

COVERAGE OF PHYSICAL FITNESS AND CONDITIONING ACTIVITIES IN PHYSICAL EDUCATION CURRICULUM IN SECONDARY SCHOOLS: A PATHWAY FOR HEALTH PROMOTION IN NIGERIA

Aniodo D. A.¹ and Eze G.²

Abstract

The main thrust of this study was to determine the extent of coverage of physical fitness and conditioning activities in physical education curriculum in secondary schools in Nigeria using Nsukka education zone as area of the study. It was also to point out how it can serve as a means of health promotion. The sample for the study consists of 220 physical Education teachers and students at the junior secondary level in Nsukka Education Zone of Enugu State. All the 72 physical education teachers and 148 junior secondary school students made up the sample, for this study. The data-gathering instrument for this study was a checklist and questionnaire titled Junior Secondary School Curriculum Coverage Questionnaire (JSSCUQUE) developed by the researchers based on literature review and personal experience. The questionnaire was made up two sections: A and B. Section A sought for demographic information from the respondents while section B elicited from the respondents information on the curriculum coverage associated with physical fitness and conditioning. Three experts in Department of Health and Physical Education, University of Nigeria Nsukka validated the instrument. The split-half method was used to establish the reliability of the instrument which was carried at a time lag of two weeks using twenty four teachers from Obollo Education Zone. The items were selected into even and odd number items. The responses of the two groups were analysed to establish the reliability co-efficient of the entire instrument using Spearman-Brown Correlation formula. The acceptable co-efficient was .78. The mean and standard deviation was used for the purposes of description and in order to answer the research questions. The t-test, Anova and scheffe multiple comparisons test statistic

^{1,2} Department of Health and Physical Education, University of Nigeria, Nsukka.

were used to verify the null hypothesis. All the hypotheses were tested at .05 level of significance using the t-test statistics. It was found that coverage of physical fitness and body conditioning in the physical education curriculum is of a moderate extent. Two of the three hypotheses tested were rejected while one was retained. The study concluded that physical fitness and conditioning activities are covered in the physical education curriculum. It was therefore recommended that physical fitness and conditioning should be encouraged the more as a way of promoting health.

Keywords: Students, teachers, sergeant jump, balance beam and activities.

Introduction

Physical education is an integral part of Junior secondary school curriculum in Nigeria. It is a compulsory subject at that level and as such every Nigerian child in JS1-3 is expected to be taught physical education as contained in the curriculum. Physical education curriculum according to Ajala and Sohi (2010) is a term meant to include the totality of all the experiences of the learner through physical activities while under the influence, guidance and direction of the teacher. Selected physical activities and intended outcome are systematically planned by the school to enable learners develop physically, mentally, emotionally and socially in order to live a useful life in the society. The task of physical education curriculum is to help each one develop his abilities, skills and talents. Ajibola (2008) maintained that the curriculum is geared towards improving the well being of man and to bring about national development by accelerating the needed

manpower development for the technological, economic and political development of the nation in line with the objectives of general education. It should be noted that effective curriculum coverage in physical education contributes to individual physical, recreational interests and skills as well providing for those who are physically challenged, those of average ability and those who are highly skilled.

Physical education curriculum has ten major components which are supposed to be covered within the three years of junior secondary school programme (NERDC, 2007). The areas include athletic, sports and games, physical fitness and conditioning, gymnastics, aquatic sports. Careers guidance, issues and challenges, dance activities, historical and scientific foundation, recreation and leisure and martial arts. This study however focused on the coverage of physical fitness and conditioning activity as an avenue for health promotion,

Physical fitness is an important quality which every individual, young or old requires. It is seen as the ability of the individual to carry out his or her daily activity; take part in recreation and have enough energy for emergencies (Aniodo, 2011). Attaining a level of fitness requires conditioning through physical activities. The physical education curriculum in Nigeria provides for the coverage of certain activities for the purpose of becoming physically fit. Such activities are balance beam walk, sergeant jump, sitting position, wooden box activities and standing broad jump. These activities are expected to improve physical fitness and promote health if well covered.

Coverage according to Merriam (2000) is the extent to which a programme of studies is observed, analyzed and reported in the instruction process. Coverage in the context of this study is the extent to which the activities in the physical education curriculum are observed. Soanes (2001) defined observation as the ability to identify important details in a study in order to define it clearly. Through observation, important element of the curriculum content in the form of lesson notes, diaries and the scheme of work and student's evaluation materials were analysed and reported. These elements reveal the extent of coverage as pupils need to be observed as their interest, abilities and skills manifest in the subject areas.

Coverage of physical fitness and conditioning activities will promote health of the students and inculcate the idea of keeping fit and promoting health in them. Instruction on knowledge and practice of physical fitness and conditioning activities for health promotion should start as early as possible when the students physical and intellectual capability of benefitting from instruction is at a high level. The study was carried out in Junior secondary schools in Nsukka education zone where physical education is taught. It would help determine the extent of coverage of physical fitness and body conditioning programme.

Research Question

To what extent is physical fitness and body conditioning activity covered in curriculum?

Hypotheses

1. There will be no statistical significant difference between urban and rural schools regarding the extent of coverage of physical fitness and body conditioning.
2. There will be no statistical significant difference between public and private schools regarding the extent of coverage of physical fitness and body conditioning.
3. There will be no statistical significant difference among boys, girls and co-educational schools regarding the extent

of coverage of physical fitness and body conditioning.

Methods

A descriptive survey design was used for this study. This design is one that produces a snap shot of a population at a particular point in time. Mallini and Cowen (2010) viewed the design as a representative sample of the population consisting of individuals of different ages. It studied a section of a population in a single point in time.

The sample for the study was 220 respondents from both public and private secondary schools in the zone. It was made up of all the 75 Physical Education teachers and 148 students drawn from fourteen (14) private schools and sixty-one (61) public junior secondary schools. Fifty-nine (59) of the schools are in rural areas while sixteen (16) are located in urban areas. These are four (4) exclusive boys and five (5) exclusive girls schools in this study. Fifty-two (52) co-educational schools was also part of the study. Nsukka Education Zone comprises of three local government areas. The Local Government Areas in the zone are Nsukka with urban and rural settings, Igbo-Etiti and Uzo Uwani both of them are located in the rural areas. Nsukka Education zone is endowed with higher institution of learning, University of Nigeria, equally endowed with basic amenities and functional private and

public schools. All the schools both private and public use the same curriculum, partake in inter zonal competitions and extramural competitions. The schools are being managed by the Post Primary Schools Management Board and Diocesan Education Board in case of mission schools. Nsukka Education zone was chosen because to the best of the knowledge of the authors there is no available information on the coverage of physical fitness and conditioning activities in physical education curriculum at the junior secondary school level in the zone.

The data-gathering instruments for this study were the Checklist and a questionnaire titled Junior Secondary School Curriculum Coverage Questionnaire (JSSCCQUE) developed by the researchers based on literature review and personal experience. The checklist was used to ascertain if topics in physical fitness were covered in the teaching of physical education or not, while the questionnaire served to determine the extent of coverage of topics in athletics. The questionnaire had two sections: A and B. Section A collected demographic information of the respondents while section B elicited information from the respondents on curriculum coverage associated with athletics:

The face validation of the questionnaire was obtained through the judgment of three experts in the Department of Health and Physical Education and two in

Curriculum Studies and Dept. of Measurement and Evaluation, all in the University of Nigeria, Nsukka. To determine the reliability of the instrument, the split-half method was used to establish the reliability of the instrument which was carried at a time lag of two weeks using twenty four teachers from Obollo Education Zone. The items were sorted into even and odd number items and reliability co-efficient of .78 was established using Spearman-Brown Correlation formula..

The researchers used a direct delivery technique in the administration of the questionnaire to the respondents. An introductory letter from the Head, Department of Health and Physical Education, University of Nigeria, Nsukka was obtained and presented to the schools. A total of 220 copies of the questionnaire were distributed to the respondents by hand and retrieved on the spot by the researchers with the help of three research assistants who were drawn from secondary schools and properly briefed orally

and directed by the researcher. The retrieval of completed questionnaire on the spot was to ensure high return rate.

The responses to the questionnaire for each item was examined for completeness. All the 220 copies of the questionnaire was used for data analysis. The data was converted into mean and standard deviation for the purposes of description and comparison in order to answer the research questions. The criterion mean of 2.5 was set for the purpose of taking decision. A mean score of 3.51 and above were regarded as very high extent, a score of 3.10 -3.50, a score of 2.5-2.99 were regarded as medium extent, which a mean score that was less than 2.5 were of a low extent. The t-test, ANOVA and scheffe multiple comparisons test statistics were used to verify the null hypothesis where there was a significant difference. All the hypothesis was tested at .05 level of significance using the t-test statistics.

Results

The results of this study are presented in tables 1-5

Research Question

To what extent is physical fitness and body conditioning covered in curriculum?

Table 1

Mean scores (\bar{x}) and standard deviation (SD) of subjects regarding coverage of physical fitness and body conditioning N-220

S/N	Statements	\bar{X}	SD	Decision
1	Coverage of balance beam walk	2.24	1.01	ME
2	Sergeant jump coverage	2.25	1.01	ME
3	Sitting position coverage	2.69	1.10	ME
4	Coverage of wooden box activities	1.97	.87	LE
5	Coverage of standing broad jump	2.29	1.06	ME
	Grand total	11.4	4.96	
	Grand mean	2.29	0.99	ME

Table 1 indicates that fitness sitting position had the highest mean score of 2.69 followed by standing broad jump of 2.29. Wooden box activities had the least average score of 1.97. Wooden box, broad jump, sergeant jump, balance beam walk fell below the criterion mean. Based on the grand mean in table 6 the coverage of physical fitness and body conditioning in the physical education curriculum is of a moderate extent.

Hypothesis 1

There will be no statistical significant difference between urban and rural schools regarding the extent of coverage of physical fitness and body conditioning.

Table 2:

Analysis of group t-test for difference between coverage of physical fitness and body conditioning among school by location

Component	School	N	\bar{X}	SD	DF	T	Sig. (2 tailed)	Critical value	Decision
Physical fitness & body conditioning	Rural	111	10.70	4.19	218				
	Urban	109	12.16	3.42	218	-2.814	.005	1.96	Rejected

The data presented in table 2 shows significant (2 tailed) values for test of physical fitness and body conditioning by location is .005 which is lesser than .05 the hypothesis is rejected, the

findings revealed that there is a significant different in the coverage of physical fitness and body conditioning in physical education in urban and rural schools.

Hypothesis 2

There will be no statistical significant difference between public and private schools regarding the extent of coverage of physical fitness and body conditioning.

Table 3:

Analysis of group t-test for difference between coverage of physical fitness and body conditioning among public and private schools.

Component	School	N	\bar{X}	SD	DF	T	Sig. (2 tailed)	Critical value	Decision
Physical fitness and body conditioning	Public	168		11.29	4.09	218			Not
	Private	52	11.87	3.11	218	-0.94	.349	1.96	Rejected

Significant (2 tailed) values for school ownership is .687 greater than .05, the hypothesis is accepted. This finding indicates that there is no significance difference in the coverage of physical fitness and body conditioning in public and private schools.

Table 4:

One-way ANOVA for school type of activity/theoretical areas in physical fitness and body conditioning
Dependent variable curriculum coverage of physical fitness and body conditioning

Source of variation	Type III/ sum of squares	DF	Mean Square	F	Sig. of F
School Type	322.395	2	161.197	11.694	.000
Error	2991.292	217	13.785		
Total	3313.686	219			

The table 4 also show F value for the coverage of physical fitness and body conditioning is 11.694 with significance of .001 which lesser than .05, the null hypothesis is therefore rejected.

This finding also indicates that there is a significant difference in the coverage of physical fitness and body conditioning among schools. To show the direction of the difference f-value when a significant difference is observed, Scheffe test is applied in the table below

Table 5:
Between groups Scheffe test (multiple companion) on school type curriculum coverage of sports and games.

Component	School	N	\bar{X}	SD	DF	T	Sig. (2 tailed)	Critical value	Decision
Physical fitness & body conditioning	Ex. boys-	21	11.24	4.66	218	-3.64	.005		Rejected
	ex, girls-	24	14.88	3.34	218	-27	.953		Not Rejected
	Ex. girls-co-ed.	175	10.97	3.64	218	-3.91	.000		Rejected
	Ex, girls-co-ed.								

Data in the above table shows that exclusively girls had a greater coverage followed by exclusively boys and co-education respectively.

Discussions

The coverage of physical fitness and conditioning activities was of a moderate extent, this study found that there is a significant difference among urban and rural schools regarding the coverage of physical fitness and body conditioning. The findings attest to Okojie (2004) position who attributed these differences between urban and rural achievement to the facilities and amenities found in urban areas. Some of the schools in urban areas has mini gymnasium where they practice body conditioning activities.

It was found that there is no significant different between public and private schools regarding coverage of physical fitness and body conditioning, the finding shows that public and private schools covered the topics to a moderate extent. The fact that the zone accommodates a university with an overwhelming influence on the environment including the urban and rural areas may be responsible for the similar result for the two locations. The study equally found that there is a significant difference in the coverage of physical fitness and body

conditioning between groups (school types). Exclusively girls' schools had the highest coverage. This may be because of some social factors. Nowadays the females appear to be more conscious of maintaining slim fit which could come largely from fitness activities. This may be why they teach physical fitness activities more in female schools than in male schools.

The teaching of physical fitness as part of physical education programme in the secondary schools in Nigeria is a true medium through which health promotion could be achieved nationwide. Sequel to the provisions of the national policy on education which makes physical education compulsory subject in junior secondary schools (Federal Government of Nigeria, 2004) and the UBE programme which makes junior secondary education mandatory for the Nigerian child (NERDC, 2007) it then means that every Nigerian child is expected to experience the physical education programme. The student who goes through the junior secondary school system would have taken part in physical fitness and conditioning activities as part of the physical education programme in the school.

Coverage physical fitness and conditioning activities as part of physical education indeed holds some future relevance. As the students are taught these activities they are made to realize the importance of keeping fit. They acquire basic knowledge of physical fitness and body conditioning necessary for enhancing the health of the individuals. Knowledge gathered will help the student plan for fitness training both in the immediate and in the future (Wadsworth, 2011). Once the culture of keeping fit is imbibed at this stage the student tends to move on with it to adulthood. This will in no doubt impact positively on the health of Nigerians who had passed through the school system.

Conclusion

Sequel to the findings of this study the following conclusions were drawn

1. The extent of coverage of physical fitness and conditioning activities of physical education curriculum in urban and rural Junior Secondary Schools are of the same level.
2. The extent of coverage of physical fitness and conditioning activities of physical education curriculum in public and private Junior Secondary Schools are not of the same level.
3. The extent of coverage of physical fitness and conditioning activities of physical education curriculum in exclusive boys, exclusive girls and co- education Junior Secondary Schools are of the same level.

Recommendations

Based on the findings and conclusions drawn from this study the following recommendations were made:

- 1 The coverage of physical fitness and conditioning activities of physical education curriculum in urban and rural Junior Secondary Schools should be sustained by the various school authorities.
- 2 The coverage of physical fitness and conditioning activities of physical education curriculum in private and public Junior Secondary Schools should be improved by the various school authorities.
- 3 The coverage of physical fitness and conditioning activities of physical education curriculum in exclusive boys, exclusive girls and co-education Junior Secondary Schools should be sustained by the various school authorities.

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