledge and skills that will help its students to succeed in life. In the same manner, these institutions must ensure their success by making progress in recruiting a large number of students annually and to enhance recruitment efforts. They must understand what influences students' decisions to pursue post-secondary education in a specific institution of higher learning. The process of deciding on which higher institution to attend is considered very complex (Chapman, 1981; Moogan & Baron, 2003), as there are several factors to consider.

Various research across the world has been carried out to understand how student chooses; however, there is a shortage of insight from an African perspective. This study explicitly focuses on the Nigerian education system. Nigeria, the most populous country in Africa, with over 180 million has considerable challenges in educating her growing population. Olaleye et al. (2019) highlight the market dynamics that influence the supply of universities, as Nigeria needs more university spaces to meet the need of prospective students. The government universities are not enough; even the available ones are not well funded and equipped to meet the growing needs. Usually, most public universities in Nigeria have more student applicants than they can admit in any given academic year. Hence, marketing for the sole purpose of recruiting students is not on the agenda of most public universities because it is almost natural for students to apply to them (Aluede, et al. 2012; Iruonagbe et al. 2015; Otoja and Obodumu, 2017).

Recognising the fact that there is more demand for university spaces than is supplied, a structured questionnaire was administered to undergraduate students of a top-ranking federal university of technology in South-West Nigeria. By examining the factors influencing the choice-making process of the students, the study makes both theoretical and managerial implication. It provides a holistic understanding of factors that influences student' choices of university, albeit a federal university. No doubt, this may be different from other universities in the country or other countries on the African continent, but it offers a crucial point to start in adding to knowledge about student choice-making process on the continent. In this study, the choice factors across five categories by Hemsley-Brown and Oplatka (2015), were adopted to understand factors that influence decisions regarding the choice of a university and the sources of information regarding tertiary institutions.

The Nigerian University Education system

Nigeria runs the 9-3-4 system of education under the Universal Basic Education (UBE). Students pass through 6 years of primary education, three years of junior secondary school, and three years of senior secondary school. A minimum of 4 years is spent on tertiary education, depending on the institution and duration of the course of study (Iruonagbe et al. 2015). In Nigeria, the university education system includes both public and private universities. Both federal and state governments run public universities. There are currently 174 approved universities in Nigeria comprising 43 federal universities, 52 state universities and 79 private universities (Farinloye, Adeola & Mogaji, 2019). Up until 1999, the establishment, ownership, management and funding of universities and all tertiary educational institutions remained the exclusive reserve of federal, regional and state governments (Akpotu & Akpochafo, 2009).

Although majorly the colleges of education offer tertiary education, polytechnics and universities in Nigeria, many students graduating from secondary schools prefer to seek admission into universities rather than in the colleges of education or polytechnics (Akinwumi and Oladosu, 2015; Stephen, 2015), evidenced by the large proportion of students that apply to study in universities every academic year (Aluede and Idogho, 2012). Studies revealed that most prospective candidates would only seek admission into Nigerian colleges of education as a last resort, if they are unable to secure admissions into the universities (Akinwumi and Oladosu, 2015). Furthermore, the majority of college students would continue to seek admissions into the universities, even while still on their college programs (Akinwumi and Oladosu, 2015). For polytechnics, Stephen, (2015) claimed that young secondary school leavers prefer to seek admission into the universities due to the discrimination against the polytechnic graduates and certificates by the government, employers of labour, and the general public in Nigeria. Likewise, polytechnic graduates also face limitation in proceeding directly on a Master's degree programme as they have to enrol for a minimum one-year postgraduate diploma program in a university before proceeding for a Master's degree program.

The National Universities Commission (NUC) of Nigeria is a government agency saddled with the responsibility of promoting quality higher education in Nigeria. Created in 1962 and reconstituted as a statutory body in 1974, the NUC is also responsible for approving all academic programs run in Nigerian universities and granting approval for the establishment of all higher educational institutions offering degree programs (Saint, 2003). The Joint Admissions and Matriculation Board (JAMB) is the Nigerian central admissions agency established in 1978, tasked to streamline admissions and expand access to universities across the nation. The board is popularly known to conduct entrance examination - Unified Tertiary Matriculation Examination (UTME) for prospective undergraduates applying to any Nigerian tertiary institution (Adeyemi, 2001; Otoja and Obodumu, 2017).

According to reports, only 12.2% to 26.9% of university applicants got admitted into Nigerian universities between 2011 – 2015, while 73.1% to 87.5% (over 1 million) of the applicants could not be admitted into the universities (Otoja and Obodumu, 2017) Based on JAMB's annual report, the entire universities in Nigeria can only comfortably accommodate about 20% of those seeking admissions. To bring this to perspective, only 1,519,449, representing 24.1% of the 6,229,535 candidates who sought university admission between 2011-2015, were given admission (Otoja and Obodumu, 2017). The problem of carrying capacity has worsened these situations, increase in population growth and demand for higher education, poor budgetary allocation, inadequate infrastructural facilities, inadequate academic staff in number, and quality (Aluede et al. 2012; Otoja and Obodumu, 2017).

The challenges facing public higher education in Nigeria led to the emergence of private higher education under President Olusegun Obasanjo, the then newly inaugurated democratic government in 1999, as a result of deregulation of the education sector (Iruonagbe et al. 2015; NUC, 2019). Starting with three private universities in 1999, this number has grown to 79 and still counting (Iruonagbe, et al. 2015). The introduction of private universities has contributed to the Nigerian educational landscape in the area of human resources development, job provision for academics, building healthy academic and industry-based international partnerships, and reduce pressure on public universities (Iruonagbe et al. 2015). Private universities are quite expensive compared to government universities. In terms of funding and facilities, the federal

government universities are better places, which evidences the demand for a place by students who want education at an affordable rate. The choice-making process of these students is therefore essential to empirically understand their choice-making and decisions process.

The factors influencing the choice of Higher Education Institution

Many studies have made an effort to identify decision-making profiles of students who choose a Higher Education Institution (HEI). Rika et al., (2016)'s research on final year students of Latvian secondary schools identified cultural factors, social factors, psychological factors, and organisational factors as important and relevant with regards to student choice. Mbawuni and Nimako (2015) identified seven factors that have a vital role during students' selection - attachment to university, school location benefits, cost of programme, failure to gain alternative admissions, schools' student support, lectures and staff recommendations, and personal intention to pursue the programme. However, building on the longitudinal model on students' decision-making by Chapman (1981), these factors affecting student choices are classified into two areas: institutional and personal (Henriques et al., 2018).

The institutional factors highlight the features of the university, which influences the students' choice. Tuition fees were considered an essential factor as reported by (Broekemier and Seshadri, 2000; Galotti and Mark, 1994). The price or affordability of the school is a significant point of attraction to some institutions, as prospective students are aware of the cost of higher education and in many cases considers these financial variables during their HEI selection process (Stephenson et al., 2016). Also, financial support in the form of scholarship was found to expressively influence the students' choice (Drewes and Michael, 2006). Equally, the size and location of the university were also considered to influence the student choices, as they may have to leave home and live on and around the university campus (Kallio, 1995; Drewes and Michael, 2006). A study revealed that students have acknowledged how the beautiful campus environment influenced their choices; suggesting that the institution gave off a welcoming, friendly, and laid-back ambience. Many participants spoke of their experiences with the warm and welcoming nature of the campus, appreciating the overall communal feeling they observed and later experienced (Stephenson et al., 2016). This aligns with earlier findings that campus visits emerged as having a profound effect on the draw to the university (Ancil, 2008). Open Days, which allows the students to explore the university before enrolling, has enormous benefit to prospective students, and it can be hugely influential in their decision making (Maniu and Maniu, 2014; Beneke, 2011).

In addition, the reputation of an institution which contributes to its ranking on league table is considered one of the most essential decision factors for students (Briggs, 2006; Briggs and Wilson, 2007; Angulo-Ruiz, Pergelova, and Cheben, 2016; Judson, Aurand, and Karlovsky, 2007; Sarkane and Sloka, 2015). Likewise, the courses offered by universities is another factor that deeply affects students' decision-making process (Sojkin et al. 2015; Broekemier and Seshadri, 2000). The marketing activities of HEI to reach out to prospective students also shape the students' way of thinking (Angulo-Ruiz, Pergelova and Cheben, 2016). For instance, positive word-of-mouth and marketing campaigns that prospective students often engage with also affect the choice of HEI (Demetriou, Thrassou and Papisolomou 2018). Similarly, the branding and positioning of the university are vital factors in shaping a student's decision. Bastedo et al. (2014)

identified a definite link between the HEI's brand image and the charismatic leadership which impacts applications for enrolment and financial donations.

The personal factors highlight the students' thought process and factors that influence the choice as an individual. Student's socioeconomic status, the levels of their educational aspiration, and the influence of essential persons (e.g., family, friends, and high school personnel (Henriques et al., 2018), household budget aligning with the university's tuition fees, and financial support are considered the main factors in the students' choice of HEI (Sarkane and Sloka, 2015). A study by Rocca, *et al.* (2003) reported that influential people in a student's college decision-making process might include friends, parents, guardians, other relatives, alumni, teachers, as well as counsellors. These categories of people may influence a student's college and university choice by helping shape a student's expectations of a particular university by providing direct advice about the institution as they previously attended the institution (Chapman, 1981). In fact, in homes where the parents are educated, some children can be influenced to study the same degree as their parents and/or attend their alma mater (Denzler, 2011).

In the same way, family backgrounds play an important role as students from more privileged family backgrounds tend to prefer high ranking universities (Henriques et al., 2018). Goodman et al. (2015) found that younger and older siblings' choices are very closely related. Similarly, the gender of siblings can influence the decision they make on the choice of HEI, especially with regards to the choice of the degree to pursue (Anelli and Peri, 2015).

The students' effort in choice making

Despite these factors, university choices are often evaluated based on several attributes that can be perceived positively or negatively (Sipilä, et al., 2017). The reputation of a university, the course they offer, and the facilities available, may be considered positive attributes that are likely to influence the student's choice. However, the university location may be far from home, or the university's tuition fees may be costly and not affordable because there is no scholarship. These are the negative attributes that can affect the student's choice. Here the prospective student holds both positive and negative beliefs about the choice to be made. The student is aware of the value of being educated in the university and also aware of the financial pressure.

Sipila et al. (2017) suggested that these conflicting beliefs constitute an ambivalent summary evaluation of the HEI institution and information search helps to reduce attitudinal ambivalence early in the decision-making process. This aligns with previous findings that students behave as rational consumers in their decisions making the process (Tavares and Cardoso, 2013). The students' effort in making an informed choice cannot be overlooked or overemphasised. They make an effort to engage with the universities' marketing communication, visit the universities on Open Days, and make their research on websites and social media. Higher education marketers perceive that the traditional means of communication, such as brochures and college fairs, are giving way to newer social media methods - including websites, Facebook, YouTube, Twitter, etc. (Marklein, 2009). In terms of student innovative information gathering, it is a complex and challenging decision-making process. As with any vital and essential decision to be made, information is being searched and continually evaluated (Frey et al., 2013; Mogaji, 2018). Students are spending time gathering information systematically and rationally (Menon et al., 2007) as they have many options to consider. A study in the United States found that on average, students had 3.03 institutions in their consideration set (Stephenson et al., 2016), while in the

UK, the average consideration HEI set size was 6.01 (Dawes and Brown, 2002), which highlights students' effort in gathering information about these HEI before making their choice. In a study conducted in the UK, (El Nemar et al. 2018) it was found that information is a continuous innovative process and not a stage, and so students are continually searching for information through innovative methods (Mogaji, 2016). This information flow and information gathering are critical to both students and HEI (El Nemar et al., 2018). Notwithstanding the student's search for information, the decision-making process of HEI is subject to change over time and might be influenced by economic, social, and demographic changes related to students (El Nemar et al., 2018).

Many studies have been carried out in specific countries to understand student choice process. In Greece, Menon, et al., 2007) studied the information search and choice in Greek higher education. Stephenson et al. (2016) researched first-time first-year students in the USA while other studies include first-semester tertiary-level students in Lebanon (El Nemar, et al., 2018), Portuguese secondary or vocational education students in their final year who intend to apply to a public HEI (Henriques, et al., 2018), and factors influencing undergraduate students' choice of a university in Botswana (Rudhumbu, 2017) and Ghana (Afful-Broni and Noi-Okwei, 2010).

With these varieties of studies, there are few studies on how students in Nigeria choose their universities. Instead, most of the available literature has focused on factors influencing students' choice of specific courses or major namely Agricultural Science (Onu & Ikehi, 2013), Business (Obijole, 2009), and Vocational studies (Igbinedion, 2011). Other authors have centred on extensive choice of programs in universities (Pitan, & Adedeji, 2014; Ajibola et al. 2017) and willingness to complete courses of study (Akinwumi and Oladosu, 2015). While recognising the effort in understanding student choices at a course level, it is paramount to have an understating at the tertiary institutional level, how students in Nigeria are making their choices. Only few kinds of literature exist on the factors influencing the choice of tertiary education institutions in Nigeria (Badau, 2013; Anyasi et al. 2019), which utilised survey methods to elicit information from respondents. For instance, Anyasi et al. (2019) studied factors influencing students university choice by surveying 50 undergraduate and postgraduate students of a Nigerian university. Results revealed that 54 per cent of respondents indicated the university's characteristics including staff quality, the quality of available university programs, university image and reputation, institutional location, and graduating employability are the major factors which influenced their university choice. Badau, (2013) sampled 2,200 prospective students and parents of prospective students and first-year tertiary education students in four tertiary education institutions in Nigeria to understand students decision-making basis for choosing tertiary institutions. Results showed that factors including finance, location, physical infrastructure and industrial expectations were significant factors influencing student choice of tertiary institution except for the promotion factor which was not significant.

Methodology

Site study and survey description

The Federal University of Technology Akure (FUTA)¹ in Nigeria was selected for this study. The University was established in 1981 by the Acts of Parliament of the federal government alongside six other Federal Universities of Technology located in Minna, Yola, Owerri, Abeokuta and Bauchi. This was aimed at creating universities with specialised capacities and programmes to produce graduates with practical as well as theoretical knowledge of technologies. Presently, FUTA has eight different academic schools (Sciences, Computing, Agricultural Technology, Engineering Technology, Environmental Technology, Earth and Mining Sciences, Health Technology and Management Technology) that run both undergraduate and postgraduate programmes, with over fifty (50) academic departments combined.

With the support of and reference from the faculty heads and students' societies at the University, the structured survey questionnaires were administered and retrieved immediately after completion by the respondents (undergraduate students on campus). A participant information sheet was attached as the first page of the questionnaire to explain the objective of the research, the rights of the participants, and how to give informed consent to participate. Three hundred questionnaires were distributed.

As used by Hemsley-Brown and Oplatka (2015) and Linda et al. (2019), the 31 choice factors across five categories were adopted in the study. Three Nigerian academics who were experienced in the higher education sector were invited to review the initial list of factors. The reviewers removed the factors that were duplicated or unusual to the Nigerian context. For example, Open Day and Prospectus were excluded. A final list of 21 choice factors was selected for the survey. Of the 21 choice factors, 13 were adopted from the previous authors while the expert reviewers introduced eight as they are said to be relevant within the Nigerian context. In the questionnaire, respondents were asked to select the choice factors that influenced their decision to choose FUTA. The respondents were also asked to choose from a list of information sources which supported their choice factors.

Data analysis

The retrieved questionnaires were transcribed and analysed quantitatively. All analysis, including descriptive statistics, multiple factor analysis, and factor analysis was conducted using the R statistical package (version 1.0.153, <http://rstudio.org/>). Firstly, using the FactoMineR package (Lê et al. 2008) implemented in R statistics for multiple factor analysis (MFA), we analysed the "choice data". We grouped all 12 decisions influencing student choice of university into five main thematic groups based on the similarity of the characteristics of the factors influencing choice as follows:

1. **The accommodation** which had two variables - on-campus housing and off-campus housing;
2. **Human-based factors** had three variables - personal interest, parental influence and opinion;
3. **University characteristics** had three variables – university reputation, university ranking, and specialised programme offered;
4. **Economic considerations** had two variables – lower fees and scholarship opportunity while

¹ <https://www.futa.edu.ng/>

5. **The location** had two variables – proximity to home and geographical location.

We then divided the groups into variable groups; the active group and supplementary group. This grouping enables us to identify variables that contribute similarly in each dimension of the factor analysis.

Secondly, we analysed the “source of information data” (i.e. through what channels did students obtain information about their choice university). We applied factor analysis using the psych package (Revelle, 2018) implemented in R statistic and chose the components with the most significant three eigenvalues. We used a minimum loading of 0.4 to select the source of information for students.

Data description

A total number of 282 questionnaires were completed and used for the analysis in this study. (Table 1) There were a more significant number of males compared to females (64.2/33.7 per cent) with most of the participants studying Engineering and Engineering Technology (19.1 per cent), Agriculture and Agricultural Technology (17 per cent) and Science (15.2 per cent). The Questionnaire participant profile is presented in Table 1.

Table 1: Questionnaire participant profile

	Frequency	%
<i>Gender</i>	282	100.0
Male	181	64.2
Female	95	33.7
No answer	6	2.1
<i>Age</i>	282	100.0
21-25	148	52.5
15-20	117	41.5
26-30	15	5.3
31 and Above	2	0.7
<i>Field of study</i>	282	100
Engineering and Engineering Technology	54	19.1
Agriculture and Agricultural Technology	48	17.0
Science	43	15.2
Earth and Marine Science	37	13.1

Environmental Technology	37	13.1
Management Technology	32	11.3
Health and Health Technologies	22	7.8
Computing	9	3.2
<i>Sponsor</i>	282	100
Parents & Guardian	110	39
Self	3	1.1
Friends	2	0.7
Scholarship	1	0.4

Results

Factors that influenced the choice of a university

The descriptive statistics suggest that personal interest, parental influence, university reputation, university ranking, and fees are the major five factors that influenced student's choice of the university (FUTA) as presented in Table 2.

Table 2: Choice factors

Factor	Respondent (n=282)	Percentage of Respondent
Personal Interest	213	75.5
Parental Influence	104	36.9
University Reputation	98	34.8
University Ranking	88	31.2
Fees	80	28.4
Opinions	42	14.9
Programme	35	12.4
Scholarship and Financial Aid	34	12.1
Distance from Home	32	11.3
University Geographical Location	31	11.0
On campus Student Accommodation	27	9.6

Off-campus Student Accommodation	25	8.9
----------------------------------	----	-----

Personal interest to study at FUTA was the highest-ranked factor influencing the students' choice. This was reported by 75.5% (n=213) of the respondents. This aligns with the idea of student perception as a determining factor (Briggs, 2006) and this choice decision linked to perceptions are formed at a young age (Foskett et al., 2008). This suggests that student have a personal interest in the university as they perceive it to be the best to meet their needs. Briggs (2006) noted that the personal interest and perception about a university was more important than the actual league table placings of individual institutions. In the case of FUTA, the student's interest in the university was considered more important than parental influence (36.9%, n=104) and the university reputation (34.8%, n=98).

Irrespective of the context of this study, fees were found to be a significant factor influencing student choices, albeit not the most significant as other studies have found (Ivy, 2008; Dao & Thorpe, 2015). Being a federal School with cheaper fees, unlike private universities, 28.4% (n=80) of the respondents noted that the low school fees influenced their choice of FUTA. The availability of scholarship and financial aid was considered different from the low school fees influence. Scholarships are limited in Nigeria and available for selected few. Notwithstanding its shortage, 12.1% (n=34) of participants reported the availability of scholarship and financial aid in FUTA influenced their decision to choose the university.

14.9% (n=42) of the respondents noted that opinions influenced their choice of FUTA. This includes the opinion of friends and especially older friends that have attended FUTA, opinions of siblings, other family members, teachers and even religious leaders. The influence of parents is excluded from their opinions. In as much as the parents are funding the education, they have more influence over the student with regards to the choice of University.

Consistent with the findings in other contexts (Ivy, 2008; Dao & Thorpe, 2015), the programme offered by FUTA was considered as an essential factor influencing the choice of students. Taking into consideration that FUTA offered specialised programs in technology which often are not available in other universities, 12.4% (n=35) of respondents noted that the choice of courses offered at the university influenced their choice. This also tied in with the personal interest which was the most significant influence. Students have an interest in a course, and they are more likely to select Universities offering what interests them.

The location of the University in the South West of Nigeria was also considered an influence in the student choice. 11% (n=31) of participants acknowledged that the university's geographical location was a determining factor when considering a university to attend. This aligns with earlier findings considering university location is a highly pragmatic decision (Briggs, 2006). Even though some students would not mind travelling and incur costs to access reputation, FUTA is considered a reputable university in Nigeria, offering specialised programs which may not be available in other countries. With the understanding of the specific context of Nigeria, transportation and security may have also make FUTA more appealing to prospective students. Not surprising that some participants considered the distance from home (11.3%, n=32) as a determining factor.

The result shows two identical coordinates in the active groups in the first dimension. The coordinates of economic consideration and university characteristics are the highest, while human factors and accommodation contribute lowest. This indicates similar contribution in the

two identical coordinates. Concerning the second dimension, human factor has the highest coordinates and contribution.

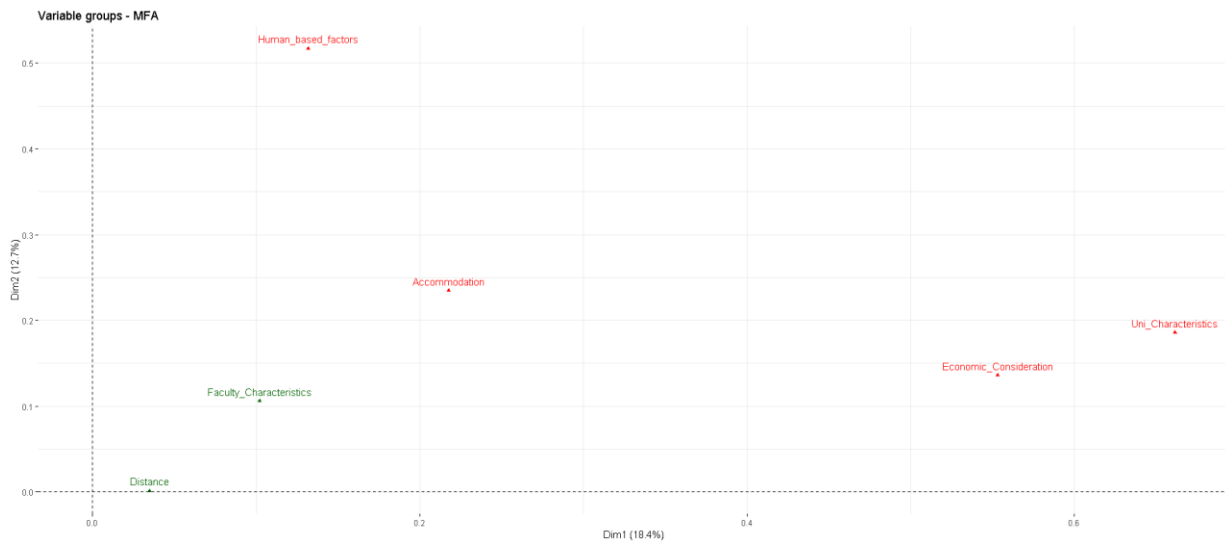


Figure 1: The groups of variable for the factors influencing the choice of university (Multiple Factor Analysis)

The plot illustrates the correlation between groups and dimensions. The active groups of variables are in red and supplementary groups of variables in green colour.

We further examined the correlation between the quantitative variable and dimensions (Figure 2). The first dimension represents the significant positive variables that influence the choice of university - university ranking and the lower fees. However, in the second dimension, peer

influence and housing on campus were represented. This dimension represents the interaction between human-induced factors and interest in comfortability.

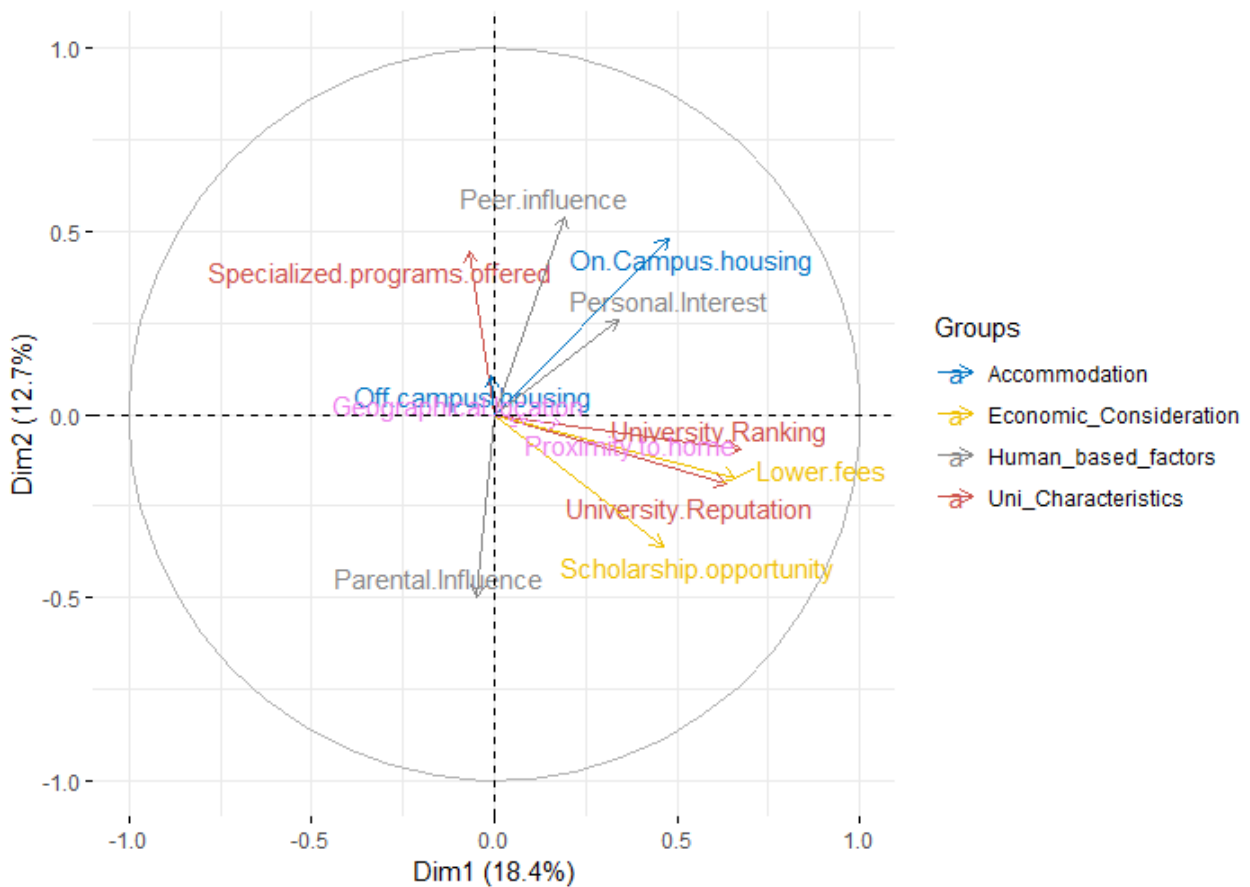


Figure 2: The correlation between the quantitative variable and dimensions for the factors influencing the choice of university (Multiple Factor Analysis)

Table 3: The significant elements within each factor group that described the student choice of university

Human-Based factor	Accommodation	Economic Consideration	University Characteristics	Location
Personal interest	On-campus housing	Low fees	Ranking	Proximity to home
Peer influence		Scholarship opportunity	Reputation	Geographical location

Information Sources influencing student's choice of university

Having identified the factors influencing student's choice of university, we examined the channels through which the students obtained information about the university to attend. The information source is presented in Table 4 below.

Table 4: Information Source

Information Source	Respondent (n=282)	Percentage of Respondent
Parent and Guardian	121	42.9
Media	108	38.3
Friends	100	35.5
Family Relatives	62	22.0
Lecturer and School Counsellor	52	18.4
Alumni	39	13.8
Religious Advisor	24	8.5
University Representatives	24	8.5

In terms of information search, student predominantly relied on information from three significant channels namely: parent and guardian, media and friends, while other channels such as university representatives, lecturer/school counsellor and religious advisor were not significant or important. Parents and guidance were the most significant source of information for students attending FUTA. 42.9% (n=121) of participants acknowledge that they got information about the university to attend from their parent (s). This is not surprising taking into consideration that the parents are the one funding the university education, as there are no government funds, Parents are aware of their financial capabilities and are aware of various universities reputation and location.

While some other studies found that advertisements, Open Day, and prospectuses were key determinants, this was not so in the case of FUTA. Media was the second most significant sources of information. 38.3% (n=108) got information from the media to enhance their decision-making process. This media includes information provided by JAMB, University social media, and websites.

Friends, including classmates and older friends attending universities, were also a source of information for students attending federal universities. 35.5% (n=100) of participants identified their friends as a source of information. This aligns with previous studies that noted that prospective students want to engage with other students in order to make decisions about choosing a programme (Dao and Thorpe, 2015).

In addition to these three significant sources of information for students, family relatives, lecturer and school councillor, and alumni were also a source of information. While campus visits and Open Days have been found to have a profound effect on the draw to universities (Stephenson et al., 2016), this was not the case in Nigeria, as this was not recognised as a source of information. Instead, they rely on friends, especially older friends that attended the university, to provide information about the university.

Based on the results from the factor analysis, four information source were identified under the three-factor component with the eigenvalues that accounted for 65% of the variance. These sources include former students, social media, parent and guardian, family and relatives. (Table 4).

For table 5, the factor analysis identifying the primary information source about university. Note, MR 1-3 represent the factor names as identified using the Minres method. Factors are arranged in order of variance amount.

Table 5: Factor analysis identifying the main information source about university

Loading	MR 1	MR 2	MR 3
University Representatives			
Lecturer/School Councillor			
Parent/Guardian		0.585	
Friends/Schoolmates			
Family/Relatives		0.415	
Religious Advisor			
Former students	0.998		
Social media			0.440

Discussions

This study presents an analysis of the choice factors and information sources utilised by Nigerian undergraduate students, using a sample of students attending a Federal University of Technology in Nigeria. This study extends existing research on students' choice factors by specifically investigating what influences Nigerian undergraduate students to select a federal university. The chapter makes both theoretical and managerial contribution to higher education marketing and understanding student choice-making in Nigeria and Africa, as this is an under-researched area.

As federal universities have more options of undergraduate degree, some which are not being offered in state and private universities because of the facilities needed to deliver those courses (Mogaji, 2019a), this attract prospective students to federal schools; even though they are aware of challenges of government universities, like the depreciating facilities, overpopulation and interruption to academic calendars due to strike. Besides, physical location of the

university was also a factor influencing student choice. This is more likely linked to the transportation and security challenges within the country. This aligns with findings from Adefulu et al. (2020) of factors influencing students attending private universities in Nigeria. Students do not want to travel away from home, and likewise they recognise their parent's fear of travelling away from home.

The reputation of the university is also important. The federal universities are created in batches to meet specific needs, this federal university (of technology) was created to meet the technology needs of the country, it has been established since 1983 (Adeola et al., 2020), and it has built reputation which attracts prospective students. Though there are other state universities of technology (like Ladoko Akintola University of Technology) and private (Bells University of Technology), the reputation of the university is still crucial. This is consistent with the result of Briggs (2006) and Anyasi et al. (2019) who highlight the university reputation as a significant factor influencing students' university choice. Generally, universities with ranking and reputation would have higher funding potentials (Saint et al., 2003) compared to others. Hence they are better positioned to provide excellent accommodation facilities for students which are often offered at a little cost. Some parents prefer their children attend universities close to home and some children also prefer a university close to home (Briggs, 2006). This is to allow the children to visit them (parents) more regularly and to get foodstuffs and money for upkeep (Badau, 2013).

This reputation is also reiterated by facilities (Mogaji & Yoon, 2019), especially parents who may have attended federal universities (as there were no private universities in their time), and they want their children to attend same university. As parents make financial commitment, they also influence where their children can study. This is consistent with previous studies that recognised the influence of parents. Iacopini & Hayden (2017) found that parents feel responsible for making sure their children are better qualified than them, more of making sure their future is guaranteed. Le et al. (2019) also found that Vietnamese parents play an essential role in student choice making. As Adefulu et al. (2019) noted, even though the Nigerian parents cannot afford to send their kids to universities in Europe or private school, they make an effort to send their children to one of the best federal universities in the country.

While marketers need to understand the groups of information sources that prospective students rely on during their decision-making process (Le et al., 2019; Dao & Thorpe, 2015), this does not necessarily apply in the context of FUTA. Though our findings provide insights for university managers to understand the choice factors and information sources utilised by their prospective students, the value of this information may, however, be irrelevant taking into consideration that marketing activities in this university may not be focused on student recruitment. Instead, the implications of findings are directed towards how federal universities can be more selective in their recruitment process and global outreach.

Perhaps, instead of advertising to attract prospective local students, they need to focus on building their brands to attract international partnership for research and mobility of students and staff, international recognition in terms of ranking and research output, and talented international students who will contribute their perspectives and diverse experiences to the university. The universities will need to invest in facilities and services, diversifying programmes to meet the student's expectation in the technology-driven world, and provision of scholarships for both local and international talents. Federal university fees will always be considerably lower than the

private universities since they receive the most significant chunk of their funding from the federal government; so, there is no basis to compete on fees. Federal universities should look towards being self-sustaining, generate revenue through collaborative programmes with foreign universities (Dao & Thorpe, 2015), and building their reputation to compete with other universities around the world.

Conclusion

The study aimed to identify factors that influence student choice of a federal university in Nigeria. Although federal universities in Nigeria are overwhelmed with admission requests which often renders marketing/advertising efforts unnecessary, there is a general need to understand why students in Nigeria are particularly interested in federal universities, as it would help the general planning and management of admissions. The study found that personal interest of the student is a significant determining factor for the students. Likewise, the reputation of the university and influence of parents were recognised. This aligns with Farinloye, Adeola & Mogaji (2019) study that there seems to be a sense of attachment and accomplishment for attending these federal universities because they have more varieties of courses, are strategically located across the country, and student experience is more enhanced, unlike Private Universities which take pride in a regular academic calendar or state universities which are less funded.

The study makes both theoretical and managerial implication. It provides a holistic understanding of factors that influences student' choices of university, albeit a federal university. Factors affecting students' choice of higher education is essential for any university's management admission policies and marketing strategies. The marketing communication should be strategic to build the brand for international standards, maybe not for student recruitment, but positioning the university for anticipated partnership with international research organisations and funders, and philanthropic donations. Relevant information for different stakeholders in the education sector should be easily accessible on the website and presented in a visually-appealing manner. Prospective international students and researchers should know what is going on in the university and how to reach out. Likewise, a robust social media strategy is needful to help execute the overall marketing plan which is to build the brand equity and reputation of the university (Mogaji, 2019b). Social media platforms such as Facebook, Twitter and LinkedIn, should be used to curate relevant and engaging contents to build the brand of the university and to improve public access.

Efforts should be made towards improving the university on league tables around the world Rankings are a quantitative measure of university achievements. To improve continental and global positions, investments in facilities, research output, teaching quality, and overall student experience are much required. Building international collaboration and encouraging research partnerships collectively improves the reputation of any university and consequently attracts prospective sponsors. Provision of grants or funds for talented students, perhaps those from other African countries as well as domestic students, could also encourage scholarship amongst the students in the university, provided the university can get additional funds to support the initiative. Taking into consideration that FUTA is a public university receiving funds from the Government and with the expectation of providing education for Nigerians at affordable costs, the administrative bureaucracy and financial constraints in implementing these strategies for improved global reputation are acknowledged. However, university managers must take ownership and must be creative and strategic in their approach. The prospective student market in Nigeria is saturated, federal universities will always be attractive to Nigerian students, but for these universities to reach full potential, they need to look beyond the overwhelming requests from domestic students and their reputation within Nigeria.

This study offered more in-depth insight into factors which influence Nigerian students when they choose which university to attend can be considered its strengths. Although the sample for this study was collected from a federal university in Nigeria, the findings of this study are relevant and applicable to other African universities with similar structures and challenges. The respondents in this study were undergraduate students presently studying at FUTA, and this may have affected the outcome of the studies. By recruiting current undergraduate universities, their reflections come after they have chosen the university (Dao & Thorpe, 2015); though our studies shed light on what influenced their decision, future research can survey prospective student, perhaps final-year high school students who were considering writing the Unified Tertiary Matriculation Examination to apply for higher education studies. This allows for the examination of university choice factors from the view of prospective students, rather than interviewing students who have already been admitted into the university (Le et al., 2019).

In addition, future research should endeavour to identify differences and similarities in the decision-making process of students in different levels of study (undergraduate or postgraduate), different university (technology vs non-technology), different fields of study (arts, humanities or science subjects) and types of universities (federal, state and private University). Also, future studies should consider the qualitative analysis of the questionnaires. In our study, students identified parental/peer influences as one of the choice factors; it would be worthwhile to understand these influences and how they shaped the students' decision.

Acknowledgement

The authors will like to appreciate the students of the Federal University of Technology, Akure who participated in our survey. We also thank the Deputy Director of Public Communications of the university (FUTA), Mr Adegbenro Adebajo, for his support towards the project. We thank Tajudeen who assisted with administering the questionnaires. We also thank Adetula Olaoluwa for assisting in inputting the data.

REFERENCES

- Adefulu, A., Farinloye, T. & Mogaji, E., 2019. Factors Influencing Post Graduate Students' University Choice in Nigeria. In: E. Mogaji, F. Maringe & R. E. Hinson, eds. Higher Education Marketing in Africa - Explorations on Student Choice. Cham, Switzerland: Springer.
- Adeyemi, K. (2001). Equality of access and catchment area factor in university admissions in Nigeria. In *Higher Education* (Vol. 42). Retrieved from <https://www.jstor.org/stable/3447999>
- Afful-Broni, Anthony and Noi-Okwei, Christina (2010) "Factors Influencing The Choice Of Tertiary Education In A Sub-Saharan African University," *Academic Leadership: The Online Journal*: Vol. 8: Iss. 2, Article 20. : <https://scholars.fhsu.edu/alj/vol8/iss2/20>
- Ajibola, M. O., Emeghe, I. J., Oluwumi, A. O., & Oni, A. S. (2017). A Study on Students' Choice of Programme in the University. *Journal of Educational and Social Research*, 7(1), 137-144.
- Akinwumi, I. O., & Oladosu, A. T. (2015). *Factors Influencing Admission and Completion of Program in a Teacher Tertiary Institution*. 5(3), 90–93. <https://doi.org/10.5923/j.edu.20150503.03>
- Akpotu, N. E., & Akpochofo, W. P. (2009). An analysis of factors influencing the upsurge of private universities in Nigeria. *Journal of Social Sciences*, 18(1), 21-27.

- Aluede, O., & Idogho, P. O. (2012). Increasing access to university education in Nigeria: present challenges and suggestions for the future. *The African Symposium*, 12(1), 1–12. Retrieved from <https://www.researchgate.net/publication/265876574>
- Anyasi Amaka Ifeyinwa, Ogunnaike Olaleke Oluseye, O. A. M., & Folorunsho Olamide, Dinyain Tamarapreye, D. I. P. (2019). Reconceptualizing Students Choice of University in Higher Education Management: Scale Development. *World Journal of Innovative Research*, 6(4), 35–40. Retrieved from www.wjir.org
- Badau, K. M. (2013). Factors Influencing the Choice of Tertiary Education Institutions in Nigeria. In *Journal of Resourcefulness and Distinction* 6(1), 1-13. Retrieved from <http://www.globalacademicgroup.com/journals/resourcefulness/Factors Influencing the Choice of Tertiary Education.pdf>
- Briggs, S. (2006). An exploratory study of the factors influencing undergraduate student choice: The case of higher education in Scotland. *Studies in Higher Education*, 31(6), 705–722. <https://doi.org/10.1080/03075070601004333>
- Chapman, D.W., 1981. A model of college student choice. *Jour. of Higher Education* 52: 490-505.
- El Nemar, S., Vrontis, D. & Thrassou, A., 2018. An innovative stakeholder framework for the Student-Choice Decision making process. *Journal of Business Research*. <https://doi.org/10.1016/j.jbusres.2018.11.053>
- Farinloye, T., Adeola, O. & Mogaji, E., 2019. Typology of Nigeria Universities: A Strategic Marketing and Branding Implication. In: E. Mogaji, F. Maringe & R. E. Hinson, eds. *Understanding the Higher Education Market in Africa*. Abingdon, Oxfordshire: Routledge.
- Frey, D., Schulz-Hardt, S. & Stahlberg, D., 2013. Information seeking among individuals and groups and possible consequences for decision-making in business and politics. In: E. H. Witte & J. H. Davis, eds. *Understanding Group Behavior 2*. New York: Psychology Press, pp. 211-225.
- Henriques, P. L., Matos, P. V., Jerónimo, H. M., Mosquera, P., da Silva, F. P., & Bacalhau, J. (2018). University or polytechnic? A fuzzy-set approach of prospective students' choice and its implications for higher education institutions' managers. *Journal of Business Research*, 89, 435-441.
- Igbinedion, V. I. (2011). Perception Of Factors That Influence Students’ Vocational Choice Of Secretarial Studies In Tertiary Institutions In Edo State Of Nigeria. In *European Journal of Educational Studies* (Vol. 3). Retrieved from <https://pdfs.semanticscholar.org/70c8/f8a7ef48c2db495595e49ced8444791d8cd5.pdf>
- Iruonagbe, C. T., Imhonopi, D. and Egharevba, M. E. (2015). Higher Education in Nigeria and the Emergence of Private Universities. *International Journal of Education and Research*, 3(2), 49-64.
- Ivy, J. (2010). Choosing Futures: Influence of Ethnic Origin in University Choice. *International Journal of Educational Management*. 24(5): 391-403.
- Lê, S., Josse, J. & Husson, F. (2008). FactoMineR: An R Package for Multivariate Analysis. *Journal of Statistical Software*. 25(1), 1-18.
- Mbawuni, J. & Nimako, S. G., 2015. Modelling Job-Related and Personality Predictors of Intention to Pursue Accounting Careers among Undergraduate Students in Ghana. *World Journal of Education*, 5(1), pp. 65-81.
- Menon, M. E., Saiti, A. & Socratous, M., 2007. Rationality, information search and choice in higher education: Evidence from Greece. *Higher Education*, 54(5), pp. 705-721.

- Mogaji, E., 2016. University website Design in International Student Recruitment: some reflections. In: T. Wu & V. Naidoo, eds. *International Marketing of Higher Education*. New York: Palgrave Macmillan, pp. 99-117.
- Mogaji, E., 2018. UK Universities Corporate Visual Identities. Stirling, Academy of Marketing Annual Conference Proceedings 3rd-5th July Stirling University.
- Mogaji, E., 2019a. Types and Location of Nigerian Universities. *Research Agenda Working Papers*, 2019(7), pp. 92-103. Available at SSRN: <https://ssrn.com/abstract=3442737>
- Mogaji, E., 2019b. Strategic Stakeholder Communications on Twitter by UK Universities. *Research Agenda Working Papers*, 2019(8), pp. 104-119. Available at SSRN: <https://ssrn.com/abstract=3445869>
- Mogaji, E. & Yoon, C., 2019. Thematic Analysis of Marketing Messages in UK Universities' Prospectuses. *International Journal of Educational Management*, 33(7), pp. 1561-1581.
- Nigerian Universities Commission - NUC, (2019). NUC Holds Maiden National Summit on Private Universities <https://nuc.edu.ng/nuc-holds-maiden-national-summit-on-private-universities/>
- Obijole, E.E, (2009). An investigation into factors influencing the choice of business education in two tertiary institutions in Nigeria. *Mathematics Connection*, 8(2). 69-74
- Onu, F. M., & Ikehi, M. E. (2013). Factors Influencing Students' Choice to Study Agricultural Science in South-South, Nigeria. *Journal of Agriculture and Biodiversity Research*, 2(4), 80–86.
- Otoja, R. I., & Obodumu, E. (2017). Access to University Education in Nigeria: Issues and Trends. In *International Journal of Progressive and Alternative Education* (Vol. 4). Retrieved from [http://www.globalacademicgroup.com/journals/asproaedu/ACCESS TO UNIVERSITY EDUCATION IN NIGERIA.pdf](http://www.globalacademicgroup.com/journals/asproaedu/ACCESS%20TO%20UNIVERSITY%20EDUCATION%20IN%20NIGERIA.pdf)
- Pitan, O. S., & Olugbenga Adedeji, S. (2014). Students' choice of courses: Determining factors, sources of information, and relationship with the labour market demands in Nigeria. *Africa Education Review*, 11(3), 445–458. <https://doi.org/10.1080/18146627.2014.934997>
- Revelle, W. (2018) psych: Procedures for Personality and Psychological Research, Northwestern University, Evanston, Illinois, USA, <https://CRAN.R-project.org/package=psych> Version = 1.8.12.
- Rocca, S.J., S.G. Washburn, and E. Spring. 2003. Survey of factors influencing the matriculation decisions of college of agricultural and life sciences students: University of Florida.
- Rika, N., Roze, J. & Sennikova, I., 2016. Factors affecting the choice of higher education institutions by prospective students in Latvia. s.l., CBU International Conference Proceedings, pp. 422-430.
- Rudhumbu, N., Tirumalai, A., & Kumari, B. (2017). Factors that Influence Undergraduate Students' Choice of a University: A Case of Botho University in Botswana. *International Journal of Learning and Development*, 7(2), 1–11. <https://doi.org/10.5296/ijld.v7i2.10577>
- Saint, W., Hartnett, T. A., & Strassner, E. (2003). Higher Education in Nigeria: A Status Report. *Higher Education Policy*, 16, 259–281. Retrieved from http://siteresources.worldbank.org/INTAFRREGTOPEIA/Resources/he_nigeria_status.pdf
- Stephen, A. I. (2015). The Effects of the Discrimination between Polytechnic Education and University Education on the Overall Technological Development of Nigeria. *Industrial Engineering Letters*, 5(4), 41–45. Retrieved from www.iiste.org

- Sipilä, J., Herold, K., Tarkiainen, A. & Sundqvist, S., 2017. The influence of word-of-mouth on attitudinal ambivalence during the higher education decision-making process. *Journal of Business Research*, Volume 80, pp. 176-187.
- Stephenson, A. L., Heckert, A. & Yerger, D. B., 2016. College choice and the university brand: exploring the consumer decision framework. *Higher Education*, 71(4), pp. 489-503.