

Relationship between Admission, Extracurricular Services and Academic Achievement in Secondary Schools: A Partial Least Square (PLS) Approach

Yusuf Suleiman Zahyah Bt Hanafi Muhajir Bin Taslikhan

School of Education and Modern Languages, Universiti Utara Malaysia, 06010, Sintok, Kedah, Malaysia

Abstract

This study investigates the nexus between two dimensions of student personnel services (Admission Services, Extracurricular Services) academic achievement in secondary schools with the particular interest to know the significant impact of these services on students' academic achievement. It is believed that the provision of these services are determinant factors that fast track the development of the students in the school system. The study is quantitative in nature and adopts a correlation survey method. Instruments titled: "Admission and Extracurricular Services Questionnaires" (AESQ) were adapted from relevant studies to measure the services. Questionnaires were distributed to 379 students in one of the secondary schools in Kwara State, Nigeria. This study secondary data to measure the academic achievement of students. Statistical Package for Social Science (SPSS) and Structural Equation Modelling (Smart PLS) were used to analyze the data. The findings revealed a significant relationship between admission services and academic achievement as well as significant relationship between extracurricular services and academic achievement in school. The study concludes that admission and extracurricular services are essential services that are needed for the development of the school students. The presence of these services stimulates students to achieve academic excellence while the reverse could lead to students' failure. Thus, this study recommended that schools should ensure that admission processes should be thoroughly done for them to select the best students for placement. Also, extracurricular activities should be provided for students to be developed socially, physically and emotionally. Future studies should focus on other aspects of students personnel services like health, accommodation services, and bursary services etc with a view to assess more on the the impact of the services in education system.

Keywords: Admission Services, Extracurricular Services, Academic Achievement, Kwara State,

1. Introduction

Secondary education is seen as the second stage of education which prepares students for entry into a higher institution of learning. It's an important stage of education simply because it serves as an intermediary between primary and higher institution. According to National Policy on Education (2004), it stipulates the core objectives of secondary education in Nigeria: to produce a skilled manpower; and for self-reliance. In realizing these objectives, it is included in the policy that certain provision of services must be provided in the school. However, admission and extracurricular services remain an integral part of the school services in the school system. They are indispensable services that are vital to school success. According to Adnett et al. (2011) and Albanese et al. (2003), admission services are services aimed at picking the qualified candidates for placement into the school system. It's the first service to be provided to prospective applicants seeking admission in the school. Globally, it's a service that cuts across all tiers of education (primary, secondary and tertiary). It is also an essential service that schools need to fulfil the essence of education. On the other hand, it forms the three domains of learning (cognitive, affective and psychomotor) (Fan, et al., 2010; Haunt, 2005; Ludeman, 2002). Okoroma (2008) is of the view that Nigeria as a country is configured on heterogenous way, this is causing a lot of fundamental issues that have continued to affect the admission into the education system. The admission in Nigeria hinges on the notion that some regions are educationally advantaged, while some other region are educationally is disadvantaged. Joshua, Loromeke and Olanrewaju (2014) expressed that the inclusion of quota system as well as the federal character principles incorporated into the admission system in Nigeria has made admission in Nigeria to lack credibility. This is reflected in all admission process across the three levels of education n Nigeria. Admission in public universities is often characterized by corruption, nepotism and favoritism. In view of the fact that the admission quota system has drastically reduced the gap between the major ethnic groups. In spite of these hiccups, the admission process in Nigeria has tremendously united the country together. Bolape, Adeyemi and Ogbodo (2014) and Okoroma (2008) opined that admission services in the Nigerian education system are often based on politics. Some flashy secondary schools (i.e., government and privates) in urban areas mostly based on politics and even though there are elements of good things which could meritocracy. Further, Sacket et al. (2009) is of the view that admission services are provided in school to determine the likely candidates to be selected in the school system. They opined that admission services may be problematic if care is not taken especially if the applicants are more than the needed candidates expected to be admitted. Shedding more light on what admission stands for in the school system, Ali (2008), Boyd (2014) and

Ludeman (2002) believes that admission services is a necessity for the school to scrutinize their applicants before they consider applicants to be picked. Thus, the need for a functional admission unit in the school system.

Ohierunuan (2008) asserts that extracurricular is a popular activity in the school system. The students' involvement in various activities demonstrates that it is beneficial in strengthening and building students' academic achievement. Extracurricular services are pivotal to the mental and psychological development of students in the school system (Ludeman, 2002). Bradley (2012) Extracurricular services are designed to cater for outside classroom needs of school students. Extracurricular services are part and parcel of the school services. It is an important service that is meant to develop students socially, emotionally and physically (Ohierunuan, 2008; Pitts, 2013; Taras, 2005). Mccaugn (1999) suggests that students' participation in extracurricular activities does not necessarily ensure acceptance, responsibility, success, acceptance and responsibility, and the emotional and physical maturation of the students. But there is strong indication to suggest that there is a plethora of benefits to high students' participation in extracurricular activities in school.

However, admission and extracurricular services are embedded in the Nigerian education system at all levels of education. These services are structured in such a way that they cannot be separated from other aspects of school services. The nature of admission in Nigerian secondary schools, mostly depends on certain procedures which the prospective applicants must fulfil before placement. Also, provision of extracurricular of services in schools varies. The provision usually depends on the capability of the school. In the light of the above, the study intends to know whether students who pass through the laid down admission processes perform better in the school or not. Also, this study wants to find out whether students who participates in extracurricular activities do well in their academic sojourn.

2. Literature Review

The abysmal performance of students in schools has been credited to the lack of seriousness on the part of the students, while the school's inattentive attitude in providing and promoting a healthy environment for its students. Some stakeholders in education have said that inadequate provision of school services could hamper the achievement of school goals, while constant provision of the services are ingredient or bedrocks to the success of students in their examinations. Education policies that fail to take into consideration students' academic capability as well as adequate and quality of availability of resources in the school can be frustrating and discouraging to the school administrators. Inconsistent with the admission policy in a Nigerian education system is a serious concern at all levels (primary, secondary, and tertiary) of education (Ogundele, Olanipekun & Aina, 2014). Inquiries have been made in the past to determine the relationship between admission services and academic performance, even though the studies mainly focused only on the criteria for determining admission in the school system, it fails to look at the holistic provision of admission and whether they are offered or not (Ali, 2008; Boyd, 2014; Oladokun, Adebajo & Charles-Owaba, 2008). Also, extracurricular services are important aspects of school services, they are indispensable services that are prominent in the school system. The provision of these services to students is akin to their physical, social and intellectual development, which could assist them in their academic sojourn (Bradley, 2012; Ludeman, 2002).

According to Adnet (2011), Bryant, Bolton and Fleming (2015) and Sacket (2009), Admission and extracurricular services are an aspect of student personnel services in the school system. These aspects are essential for the overall development of the educational system. The academic achievements of students often relate to some of the aspect of school services. Studies suggest that provision of school services influences the performance of students in the school, while some discountenance the position with a view that provision of services do not really determine the academic achievement of students. For instance, Sackett et al. (2009) carried out an empirical study on admission service and academic performance; the study used survey to collect data from the respondents (students). The results of the students were used to measure their academic performance. The outcome of the research revealed a significant relationship between the two variables. Likewise, Shaw et al. (2013) investigated the relationship between admission service and academic performance. The outcome of the research found a significant relationship between the independent and dependent variables. In the same vein, Adnet et al. (2011) found a significant relationship between admission services and academic performance in the school system. A study conducted by Agboola, Adeyemi and Ogbodo (2014) found that conducting the admission process for the prospective applicants will enable schools to select the qualified candidates for admission. Admission services are key to students' academic achievement in the school system. They are important in achieving school's goals and objectives. Furthermore, previous studies show that admission services were mainly discussed as a predictor of academic performance (Adeyemo, 2010; Ali, 2008; Archibong et al., 2011; Boyd, 2014; Okoroma, 2008). Even Though Fan et al., (2013) found a negative relationship between admission services and academic achievement. They concluded that going through the admission processes such as entrance examination and interviews do not guarantee the success of such applicants when admitted into the success.

Regarding the association between extracurricular services and academic achievement, numerous

studies have been conducted. According to Pitts (2013), he conducted research on the relationship between student personnel services (i.e. Extracurricular service) and academic performance. Bradley (2012), Kim and So (2012) also researched on one aspect of student personnel services (Extracurricular) and academic performance of students. Their study found highly significant relationship. Bozkus (2013) and Weilk et al. (2013) found a significant relationship between extracurricular service and academic performance. Sadly, there is a paucity of research on the nexus between extracurricular services and academic performance in the school, this necessitate in the inclusion of extracurricular services in this study. Furthermore, Castrechini (2009) claimed that students who participates in total extracurricular activities perform better than those that didn't participate, according to his study. He went further that the participation of students in numerous extracurricular activities not only improve their academic performance in the classroom, but also reduces absenteeism, stimulates them for higher educational aspirations as well promotes students' attendance in the classroom. Similarly, Ludeman (2002) found a positive significant relationship between students' participation in various extracurricular services and academic achievement. He concluded that extracurricular activities complement and extend those experiences and contacts that can be found in classroom learning activities. Chen et al., (2012) agreed that there are three main factors which increases the relationship extracurricular activities and students' academic achievement in school. The factors include "what", "where", and "when". The "what" means that the various types of extracurricular in which students involve increase the developmental outcomes of the students. The "where" encompasses that the school system and community context in which the school various extracurricular activities take place really matter. The "when" means that the historical and developmental context in which school extracurricular activities take place greatly influences the link between participation in extracurricular activities and academic achievement in the classroom, simply because the each places a dissimilar value both on activities as well as the academic. Lending credence to the foregoing studies on the nexus between extracurricular services and academic achievement, Adeyemo (2010) opined that the importance of students' participation in extracurricular activities cannot be underrated, as it prepares students for future tasks with a view to adjust to the environment and builds confidence in them. Thus, it has been established that extracurricular services were mainly studied as a correlate of students' academic performance (Adewusi, 2013; Alani, Okunola & Subair, 2010; Thiede et al.; 2005). Further, on the relationship between admission, extracurricular services and academic achievement, the links between these variables can be explained from the domain of students' development theory perspectives, students' development theory postulates that there are certain services (admission and extracurricular services inclusive) that are needed in the school which serves as an important ingredient for students' success. The provision of the services to students would spur them to perform better in the classroom (Creamer, 1980; Renn, 2008). This suggests that if certain services are provided for students, there is tendency that it would influence their academic achievement in the classroom (Astin, 1984). It was observed in the literature that there is a paucity of study on the need to know the level of the services provided in the school as the majority of the studies only studied the relationship between the independent and dependent variables. It is researchers' believe that attention is yet to be focused on this aspect. Also, extant literatures have shown that there is less research on the relationship between student personnel services and academic performance in Africa, most especially in Nigeria. The majority of the studies on the aspect of student personnel services was carried out in Europe and American, this necessitates the research to be conducted in Nigerian.

2.1 Research Questions

The following are the research questions formulated to guide the study:

1. What is the perception of students for admission and extracurricular services in the school?
2. Is there any relationship between admission services and academic achievement?
3. Is there any relationship between extracurricular services and academic achievement?

2.2 Objectives of the Study

The study's research objectives are stated as follows:

1. To determine the level of admission and extracurricular services in the school
2. To investigate the relationship between admission services and academic achievement
3. To know whether a relationship exists between extracurricular services and academic achievement.

2.3 Research hypotheses

The following research hypotheses were formulated to guide the study:

1. There is a significant relationship between admission services and academic achievement
2. There is a significant relationship between extracurricular services and academic achievement

2.4 Meaning and Nature of Admission Services in School

Admission service one of the most important aspect of student personnel services in the school system. It's the

first service to be provided for prospective students seeking admission into the school system at all levels of the education system, it is the service that other dimensions of student personnel services are built on (Juradja & Munich, 2010; Vssiliou et al., 2015). According to Okoroma (2008), admission service is being offered to the prospective applicants seeking placement in the school system. It is also a systematic way of recruiting people that are eminently qualified to be given admission in the school. House and Hu (2006) described the admission service as the systematic process of selecting applicants based on their performance in the entrance examination as well as the interview which might be conducted for them before admitting them to the school. Soares (2012) also see admission as a way of fulfilling the essence of education based on the intellectual prowess of the applicants seeking placement in the school system. Given the foregoing definitions of admission service, it can be seen that admission service is sacrosanct in the school system because it is vital to the success of the education system.

2.5 Usefulness of Test Score in Selecting Applicants for Admission in School

Conducting test for the applicants seeking placement in the school system can be said to be the best yardstick or parameter for picking the successful applicants for admission (Okoroma, 2008). According to Sawyer (2013), research has shown that the best technique that be used to screen out those that got the lowest mark during the entrance examination. Before such applicants can be eliminated, certain benchmark must be set as standard, this will make it easy to make a decision on who to be admitted or who not to be admitted. Supporting this, Crede and Thomas (2007) were of the view that admission test for all applicants seeking admission to all levels of education must be subjected to scrutiny before given admission, this will enable the school admit best candidates among the applicants. Archibong et al. (2011) opined that the usefulness of admission test has to do with the philosophical goals and objectives of the school. The goals are to assess applicants towards their placement as well as to maximize academic standard. The highlighted goals are interrelated and interwoven. The foregoing mentioned goals guide and direct the school during the pre-admission exercise (Hsie & Miucich, 2006). According to Adnet (2011), school admission strategies in the school system are stated as follows:

1. Application collection from the applicants
2. Processing of application forms
3. Conducting examination for the applicants
4. Conducting interview
5. Selecting the successful applicants
6. Issuing of admission letters to the successful students

Furthermore, Okoroma (2008) and Ludeman (2002) highlight the usefulness of test score in admission and selection services in school. They are as follows:

- (a) To fulfil the essence of education.
- (b) To select those who are genuinely qualified admission.
- (c) To eradicate favoritism
- (d) To ensure academic excellence and,
- (e) It promotes the image of the school.

2.6 Concept and Functions of Extracurricular Services

The school curriculum is structured on the three domains in education, (i.e. Affective, Psychomotor and Cognitive domains). These domains in education form the basis of activities in the school system. Educational activities are entrenched in the school curriculum which is to be implemented with the school aims and objectives (Bryant, Bolton, & Fleming, 2015; Dieringer & Judge, 2015; Ludeman, 2002; Pence & Dymond, 2015; Pulkinen, 2014). According to Pitts (2013), extracurricular service can be defined as the kind of the service that are rendered to students that enable them to have fun and enjoy all social life after classroom activities. Extracurricular service is often called extra-academic service or co-curricular services. Hunt (2005) is of the view that the activities for students are designed for outside program for students to explore their hidden skills for the benefit of such students. Adeyemo (2010) and McGaha and Fitzpatrick (2010) asserts that extracurricular services, foster unity, enhance academic achievement, prepare for future tasks/challenges as well as serve as an avenue to develop them physically and emotionally, and socially. As explained that extracurricular services remain an indispensable service in the school system, there is no gainsaying the fact that the engagement of students in extracurricular activities would continue to play a significant role towards the growth and development in the school. According to Ludeman (2002) and Chang and Shon (2015), there are various functions of extracurricular activities in the school, which cut across all levels of the education system. They are as follows:

- (a) Develops recreation, intramural and sports services that are in consonance with the needs and aspirations of the students and,
- (b) To make students to be physically fit for co-curricular activities

- (c) It changes the tone of the school
- (d) It prepares students for future tasks
- (e) It fosters unity
- (f) It promotes friendship among students

More so, Haunt (2005) posits that the provision of extracurricular activities varies. Weilk et al. (2013) were of the opinion that the nature as well as the provision of extracurricular activities is different in schools. Adeyemo (2010) concurred that extracurricular activities are provided based on the financial capability of the schools in Nigeria. He, however, opined that there are various extracurricular that are common in primary, secondary, and tertiary institutions. The activities are displayed below in the table. .

Table 2.1 Common Extracurricular Service in School

Structure of Education System	Extracurricular Activities
1. Primary School Level	Quiz Competition, Football, Table Tennis, Gymnastics, Relay Race etc.
2. Secondary School Level	Volleyball, Basketball, Badminton, Gymnastics, Long Jump, Relay Race, Table Tennis, High Jump, Social Club, Quiz Competition etc.
3. Tertiary School Level	Football, Lawn Tennis, Badminton, Taekwondo, Gymnastics, Basketball, Volleyball, Chess, Table Tennis, Rugby, Swimming, Car Race, Karate, Quiz Competition, Students' union etc.

2.7 Underpinning Theory of the Study

Students' Development Theory

Student development theory, which is also referred to as students' services theory, is a component of educational psychology which posits that students advance educationally outside the environment where they come from. It also means a psychological finding that has to do with students in the educational system. It is described as the way in which the parents of the students and school work together for the intellectual and moral development of the student for their improved school performance. According to Psychologists such as B.F Skinners and Carl Rogers considered the ideas of the student development theory, which brought in a new paradigm known as the student's developmental theory (Creamer, 1980; Renn, 2008). Student development theory posits that there are some essential needs that must be made available for the knowledge improvement of students. It is anticipated that student needs are normally influenced by their genetics and environment. This theory can be grouped into five groups, namely, cognitive structural theory, psycho social theory, person-environment, student process model and humanistic existential (Astin, 1984).

Psychosocial theory is described as the future issues that are in line with sequential age, which concentrates on the individual's development through a multiple stages which are in relation with the students' needs (Moore, 1990). Further, the Cognitive structural theory is described as the way students rationalize and see their school experiences, while person-environment discussed in the link between the environment and conceptualization of students. Specifically, it looks into student and its environment. Similarly, humanistic existential theory discusses on some conceptualization of student nature, as well as the responsibility, self-actualization and freedom. Personal growth is determined by self-awareness, self-acceptance and self-actualization. The student development theory has to do with the practical and abstract of the needs of the student in the school (Upcraft & Moore, 1990). In view of the aforesaid discussion of students' development theory and in applying the theory to the school system, this theory serves as a framework for better knowledge on how student services should be catered for in the school system. The theory would enable students to discover the variety of services provided for them in order to progress academically in the school system (Renn, 2008).

Conceptual Framework

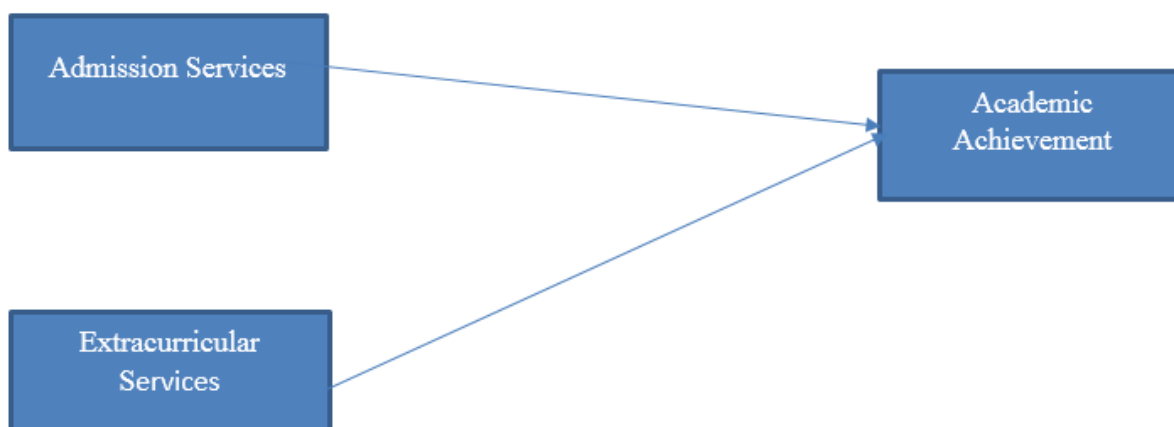


Figure 2.1: Proposed Framework on the relationship between admission, extracurricular services and academic performance

3 Materials and Methods

Research Design: This study adopts quantitative paradigm in examining the relationship between the independent variables (admission and extracurricular services) and dependent variable (academic achievement) of the study.

Respondent: The population for this study consists of secondary schools' students in Kwara State, Nigeria. Stratified and simple random sampling techniques were used to select 379 students, which formed the respondents for the study.

Instrument: Survey questionnaire tagged "Students' Personnel Services Questionnaire" (SPSQ) was used to elicit data from the students, while their results in five subjects (Mathematics, English Language, Biology, Geography and Economics) were used to measure their academic achievement. Items in the questionnaire were adapted and revised from the previous studies so as to suit the purpose of the study. The instrument has four Likert scale which range from Strongly Disagreed= 1, Disagreed= 2, Agree=3, Strongly Agreed=4. The 22 survey items used above are displayed in Table 1. In order to ensure the content validity of the items, experts in the field of research were given the questionnaires for their positive suggestions so as to make the questionnaire valid for the study. Statistical Package for Social Science (SPSS) was used for the initial screening of the data, the data screening includes normality, and missing value of the data to ensure non-distortion of the analysis. Also, a Partial Least Square (PLS SEM) was used to test the model of the study.

3.1 Variable Measurement

Table 3.1 Independent Variables

<i>Construct</i>	<i>Sources</i>
1. Admission Services	Adnett et al. (2010) Adnett et al. (2011)
2. Extracurricular Services	McCaugn (1999), Mestapelto and Pulkkinen (2014)

4 Analysis

In testing the model proposed in this study, we used Smart PLS (SEM) for outer and inner model for the purpose of analysis (Ringle et al., 2006). Looking at the configuration of the software, it is free from any postulation in terms of multicollinearity, sample size, normality, missing value etc. (Hossain, 2013). The instrument adapted for the study was subjected to reliability as well as construct validity test for suitability.

4.1 Descriptive Analysis of the Latent Constructs

This describes primarily on descriptive statistics of the latent variables used in this study. Descriptive statistics, which forms the mean as well as the standard deviation of the study variables were computed using Statistical Package For the Social Sciences (SPSS version 22) to arrive at the scores for the mean and standard deviation of each of the variables. All the variables in this study were measured using a four-point Likert scale (1-4) which was anchored by strongly disagree to strongly agree. The results of the analysis are presented in the table. For easy interpretation of the descriptive analysis, the four-point scale were classified into three groups, namely, low, moderate and high. Scores of less than 2 (i.e., 3/3+lowest value 1 is used as a low score), while a score of 3

(highest value 4-3/3) is considered as high. Lastly, those between the low and high scores are regarded as moderate (Sassenberg, Matschke, & Scholl, 2011) .

Table 4.1 Descriptive Statistics for the Latent Variables

Latent Constructs	Mean	Standard Deviation
Admission Services	2.910	.384
Extracurricular Services	3.895	.798
Academic Achievement	2.793	.985

Table 3 shows the total mean for the study’s constructs ranged between 2.793 and 3.895. Specifically, the students’ perception of the services in the school system, the mean and standard deviation for admission services were 2.910 and .384 respectively. This indicates that students tended to have a moderate level of perception of admission services in the school. For easy understanding of the level of the services as perceived by the students, Figure 2 below the bar chart of the admission services.

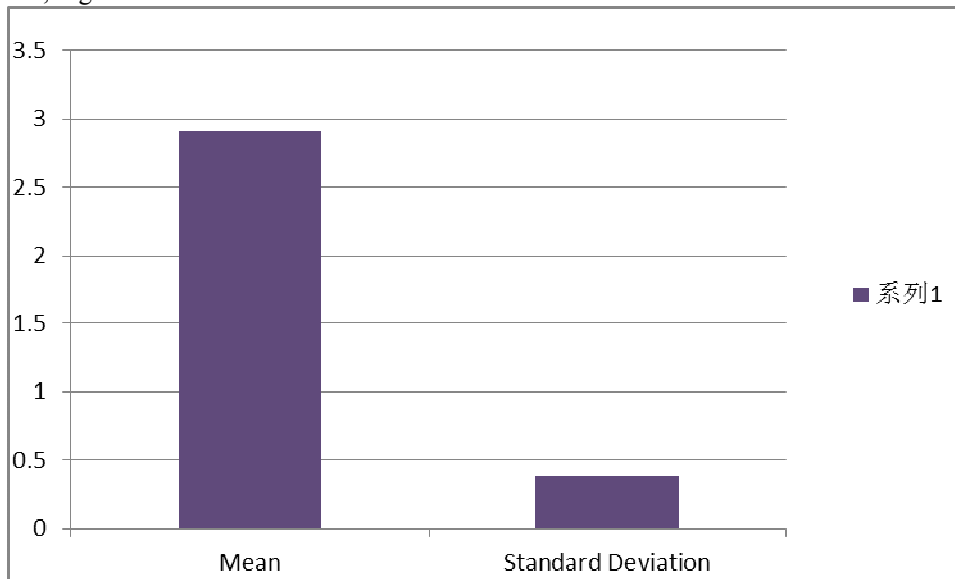


Figure 4.1 Students’ perception of admission services in the school

Also, Table 3 results revealed that the mean for the extracurricular services was 3.895, while the standard deviation is .798. This indicates that students tended to have a high level perception on the provision of extracurricular services in the school. The students’ perception of admission and extracurricular services are presented below for easy comprehension. In order for better understanding of the extracurricular services as perceived by the students, Figure 3 below shows the level of the services in the school.

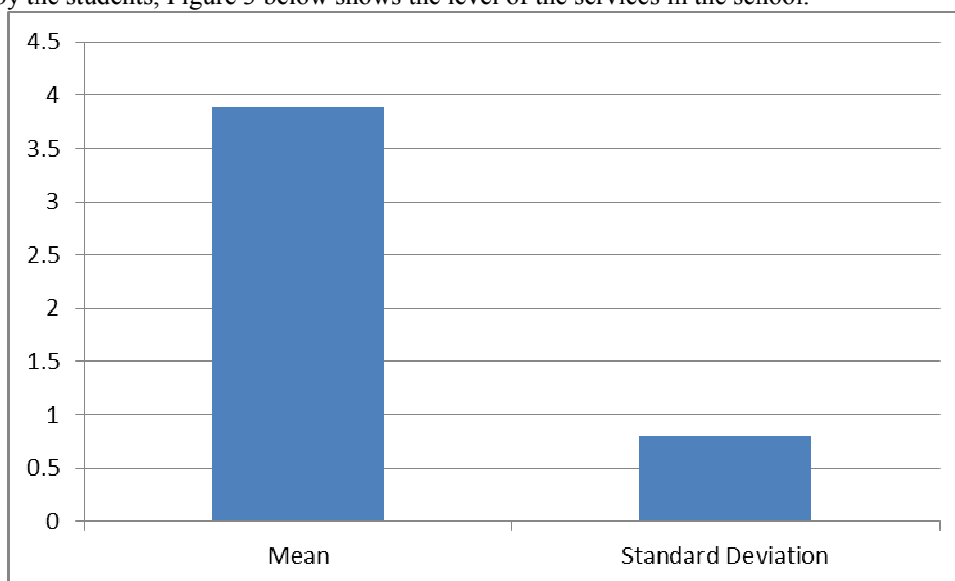


Figure 4.2 Students’ perception of extracurricular services in the school

4.2 Construct Reliability

The items in this study are reflective, therefore it's necessary to make sure that the measurement model is measured for internal consistency. The internal consistency can be done through convergent and discriminant validity of the variables as postulated by Bollen (1998), and Chin and Gopal (1997). In assessing the internal consistency of the measurement model, we used Fornell's composite reliability (Fornell & Larcker, 1981). Fornell and Larcker (1981) suggest that composite reliability that is greater or more than 0.7 which is in tandem with this study is good for composite reliability of the model. Further, the average variance extracted (AVE) is greater than 0.5 as suggested by Fornell and Larcker (1981) which shows that over 50% of the variance of the measurement items are accounted for the latent variables. The calculated composite reliability and Average Variance Extracted (AVE) of constructs have values that are greater or more than the suggested criteria as shown in table 2.

4.3 Construct Validity

Chin et al. (1997) sees construct validity as the extent to which a test measure what is supposed to be measured. This can be achieved through discriminant validity and the convergent validity of the model. Discriminant validity is defined as the measure of constructs that should not be connected or related theoretically, while convergent validity can be explained as the measure of constructs that should be connected or related theoretically. Both discriminant and convergent validity are subtypes of construct validity because they work interdependently as one alone is not appropriate to establish construct validity (Chin, 1999). Though it has been confirmed that item loadings that are greater than 0.50 are suitable for convergent validity and this is shown in this study as displayed in Table 4

Table 4.2 Factor Loading and Crossloadings

	Academic Achievement	Admission Services	Extracurricular Services
AA1	0.8205	0.3456	0.4396
AA 2	0.7359	0.3303	0.3346
AA3	0.8441	0.3823	0.4884
AA4	0.5272	0.156	0.097
AS4	0.2364	0.5138	0.2481
AS5	0.1733	0.5701	0.3111
AS6	0.3927	0.877	0.4773
AS7	0.3333	0.7447	0.5136
ES3	0.1192	0.4339	0.5031
ES4	0.1593	0.3227	0.5839
ES5	0.5799	0.4815	0.9462
ES6	0.1112	0.5212	0.5209

More so, the average variance extracted (AVE) can be used to gauge the discriminant validity. When the square root of the average variance extracted (AVE) of a particular construct is conducted, its value should be greater or more than.

Table 4.3 Convergent and Reliability Analysis

Constructs	No of Items	Loadings	Composite Reliability	Cronbach's alpha	AVE
Academic Achievement	AA 1	0.8205	0.8268	0.739	0.5513
	AA 2	0.7359			
	AA3	0.8441			
	AA4	0.5272			
Admission Services	AS4	0.5138	0.7781	0.6218	0.5182
	AS5	0.5701			
	AS6	0.877			
	AS7	0.7447			
Extracurricular Services	ES3	0.5031	0.7444	0.6475	0.5304
	ES4	0.5839			
	ES5	0.9462			
	ES6	0.5209			

Table 5 reveals that the results of the average variance extracted (AVE) with coefficient, which range from 0.5182 to 0.5513, which shows that all the constructs and convergent validity has been established. Also, the table shown above reveals that composite reliability that has values between 0.7444 and 0.8268. The composite reliability is normally used by researchers instead of cronbach's alpha that makes the equality assumption among all the constructs because of its sensitivity to a number of items embedded in the scale and

this undervalues or underestimates the internal consistency reliability (Hair et al., 2014). With the results of the composite reliability, convergent validity, and satisfactory average variance extracted (AVE) coefficients for the individual items. It has been established that the indicators represent distinct latent constructs thereby shows their convergence validity.

Table 4.4 Discriminant Validity

	Academic Achievement	Admission Services	Extracurricular Services
Academic Achievement	0.742495791	0	0
Admission Services	0.4321	0.691520065	0
Extracurricular Services	0.5111	0.5797	0.663475697

Diagonal elements are the square root of AVE. The values should exceed the inter-constructs correlation for adequate discriminant validity

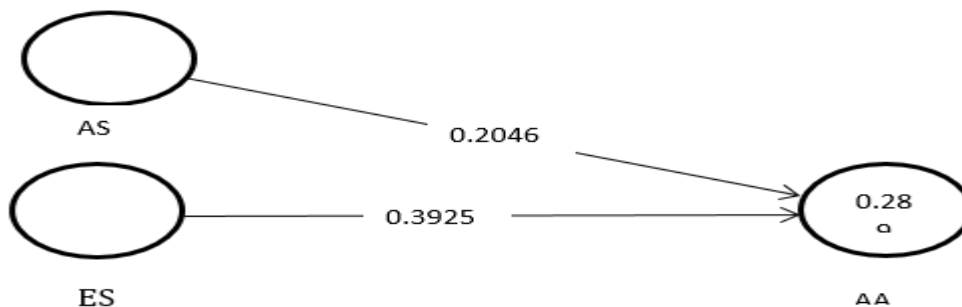


Figure 4.3: PLS Algorithm for direct relationship between IVs and DV

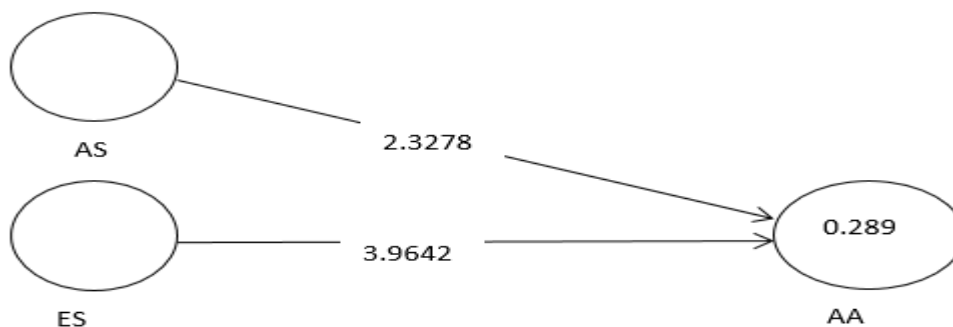


Figure 4.4: PLS Bootstrapping for direct relationships between IVs and DV

4.4 Structural Assessment Model

A Smart PLS bootstrap was ran to assess the structural model of the study. The reason for doing this is to test the level of variance of the dependent variable that is caused by the independent variables. In the light of the foregoing, Table 6 shows the standard path coefficient (β) is gotten from a PLS algorithm (figure 3), and t-value and P-value (figure 4) that is gotten from bootstrapping and decision are taken. As shown in Table 6, the two hypothesized relationships are significant. The two significant relationships are Admission Services (AS) and Academic Achievement ($\beta=0.2046$; $t=2.3278$; $p < 0.04$), Extracurricular Services and Academic Achievement ($\beta=0.3925$; $t=3.9642 < 0.03$).

Table 4.5 Results for direct relationship between IVs and DV

Path of Coefficient	β	STDEV	Standard Error	T value	P value	Decision
Admission Services -> Academic Achievement	0.2046	0.0879	0.0879	2.3278	0.04	Supported
Extracurricular Services -> Academic Achievement	0.3925	0.099	0.099	3.9642	0.03	Supported

Note: R^2 of endogenous variable is 0.289 which is acceptable based on the recommendation of Falk and Miller, (1992) that R^2 of .10 and above is acceptable.

5 Discussion and Implications of Findings

Important factors that impact the academic achievement of students in secondary school have been investigated empirically in this study. The extended model shows that all the two relationships are supported. The first

hypothesis (H1), shows that the relationship between admission services and academic achievement is positive and significant ($\beta=0.2046$; $t=2.3278$; $p<0.04$). In the light of this, prior studies conducted by Okoroma(2008), Sacket et al. (2009), and Shaw et al. (2013) found similar findings on the relationship between admission services and academic achievement in school. This finding show that nature of admission services influence the achievement of the students. Admission services in the school are akin to the success of the school. Conduct of entrance examination and interview for applicants assists the school to select the best candidate for placement. The current attests to that due to the admission standards in the school used for the study.

Also, the relationship between extracurricular services and students' academic achievement in school are positive and significant in this study ($\beta=0.2046$; $t=3.9642$; $p<0.03$). The outcome of this finding is consonance with the studies of Adeyemi (2010) and Archibong (2011). This finding depicts the importance of having extracurricular services for students in school. It means that students who engage in various extracurricular activities tend to achieve high in his/her academic achievement in school. Having extracurricular services stimulate the students to participate which in turn positively influence their academic performance in school. School as a mini society must be proactive in the provision of extracurricular services towards actualizing one's aims and objective in education system. More so, this study had contributed to the body of knowledge practically, theoretically and methodologically. Practically, the findings of this study will help stakeholders in education on how best to provide extracurricular, admission and other aspects of student personnel services in the school for the benefit of students; this would enhance their academic achievement. Theoretically, student development incorporated in the study had been validated because explained the significance of the presence of school services to students. Since most of the studies hardly use this theory, the theory was used and validated in this study. Methodologically, two types of data (primary and secondary) were used for the study. The independent variables were measured subjectively while the independent variable was measured subjectively.

In conclusion, the importance of admission and extracurricular services which are dimensions of student personnel services in school are very important aspect in the development of the school. The importance of this cannot be quantified hence, the need to have prompt provision of these essential services.

5.1 Recommendations and Future Research Direction

In view of the above discussion, we would like to recommend that, adequate provision of extracurricular services should be made available in schools. Schools should allow their students to be involved in participating in various extracurricular services. More time should be allocated for the involvement of students in extracurricular services. Also, the admission service procedure should be maintained in the school system to ensure quality assurance in the education system. In view of the findings, we would like to suggest that, future studies should focus on other aspects of student personnel services and academic achievements like health, accommodation services, and bursary services etc. for the overall development. Since one study cannot be generalized, the scope of the future studies should be extended to focus more on larger respondents by extending it to geopolitical zones in the country or the entire schools in Nigeria.

References

- Adeyemo, S. A. (2010). The relationship between students participation in school based extracurricular activities and their achievement in physics. *International Journal of Science and Technology Education Research*, 1(6), 111-117.
- Adnett, N., McCaig, C., Slack, K., & Bowers - Brown, T. (2011). Achieving 'Transparency, Consistency and Fairness' in English Higher Education Admissions: Progress since Schwartz?. *Higher Education Quarterly*, 65(1), 12-33.
- Agboola, B., Adeyemi, J. K., & Ogbodo, C. M. (2014) Academic Achievement and Admission Policy as Correlate of Student Retention in Nigerian Federal Universities. *Journal of Educaon*, 1(8), 324-335.
- Albanese, M. A., Snow, M. H., Skochelak, S. E., Huggett, K. N., & Farrell, P. M. (2003). Assessing personal qualities in medical school admissions. *Academic Medicine*, 78(3), 313-321.
- Ali, P. A. (2008). Admission criteria and subsequent academic performance of general nursing diploma students. *Journal of the Pakistan Medical Association*, 58(3), 128.
- Archibong, F. I., Jude, W. I., & Etudor-Eyo, E. (2011). Influence of gender and quota admission system on students 'academic performance in unity schools. *International Journal of Academic Research*, 3(5).
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25(4), 297-308.
- Bolapeju, M., Adeyemi, J. K., & Ogbodo, C. M. (2014). Academic Achievement and Admission Policy as Correlate of Student Retention in Nigerian Federal Universities. *International Journal of Business and Social Science*, 5(2).
- Bollen, K.A. (1989). Structural equations with latent variables. Wiley, New York.

- Boyd, K. H. (2004). *An analysis of selected pre-and post-admission variables as they relate to the retention of new freshmen at a large, research, public university* (Doctoral dissertation, Texas A&M University).
- Bryant, A., Bolton, N., & Fleming, S. (2015). Extracurricular sport and physical activity in Welsh secondary schools: Leisure lifestyles and young people.
- Chang, T. M., & Shon, Z. (2015). Exploring the Relationship on Service Quality and Satisfaction of Extracurricular Activity Section of Universities in Taiwan. In *LISS 2014* (pp. 1579-1584). Springer Berlin Heidelberg.
- Chen, L. J., Fox, K. R., Ku, P. W., & Wang, C. H. (2012). A longitudinal study of childhood obesity, weight status change, and subsequent academic performance in Taiwanese children. *Journal of School Health, 82*(9), 424-431.
- Chin, W.W.; Gopal, A. & Salisbury, W.D. (1997). Advancing the theory of adaptive structuration in the development of a scale to measure faithfulness of appropriation. *Infysyst Res 8*(4), 342-367.
- Clinedinst, M. E., & Hawkins, D. A. (2011). State of college admission. Washington, DC: National Association for College Admission Counseling.
- Creamer, D. G. (Ed.). (1980). *Student development in higher education: Theories, practices, and future directions* (No. 27). American College Personnel Association.
- Dieringer, S. T., & Judge, L. W. (2015). Inclusion in extracurricular sport: A how-to guide for implementation strategies. *Physical Educator, 72*(1), 87.
- Fan, A. P., Tsai, T. C., Su, T. P., Kosik, R. O., Morisky, D. E., Chen, C. H., & Lee, C. H. (2010). A longitudinal study of the impact of interviews on medical school admissions in Taiwan. *Evaluation & The Health Professions, 33*(2), 140-163.
- Federal Republic of Nigeria (2004). 4th Ed. National Policy on Education. Federal Ministry of Education. Lagos, Nigeria.
- Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 39*-50.
- Hair Jr, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2010). SEM: An introduction. *Multivariate data analysis: A global perspective*, 629-686.
- Hossain, S., & Faisal, R. A. (2013). Guidance and Counseling Services in Schools of Bangladesh: An Exploratory Study. *Online Submission*.
- Hunt, H. D. (2005). The Effect Of Extracurricular Activities In The Educational Process: Influence On Academic Outcomes. *Sociological Spectrum, 25*(4), 417-445. Doi: 10.1080/027321790947171.
- Joshua, S., Loromeke, R. E., & Olanrewaju, I. P. (2014). Quota System, Federal Character Principle and Admission to Federal Unity Schools: Barriers to Learning in Nigeria.
- Jurajda, Š., & Münich, D. (2008). Gender gap in performance under competitive pressure. Centre for Economic Policy Research.
- Kariyana, I., Maphosa, C., & Mapuranga, B. (2012). The influence of learners' participation in school co-curricular activities on academic performance: assessment of educators' Perceptions. *Journal Social Science, 33*(2), 137-146.
- Kim, S. Y., & So, W. Y. (2012). The relationship between school performance and the number of physical education classes attended by Korean adolescent students. *Journal of Sports Science & Medicine, 11*(2), 226.
- Ludeman, R. B. (2002). The role of student affairs and services in Higher Education: A practical manual for developing, implementing, and assessing student affairs programs and services. *Online Submission*.
- McCaughn, K. P. (1999). The Maturation Of High School Students Involved In Extracurricular Activities As Witnessed From A Guidance Counsellor's Perception (Doctoral dissertation, University of Wisconsin-Stout).
- McGaha, V., & Fitzpatrick, J. (2010). Employment, Academic and Extracurricular Contributors to College Aspirations. *Journal of College Admission, 207*, 22-29.
- Metsäpelto, Riitta-Leena, and Lea Pulkkinen. "The benefits of extracurricular activities for socioemotional behavior and school achievement in middle childhood: An overview of the research." *Journal for educational research online* 6, no. 3 (2014): 10-33.
- Ogundele, G. A., Olanipekun, S. S., & Aina, J. K. (2014). Factors affecting students' academic performance. *Scholars Journal of Arts, Humanities and Social Sciences ISSN 2347-5374 (Online)*.
- Ohiorenuan, O. J. (2008). Extra-Curricular activities and teacher attitude to girl-child education and psycho-emotional preparedness. *Journal of Social Science, 17*(1), 73-82.
- Okoroma, N. S. (2008). Admission Policies and the Quality of University Education in Nigeria. *Educational Research Quarterly, 31*(3), 3-24.
- Oladokun, V. O., Adebajo, A. T., & Charles-Owaba, O. E. (2008). Predicting students' academic performance using artificial neural network: A case study of an engineering course. *The Pacific Journal of Science*

- and Technology*, 9(1), 72-79.
- Pence, A. R., & Dymond, S. K. (2015). Extracurricular School Clubs: A Time for Fun and Learning. *Teaching Exceptional Children*, 47(5), 281.
- Pitts, S. E. (2013). Would you credit it? Navigating the transitions between curricular and extra-curricular learning in university music departments. *Arts and Humanities in Higher Education*, 12(2-3), 194-203.
- Renn, K. (2008). The application of student development theories in a practical introduction to use student development theories [J]. *Journal of Higher Education*, 3, 004.
- Sackett, P. R., Kuncel, N. R., Arneson, J. J., Cooper, S. R., & Waters, S. D. (2009). Does socioeconomic status explain the relationship between admissions tests and post-secondary academic performance?. *Psychological bulletin*, 135(1), 1.
- Sassenberg, K., Matschke, C., & Scholl, A. (2011). The impact of discrepancies from in group norms on group members' well - being and motivation. *European journal of social psychology*, 41(7), 886-897.
- Shaw, E. J., Marini, J. P., & Mattern, K. D. (2013). Exploring the utility of advanced placement participation and performance in college admission decisions. *Educational and Psychological Measurement*, 73(2), 229-253.
- Soares, J. A. (2012). The future of college admissions: Discussion. *Educational Psychologist*, 47(1), 66-70.
- Taras, H. (2005). Physical activity and student performance at school. *Journal of School Health*, 75(6), 214-218.
- Upcraft, M. L., & Moore, L. V. (1990). Evolving theoretical perspectives of student development. *New futures for student affairs*, 41-68.
- Vassiliou, A. G., Kotanidou, A., Mastora, Z., Maniatis, N. A., Albani, P., Jahaj, E., & Orfanos, S. E. (2015). Elevated soluble endothelial protein C receptor levels at ICU admission are associated with sepsis development. *Minerva anesthesiologica*, 81(2), 125-134.