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### **Power supply as a predictor for patronage of recreational centres in kaduna, Nigeria**

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**Abstract:** The study assesses power supply as a predictor for patronage of recreational centres in Kaduna State, Nigeria. One research question was answered and one hypothesis was formulated. A descriptive survey research design was used for this study. The population for the study comprised all staff of recreational centres in Kaduna State, with a population of 3,249. Multistage sampling technique was used to select the sample for the study. Researcher developed questionnaire was used as the instrument for data collection and it was validated by 3 experts from the Department of Physical and Health Education, Faculty of Education, Bayero University, Kano. A pilot study was conducted and a reliability index of 0.87 was obtained. Out of 441 copies of questionnaire administered by the researcher and his assistants, 432 copies were duly completed, returned and analyzed. Frequency count and percentage were used to describe the demographic information of the respondents while Chi-square ( $\chi^2$ ) statistics was used to test all the formulated hypotheses at the 0.05 alpha level of significant. The findings of this study revealed that power supply significantly influence the patronage of recreational centres in Kaduna state  $\chi^2=184.08$ ,  $df=1$ ,  $P<0.05$ . It was recommended among others, that more roads should be constructed within the recreational centres in Kaduna state, as this will go a long way in increasing the numbers of patronage.

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## Introduction

In Nigeria, electricity supply is the prerogative of Power Holdings Company of Nigeria (formerly known as National Electric Power Authority). Electricity is one of the most important infrastructures, as its importance cannot be overemphasized. Its presence is normally felt in all fields of human endeavour. In Nigeria as in most developing nations, the demands for sustainable energy are increasing due to population and developmental growth. But the available infrastructures for providing and extending this required energy especially to rural areas have continued to diminish and have become grossly inadequate in recent times [1].

Recreational patronage should be generally conceived as the consumption of leisure and leisure facilities for the purpose of refreshing oneself, a distinction in line with Butter's [2] view can be readily made on the one hand between active or outdoor recreation involving participation in sports and outdoor games, driving, fishing for pleasure, swimming and climbing. On the other hand, passive or indoor recreation in which the individual is essentially a spectator as in sight seeing watching and listening to electronic gadgets and relaxation with indoor game.

According to Parent, Rousseau, El-Zein, Latreille, Désy and Siemiatycki [3], recreation is an essential part of human life and finds many different forms which are shaped naturally by individual interests but also by the surrounding social construction. Recreational activities can be communal or solitary, active or passive, outdoors or indoors, healthy or harmful, and useful for society or detrimental. A significant section of recreational activities are designated as hobbies which are activities done for pleasure on a regular basis. A list of typical activities could be almost endless including most human activities, a few examples being reading, playing or listening to music, watching

movies or TV, gardening, hunting, sports, studies, and travel.

## Research Question

Will constant power supply have influence on the patronage of recreational centres in Kaduna state?

## Hypothesis

Constant power supply will not significantly influence the patronage of recreational centres in Kaduna state.

## Methodology

A descriptive survey research design was used for this study. According to Nwana (2005), descriptive survey design focuses on the people and their beliefs, opinions, perception and behaviours. Sunusi [4], stated that descriptive survey design is a kind of survey design in which a person is able to find out the feelings of others about something. He added that descriptive survey design is a systematic description of event in a very factual and accurate manner.

## Population and Sampling

The population of the study comprised all the staff in the recreational centres in Kaduna state, with the population of 3,249 (Source: Kaduna State Ministry of Culture and Tourism Report, [5]. Four hundred and forty four (441) respondents were sampled for this study. Krejcie and Morgan (1970) suggested that for any population of the study up to 3000, the sample should not be less than 341. However, the sample of 441 is adequate to represent a population of about 3,249. The researcher used a multistage sampling procedure to select the sample for the study. According to Njodi and Bwala [6], multistage sampling is a procedure carried out in phases and usually involves more than one sampling method. They further stated

that in a very large and diverse study population, sampling may be done in two or more stages. Hence, the stages for sample selection in this study were as follows:

Stage 1:- Stratified sampling technique was used to stratify Kaduna state into three (3) stratum as in the Senatorial zones, Kaduna Central zone strata one, Kaduna Northern zone strata two, and Kaduna Southern zone strata three.

Stage 2:- Simple random sampling technique was used to select six (6) recreational centres from the 3 senatorial zones of Kaduna State.

Stage 3:- Using proportionate sampling technique, fifty percent (50%) of the total population of staff in each recreational centre in Kaduna state was used as the respondents (Sample) as presented in the table 3.3.1 below:

**Table 1:** Distribution of population and sample used for the study by senatorial zone and recreational centres.

Three Senatorial Zone of Kaduna State	Recreational centres	Population	Sample (50%)
<b>Central Zone</b>	Kufena Hills	49	25
	Queen Amina of Zaria Kindom	33	17
	Zaria polo club	52	26
	Zaria golf club	66	33
	Fifth chukkar polo resort	46	23
	Zaria township stadium	57	29
<b>Northern Zone</b>	Kofar gamji amusement park	41	21
	Pixie-Dixie amusement park	29	15
	Kaduna polo club	38	19
	Kaduna golf club	61	31
	Kaduna township stadium	47	24
	Ahmadu Bello stadium	52	26
<b>Southern Zone</b>	The ancient nok culture	39	20
	Naval armament club	63	32
	Water hills park	47	24
	Treasure of the universo	68	34
	Matsirga water halls	35	18
	Kagoro hills	48	24
<b>Total</b>			<b>441</b>

Stage 4:- Simple random sampling technique was used to administer the questionnaire to the respondents in each of the recreational centre in Kaduna state.

#### **Data Collection Instrument**

The instrument for data collection in this study was a researcher's developed questionnaire. The questionnaire consists of two (2) sections A and B. Section "A" contained the information on the demographic characteristics of the

respondents (Gender, age range and highest educational qualification) while Section "B" contained information on the influence of power supply on the patronage of recreational centers. The variables are four (4), therefore, statements was formulated on each variable. The questionnaire was prepared on four (4) points Likert scale and the rating score was as follows: Strongly Agreed (SA) 4 points, Agreed (A) 3 points, Disagreed (D) 2 points and Strongly Disagreed (SD) 1 point.

### Validity and Reliability of Instrument

In order to establish the content validity of the questionnaire, the questionnaire was subjected to vetting by the 3 experts in the Department of Physical and Health Education, Bayero University, Kano. Their observations and corrections were incorporated in the final draft of the questionnaire to the satisfaction of the supervisor before administration for a pilot study.

To ascertain the reliability of the instrument, a pilot study was conducted using twenty (20) staff of Sani Abacha Stadium, and that of Gidan Makama, Kano State. A split-half reliability test was used to determine the reliability of the research instrument. The administered and filled questionnaire was pooled and split out into odd and even number items. The scores obtained from odd and even number items collected was subjected to a statistical test using Spearman-Brown Prophecy Formula, and the reliability index of 0.86 was obtained which confirmed the questionnaire as reliable for usage.

### Data Collection Procedure

An introductory letter was obtained from the Head of Department, Physical and Health Education Department, Bayero University, Kano, which was taken to the authorities of the sampled recreational centers in Kaduna State, to seek permission to conduct the study. After permission was granted, the researcher employed the services of six (6) research assistants who helped in administering and retrieving the questionnaire within a week. Four hundred and forty one (441) copies of questionnaires were administered and four hundred and thirty two (432) copies were duly completed, returned and analyzed.

Simple frequency count and percentage was used to organize and describe the demographic information of the respondents while Chi-

square ( $\chi^2$ ) statistic was used to test the formulated hypotheses at 0.05 level of significance. On the course of analysis, all the responses (strongly agree, agree, strongly disagree and disagree) were merged to agree and disagree.

### Results

Out of four hundred and forty one (441) copies of questionnaires administered, four hundred and thirty two (432) were duly completed, returned, analyzed and presented in the tables below:

<b>Table 2:</b> Demographic Information of the Respondents.		
<b>Variables</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Gender:</b>		
Male	304	70.4
Female	128	29.6
<b>Total</b>	<b>432</b>	<b>100</b>
<b>Age:</b>		
18-29 years	259	60.0
30-39 years	122	28.2
40 years and above	51	11.8
<b>Total</b>	<b>432</b>	<b>100</b>
<b>Highest Educational Qualification:</b>		
University Degree/HND	35	8.1
NCE/OND	252	58.3
SSCE/Grade II/WASCE	145	33.6
<b>Total</b>	<b>432</b>	<b>100</b>

Table 4.2.1 shows that 304 (70.4 %) of the respondents were male and 128 (29.6%) female. Based on the ages of the respondents, 259 (60.0%) were between the ages of 18-29 years, 122 (28.2%) were between the ages of 30-39 years old, while 51 (11.8%) were 40 years and above. Regarding the highest

educational qualifications of the respondents, 35 (8.1%) were University Degree/HND holders, 252 (58.3%) were NCE/OND holders while 145 (33.6%) were SSCE/Grade II/WASCE holders.

### Hypotheses Testing

**Hypothesis:** Constant power supply will not significantly influence the patronage of recreational centres in Kaduna state.

**Table 3:** Demographic Information of the Respondents.

Variables	Observed	Expected	df	$\chi^2$	P-value
Agreed	357	216.0			
			1	184.08	.001
Disagreed	75	216.0			
Total	432	432			

$\chi^2 = 184.08$ ,  $df = 1$ ,  $P < 0.05$ .

Table 3 revealed that 357 of the respondents agreed that constant power supply influence the patronage of recreational centres while 75 of the respondents disagreed. From the table, it is indicated that the number of respondents that agreed are more than those disagreed.  $\chi^2$  statistical computation indicated the  $\chi^2$  value of 184.08 at  $df=1$ ,  $P<0.05$ . The null hypothesis tested is therefore, rejected on the basis that constant power supplies influence the patronage of recreational centres in Kaduna state.

### Discussion

The finding of this study indicates that constant power supply influence the patronage of recreational centres in Kaduna state. This finding is line with that of Abdallah, Aryeetey, Emmanuel, Dwomoh and Justice [7] who found that Ghanaians are currently provided with

electricity, in both urban and rural areas, including recreational centres and the Greater Accra Region where many institutions of higher learning are located. The electricity supply had influence on the socio-economic wellbeing of people in the University of Ghana as well as within their school recreational centres. Students in this university are dependent on the regular electricity supply to carry on with their normal academic and other lifestyle activities. Therefore, the infrequent supply of electricity to the university community would undoubtedly affect the students' lifestyle, including their recreational activities. Kontoangelos, Tsiori, Koundi, Pappa, Sakkas and Papageorgiou [8] stated that college students are normally confronted with a myriad of issues including academic, social and personal that has potential to influence their recreational activities. In recent years, electricity supply has become very significant owing to the seeming dispensable role played by electricity in every part of our daily lives. Absence of electricity for long periods causes discomfort and hampers participation in the recreational centres. It is also a known fact that electricity consumption has become a parameter by which the standard of living is measured [9].

### Conclusion

Constant power supply contributes to the patronage of recreational centres in Kaduna state..

### Recommendations

Based on the various facts that emerged from this study, the following recommendations are made:

1. Various source of power supply should be readily available in all recreational centres in Kaduna state. This will also go a long way in influencing the patronage of the recreational centres.

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