

IMPACT AND SIGNIFICANCE OF TRANSPORTATION AND SOCIO ECONOMIC FACTORS ON STUDENTS' CLASS ATTENDANCE IN NIGERIA POLYTECHNICS: A Study of Moshood Abiola Polytechnic

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Abstract - *This study examined the impact and significance of transportation and socio economic factors on students' class attendance. For the successful execution of this research work, primary data via self-administered questionnaires was employed. These were administered to 150 randomly selected students of Moshood Abiola Polytechnic, Abeokuta, Ogun State, Nigeria. Data collected were analyzed electronically using SPSS 21. The analysis techniques employed were Multiple Regression, Correlation Matrix and Coefficient of Determination. Results from the analysis revealed that transportation and socio-economic factors have positive effect on students' class attendance. However their positive effects are not independently and jointly statistically significant. In terms of magnitude of impact, socio economic factors impact more on students' class attendance than transportation factor. In addition, transportation and socio-economic factors contribute to approximately 49.8% of the variation in students' class attendance. The multiple correlation coefficient value indicates that there is a strong positive but imperfect correlation between the dependent variable (class attendance) and the independent variables (transportation and socio economic factors).*

Keywords: *Class Attendance, Socio Economic Factors, Transportation*

1. INTRODUCTION

The multiple regression is a statistical tool use to derive the value of a criterion from several independent, or predictor variables. It is the simultaneous combination of multiple factor to assess how and to what extent they affect a certain outcome. The regression analysis is also used to investigate relationship between quantitative variables; a dependent variable, whose value is to be predicted, and an independent variable, about which significant knowledge is available. This statistical tool is

used to develop the equation that represents the relationship between the variables. Multiple regression analysis provides an equation that predicts dependent variables from two or more independent variables.

In other words, it can be said that multiple regression involves a single dependent variable from two or more independent variables.

In some situations researchers are interested in determining the underlying effect of one variable on another variable vis-à-vis the effect of transportation and socio economic factor on students, class attendance. At the same time, the researchers also asses the statistical significance of the estimated relationship, that is the degree of relationship that the true relationship is closed to the estimated relationships. The statistical tool is concerned with the nature as well as the degree of association between variables.

The issue of the impact of transportation and socio economic factors on students' class attendance is one that has been on long standing but increasing concern in some higher institutions. This study uses Moshood Abiola Polytechnic; an off-campus institution as a case study.

Being an off-campus institution, there are lots of challenges students face in attending their lectures, among which are the transportation and socio economic factors under study. The need to assess the impact of transportation and socio-economic factors on students' class attendance is the motivation of this study.

2. STATEMENT OF THE PROBLEM

The problem of this research work is to investigate the level to which transportation and socio-economic factors has affected the attendance of students in class.

3. AIM AND OBJECTIVES OF THE STUDY

The aim of this research work is to examine the impact and significance of transportation and socio-economic factors on students' class attendance in Moshood Abiola Polytechnic.

The objectives are:

1. To determine the significance of transportation factors on students class attendance.
2. To determine the significance of socio economic factors on students class attendance.
3. To determine the joint significance of transportation and socio economic factors on students class attendance.
4. To determine the proportion of variation in students' class attendance that is being explained by the transportation and socio economic factors.

4. SCOPE OF THE STUDY

This study is with respect to students of Nigeria polytechnics. The survey covers 150 randomly selected students of Moshood Abiola polytechnic across all the departments of the institution. It included both the male and female students of the institution.

5. LITERATURE REVIEW

Recent Quality Assurance Agency/Higher Education Funding Council for England (QAA/HEFCE) policy documents have shown that student's non-attendance is an area for concern (Morgan, 2001). The present research seeks to add to the educational literature in the area of students' attendance at lecture via an empirical study on transportation and socio-economic factors underlying students class attendance at Moshood Abiola Polytechnic.

Thus, this question inevitably arises: Does nonattendance affect students' success in a course? The answer according to Longhurst (1999) is "yes" although it is generally recognized that not all students learn best from a lecture type scenario. There seems to be some concern moreover that nonattendance is indicative of lower levels of motivations amongst students. The importance of the issue can be seen in reports and articles such as that recently presented by Longhurst (1999) who noted that "figures of the order of one quarter of all students absent on any given day are not

usual". Longhurst also noted that absentee resulted in poor learning for those absent.

This study is important to understand the histories of how transportation and socio-economic factors affects the class attendance in Moshood Abiola Polytechnic using multiple regression analysis as the statistical tools and in order to better understand its application to this research work.

Transportation as a factor

Wright (1978) found a significant difference in attendance to be associated with transportation. Also, he reported that courses offered, youthfulness of the teaching staffs and progress were factors associated with class attendance.

The campus population is much more than the amount of campus buses which really affects the students' class attendance. All of these items are the result of specific factors that are directly related to transportation trends.

The factors affecting campus transportation policies practice (Toor, 2005) are:

1. The physical layout as driven campus growth, the campus master plans and aesthetics considerations. Aesthetics and the value of campus given spaces influence packing and transportation programs.
2. The philosophy about transportation priorities is determined by the governing body (reagent, trustee's and so on) or students' initiatives are implemented by institution administration.
3. Resources available both staff and funding to create efficient campus transportation options.
4. The physical transportation options.
5. The physical transportation infrastructure in the surrounding region that is urban campuses.
6. Residential campuses differ from commuter campuses.
7. The trend of more students and employees living farther away from campus in order to achieve rents or ownership savings.
8. The cost of parking.

Socio-economic factors

Socio economic factors are the social and economic experiences and realities that help mould one's personality, attitudes, and lifestyle. The socio-economic state according to dictionary.com is an individuals or groups position within a hierarchical social structure. Socio-economic status depends on a combination of variables, including occupation, education, income, wealth and place of residence. Sociologists often use socio-economic status as a means of predicting behaviour (Applegate K., 2003).

The socio-economic status of a child is most commonly determined by combining parents' educational level, occupational status and income level (Jeynes 2002). Studies have reportedly found that socio-economic status affects students' outcome (Bahardin and Inster 1998, Jeynes 2002, Eamon 2005, Majoribanks 1996, McNeal 2001).

6. METHODOLOGY

Research design

This research work was carried out to examine the impact and significance of Transportation and Socio Economic factors on students' Class Attendance in Nigeria Polytechnics.

For the successful execution of this research work, primary data via self-administered questionnaires was employed. These were administered to 150 randomly selected students of Moshood Abiola Polytechnic, Abeokuta, Nigeria. Data collected were analyzed electronically using SPSS 21.

Techniques of data analysis

The analysis techniques employed were Multiple Regression, Correlation Matrix and Coefficient of Determination.

Method of data analysis

In analyzing the data for the impact of Transportation and Socio Economic factors on students' Class Attendance, a regression analysis was conducted to determine the individual effect and significance of the explanatory variables. Transportation and Socio Economic factors were taking as the explanatory variables while the Class Attendance was taken as the explained variable. Regression ANOVA is used to determine the joint significance of the explanatory variables on the explained variable. Bivariate correlation (via correlation matrix) between the variables was analyzed by Pearson correlation coefficient. Coefficient of determination to explain the proportion of the variation in Class attendance that is being explained by Transportation and Socio Economic factors was equally computed.

7. RESULT

TABLE 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.699 ^a	.489	.234	4.58803

a. Predictors: (Constant), SocioEconomic, Transportation

TABLE 2: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	80.657	2	40.329	1.916	.261 ^b
	Residual	84.200	4	21.050		
	Total	164.857	6			

a. Dependent Variable: ClassAttendance

b. Predictors: (Constant), SocioEconomic, Transportation

TABLE 3: Coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-24.054	25.638		-.938	.401
Transportation	.006	.214	.010	.028	.979
SocioEconomic	1.595	.815	.700	1.957	.122

a. Dependent Variable: ClassAttendance

TABLE 4: Correlation Matrix

		Transportation	Socio Economic	Class Attendance
Transportation	Pearson Correlation	1	-.020	.238
	Sig. (2-tailed)		.966	.264
	N	24	7	24
Socio Economic	Pearson Correlation	-.020	1	.016
	Sig. (2-tailed)	.966		.923
	N	7	41	41
Class Attendance	Pearson Correlation	.238	.016	1
	Sig. (2-tailed)	.264	.923	
	N	24	41	150

8. DISCUSSION OF RESULTS

The model summary table indicates that approximately 48.9% of the variation in students' class attendance is being explained by transportation and socio-economic factors with a R² value of 0.489. A multiple correlation coefficient value of 0.699 indicates that there is a strong positive but imperfect correlation between the dependent variable and the independent variables.

The regression ANOVA table indicates the joint significance of the independent variables on the dependent variable. A Sig. value of 0.261 (which is

greater than the set 5% level of significance) from indicates that the independent variables (transportation and socio-economic factors) do not jointly exert significant influence on students' class attendance.

The regression coefficients table indicates the impact and significance of the individual independent variables. The positive values of the coefficients of the independent variables indicate that transportation and socio-economic factors both have positive effect on students' class performance. However, a look at the Sig. values shows that of the two independent variables under study none is independently a statistically useful predictor of students' class attendance with a Sig. value of 0.979 and 0.122 respectively. In other words, neither the transportation factor nor the socio-economic factor independently exerts significant influence on students' class attendance. In terms of magnitude of impact, socio economic factors (Beta = .700) impact more on students' class attendance than transportation factor (Beta = 0.010).

The correlation matrix from Table 4 indicates that there is a weak positive imperfect relationship between transportation factors and class attendance, and between socio-economic factors and class attendance. However, there is a weak negative imperfect relationship between transportation factors and socio-economic factors. Of these three bivariate correlations none is significant at 95% confidence level.

9. CONCLUSIONS

From the results of this study, it can be concluded that transportation and socio-economic factors have positive effect on students' class attendance. However their positive effect is not individually and jointly statistically significant. In addition, transportation and socio-economic factors contribute to approximately 49.8% of the variation in students' class attendance.

10. RECOMMENDATIONS

In the light of the findings of this study, the following recommendations are made to ensure punctuality in class attendance.

1. Since transportation factors affect students' class attendance positively; the school management, the government and concerned stakeholders should ensure the constant provision of effective and adequate transportation system for the students from time to time.
2. Similarly, having discovered that socio-economic factors affect students' class attendance positively, the students should take the front sit in the affair of their social-economic factors. Parents and concerned stakeholders should equally strive to contribute effectively to the management of the students' socio-economic factors.
3. Since transportation and socio-economic factors jointly contribute to approximately 49.8% of the variation in students' class attendance, it is recommended that a combination of other factors or combination of these two factors with other factors should be looked into so as to determine the best combination that would have higher contributing effect to student's class attendance.

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