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EVALUATION OF STUDENTS INVOLVEMENT IN PHYSICAL ACTIVITIES IN IBADAN METROPOLIS

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Abstract

The study evaluated the level of involvement of students in physical activities in the city of Ibadan. Three hundred and fifty-eight (358) students and sixty-one (61) teachers were randomly selected through multi-staged sampling procedure from fifty (50) junior secondary schools in the metropolis. The teacher and student questionnaires were used to collect relevant information that were analysed with descriptive statistics and multiple regression. Findings indicate that about 70% of the students reported that physical activities are good for them. However, they do not seem to have very good knowledge of the benefits of being involved in physical exercises. Number of health periods in the school timetable, availability of teachers in the school and the number of physical and health education periods in the school timetable in that order, significantly explained students' involvement in physical activities. Non-availability of equipments and facilities, lack of textbooks, inadequate number of teachers, administrative interest and lack of funds, among others were reported by the teachers as constraints to involving students in physical activities. To improve the present standard of teaching and to achieve the expected objectives of physical and health education, it was recommended that school management should note the school factors observed to be important and those militating against involvement in this study while allocating teacher workload.

***Key Words**: Evaluation, Physical Activities, Ibadan Social benefits, Equipment and Facilities.*

Introduction

Physical Education and Health Education are currently elective subjects at the junior secondary school system. Physical activity is an important component of physical education (PE). Physical activities contribute to good mental health, normal functioning of vital organs in the body and an

outlet for negative emotions like fear, frustration and anger. The effects of physical activities on school children's physical, intellectual and emotional life are well documented (Spady, 1970; Hanks & Eckland 1976; Marsh, 1993; Gitonga & Apata, 1999; Caldwell & Huitt 2004; Bowtell & Verne, 2006). Physical Education like any other school subject requires conscious planning and execution coupled with proper curriculum adjustment to ensure that there is a regular all year round exposure. It is, therefore, not enough for children of school age to be introduced to physical activities only when it is convenient for the teacher, nor should it be a time for free lance (leisure) plays. In the views of Bucher (1985), it is equally necessary that school children are made to understand the effects of those activities on the body and mind, as these ensure that the benefits of the venture are reaped. Besides the many physical, mental and social benefits of physical education and the invaluable benefits of physical activities, is increased resistance to diseases. Making reference to 'Kids in Action," Anyanwu (2002) confirms the views of many physical education experts that physical activities are very essential in children's daily life. Physical education experts, paediatrics and medical experts such as Venkateswarlu (1990), Adesanya (1993), Caldwell and Huitt (2004), Robert Wood Johnson Foundation (2007) and American Academy of Paediatrics (2009) among others recommend that school children and youths should be introduced to moderate vigorous physical activities in physical education programme that should have carryover value to adulthood. However, Amusa, Blade, Agbonjimi and Akintunde (1993) and Caldwell and Huilt (2004) caution that age, body size and weight should guide the extent of exposure of children to activities that are absolutely muscular strength related.

There is a growing evidence in developed countries of the world like America and Britain to support the idea that modern day school children are becoming less inactive physically (Caldwell & Huitt, 2004; Bowtell & Verne, 2006; Robert Wood Johnson Foundation, 2007). In America alone lack of physical activity has been implicated for the high increase (100%) of the prevalence of childhood obesity in the last three decades (Centre for Disease Control (CDC) as reported by Caldwell & Huitt (2004), problem of overweight and obesity (American Academy of Paediatrics, 2009; Caldwell & Huitt ,2004). The situation according to these experts has also led to other health risk related diseases like Type II diabetes among school children and adolescents. There is no doubt that

this condition with its associated health risks is creeping in so astronomically on Nigerian school children of today.

Furthermore, Bowtell and Verne (2006), contend that such health risk related diseases among children and adolescents can persist into adulthood where they are severe and well established. But when children are helped to form a regimen it is expected that they carry over the benefits to adulthood. These views are supported by those of Boreham, Twist, Murray *et al* (2001), The Health Education Authority (1992) as cited by Bowtell and Verne (2006). The recommended standard of exposure of school children to physical activities according to the U.S Surgeon General is 'at least 60 minutes of moderate physical activity most days of the week' (Robert Wood Johnson Foundation, 2007, P.I).

In view of the fore stated, the school and the teacher thus have important roles to play to ensure that young children are adequately exercised. School factors such as whether PE is taught in the school, a school has PE teachers, number of periods allocated to PE and Health Education in the school time table and whether the same teacher teaches Physical Education and Health Education are important. As rightly observed by Cadwell and Huitt (2004) participation in school physical education class is the only opportunity some school children will have to be exposed to physical activities. Also, the craze for junk food among young school children and adolescents aided by their parents makes it imperative now than ever before for them to be physically involved in activities. The health implication for inaction can be grievous for the individual, parents and the nation.

In the light of the foregoing, this study evaluated the level of involvement of secondary school students in physical activities through Physical Education, with a view to providing decision makers with information that would lead to improvement in individual and corporate well-being of the nation more so as PE now unfortunately assumes an elective status in the school curriculum. To this end, the following research questions formed the thrust of the study.

1. What is the level of students' knowledge on the importance of their involvement in physical activities?
2. To what extent do school factors foster students' involvement in physical activities?
3. What are the relative contributions of these factors in explaining students' involvement in physical activities?

4. What problems militate against the involvement of students in physical activities in the metropolis?

Methodology

Research Design

The study is ex-post-facto types of research.

Sampling Procedure and Sample

The multistage and stratified sampling techniques were adopted in which public schools in the five Local Government Areas of Ibadan Municipality (that is, Ibadan North, Ibadan North East, Ibadan North West, Ibadan South East and Ibadan South West) were selected based on population proportional to size (PPS) (Sambo, 2005). This method of sampling enables a researcher to sample from the universe, elements based on the total population of an area or sampling domain. The essence is to avoid the error of over or under sampling of any area over the others. Thus, in LGAs were there were fewer schools (Ibadan South West and Ibadan North West), five public secondary schools were randomly selected whereas LGAs where there were more schools (Ibadan North, Ibadan South East and Ibadan North East), ten public secondary schools were randomly selected. In addition, two private secondary schools were also selected from each local government area. This gave a total of 50 junior secondary schools selected. The selection of the teachers was based on the process as earlier explained, that is one PE teacher was selected from schools with small number of teachers while two PE teachers were sampled from large schools bringing the total number of teachers to sixty –one. Five students were randomly selected from JSS 1 and II respectively to participate in the study making a total of 500 students. However, 142 students who reported that Physical and Health Education was not taught in their schools were eliminated and the remaining 358 students and 61 teachers were used for analysis. The students were aged between 10-16 years with a mean age of X= 14.5 and a S.D of 4.85, and the teachers' mean age was X= 37 years and a S.D. of 6.24.

Instrumentation

Two instruments; Students' Knowledge of the Importance of Involvement in Physical Activities (SKIIPA) and Teacher Questionnaire (TQ) were developed and used to collect data. SKIIPA consisted of 16 initial items

which were subjected to content validation and administered on 50 junior secondary students. The students were asked to respond to the items in a three-point scale of "agree" "do not know" and "disagree". Their responses were further subjected to statistical validation using Cronbach alpha method to establish the validity and internal consistency of the instrument. Eleven items survived the validation process and yielded a correlation coefficient of 0.87.

The Teacher Questionnaire (TQ) required that the teachers provide information on school factors such as: whether the school teaches Physical Education (PE) or Health Education, school has PE and Health Education teachers, the number of periods of PE and Health Education on the time-table, and if same teacher teaches PE and Heath Education. They were also required to indicate the challenges they face in engaging students in physical activities. TQ was subjected to content validation and no ambiguity was found in it.

Data Collection and Analysis

The researcher and four other assistants administered the questionnaire to the respondents. The data collected were subjected to descriptive and multiple regression statistics.

Results

Result in Table 1 shows that over 80% of the students do not agree that physical activities work on the human body; teaches important lessons that can be useful in later life; allows proper movement of the various parts of the body; produces strong bones, improves blood circulation, and should be introduced early to children. They were also not sure iff physical activities provided oxygen to the brain or muscles. As presented in the Table, the students agree that PE is necessary for children butt ((over 70%)) said it should be taught only in the class, in other words, theory without practise.

Table 1: Students Knowledge of the Importance of their Involvement in Physical Activities

S/N	Item Statement	Agree		Do not know		Disagree	
		Freq.	%	Freq.	%	Freq.	%
1	works on the human body	20	5.6	24	6.7	314	87.7
2	should be taught in class only.	286	79.9	3	10.6	34	9.5
3	teaches important lessons useful in life.	19	5.3	41	10.15	298	83.2
4	allows proper movement of all parts of the body	14	3.9	29	8.1	315	88.0
5	produces strong bones	14	3.9	23	6.5	321	89.7
6	improves blood circulation	23	6.4	29	8.1	306	85.5
7	is necessary for school children	269	75.1	43	12.0	46	12.8
8	should be done during inter-house sporting activities	210	58.7	36	10.0	112	31.3
9	improves the movement of oxygen (air) to the brain and muscles	79	22.1	154	43.0	125	34.9
10	should be introduced to young children early	14	3.9	46	2.8	298	83.2
11	Should not be done by students themselves	182	50.8	53	14.8	123	34.4

Also, about 50% of the students agreed that Physical Education should not be left alone for them to handle. Table 2 shows the regression ANOVA and composite Multiple regression summaries of school factors on the dependent variable of involvement in physical activities. Results in Table 2 show a significant ANOVA of school factors on involvement in physical activities ($F_{(5,353)} = 11.11$, $p \leq 0.05$). The Table also shows that school factors have a multiple correlation of (R=.389), R^2 of .136 and adjusted R^2 of .124 with level of involvement in physical activities. This implied that school factors accounted for 12.4% of students' involvement in physical activities.

Table 2: Multiple Regression Summary of School Factors on Level of Involvement in Physical Activities

Model Summary

Multiple R = .389
R Square = .136
Adjusted R^2 = .124
Standard Error = 2.114

Model	Sum of Squares	Df	Mean Square	F	Sig
Regression	248.47720	5	49.69544	11.11	.000
Residual	1574.35800	353	4.46977	813	
Total	**1822.83520**			**358**	

*Significant at $p \leq 0.05$

Table 3 shows the relative contributions of school factors on the variance in involvement of school children in physical activities. Number of Health Education periods in the time table with a β weight of 0.237 made the highest significant contributions to involvement of students in physical activities. This was followed by the number of Physical Education teachers the school has with a β weight of 0.145 and the number of PE periods on the timetable β = -0.304. These were significant at $P \leq 0.05$.

Table 3: Relative Contributions of School Factors to Level of Involvement

Variable	Unstandardised Coefficients B	Std Error B	Standardised coefficients B	t	Sig Beta
Constant	5.018111		0.804686	6.234	.000*
1. Number of Health periods in timetable	1.028337	0.225294	0.236965	4.564	.000*
2. School teaches PE	0.049481	0.2195570	0.011179	0.225	.8218NS
3. School has PE teachers	0.70448	0.244975	0.144994	2.876	.0043*
4. Same teacher teaches PE & Health	0.002797	0.616068	-3.2176.04	-0.005	.9964NS

5. Number of PE in timetable	-2.625084	0.636994	-0130374	-4.121	.0000 *

*Significant at $P \leq 0.05$
NS = Not significant at $P \leq 0.05$

Table 4 provides information on factors that militate against exposure to physical activities. Five major factors are non- availability of facilities and equipments (38.0%), lack of textbooks (16.8%), inadequate teachers (12.3%), administrative interest (9.5%) and lack of fund (8.4%). Other constraints are as stated in Table 4.

Table 4: Constraints to Involvement of Students in Physical Activities

S/N	Factors	Frequency	%age
1	Non-availability of facilities and equipments	136	38%
2.	Lack of textbooks	60	16.8%
3.	Inadequate teachers	44	12.3%
4.	Administrative Interest	34	9.5%
5.	Fund	30	8.4%
6.	Poor student interests especially (females)	13	3.6%
7.	Not a compulsory subject	12	3.4%
8.	Too many students	11	3.1%
9.	Inadequate space	9	2.5%
10.	Inadequate class periods	9	2.5%
	Total	**358**	**100%**

Discussion

Findings from this study indicate that the school children sampled from the metropolitan city of Ibadan do not seem to have good knowledge of the beneficial effect of physical activities to the human body. This is evident in the students' responses in which over 80% of them believe that physical activities should not be introduced to students early, nor do they agree to the fact that physical activities involve the human body or that any lesson learnt from physical activities can be useful in later life. They also believe that strong bones, proper blood circulations and proper movement of various parts of the body do not benefit from physical

activities. It was also obvious that students could not associate the benefits of the air they breathe to organs of the body such as the brain or muscles. However, most of these school children (75%) agreed that physical activities are good for school children even though about half of them (50%) said physical activities should not be left alone for students to handle. They are also of the view that physical activities should be restricted to the four walls of a classroom. The line of thinking of these students is fraught with problems. First is the problem of serious lack of awareness of what Physical Education teaches. Second is the problem of decay in the practice of the subject which may have led to faulty reasoning as these. Third is the lack of enthusiasm both on the part of teachers and students to display good practices in the subject. Gone were those days when the first subject in the school timetable was PE and both teachers and students properly dressed in smart shorts, tops and comfortable shoes come out for training. Nowadays, what you observe on the field during PE practical is students wearing their school uniforms (boys in shirts and trousers and girls in their pinafores and sandals, rubber or leather). Also, the findings in this study run short of the views of Buchor (1985), Critonga and Apata (1999), Adesanya (1993), Kids in Action (2002), Caldwell and Huitt (2004), American Academy of Pediatrics (2009) and Robert ood Johnson Foundation (2007). The views of the students as to when children are to be introduced to PE, runs contrary to the findings of experts (Amusa *et al,* 1993; Caldwell & Huitt, 2004).

The findings in this study equally show that school factors are significant in explaining students' involvement in Physical Education in school. A Multiple regression ANOVA which was significant at ($F_{(5,353)}$ = 11.118; ≤ 0.05) explained 0.389 composite effect with the dependent variable involvement in physical activities. Number of health periods in the school timetable with β weight = 0.2370; availability of PE teachers in the school with β weight = 0.1450; and the number of PE periods in the school timetable with β weight =-0.3037 made significant relative contributions to students' involvement in physical activities. However, that the school teaches PE or whether the same teacher teaches PE and Health Education in the school did not make significant contributions to students' involvement in physical activities. Findings suggest that the teacher workload in terms of number of periods taught and availability of teachers in a subject area go a long way to explain a teachers' task performance or what teachers can do in class. These findings tend to agree with previous works by Okwilagwe (2011) which observed that school

factors such as the number of periods for PE and Heath Education on the time-table significantly influence the extent of exposure of students to all the components of PE in the school. In another study, Okwilagwe and Samuel (2011) found that the number of periods that a secondary school teacher teaches can explain their effectiveness or performance.

With respect to problems militating against involvement of students in physical activities, the teachers reported that non- availability of equipments and facilities, lack of textbooks, inadequate number of teachers, administrative interest and lack of funds are major constraints to involving students in physical activities. While it seems that problems militating against exposure to physical activities in developed nations are environmentally related (Active Living Research, 2007; American Academy of Pediatrics, 2009), in developing countries like Nigeria, those observed as in this study are material, financial, personnel and administrative problems. These findings have serious implications for the teaching and learning of Physical and Health Education and the achievement of the objectives of the subject our schools.

Conclusion

Physical activities besides good nutrition are essential to healthy lives of children, youths and adults of a nation. In fact, the effects of physical activities on nutrition are intertwined. Physical activities are to be established early in the life of an individual for any beneficial effect in adulthood. In the Nigerian educational system, the proper implementation of the school curriculum in PE is the main avenues through which physical activities can be developed in school children. The findings in this study indicate that students in JSS schools in Ibadan do not seem to have good knowledge of the value of exposure to physical activities. However, three variables contributed to explaining the variance in involvement of these students in physical activities. Also, the study isolated five factors that militate against proper involvement of students in physical activities.

Recommendations

Study findings have implications for teachers, school administrators and policy makers. It was recommended that these stakeholders should see to it that adequately qualified Physical Education teachers, teacher workload in terms of periods for Physical Education on time table and the availability of equipments and facilities to teach the subject practically

received urgent attention if students at this level of education are to become healthy and physically fit individuals preserved for the future labour force of the country.

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