INFLUENCE OF HEALTHY LIFESTYLE ON ACADEMIC ACHIEVEMENT OF JUNIOR SECONDARY SCHOOL STUDENTS OF INTEGRATED SCIENCE IN ISEYIN LOCAL GOVERNMENT AREA OF OYO STATE

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Abstract

The link between the healthy lifestyle and the academic achievement of school children were assessed in the survey for better academic achievement in integrated science. The survey also considered the key elements of healthy lifestyle to improve school children health which will subsequently improve their performance in school as well. These elements of healthy lifestyle are many but the index for the purpose of this study investigated on: food type, attitude to personal hygiene and physical activity. The researchers however investigate the impact of healthy lifestyle in a combined form on the academic achievement of the students in integrated Science. Four research questions and four hypotheses were raised to guide the study. A 20 items structured questionnaire was the research instrument. A total sample size of 100 students was randomly selected from the total population of five (5) selected schools in Iseyin Local Government Area of Oyo State. The four hypotheses raised were tested using chi-square. The study revealed that: food type, hygiene and physical activity, all are important for good health and the study also revealed that healthy lifestyle in general would help to improve academic achievement of the students. However, the study made the recommendations that: Parents should be sensitized on the importance of giving children adequate and nutritional food, every stakeholder in education should encourage the students to adopt and keep to healthy lifestyle , Parents and guardians should be sensitized on the importance of living healthy lifestyle and its effects on the academic achievement of their students and finally, the teachers and schools generally should be academically prepared to organize appropriate developmental learning experience that can empower students to embrace safer and healthier lifestyles.

Key words: *Academic achievement, Children' health, personal hygiene, health education, healthy lifestyle*

Introduction

Health care services utilization is very crucial and of great importance to the school children for maximum achievement in their academics. To protect, preserve, maintain and promote the health of children, it is absolutely necessary to provide them with comprehensive health care services. Agnes (2015).

It is quite obvious that health constitutes a priority in the life of every individual. It determines to a great extent, the level at which man functions in the society hence, Health is Wealth. It is that quality of life that enables an individual live most and serves his community best. It remains a fact that health is a major determinant of success in man's life. It guarantees hope and progress for individuals in any society (Dorman, 2002).

Health according to Cambridge Advanced Learner's Dictionary is the condition of the body or mind and the degree to which it is free from illness or the state of being functional and metabolic efficiency of a living organism. In human, it is the ability of

individuals in communities to adapt and self-manage when facing physical, mental or social changes (dictionary.cambridge.org on 30/11/21 at 9.15pm)

Many health personnel and professionals in education have made it known that health status of the children have a significant impact on the academic achievement of the children. In Nigeria, many children go to school with different health problems, hence resulting to poor performance in the school. For any meaningful learning to occur, the students need to be in a state of good health (Berryman, 1994).

In every part of the world, the youths and school age children form a significant portion of the country's population. The roles and impacts of these youths to the national growth and development cannot be overemphasized. The healthier the youths the more accurate they can think, act and productive. This is more reason why quality attention should be given to the health of Nigerian schools children. Education institutions such as secondary schools take a unique and powerful position to change the healthy lifestyle of youths who attend such schools.

Schools provide the setting which can mould the health behaviours of children and youths positively. The teachers and schools generally are academically prepared to organize appropriate developmental learning experience that can empower students to embrace safer and healthier lifestyles. According to Stea & Torstvelt (2014). Healthy behaviors are usually associated with academic achievement in adolescents which suggests that practicing unhealthy lifestyle might lower the cognitive function and in turn likelihood of succeeding in school

To promote schools children health for better academic achievement, the healthy lifestyle of these school children need to be checked and improved for optimum achievement in their studies. These healthy lifestyles are many, it ranges from doing the right amount of physical exercise, eating healthily, maintaining a good standard of hygiene, getting quality sleep, managing stress, abstaining from illegal drug use but the purpose of this study, the index of the healthy lifestyle will be limited to areas such as nutrition, personal hygiene and physical exercise.

Nutrition: Nutrition is a basic human need and a prerequisite for healthy life. A proper diet is essential from very early age of life for growth, development and active life. Nutrition is the science that deals with all the various factors of which food is composed and the way in which proper nourishment is brought about. The average nutritional requirements of groups of people are fixed and depend on such measurable characteristics such as age, sex, height, weight, degree of activity and rate of growth. In this section following are covered in detail (Vikaspedia, 2021). Several studies have shown that nutritional status can directly affect mental capacity among school aged children. For example, iron deficiency can decrease dopamine transmission, thus negatively impacting cognition, deficiency in other vitamins and minerals specifically thiamine, Vitamin E, Vitamin B, iodine and Zinc are proved to inhibit cognitive abilities and mental concentration. Improvement in nutrition make student healthier and they are likely to be free of truancy and therefore able to attend class more frequently. Sorhaindo, Feinstein L (2006).

Personal Hygiene: Among the factors hindering better performance of the school children is the lack of awareness of the health benefits of personal hygiene. Diarrhoeal disease, skin diseases, worm infections and dental diseases are mostly commonly associated with poor personal hygiene. One of the major problems faced by school children are infections whose their causes are contaminated water and poor sanitation as well as poor hygiene practices Dongre, Deshmukh. and Garg (2006). Personal hygiene deficiency diseases have been found to be a serious public health problem and

people often affected are school children. These have been attributed to inadequate knowledge of personal hygiene and its pr Personal hygiene is an important global public health issue since long. Hygiene refers to practices associated with ensuring good health and cleanliness. Personal hygiene is the practice of maintaining cleanliness of ones own body. Good hygienic care as well as practices in terms of personal hygiene contributes to a large extent on factors relating to healthful living and prevention of hazards from diseases (Oluwafemi, 2016)

Physical activity: Physical activity refers to all energy expended by movement, and is defined as any body movement produced by skeletal muscles that results in energy expenditure above resting level (Caspersen et al., 1985) in (Joanna, 2009). Scientific evidence indicates that regular physical activity, exercise, and fitness are a key determinant of health. Appropriate dose of regular physical activity, participation in sports provides male and female of all ages, including those with disability, with physical and mental health benefits, as well as with social relationships. Physical activity is a cheap and strong means for prevention of diseases, improvement health and well-being, and it also promotes integration and social interaction (WHO, 2003). The benefits of doing regular exercise or physical activity include improve fitness, cardiovascular function, metabolic function and bone health.

Healthy Lifestyle and Academic Achievement

According to the World Health Organization about 60% of health status and quality of life of a person is dependent on his / her behaviors and lifestyle. Health related behaviors are so much important and concern for health professionals as well as for communities and can lead to health-related inconsistent consequences such as obesity, diabetes, and the risk of heart disease. Moreover, these behaviors can also be related to the adolescents' academic achievement, which requires more analysis and further evidence (Faught, E. L et al 2017) In Fatemeh, B., Shabnam, O., Seyed, J. S. & Sareh, B. (2019).

The World Health Studies has equally shown that there is a relationship between educational outcomes such as test scores and other measures of academic achievement and some dimensions of healthy lifestyle behaviors (Desai I.K, Kurpad A.V, Chomitz V.R & Thomas, T. 2015). But a systematic review study reported that more and up-to-date studies are needed. On the other hand, in some studies, some aspects such as nutrition, physical activity, and sleep have been considered

Statement of the Problem

Many Nigerian school children go to school with different health problems. This is because majority of them live a poor healthy lifestyle. Many of them go to school in the morning without nutritional and adequate food. Many even lack hygienic culture. In addition, many school children practice self-medication at their various homes, hence, their health is affected and this would affect their concentration toward academic as well. Also the practice of self-medication can equally decline their cognition function. Sometimes the consequence effect of this can lead to withdrawal of many children from the school. So, this prompts the researcher to investigate on the influence of healthy lifestyle on the students' academic achievement in Integrated Science. And suggest ways to improve their healthy lifestyle for more achievements.

Purpose of the Study

The study aimed at investigating into the influence of healthy lifestyle on students academic achievement in Integrated science. Basically, the study sought to investigate into the:

(1) effect of healthy lifestyle independently on the health status of the students.

(2) Effect of healthy lifestyle in a combined

form on the academic achievement of the students.

Research Questions

In order to achieve the purpose of the study, the following questions were raised to guise the study.

1. What is the effect of food type on the health status of the students?
2. What is the effect of personal hygiene on the health status of the students
3. What is the effect of physical activity on the health status of the students
4. Do the students aware of the importance of healthy lifestyle towards achievement in integrated science?

Research Hypotheses

The following hypotheses were tested in the course of study

(1) There is no significant effect of food type on health status of the students of the students

(2) There is no significant effect of personal hygiene on health status of the students

(3) There is no significant effect of physical activities on health status of the students.

(4) There is no significant impact of healthy lifestyle on academic achievement of the students in integrated science

Methodology

Research Design

This study adopts a survey research design. This study would equally investigate independently, the effect of healthy lifestyle on health status of the students. However, it will further examine the influence of healthy lifestyle in a combined form on the academic achievement of the students in Integrated Science.

Population of the Study

The population of this study covers all the public junior secondary school students offering Integrated Sciences in Iseyin Local Government Area of Oyo State.

Sample and Sampling Techniques

A total sample size of 100 students was randomly selected from the total population of selected students in Iseyin Local Government Area of Oyo State. Simple random sampling was used because of the study intended to select a representative without bias from the accessible population.

Research Instrument

The main research instrument used to collect data from the respondents was a twenty (20) items 4 points, Likert type questionnaire consisting of Section A and B. section A was aimed at collecting information on demographic data of the respondents such as age, sex, class, school. Section B sought information on the habit of the students towards drug use, nutritional, hygiene and physical activities.

Method of Data Collection

Each of the schools involved in the study was visited by the researchers and the questionnaire was administered by giving a copy of the instrument to each of the selected students.

Method of Data Analysis

The data collected through the questionnaire administered were grouped under the following headings: Drug habits, nutritional habit, personal hygiene and physical activities. The main statistical instrument used for analysis of data was chi-square at 0.05 level of significant.

Result and Discussion

The results of this study were discussed based on the hypotheses formulated.

Table 1:

Ho_1: There is no significant effect of food type on the health status of the students

S/N	Questions	SA	A	D	SD	Total	DF	x^2 Cal.	Cri. Val	Decision
6.	Eating balance diet makes students more healthier	30(30)	26(17.2)	14(29.8)	30(23)	100				
7.	Eating adequate food makes one to be more energetic	40(30)	20(17.8)	20(29.8)	20(23)	100				
8.	The foundation for good physical health is good food	40(30)	10(17.2)	45(29.8)	35(23)	100	12	91.46	21.03	Rejected
9.	Good nutritional status helps to live a healthy and active life	20(30)	15(17.2)	50(29.8)	15(23)	100				
10.	Malnutrition can prone one to serious health issues such as stunted growth, diabetics etc	50(30)	15(17.4)	20(29.8)	15(23)	100				
	Total	**150**	**86**	**149**	**115**	**500**				

$\alpha = 0.05$

From the 2 above, it is observed that the chi square value of (91.46) is greater than the critical value of chi-square statistics (21.03) at 0.05 level of significant. This implies that null hypothesis is rejected and alternative hypothesis is upheld. This means, there is a significant effect of the food type on the health status of the students.

Table 2

Ho_2: There is no significant effect of personal hygiene on health status of the students

S/N	Questions	SA	A	D	SD	Total	DF	x^2 Cal	Cri. Val.	Decision
11.	Poor dental hygiene can cause unpleasant mouth odor	16 (29.4)	30 (32.8)	24 31.2)	30 (11.8)	100				
12.	Wearing dirty clothes can prone one to diseases	20 (29.2)	28 (32.8)	34 (21.2)	18 (16.8)	100				
13.	Good personal hygiene is one of the most effective ways to protect ourselves from illness such as cholera, diabetics etc	42 (29.2)	30 (32.8)	12 (21.2)	16 (16.8)	100	12	56.23	21.03	Rejected
14.	Most infections are caught as a result of poor hygiene	30 (29.2)	38 (32.8)	16 (21.2)	16 (21.2)	100				
15.	Poor hygiene in children can make them more susceptible to contracting illness	38 (29.2)	38 (32.8)	20 (21.4)	14 (16.8)	100				
	Total	**146**	**154**	**106**	**94**	**500**				

$\alpha = 0.05$

From the 3 above, it is observed that the chi square value of (56.3) is greater than the critical value of (21.03) at 0.05 level of significant. This implies that null hypothesis is rejected and alternative hypothesis is upheld. This means, there is a significant effect of personal hygiene on the health status of the students.

Table 3:

Ho_4: There is no significant effect of physical exercise on health status of the students

S/N	Questions	SA	A	D	SD	Total	DF	x^2 Cal.	Cri. Tab	Decision
16.	Doing regular exercise enable us to control our bodies	25 (21)	25 (18)	25 (29)	25 (34)	100				
17.	Regular exercise prevent people from sickness	15 (21)	25 (18)	20 (29)	40 (32)	100				
18.	Exercise helps our bodies to functioning well	20 (21)	20 (18)	35 (29)	25 (32)	100				
19.	Regular exercise helps to reduce the risk of developing several diseases like diabetics, cardiovascular etc	15 (21)	20 (18)	25 (29)	40 (32)	100	12	34.40	21.03	Rejected
20.	Exercise helps to promote better sleep	38 (29.2)	38 (32.8)	20 (21.4)	14 (16.8)	100				
		105	**100**	**145**	**150**	**500**				

$\alpha = 0.05$

From the table 4 above, the chi square value of (34.40) is greater than the critical value of (21.03) at 0.05 level of significant. This implies that null hypothesis is rejected and the alternative hypothesis is upheld. This means that, there is significant effect of physical activity on health status of the students.

Table 4:

H_{04}: There is no significant impact of healthy lifestyle on the academic achievement of the students

S/N	Questions	SA	A	D	SD	Total	DF	x^2 Cal.	Cri. Val	Decision
1.	Poor healthy lifestyle can affect academic achievement of students in school	35 (32)	20 (20)	15 (22)	30 (26)	100				
2.	Healthy lifestyle triggers change in the human brain due to increase in metabolism, oxygenation and blood flow	40 (32)	25 (20)	20 (22)	15 (26)	100				
3.	Healthy lifestyle can improve the brain plasticity	50 (32)	20 (20)	15 (22)	15 (26)	100				
4.	Adequate dietary patterns such as regular three meal a day improves academic achievement of the students	20 (32)	25 (20)	30 (24)	25 (26)	100	12	66.93	21.03	Rejected
5.	Healthy lifestyle can improve students' academic achievement by improving attention, memory and cognitive function	15 (32)	10 (20)	30 (24)	45 (26)	100				
		160	**100**	**110**	**130**	**500**				

$\alpha = 0.05$.

From the table 4 above, the chi square value of (66.93) is greater than the critical value of (21.03) at 0.05 level of significant. This implies that null hypothesis is rejected and the alternative hypothesis is upheld. This means that, there is significant impact of the healthy lifestyle on the academic achievement of the students.

Discussion of Findings

The result of the findings from table 1 shows that, the chi-square calculated (91.46) is greater than x^2 table (21.03). This indicates that null hypothesis which states that there is no significant effect on food type and academic performance of the students in rejected. It implies that alternative hypothesis upheld which means, there is a significant effect on food type and academic performance

of the students. This is in support of Sorhaindo, Feinstein L (2006) who argued that improvement in nutrition make students healthier and they are likely to have fewer absences and attend class more frequently.

Result from table 2 also shows that chi-square calculated (56.23) is greater than x^2 critical table (21.03). This implies that, null hypothesis which stated that there is no significant effect of personal hygiene on the health status of the students is rejected. So the alternative hypothesis is upheld. This means that there is a significant effect of personal hygiene on the health status of the students. This is in support with the claimed of (Dongre, Deshmukh. & Garg (2006) who stressed that one of the major problems faced by school children are infections whose their causes are contaminated water and poor sanitation as well as poor hygiene practices.

Result from table 3 indicated that calculated chi-square (34.40) is greater than x^2 critical table (21.03). This result shows that null hypothesis which states that, there is no significant effect of physical activity on health status of the students is rejected. Therefore, alternative hypothesis which stated that, there is significant effect of physical activity on the health status of the students is confirmed. According to (WHO, 2003). Physical activity is a cheap and strong means for prevention of diseases, improvement health and well-being, and it also promotes integration and social interaction. This strong submission of WHO confirmed that physical activity has a significant impact on the health status of the students.

From the table 4, the result shows that chi square value of (66.93) is greater than the critical value of (21.03). This result implies that healthy lifestyle has a significant impact on the academic achievement of the students in integrated science in junior secondary schools. This finding is in consonant with the claim of (Desai et all 2015) The World Health Studies has equally shown that there is a relationship between educational outcomes such as test scores and other measures of academic achievement and some dimensions of healthy lifestyle behaviors.

Conclusion

The study has so far investigated the influence of the healthy lifestyle on academic achievement of the junior secondary school students of Integrated science. It is therefore can be inferred based on the findings of this study that health status constitutes a priority in the life of every individual. It determines to a great extent, the level at which man functions in the society. In other word, the functionality of any student depends largely on the status of his health. However, it can therefore be concluded that health status remains a catalyst for maximum achievement of the students not only in Integrated Science but in academics as a whole.

Recommendations

Based on the findings of the study, the following recommendations were made

1. Parents should be sensitized on the importance of giving children adequate and nutritional food,
2. Every stakeholder in education should encourage the students to adopt and keep to healthy lifestyle
3. Parents and guardians should be sensitized on the importance of living healthy lifestyle and its effects on the academic achievement of their students and finally
4. The teachers and schools generally should be academically prepared to organize appropriate developmental learning experience that can empower students to embrace safer and healthier lifestyles.

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