

# EFFECTS OF RECREATION EDUCATION INTERVENTION PROGRAMME ON HEALTH BENEFITS OF RECREATION AMONG STUDENTS OF TERTIARY INSTITUTIONS IN OWERRI ZONE

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## **Abstract**

*This study was aimed at determining the effects of recreation education intervention programme on health benefits of recreation among students of tertiary institutions in Owerri zone. The study adopted pre-test post-test control quasi-experimental design. The instrument used for data collection was self-structured questionnaire which yielded a reliability co-efficient of 0.87. The sample size for the study was 300 students of tertiary institutions in Owerri zone. The multistage sampling technique was adopted for the study. The inferential statistics of two-way ANOVA was used to test the hypotheses at 0.05 level of significance. The results showed that recreation education intervention programme had effects on perceived health benefits of recreation among students of tertiary institutions in Owerri zone. Perceived physical benefit F-ratio is 54.022,  $p > 0.05$ , while perceived emotional health benefits F-ratio is 77.864,  $p < 0.05$ . Based on the results it was concluded that recreation education intervention programme had significant effects on the physical, social and emotional health benefits among students of tertiary institutions in Owerri zone. Part of the recommendations was that efforts should be made by the school authorities to always organize recreation programmes as this will go a long way in creating awareness on the health benefits of recreation among students. This will in turn create the urge to always recreate for optimum health by students.*

**Key words:** *Recreation, Education, Intervention programme, Health benefit*

## **Introduction**

Recreation is a refreshment to the body and the mind. The human body is like a machine and for it to run well it has to be maintained. Owing to circumstances of modern civilization and the eight – hour work day, periodic recreation has become an essential element in the maintenance package for the prolongation of human life and to enhance mental health. The importance of recreation in the life of man cannot be over emphasised. It is indeed, part and parcel of good health. Man has always engaged in one type of recreational activity or the other during periods of leisure. Some people recreate for fun and relaxation, others recreate to lose weight and stay fit. There are still others who recreate to alleviate certain medical conditions like high blood pressure (Muhammad, 2006).

Recreation, according to Masterton (2008), is an activity that diverts, amuses or stimulates. It could also be viewed as activity that refreshes and renews one's health and spirit by enjoyment and relaxation. Creed (2004)

observed that, recreation can be viewed as a distinct phase of human activity, which is beneficial and constructive to the health of an individual. Fawole (2001) concluded that, recreation is any socially desirable leisure activity in which an individual participates in voluntarily, and from which a person derives immediate continuing satisfaction. The need and the place of recreation in the life of an individual cannot be overemphasised. Fundamental needs of man, particularly in three major ways namely enjoyment and happiness, enriched community living and individual fulfillment (Adisa & Oloyede, 2011).

Leisure signifies individual's choice to spend his or her discretionary time fulfilling certain interests or needs or performing a gratifying experience for the sake of wellness or personal development (Alli, 2007 & Barcelona, 2002). Jennen and Uhlenback (2004) acknowledged that participation in physical leisure activities affects quality of life and life satisfaction. A body of literature expressed the fact that comprehensive work – based physical leisure activity programme can yield promising health behaviour changes of individuals.

The National Association for Sports and Physical Education (2003) observed that participation in leisure activities makes one fit, gives participants more energy, greater mental alertness, reduces stress, and allows for better time management. Recent findings revealed the potential of participation in physical leisure activities to contribute to positive health not merely the absence of diseases but associate with the capacity to enhance life satisfaction and ability to improve individual's capability to withstand stress. Similarly, recreation has the power to create social cohesion and increased productivity, prevent cardiovascular diseases, reduces the risk of diabetes, improves plasma lipid reduce premature mortality and morbidity (Barcelona, 2002; Fadoju & Alleta, 2010; Stewart, 2006; Tompkins, Bosh, Chenowith, Taide & Swin, 2008). According to Harworth (2008), Ericksen and Brunsguard, (2004), Jennen and Uhlenbush (2004), recreation enhances self – esteem, self-confidence and self concept, reduces obesity, serves as preventive mechanism for risk behaviour, prevent disabilities associated with old age and reduces fatigue, prevents metabolic syndrome, nurtures holistic sense of wellness, promotes psychological, conversely, physical and environmental benefits. In the same vein Academy of Leisure Science (2010), WHO (2009), WHO (2010), pointed out that inactivity and sedentary living have been identified as major independent modifiable risk factors for chronic diseases, the fourth leading risk factor for global mortality associated with mental health injuries, falls and obesity. They also estimated that up to 60% of the global population fails to complete the recommended amount of physical activities required to induce health benefits. In Africa, April, Kolbe-Alex, Ander, Draper and Buchsch (2004) observed that, there are indications of high levels of physical inactivity among adults and children.

The school place is an important setting for health promotion, including physical activities. Readiness for adoption; participation and persistence in physical activities are in exercise, sports and recreation. Therefore, this study aimed at determining the impact of recreation education intervention programme on the perceived health benefits of recreation among students of tertiary institutions in Owerri zone.

### **Research Question**

This research question guided this study:

1. What is the mean effect of recreation education intervention programme on health benefits of recreation among students of tertiary institutions in Owerri zone?

### **Hypotheses**

The following hypotheses were tested at 0.05 level of significance:

1. There is no significant effect of recreation education intervention programme on the physical health benefits of recreation among students of tertiary institutions in Owerri zone.
2. There is no significant effect of recreation education intervention programme on the social health benefits of recreation among students of tertiary institutions in Owerri zone
3. There is no significant effect of recreation education intervention programme on the emotional health benefits of recreation among students of tertiary institutions in Owerri zone
4. There is no significant difference in the perceived effect of health benefits of recreation education intervention programme among students of institutions of study

### **Methodology**

The design for this study was pretest posttest control quasi-experimental design. This design was chosen because with the use of control group, change in the posttest was attributed only to the effect of intervention given. In this design two groups of subject each from the three institutions comparable in all ways were selected. Pre-treatment test (B1) was made for both the experimental group (E1) and control group (C1). The experimental groups was exposed to treatment (Tx) in this case (recreation education intervention). The control group was exposed to a placebo treatment (P1) that is, (AIDS education interview).

Post treatment observation (B2) was then made for both groups. The difference between pretest and posttest result in the two groups were then compared to determine whether (Tx) had an impact on the performance of the

experimental group. The population for this study comprised all the students in tertiary institutions in Owerri, zone.

The sample for this study was three hundred (300) students of tertiary institutions in Owerri zone. Multistage sampling technique was adopted for this study. Stage one involved simple random sampling technique of fishbowl method with replacement. This was used to select three schools out of these five institutions in Owerri zone which include the following. Federal University of Technology, Owerri, Alvan Ikoku Federal College of Education Owerri, Federal Polytechnic, Nekede Owerri, Federal College of Land Resources Technology, Egbeada, Owerri. The schools selected out of the five schools include, Federal Polytechnic Nekede, Imo State University and Alvan Ikoku Federal College of Education, Owerri. Table of random numbers was used to select one hundred students from third year classes in each of the selected schools. One hundred students from Estate Management from Federal Polytechnic Nekede, one hundred students from the Department Sociology, Imo State University and one hundred students from Political Science, Alvan Ikoku Federal College of Education, Owerri. The same table of random numbers method was also used to select fifty (50) students from the one hundred (100) students to serve as experimental group and the other fifty (50) served as control group in each of the schools.

The instrument used for this study was self structured questionnaire. The questionnaire was designed according to the hypotheses that were tested in the study. The questionnaire was in four sections. Sections A, B, C, D. section A was on the demographic characteristics of the respondents. Section B was on the perceived physical health benefits of recreation, section C was on the social health benefits of recreation while section D was on the emotional health benefits of recreation. The questionnaire were closed ended type in line with Likert scale techniques of four point summated ratings of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD), with ratings of 4,3,2, and 1 allotted to them respectively.

To enhance the validity of the instrument for this study, experts in the Department of Physical and Health Education, Alvan Ikoku Federal College of Education, Owerri, Imo State were relied on for comments, suggestions and modification of the instrument.

The validated questionnaire were administered to twenty students of Imo State Polytechnic, Orlu who were not part of the study using test re-test method. The data collected were collated and analysed with Pearson Product Moment Correlation coefficient to determine the internal consistency of the instrument which gave a value of 0.87.

The researchers obtained an introduction letter from the Head, Department of Physical and Health Education, Alvan Ikoku Federal College of

Education Owerri, Imo State to the Dean of Faculty/School where students were selected for the study. The Deans then referred the researchers to the Head of Departments where students were selected for the study to organise the meeting of the researchers with the students for the intervention programme. The Head of Department then appointed some lecturers to undertake the task.

The lecturers agreed to serve as trained research assistants and they were briefed by the researchers about the study and how the data would be collected. The lecturers assisted the researchers in getting copies of the class lists of the students. The students' class lists were subjected to simple random sampling using table of random numbers to select 100 students that were used for the study in each of the institutions. A day was fixed for the researcher to brief the students. The validated questionnaire was administered as pretest to both the experimental and control groups on the first week of the intervention programme.

The researcher met with the experimental group for one hour in a week for recreation education intervention programme and the control group for one hour in a week for placebo treatment (AIDS education) for a period of eight weeks. After the end of the fifth week lecture for the respective groups and the posttest questionnaire was administered to both the experimental and control groups in the sixth week. The data collected were analysed with the inferential statistics of two-way ANOVA at 0.05 level of significance.

## Results

**Research Question 1:** What is the mean effect of recreation education intervention programme on perceived health benefits of recreation among students of tertiary institutions in Owerri zone?

**Table 1: Mean effect of recreation education intervention programme on perceived health benefits of recreation among the students**

Group	N	Mean	S.D	Mean Difference
Experimental Group	150	35.01	2.50	10.38
Control Group	150	24.63	3.49	

Table 1 showed the mean effect of recreation education intervention programme on perceived health benefits of recreation among students of tertiary institutions in Owerri zone. It revealed that students who received recreation education intervention programme recorded higher mean of 35.01 than those without intervention programme with 24.63.

**Hypothesis 1:** There is no significant effect of recreation education intervention programme on the physical health benefits of recreation among students of tertiary institutions in Owerri zone.

**Table 2: Results of two-way ANOVA on the effect of recreation education intervention programme on physical health benefits of recreation among the students**

Source	Type III sum of square	Df	Mean square	F	Sig.
Corrected model	14401.9459	6	2400.324	128.923	.000
Intercept	4325.894	1	4325.894	232.347	.000
Physical	1004.785	1	1005.785	54.022	.000
Group	13243.002	1	13243.002	711.293	.000
Institution	8.373	2	4.186	.225	.799
Group Institution	6.958	2	3.479	.187	.830
Error	5455.135	293	18.618		
Total	399638.000	300			
Corrected Total	19857.080	299			

a. R Squared = .725 (adjusted R squared = .720)

Table 2 showed that the calculated F-ratio is 54.022 with significant p-value of 0.000 computed at level of significance 0.05. Since the calculated p-value of 0.000 is less than 0.05 alpha levels, therefore, the null hypothesis is rejected. This implied that recreation education intervention programme has significant effect on the perceived physical health benefits of recreation among students of tertiary institutions in Owerri zone.

**Hypothesis 2:** There is no significant effect of recreation education intervention programme on the social health benefits of recreation among students of tertiary institutions in Owerri zone.

**Table 3: Results of two-way ANOVA on the effect of recreation education intervention programme on social health benefits of recreation among the students**

Source	Type III sum of square	Df	Mean Square	f	Sig.
Corrected model	9228.8239	6	1538.137	242.818	.000
Intercept	1841.701	1	1841.701	290.740	.000
Social health B.	155.286	1	155.286	24.514	.000
Group	8773.592	1	8773.592	1385.045	.000
Institution	4.271	2	2.136	.337	.714
Group Institution	2.467	2	1.234	.195	.823
Error	1856.014	293	6.335		
Total	260897.000	300			
Corrected Total	11084.837	299			

a. R Squared = .833 (adjusted R squared = .829)

Table 3 showed that the calculated F-ratio is 24.514 with significant p-value of 0.000 computed at level of significant 0.05. Since the calculated p-value of 0.000 is less than 0.05 alpha levels, therefore, the null hypothesis is rejected. This implied that recreation education intervention programme has significant effect on the perceived social health benefits of recreation among students of tertiary institutions in Owerri zone.

**Hypothesis 3:** There is no significant effect of recreation education intervention programme on the perceived emotional health benefits of recreation among students of tertiary institutions in Owerri zone

**Table 4: Results of two-way ANOVA on the effect of recreation education intervention programme on emotional health benefits of recreation among the students**

Source	Type III sum of square	Df	Mean square	F	Sig.
Corrected model	3777.0599	6	629.509	154.748	.000
Intercept	1051.883	1	1051.883	258.577	.000
Emotional Health B.	316.746	1	316.746	77.864	.000
Group	3372.193	1	3372.193	828.963	.000
Institution	0.097	2	.049	.012	.988
Group institution	9.107	2	4.553	1.119	.328
Error	1191.914	293	4.068		
Total	192619.000	300			
Corrected total	4968.976	299			

a. R Squared = .760 (adjusted R squared = .755)

Table 4 showed that the calculated F-ratio is 77.864 with significant p-value of 0.000 computed at level of significant 0.05. Since the calculated p-value of 0.000 is less than 0.05 alpha levels, therefore, the null hypothesis is rejected. This implied that recreation education intervention programme has significant effect on the perceived emotional health benefits of recreation among students of tertiary institutions in Owerri zone.

**Hypothesis 4:** There is no significant difference in the perceived effect of recreation education intervention programme among students in the institutions of study

**Table 5: Results of two-way ANOVA on the difference in the perceived effect of health benefits of recreation education intervention programme among students in institutions of study**

Source	Sum of squares	Df	Mean square	F	Sig.
Between groups	19.960	2	9.980	.042	.959
Within group	34762.680	147	236.481		
Total	34782.640	149			

Table 5 showed that the calculated F-ratio is 0.042 with significant p-value of 0.959 computed at level of significant 0.05. Since the calculated p-value of 0.959 is greater than 0.05 alphas, therefore, the null hypothesis is not rejected (retained). This implied that no significant difference exist in the perceived effect of health benefits of recreation education intervention programme among students in the three (3) tertiary institutions in Owerri zone.

### Discussion of Findings

The findings were discussed in line with the research questions and hypotheses. Research question one sought to find out the mean effects of recreation education intervention programme on perceived health benefits of recreation among students of tertiary institutions in Owerri zone. The results revealed that students who received recreation education intervention programme recorded higher mean of 35.01 than those without intervention programme with a mean score of 24.63. This showed that health education intervention programme has effect on perceived health benefits of recreation among students of tertiary institutions in Owerri zone. The significant difference in the post-test scores of the experimental and control groups must have occurred as a result of the treatment (recreation

education intervention programme) that the experimental group was subjected to; which improved their knowledge on health benefits of recreation.

Hypothesis one stated that there is no significant effect of recreation education intervention programme on the perceived physical health benefits of recreation among students of tertiary institutions in Owerri zone. The result revealed that the calculated f-ratio is 54.022 with significant p-value of 0.000 computed at 0.05 level of significance. Since the calculated p-value of 0.000 is less than 0.05 alpha levels, the null hypothesis was therefore rejected. This implied that recreation has significant effect on the perceived physical health benefits of recreation among students of tertiary institutions in Owerri zone.

This result is in line with the views of California State Parks (2005) who observed that recreation education intervention programme has effect on the knowledge of physical health benefits of recreation. Also Kunstler, Thompson and Croke (2013) stated that education and participation in recreational activities increases the knowledge of physical health benefits of recreation among youths.

Hypothesis two stated that there is no significant effects of recreation education intervention programme on the social health benefits of recreation among students of tertiary institutions in Owerri zone. The result revealed that the calculated F-value is 24.514 with a significant p-value of 0.000 computed at 0.05 level of significance. Since the calculated p-value of 0.000 is less than 0.05 alpha level, the null hypothesis was therefore rejected. This showed that recreation education intervention programme has significant effect on the perceived social health benefits of recreation among students of tertiary institutions in Owerri zone. Westerslahl, Barnekow – Bergvist and Jansson (2005) noted that through recreation education, adolescents are well equipped of the social benefits of recreation. Bandura (2004) also corroborated this by observing that through recreation education intervention programmes, young people become more aware of the social health benefits of recreation.

Hypothesis three stated that there is no significant effect of recreation education intervention programme on the perceived emotional health benefits of recreation among students of tertiary institutions in Owerri zone. The result revealed that the calculated f-ratio is 77.864 with a significant p-value of 0.000 computed at 0.05 level of significance. Since the calculated p-value of 0.000 is less than 0.05 alpha levels, the null hypothesis was therefore rejected. This implied that recreation education intervention programme has significant effect on the perceived emotional health benefits of recreation among students of tertiary institutions in Owerri zone. This result is in line with the findings of Ericksen and Brunsguard (2004) who discovered that recreation education intervention programme has effect on the awareness of emotional health benefits of recreation.

Hypothesis four stated that there is no significant difference in the perceived effects of health benefits of recreation education intervention programme among institutions of study. The results revealed that the calculated f-ratio is 0.042 with a significant p-value of 0.959 computed at 0.05 level of significance. Since the calculated p-value of 0.959 is greater than 0.05 alphas, the null hypothesis was therefore not rejected. This implied that no significant difference existed in the perceived effect of health benefits of recreation education intervention programme among the three (3) institutions of study. This is expected because the recreation education intervention programme among the groups in the three institutions equally had significant impact on their perceived health benefits of recreation.

### **Conclusion**

The study showed that students who received recreation education intervention programme recorded higher mean than those without intervention programme. This implies that those who received the intervention programme had more knowledge about health benefits of recreation. Recreation education intervention programme had significant effects on perceived physical health benefits of recreation among students of tertiary institutions in Owerri zone.

Also, the study revealed that recreation education intervention programme had significant effect on perceived social health benefits of recreation among students of tertiary institutions in Owerri zone. Recreation education intervention programme had significant effect on the perceived emotional health benefits of recreation among students of tertiary institutions in Owerri zone. Nevertheless, no significant difference existed in the perceived effect of health benefits of recreation education intervention programme among the three institutions of study.

Based on the outcome of the study, the following recommendations were made:

1. Efforts should be made by the school authorities to always organise recreation programmes as this will go a long way in creating awareness on the health benefits of recreation among students. This will in turn create the urge to always recreate for optimum health.
2. Recreation education in the school curriculum at the secondary school level where students will be taught the importance of recreation to human health should be popularised.
3. A day should be set aside for recreation in various institutions by the school authorities to create room for active participation in recreational activities.
4. Recreation education should be included in the general studies of the various higher institutions to enhance practical knowledge of the students on recreation as a means of improving health.

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