



ABSTRACT

The study assesses the knowledge of Healthful school living among senior secondary school student in Northern state Nigeria. Ex-post facto design, which is a non-experimental design was used for the study. 2,482 respondents were randomly sampled for the study, 2480 copies of questionnaire were returned, using multistage sampling techniques. A modified four

ASSESSMENT OF KNOWLEDGE OF HEALTHFUL SCHOOL LIVING AMONG SENIOR SECONDARY SCHOOL STUDENTS IN NORTHERN STATES, NIGERIA

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INTRODUCTION

The World Health Organization (WHO); (1948) defines health as a state of complete physical, social and mental well-being, and not merely the absence of diseases or infirmity. Health is therefore seen as a resource for everyday life, not the objective of living. Health is positive concept to emphasizing social and personal resources, as well as physical capabilities (WHO, 2014).

Health is closely interlinked to education, good health and good education are not ends in themselves, but also means which provide individuals with the tools to lead productive and satisfying lives. It is commonly believed that a child's ability to attain his or her full potential is directly related to the complimentary effect of good health, good nutrition, physical activity and quality education. To attain educational achievements, children must fully participate in educational programmes (WHO, 2006).



The school provides healthy psycho-social environment for learning, however the school out to also prevent the students from excessive curricular and extra-curricular activities. Adequate time should be provided for food, relaxation, exercise and recreation as well as studying. The school is an agent of socialization as well as an agent of promoting health. School provides all the learning experiences which are positively influenced by knowledge, attitude and behaviour of individual on health matters which could be achieved through careful school health programme (Tawai, 2011).

According to Odok and Ekuri, Edin (2016), the social environmental rest solely on school interpersonal relationship between staff and students. When the social environment is good, there would be less violence demonstration, absenteeism, cult activities, examination malpractices,

(4) point Likert measuring scale format was used to collect data. Pilot study was carried out to test for validity and reliability of the instrument to be administered. Descriptive statistics of frequency count, percentages were used to answer the research question, while inferential statistics of One sampled t-test statistics was used to test the hypotheses. The analysis was conducted with decision criterion of 0.05 alpha level of significance. Results of study revealed that, Knowledge of senior secondary school students towards healthful school living was high, (P-value 0.001). Based on the conclusion, the following recommendations were made; Health promotion and education programme should be emphasized on by the government at all level especially in the senior secondary schools' students in Northern states, Nigeria, teaching of health education in senior secondary schools in Northern states, Nigeria should be improved and school authorities must ensure that, adequate space and conducive environment is provided for students to enable teaching and learning.

KEYWORDS: knowledge, healthful-school, students and Nigeria.



sexual exploitation and various other forms of abuse and suspension and expulsion of students. Since the school is designed to explore and expand the frontier of knowledge, the social environment in the school must give room for the development of wholesome personnel self-concept, healthy activities and practices as well as special skills for the learner.

Furthermore, the staff and students must be motivated through the provision of appropriate facilities, example a well-equipped laboratory, conducive learning environment and good salary, so that effective teaching-learning process is not hindered (Odok, 2016).

Tawai (2011) pointed out that both primary and secondary school children spent about seven hours every day in the school environment except on weekends and that about 33% of the child's everyday life is spent in school which constitute about 60% of the child's active life during the day. A school is supposed to be a joyful and a worthwhile place to live and not a cell or place of torment. The time children spent in school should be in environment and time sphere conducive to physical, social, mental and emotional health.

Healthful school living is that phase of school healthy frame which embraces all efforts to provide at school, physical, emotional and social conditions which are beneficial to health and safety of pupils and school personnel (Udok, Ekuri, & Adin 2016).

Healthful school living according to Umar, (2009) is defined as proper citing of classrooms, plants, adequate ventilation, personal hygiene, balance diet, good lighting condition, portable and wholesome water supply, adequate rest and relaxation, adequate sewage and refuse disposal in schools and neighboring environment.

According to Tawai, (2011) to live happily and healthfully, a building must be constructed with sound and safe material provided with basic facilities both internally and externally. Since a building serves as a shelter for students, the school should be sited in a suitable location with satisfactory lighting condition and ventilation, adequate portable water supply, adequate sanitary facilities and adequate facilities for both sewage and refuse disposal. Building schools in swampy and dumpy places can cause serious health-related problem, as swampy and dumpy



areas serve as breeding areas for vectors transmitting diseases especially mosquitoes which transmits plasmodium parasite that causes malaria fever.

Ejifugha (2016) posited that just as parent have the fundamental role of protecting their children by providing healthy physical, psychological, social and spiritual environment in the home, so also the school administration had the role of ensuring the optimal health of students by providing sustainable environment for learning. These comprises wholesome physical environment with emphasis on lighting, ventilation, acoustics, housekeeping practices, adequate provision for waste and refuse disposal and food services where needed. According to Ye, Kay, Nwe, Kyaw and Than (2015) Children and youth are recognized as a priority population, the national development depends on the academic success and optimal health and wellbeing of its children and youth. Schools are important settings which provides comprehensive health promotion. The school exerts the most influences on the lives of children and youth. School can play a key role in supporting student's health and by extension, the health of their families and communities.

School is a setting where education and health programme create a health promoting environment which in turn, promotes learning, according (Ye *et al.*, 2015).

Knowledge can be define as fact, information and understanding of skills that a person has acquired through experience or education, it creates a general awareness on human health especially senior secondary students; inculcates and promote good health habit in schools and provides the students with the knowledge useful in taking decision for themselves on health and wellbeing and ensure that students remained healthy during the school session (Ayodeji, 2015).

Traditionally, health and education were been viewed as a “vertical” system, each providing equality services directly to the people they serve. Health and education are interdependent: Health students are better learners, and better-educated individual are healthier. To improve the health and learning of students we need “horizontal” or structures in which partners work together toward shared outcomes (www.healthyschoolbc.ca).



The world health organization defines a healthy school as one that consistently strengthens students' health for learning, playing and working. In school, students have many opportunities especially in the classroom, and in every aspect of their school experience which have to foster their physical, mental, social and intellectual development, it enables them to achieve the following:

- i. Engaging in regular physical activity, learning about different types of activities and understating the importance of physical activity to health and learning;
- ii. Understanding basic nutrition and learning how to make health food choices.
- iii. Feeling a sense of belonging and connected to school; and
- iv. Having a safe physical environmental in which to learn and play (Annual Report, 2012).

According to Odok (2016), health of school environment for developing countries should include:

1. Provision of necessities such as shelter, warmth, water, food, light, ventilation, sanitation facilities and emergency medical care.
2. Protection from biological threats such as; molds, unsafe or insufficient water, vector borne diseases, venoms of animals, rodents and hazardous insect as other animal example dogs.
3. Protection from physical threats such as; traffic and transportation, violence and crime, injuries, extreme heat, cold and radiation.
4. Protection from chemical threats such as; air pollution, water pollution, pesticides, hazardous waste, hazardous materials and finishers; Asbestos, paint and cleaning agents.

Federal Ministry of Education, (2018) healthy school environment is one of the interrelated aspects of the school health programme. The concept of health school environment donates all consciously organized, planned and executed efforts to ensure safety and healthy living conditions for all members of the school community.



A healthful school environment (physical, biological and socio-cultural) serves as major determinant of health and greatly influences the individual's level of intellectual growth and development.

The provision of school environment must be guaranteed for efficient performance of staff and learners. All the necessary services, facilities and tools needed for the physical, social and emotional wellbeing of the school population must be assured, provided, safeguarded and sustained. The objective of a healthful school environment is to:

- i. Create healthy and safe learning environment in the school.
- ii. Provide adequate safe water supply and sanitation facilities for the school (WHO, 2016).

The researcher is of the opinion that healthful school living could be achieved through obtaining adequate knowledge of health among senior secondary school students in northern states, Nigeria

Healthful school living is an aspect of the school health program which is responsible for creating a healthy physical and emotional environment which will in turn influence effective teaching and learning activities as well as help in making intelligent decisions about personal, family and community health.

In majority of Nigerian secondary schools, the classrooms accommodation is grossly inadequate. As a result, the large enrolments to these schools, classrooms are usually overcrowded with up to sixty or more students receiving instructions in classrooms designed for only thirty or forty students. In most cases, the chairs and desks are not enough, you see them sharing chairs, standing up or sitting on windows or broken desks! When students are overcrowded like this, there is a stalling of the teaching-learning process and a disruption of the children's mental activity, a situation that generally militates against effective teaching and intellectual developments of the students (Tawai, 2011).

Health education is a relatively new discipline or area of knowledge whose content have grown from the pulling together of ideals, facts and knowledge from research findings and other discipline notably, medical and biological sciences as well as the science that deals with human behavior and people's culture.



Therefore, in order to have a good schools health program, it is important to recognize the importance of health knowledge (Musa, 2008), while to accomplish the health knowledge objectives the health education must present and interpret scientific health data which will then be used for personal guidance. Such interpretation only helps individuals to recognize health problems and solve them by utilizing information which is valid and helpful to them. In view of these problems, the researcher finds it utmost important to assess knowledge, towards healthful school living among secondary school students in Northern States, Nigeria.

OBJECTIVE OF THE STUDY

The purpose of this study is to assess knowledge towards healthful school living among senior secondary school students in Northern States, Nigeria

RESEARCH QUESTION

What is the knowledge of senior secondary school students towards healthful school living in Northern States, Nigeria?

BASIC ASSUMPTIONS

Healthful school living is influenced by knowledge of senior secondary school students in Northern States, Nigeria.

HYPOTHESIS

Knowledge towards healthful school living among senior secondary school students in Northern States, Nigeria is not significant

METHODOLOGY

Research Design

Ex-post facto research design was used to conduct this study. The researcher chose this design, because the information required already exist with the respondents, therefore, cannot be manipulated. Asika (2009), ex-post facto research design means after the fact design; which implies that, the studies the fact that had already existed. The design is



ideal for conducting a social research when it is not possible/acceptable to manipulate the independent variables under the study. The design explains consequences based on antecedent condition and test a claim using statistical hypotheses testing procedures. The justification of the choice of this design is based on the assessment of knowledge towards healthful school living among senior secondary school in Northern states, Nigeria.

Population of the Study

The population of the study comprises of senior secondary students in the three geopolitical zones in the Northern States of Nigeria. There are about 2,083,507 senior secondary school students in Northern states, Nigeria (Federal Ministry of Education, 2017)

RESULTS

The purpose of this study was to assess knowledge towards healthful school living among senior secondary school students in northern states, Nigeria. To achieve this purpose, out of (2482) copies of questionnaire administered, two thousand four hundred and eighty (2480) 99% were valid for analysis. The statistical package SPSS version 23 was used to analyse the data obtained from the respondents. The questionnaire was based on 4 point Likert scale rating. The main score of the responses for each item, was calculated using 4 as the highest and 1 as the lowest score with 2.5 as the midpoint score between the two extremes Agree and Disagree. The discussion criterion for acceptance or rejection of the items was mean score of 2.5. if the relative mean of an item is equal or greater than 2.5, it is considered that the respondents are in agreement (positive) with the suggested item, while any mean less than 2.5 imply disagreement (negative). The demographic characteristics of the respondents were computed using frequencies and simple percentages. The research questions were answered using descriptive statistics of mean, standard deviation. To analyzed the formulated hypothesis for the study, inferential statistics of one sample t-test was used. The formulated hypothesis was tested at 0.05 alpha level of significance.



Demographic Characteristics of the Respondents

Five demographic characteristics of the respondents were selected for the study which are Age of the respondents, gender, class, parents' education and occupation of the parents are presented in table 1 and described accordingly.

Table 1: Demographic Characteristics of the Respondents

S/N	Variables	Frequency	Percent
1	Age		
	14-15	415	16.7
	16-17	1219	49.2
	18-19	729	29.4
	20-21	93	3.8
	22-23	15	.6
	24 and above	9	.4
	Total	2480	100.0
2	Gender		
	Male	1018	41.0
	Female	1462	59.0
	Total	2480	100.0
3	Class		
	SS1	875	35.3
	SS II	824	33.2
	SS III	781	31.5
	Total	2480	100.0
4	Parent Education		
	Primary School Certificate	233	9.4
	Secondary school certificate	795	32.1
	Diploma	519	20.9
	First Degree	583	23.5
	Post graduate degree	269	10.8
	Others	81	3.3
	Total	2480	100.0
5	Occupation of any of the parents/guardian		
	Civil Servant	828	33.4



Self employed	376	15.2
Trader	331	13.3
Farmer	781	31.5
Others	164	6.6
Total	2480	100.0

Source: Field survey, 2019

Table 1 showed the age groups of the respondents, where 415 (16.7%) were within 14 – 15 years of age range, 1219 (49.2%) were within 16 – 17 years of age range, 729 (29.4%) were within 18 – 19 years of age range, 93 (3.8%) were within 20 – 21 years of age range, 15 (0.6%) were within 22 – 23 years of age range, the rest 9 (0.4%) were within 24 years – and above. Therefore 1018 (41.0%) were male while 1462 (59.0%) were female. Those in class level SSSI were 875 (35.3%), SSSII had 824 (33.2%) while SSSIII had 781 (31.5%) respondents. Concerning the level of education of the respondents' parents 233 (9.4%) of the parents had primary school certificate, 795 (32.1%) had secondary school certificate, 519 (20.9%) had diploma, 583 (23.5%) had first degree, 269 (10.8%) had postgraduate degree while 81 (3.3%) had other forms of educational qualifications. With regards to occupation of the parents / guardians 828 (33.4% of the parents were civil servants, 376 (15.2%) were self-employed, 331 (13.3%) were traders, 781 (31.5%) were farmers while 164 (6.6%) had other forms of occupations.

Answering of Research Questions

What is the knowledge of senior secondary school students towards healthful school living in Northern states, Nigeria?

Table 2: Mean Score of Responses on Knowledge of Healthful School Living Among Senior Secondary School Students in Northern States, Nigeria.

N = 2480

S/N	ITEMS	MEAN	STANDARD DEVIATION
1	School playground safety is important for healthful school living	3.556	0.562



2	Safety education taught in schools helps to prevent the occurrence of accidents in classrooms, laboratories, dining hall, hostels and playground among others.	3.470	0.633
3	Healthful school living emphasize on class space to prevent obstruction of movement.	3.426	0.704
4	Provision of waste bins in school is a component of healthful school living	3.118	0.931
5	Interpersonal relationship between teachers and students is part of healthful school living	2.970	0.940
6	Provision of clean and well maintained toilet facilities that are distinct based on gender is necessary for healthful school living	3.520	0.706
7	Provision of portable water(clean, odorless, tasteless, free of contamination) supply is a component of a healthful school living	3.464	0.751
8	Class size is a component of healthful school living	3.089	0.900
9	Healthful school living emphasizes on cross ventilation of classrooms	3.464	0.827
10	Where schools are sited is an important aspect of healthful school living	3.315	0.779
11	Provision of adequate staff rooms contributes to healthful school living	3.328	0.773
12	Periodic inspection of students on personal hygiene is necessary for school to maintain high academic standard and wellbeing of the students.	3.487	0.681
13	Overcrowding in the classrooms can cause easy transmission of diseases among students	3.272	0.877
Cumulative mean		3.344	0.817

Source: Field survey, 2019

Table 2 revealed that, the respondents have knowledge towards healthful school living with mean score of 3.34, which was above the decision mean of 2.5. This implied that, respondents were knowledgeable about healthful school living. The health knowledge of the respondents was assessed by evaluating their knowledge of influence of playground safety in healthful school living, safety education taught in school to prevent accidents in classrooms, laboratories, dining hall, hostels and playground among others. Other variables assessed along this line are the necessary precaution against obstruction of



movement in class, which emphasized on the classroom space. Other variables that were assessed are knowledge on the ideal component of healthful school living such as provision of waste bin, clean and well-maintained toilet facilities based on gender, probable water, siting of school, class size, adequate staff room and cross ventilation.

Further evaluation on interpersonal relationship between teachers and students periodic inspection of students on personal hygiene and issues of spreads of disease as a result of overcrowding. The mean score for the items in the table clearly indicated that the respondents have a very high health knowledge. For example, items 1, 2 and 3 (3.556, 3.470 and 3.426) respectively reflected that the respondents exhibited a very high knowledge on the role of safety in schools in relation to healthful school living.

The knowledge of the respondents on healthful school living was not restricted to Safety education but also assessed the opinion of students on components of healthful school living such as provision of waste bin. This is indicated in item 4 where the respondents were with the opinion that, provision of waste bin was a component of healthful school living with mean score of 3.118.

Respondent have very good knowledge on issues of interpersonal relationship between teachers and students as a component of healthful school living which attracted a mean score of 2.970. Provision of clean and well maintained toilet facilities that are distinct based on gender is necessary for healthful school living was another item that had positive response relation to healthful school living, item 6 (3.520).

Respondents were of the opinion that, provision of portable water (clean, odorless, tasteless, free of contamination) supply is a component of healthful school living which attracted a mean score 3.464 for item 7 on the table, which implied a positive response. Similarly, class size was also seen as a component of healthful school living as indicated in the table item 8 (3.089). Healthful school living also emphasizes on cross ventilation of classroom, which was very important in assessing the healthful school living knowledge and attracted a mean score 3.464 in item 9. Where school is sited, is an important aspect of healthful school living, which was used to assess knowledge of respondents, and



attracted a mean score 3.315 in item 10 in the table. This clearly showed that students have very high knowledge about the important of siting school in relation to their health status.

The opinion of respondents on the contribution of adequate staff rooms to healthful school living in relation to their knowledge was high as indicated in item 11 (3.328) in the table.

Similarly respondents were of the opinion that, periodic inspection of students on personal hygiene was necessary for school to maintain a high academic standard and wellbeing and this attracted a high mean score in table as indicated in item 12 (3.487); furthermore, overcrowding in class room were seen as necessary cause of transmission of diseases, item 13 (3.273).

The overall mean score of 3.344 in the table indicated that, the score is higher than 2.5 which could also be the least score for agreement on the 4 point Likert scale. This means that, students have knowledge towards healthful school living in Northern States, Nigeria.

Hypothesis: Knowledge towards healthful school living among senior secondary school students in Northern States, Nigeria is not significant.

Table 3.: One-Sample t-test Statistics on Knowledge towards Healthful School Living among Senior Secondary School Students in Northern States, Nigeria

N = 2840

Variables	N	Mean	Standard Deviation	Standard Error	df	t-computed	t-critical	p
Knowledge toward healthful school living	2480	44.18	5.78	0.116	2479	380.87	1.96	0.00

$P < 0.05$, $t_{\text{computed}} > t_{\text{critical}}$ at df 2479



The outcome of table 3 revealed that, the calculated value 0.00 is lower than 0.05 alpha level of significance and the computed t-value of 380.87 is higher than 1.96 t-critical value at degree of freedom df 247.9. The mean knowledge toward healthful school living among senior secondary school students is 44.18 and the standard deviation 5.78. The null hypothesis, which states that knowledge towards healthful school living among senior secondary school students in Northern States, Nigeria is not significant and therefore, was hereby rejected, which means that senior secondary school students in Northern States, Nigeria have knowledge towards healthful school living.

Discussion

The purpose of the study was to assess knowledge towards healthful school living among senior secondary school students in Northern states, Nigeria, to achieve this purpose, the data collected was computed and analysed

The outcome of the study revealed that, the knowledge towards healthful school living among senior secondary school students was significant which was contrary to study of Oforwe and Ofilli, 2009 on knowledge, attitude and practice on Head Teachers in primary schools in Edo state and states that inspite of the awareness of school health programme by majority of the teachers, it was surprising that no head teacher had adequate knowledge of the programme. This lack of adequate knowledge may be due to apparent lack of a concise policy on school health programme (SHP) at the national level and a poor primary health care system. However, accurate knowledge does not always guarantee correct conduct in any phase of living; a person may have known that having an unprotected sex with many sex partners could predispose him/her to sexually transmitted infections but could ignored the acquired knowledge, just to the sexual gratification against the consequences by utilizing a given opportunity (being careless). It is desirable for schools to make effort possible to ensure that senior secondary school students possess the required healthful school living knowledge in other to adopt positive health action.



Conclusion

Based on the findings of this study, it was concluded that: Knowledge, of healthful school living was high among senior secondary school students in Northern States, Nigeria

Recommendations

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

- 1) Health promotion and education programmes should be emphasis on by the government at all level especially on the senior secondary school students. Even though, there knowledge, attitude and practice towards healthful school living were found to be positive. This would great adequate environment for sustainable health practice and appraisal of health habit and skill among senior secondary school students in Northern states, Nigeria.
- 2) The teaching of health education in senior secondary school in Northern states, Nigeria should be improved. This would encouraged the development of good attitude through knowledge gained and eventually healthy practices among students. Furthermore, teaching of health education in senior secondary school should be re-oriented toward application of knowledge gained.
- 3) School teacher should periodically assess students' knowledge at various levels (of senior secondary schools) to get status on issues regarding healthful living and their understanding of in-depth knowledge regarding health education. It should be ensured that teachers receive continue education and training related to healthful school living especially, in the importance of interpersonal relationship between teachers and students, which regarded as component of healthful school living. This will go a long way to promote socio emotional health in schools.
- 4) The school authorities must ensure that, adequate space and conducive environment is provided for students, to enable teaching and learning. Furthermore, since the size of the classroom determine accommodation and overcrowding of students in classroom. Therefore, the school authority must ensure that while planning (to build a classroom structure) the number of students must be put into consideration to avoid overcrowding of living classrooms.



- 5) Provision of waste bin in schools by the school authorities and should be placed at strategic position. This will prevent indiscriminate disposal of waste among students. This could be achieved by appropriate support from government at all levels, non-government individual, organizations, parents, teachers among others.

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