In-Migration, Distance and Patronage of Secondary Schools in Urban Zaria, Kaduna State, Nigeria

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

Original Research Article

ABSTRACT

The study is concerned with In- Migration, Distance and Patronage of Secondary Schools in Urban Zaria, Kaduna State, Nigeria. Data was obtained through the administration of 210 questionnaire for students and 35 questionnaire for Tutors. Data collected were analyzed using descriptive statistics. Multiple regression was used to test the stated hypothesis that distance is a significant determinant of secondary schools in urban Zaria. The study reveals that 48.2 percent and 36.5 percent consider perception and income respectively, as the most important factors that determine patronage of secondary in urban Zaria. Furthermore, R^2 of 96.3% shows that the relationship between variables used in the study is quite strong. This view is supported by the F- ratio obtained (26.0270). The presence of educational institution in Urban Zaria, Kaduna, State, Nigeria is the major pull factor of migrant. This is because most of the migrant came to urban Zaria to seek employment opportunities in the educational institutions. It is important to note that the children of these migrant are enrolled in the various secondary schools. Therefore, all stakeholders (Federal Government, State Ministry of Education, Private individuals) must be committed to the provision of quality education.

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1. INTRODUCTION

The population growth of any urban centre is as a result of natural increase and migration. In recent times, migration has been the major factor of population increase.

Migration is the long-term relocation of an individual, household or group to a new location outside the community of origin. It is geographic or spatial movement of people across political boundaries involving change in usual place of residence and for relatively long periods of time. The dominance of an investment or resources in a particular area attracts migrants. This situation was observed in urban Zaria, Kaduna State, Nigeria.

The presence of educational institutions in urban Zaria has attracted migrant. The various educational institutions in urban Zaria are the Ahmadu Bello University, the State Polytechnic, College of Aviation Technology, School of Nursing, and Leather Technology among others. These institutions provide employment opportunity for over seventy (70) percent of residents living outside the city wall.

The population of urban Zaria (Sabon- Gari L.G.A) has been on the increase over the years. In 1991, the population was 224,067. And in 2006, it was projected to be 291,358 [1]. This increase is due to in-migration as people come to seek for employment opportunities in the various educational institutions.

Secondary education is defined as education for children of about eleven (11) years of age and above. In Nigeria, secondary education is part of the 6,3,3,4 educational systems introduced into the country in the year 1987 by Prof. Jibril Aminu, the then minister of education. Secondary education in urban Zaria includes teacher colleges, commercial colleges, science colleges and missionary schools [2]. The children of these migrant patronise the secondary schools.

It has been identified in various studies that the Patronage of Secondary schools is being determined by the following factors. These are; Parent level of education, income, occupation, preference, confidence and taste [3,4,5]; the child gender [6]; and quality of education offered [7,8]. Other factors are better or committed Teachers [8,9]; and distance or nearness to home [9,10].

Spatial interaction is the movement of people, commodities and information [11]. Postulated three conditions that affect interaction. These are complementarity, transferability and intervening opportunities. It is important to observe that for a student to patronise any school; the school must be ready to supply education which is complementarity. Also, the establishment of a new school in between the former school of the student may force him/her to change school. This is as a result of intervening opportunity. And, if the time and money cost of traversing the distance to school is large, the student may decide to have a substitute of school around his/her place of residence. This could be explained in terms of transferability [2].

The fundamental aspect of the concept of distance is that it depends upon the relative location of points [12]. Therefore, the patronage of secondary schools in urban Zaria may be due to the relative location with respect to other locations. Distance can be measured in term of physical, time, economic, social, income and perception. How far has these distance variables affect patronage of the secondary schools in urban Zaria?

There is paucity of research on the role distance play on the patronage of secondary schools in urban Zaria. Hence, the research will fill the existing gap and add to the body of knowledge.

2. DATA AND METHODS

The data for this study was collected from seven (7) secondary schools that were selected randomly within urban Zaria. A total of 210 questionnaire were administered to the students. The questionnaire was distributed 30 each among the seven (7) schools within urban Zaria. Fifteen students (15) were systematically selected each from JSS and SSS classes. This is done by arranging students in JSS classes and given numbers. Identifying number 1, 5, 10, 15, ---------.70; making a total of fifteen (15) students were selected. Similar procedure was used for the SSS classes. The students were expected to answer questions on distance to their school, place of residence and reasons for attending school.

Also, 35 questionnaire were administered to the tutors in the seven (7) schools. Five (5) tutors were randomly selected from each of the schools. The tutors were expected to answer questions on the number of students in their classes, educational qualification and place of residence. Descriptive statistics such as frequency distribution was used to analyse and interpret the data. Multiple regression was used to analyse and interpret spatial variables.

3. HYPOTHESIS

H0: Distance is not a significant determinant of patronage of secondary schools in urban Zaria.

H1: Distance is a significant determinant of patronage of secondary schools in urban Zaria.

4. RESULTS AND DISCUSSION

4.1 Demograhic and Socio-economic Characteristics of Tutors

The data on demographic and socio-economic characteristics of tutors were collected and presented in Table 1. The table indicates that 38.2 percent of the tutors are within the age brackets of 31-35 years. The analyses show that the populations of the tutors in urban Zaria are youthful. This is typical of urban centres in developing countries as youth migrate for better job opportunities in urban centres.

Information on the sex structure of the tutors was collected and analysed. The result indicates that 82.4 percent of the tutors were male and 17.6 percent female. This is a reflection of the pattern of sex composition in urban centres in developing countries as the male usually migrates for better opportunities than the female.

The table also shows information on the tutors' qualification. It reveals that 61.8 percent of the tutors were degree holders and 38.2 percent NCE holders (qualification for professional teachers in Nigeria). This suggests that most of the secondary schools in urban Zaria have good tutors. The result is an indication that quality education is being provided by the schools. And this encourages the patronage of these schools. This correlates with the findings of [9], that better and committed teacher encourage patronage of schools.Data on the income of the tutors were collected and analyse. It reveals that majority of the tutors 82.4 percent receive income between

#5,000 - #15,000. This is typical of tutors in state secondary schools in Nigeria.

Table 1. Percentage distribution and socio-economic characteristics of tutors

Variable	Frequency	Percentage
Age		
25-30	5	14.7
31-35	13	38.2
36-40	9	26.5
41-45	4	11.8
Above 46	3	8.8
Sex		
Male	28	82.4
Female	6	17.6
Qualification		
NCE	13	38.2
Degree	21	61.8
Income		
Less than #5000	-	-
#5001-#10,000	12	35.3
#10,001-#15,000	16	47.1
#15,001-#20,000	6	17.6

Source: Field Survey 2000

4.2 Information on Tutors' of Secondary Schools in Urban Zaria

Data on the tutors' place of residence, means of transportation, location and number of students in class was collected and analysed. This was done in other to assess its impact on patronage of secondary schools in urban Zaria, Kaduna State, Nigeria.

Table 2 reveals the place of residence of tutors. The table indicates that 52.9 percent of the tutors reside in Sabon- Gari/Pallandan. This is not unconnected with the fact that most migrant resides in Sabon- Gari/Pallandan. And therefore, schools are easily found in such area. This explains work/residence place relationship that will possibly lead to efficiency and ultimately patronage.

Data on the means of transportation of tutor which aid their trip to school or work place was collected and analysed. It indicates that 47.1 percent trek to school, 26.5 percent use bicycles, 20.6 percent motorcycles and 5.9 percent use cars. This suggests that closeness of place of residence and low income earned by tutors necessitates trekking as the highest means of transportation to school. This is supported by the data collected and analysed on location of school to tutors place of residence. It reveals that 44.1

percent of tutors' place of residence is near, 41.2 percent and 14.7 percent far and very far respectively. This explains efficiency in job as tutors will make it to school on time and therefore encourage the patronage of these schools.

Table 2. Percentage Distribution of information on tutors

Variable	Frequency	Percentage
Place of residence		
Zaria City	4	11.8
Tudun Wada/Gaskiya	7	20.6
Wusasa	4	11.7
Kongo	1	2.9
Sabon Gari/Pallandan	18	52.9
Means of transport		
Trekking	16	47.1
Bicycle	9	26.5
Motorcycle	7	20.6
Car	2	5.9
Location of sch. to tutors residence		
Near	15	44.1
Far	14	41.2
Very far	5	14.7

Source: Field Survey 2000

4.3 Information on Students' of Secondary Schools in Urban Zaria

Table 3 gives the data on the students of Secondary schools in urban Zaria, Kaduna State, Nigeria.

The table shows that most students patronise these secondary schools due to their perception and income. This is indicated by 48.2 percent and 36.5 percent respectively. Income is explain in term of cost of the school fees, parents low wage and low standard of living. And perception is explained in terms of affection of students to their parent and desires to help their parents at home. Income and perception of parents determines the school that will be chosen for their ward.

Data on average distance covered by the students to school was collected and analyse. The data shows that 36 percent and 48.7 percent of the students covers the distance of 0-1 km and 1-2 km respectively. This is because the schools are located within settlement close to place of residence. This explains patronage and trips to school in terms of physical distance.This is supported by [9], that distance or nearness to home determines the patronage of schools.

The data on parent status of the students was collected and analyse. The table reveals that 31.5 percent of the parents are civil servant. This is followed by 26.4 percent, 23.4 percent, 12.2 percent and 6.6 percent that are businessmen/traders, other occupations, armed forces and farmers respectively. This is not unconnected with the fact that the parent resides outside the city wall and they are migrant that are employed in most educational institutions in Urban Zaria, Kaduna State, Nigeria.

Table 3. Percentage distribution of information on student

Variable	Frequency	Percent
Average distance covered by student		
0-1 km	71	36
1-2 km	96	48.7
2-3 km	8	9.1
Above 3 km	12	6.1
Distance variables		
Income	72	36.5
Perception	95	48.2
Security	9	4.6
Proximity	21	10.7
Parent status		
Farmer	13	6.6
Civil Servant	62	31.5
Armed Forces	24	12.2
Business Trader	52	26.4
Others	46	23.4

Source: Field Survey 2000

4.4 Testing the Hypothesis

Table 4 shows the regression analysis for testing the hypothesis. A test of hypothesis was done based on the data obtained from the study area and the following relationship was established.

The Regression line and the statistical input are stated thus;

$$\hat{Y} = 33.206 - 1.364X_1 - 0.763X_2 + U$$
$$(-2.3284) \quad (-5.7239)$$
$$R^2 = 96.3\%$$
$$F = 26.0270$$

The analysis of the regression is as follows. It is intuitively expected that income and perception should have a negative effect on patronage of secondary schools in urban Zaria. Therefore, we expect the coefficient of X_1 to have a negative sign and X_2 to have a negative sign. The results obtained for X_1 (income) and X_2 (perception) is correct since it has a negative sign.

Table 4. Regression analysis

S/no	Dist. Y₁	Income X₁	Perception X₂	Y₁ Y-Ȳ	X₁ X-X̄	X₂ X-X̄	Y²	X₁²	X₂²
1	22	4	7	8.4	-1.2	-9.4	70.56	1.44	88.36
2	8	7	19	-5.6	1.8	2.6	31.36	3.24	6.76
3	12	4	20	-1.6	-1.2	3.6	2.56	1.44	12.96
4	11	5	21	-2.6	-0.2	4.6	6.76	0.04	21.16
5	15	6	15	1.4	0.8	-1.4	1.96	0.64	1.96
	Ȳ=13.6	X̄₁=5.2	X̄₂=16.4	0	0	0	113.2	6.8	131.2

X₁X₂	YX₁	YX₂	-1.364 X₁	-0.763 X₂	Ŷ	Y-Ŷ e²	e²
11.28	-10.08	-78.96	-5.456	-5.341	22.409	-0.409	0.1672
4.68	-10.08	-14.56	-9.548	-14.497	9.161	-1.161	1.3479
-4.32	1.92	-5.76	-5.456	-15.26	12.49	-0.49	0.2401
-0.92	0.52	-11.96	-6.82	-16.023	10.363	-0.637	0.4057
-1.12	1.12	-1.96	-8.184	-11.445	13.577	1.423	2.02449
9.6	-16.6	-113.2					4.1856

Source: Field Survey 2000

This implies that income and perception are negatively related to the patronage of secondary schools in urban Zaria. This suggests that as income and perception increases, the impact of distance on the patronage of the secondary schools in urban Zaria, Kaduna State, Nigeria by students will decrease.

Furthermore, R^2 of 96.3% shows that the relationship between variables used in the study is quite strong. This view is supported by the F-ratio obtained (26.0270). The calculated F is significant at 0.05 level with 2 (K-1) and 3 (n-k) degree of freedom. The tabular t 0.05 (2) (3) is equal to 19.0. Since calculated F is greater than tabulated F, we accept that the F –value obtained is statistically significant, thus supporting the R^2 earlier obtained.

The t-values obtained also indicated that the coefficient for X_1 and X_2 is statistically significant. Thus X_1 (income) and X_2 (perception) is the most important distance input. Therefore, the level of income and perception is a significant determinant of patronage of secondary schools in urban Zaria. This is so, because the t-value of X1 (-2.3284) and X2 (-5.7239) is less than -2 using two tail test.

$$\hat{Y}=33.206-1.364X1-0.763X2+U$$
$$(-2.3284)\ (-5.7239)$$
$$F=26.0270$$
$$R^2=96.3\%$$

In conclusion, the test conducted indicates that distance is a factor that determines patronage of secondary schools in urban Zaria, Kaduna State, Nigeria.

5. SUMMARY AND CONCLUSION

The presence of educational institution in urban Zaria, Kaduna State, Nigeria is the major pull factor of migrant. This is because most of the migrant came to urban Zaria to seek employment opportunity in the educational institutions. It is important to note that the children of these migrant are enrolled in the various secondary school.

These secondary schools are located in different areas within the settlements.Therefore, movement of the students from their place of residence to school and the selection of schools for the students depends on the principle of spatial interaction as put forward by Edward Ullman. Also, patronage of the secondary schools in urban Zaria is due to relative location with respect to other location and the various measurement of distance (physical, time, economic, social, income and perception).

It is therefore necessary that all relevant bodies (Federal Government, State Ministry of Education, Private individuals) must be committed to the provision of quality education.

COMPETING INTERESTS

Authors have declared that no competing interests exist

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