



Adolescent's Participation in Physical Activity for Health Promotion in Contemporary Nigerian Society

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Abstract

Adolescence health lifestyle is an important health priority to the national agenda development. In this regard, the important favourable effects of physical activity in weight control becomes extensively needed in this period for health promotion in contemporary Nigerian society. This study was designed to determine adolescent's participation in physical activity for health promotion in contemporary Nigerian society. The population was 500 adolescents registered in youth social gathering in Awka metropolis. A quantitative research design was adopted to elicit information from the volunteered adolescents on social and environmental barriers of adolescent's participation in physical activity for health promotion. The participants comprised 90 adolescents with purposive simple random sampling technique (males = 54 and females = 36). A structured questionnaire titled "Questionnaire on adolescent's participation in physical activity for health promotion" as instrument for data collection, validity and reliability of instruments were conceptualized. Descriptive statistics of mean and standard deviation were used to answer all the research questions. The study found out that adolescent's physical activity participation is strongly affected by social factor, male ($\bar{x} = 2.66$) and female ($\bar{x} = 3.00$). Environmental barrier also affects adolescent's physical activity participation. Among the suggested strategies to improve adolescent's participation in physical activity for health promotion are: knowledge promotion, environmental facility enhancement, family and community attention to these adolescents, to mention but few. There should be need for government and NGOs to provide progressive physical activities for the adolescent's health programs and not just competitive sports that happen occasionally in schools.

Keywords: Adolescent, Physical Activity and Health Promotion

Introduction

Adolescence healthy lifestyle is an important health priority to national development. According to Bann D, Wills A, Cooper R, Hardy R, Aihie Sayer A and Adams J. (2014), adolescence obesity is becoming a major public health problem all of the world. Wright, (2010) highlighted the increasing dramatical rates of overweight and obesity and their related range of adverse health outcomes especially in children and adolescents. In this regard, the important favourable effects of physical activity in weight control becomes extensively needed in this period for health promotion in contemporary Nigerian society.

Adolescence represents a critical period of development during which personal lifestyle choices and behaviour patterns establish, including the choice to be physically active (Blakemore & Mills, 2013). However, physical inactivity, sedentary behaviour and low cardiorespiratory fitness are strong risk factors for the development of chronic diseases with resulting morbidity and mortality, as well as economic burden to wider society from health and social care provision, and reduced occupational productivity (Blakemore & Mills, 2013).

An adolescent is defined by the World Health Organization, (WHO), (2010) as a person aged 10 to 19 years. They are commonly referred to as the "next" or "future generation" and they require protection and care, services, opportunities, support, and recognition (United Nations International Children's Emergency Fund, 2015). Moreover, physical activity contributes to growth and development of psychological health of adolescents. Physical activity is defined by WHO (2018) as any bodily movement produced by skeletal muscles that require energy expenditure. It also encompasses all activities, at any intensity, performed during any time of the day or night. It includes exercise and incidental activity integrated into daily activities. Piggin (2020) opined that physical activity is any bodily movement produced by skeletal muscles that results in energy expenditure. This definition produces a very specific way of understanding physical activity. The focus on "skeletal muscles" and "energy expenditure" frames physical activity as a specific mechanistic act. Furthermore, physical activity is defined by Tremblay, Aubert, Barnes, Saunders, Carson, and Latimer-Cheung (2017) as any body movement generated by the contraction of skeletal muscles that raise energy expenditure above resting metabolic rate, and is characterized by its modality, frequency, intensity, duration, and context of practice.

The new and broader definition of physical activity by Piggin (2019) include an activity that involves people moving, acting and performing within culturally specific spaces and contexts, and influenced by a unique array of interests, emotions, ideas, instructions and relationships. The inclusion of social and cultural contexts and

the array of influences allow for the consideration of opportunities and constraints to physical activity. Operationally, physical activity is bodily movement generated by skeletal muscles which produces energy for healthy living. Unfortunately, despite the benefits of regular physical activity, most of the children in growing period do not meet the recommended programs for physical activity. That is to say; promoting their health is still in jeopardy (Piggin 2019).

Health promotion as defined by WHO (2016) is the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment. Mathew and Triton (2015) affirm that health promotion involves education of the public to a high level of awareness of diabetes, its risk factors, and its complications, reduction in dietary intake of excess calories, fats and sugars, with physical activity to promote fitness and weight appropriate for height (that is BMI < 25). According to Peter, Bruce, Dona and Jenny (2003), health promotion is a combination of educational, organizational, economic and political actions designed with consumer participation, to enable individuals, groups and whole communities to increase control over, and to improve their health through attitudinal, behavioural, social, and environmental changes. Moreover, the researchers are of the opinion that health promotion is the process of enabling people to increase control over, and to improve their health. Nevertheless, some factor could affect adolescence physical activity which may affect their health promotion negatively or positively.

Social class is one factor that may affect adolescence physical activity levels (MacDonald, Rodger, Abbott, Ziviani & Jones 2014). With the increased prevalence of health related diseases, high percentage of obesity among young people and a rise in sedentary behaviours, understanding the factors that affect young people's participation in physical activity is of great importance. The environment is said to play a significant part in the reduction of health enhancing physical activity and claimed to have contributed to an increase in incidents of obesity (Foster & Hillsdon, 2014). Factors such as the decline in the rate of walking, lack of infrastructural facilities, weather and the reduction of physical education and sports in schools are given as some reasons behind the increase of sedentary behaviours (Hardman & Stensel 2004). Foster and Hillsdon (2014) suggest that in social factors, social class such as friends, peers, colleagues, religion, ethnicity as well as skills, knowledge and abilities that young people possess from belonging to a specific social class can affect their physical participation level. Qualitative research may be allowed for greater understanding of the reasons behind the adolescence's physical activity related behaviour on environmental and social aspect of deliverable's models (Allender, Cowburn & Foster 2015). It is as a result of this that this study was designed to determine adolescent's participation in physical activity for health promotion in contemporary Nigerian society.

Purpose of the Study: The general purpose of the study is to determine the extent of adolescent's participation in physical activity for health promotion in contemporary Nigerian Society. Specifically, the study tends to determine:

1. extent to which social barrier affects male and female adolescent's participation in physical activity for health promotion in contemporary Nigerian society.
2. extent to which environmental barrier affects male and female adolescent's participation in physical activity for health promotion in contemporary Nigerian society.

Research Question

The following research questions guided the study;

1. To what extent do social barriers affect male and female adolescent's participation in physical activity for health promotion in contemporary Nigerian society?
2. To what extent do environmental barriers affect male and female adolescent's participation in physical activity for health promotion in contemporary Nigerian society?

Methods

A survey research design was adopted to elicit information from adolescents on social and environmental barriers of adolescent's participation in physical activity for health promotion in contemporary Nigerian society. A sample size of 90 adolescents was used for the study and were selected purposively from a population of five hundred adolescents involved in different youth social gathering in Awka metropolis. Awka South Local Government Area of Anambra state is made up of nine communities and sixty-eight villages with its headquarters located in Awka which is the capital of Anambra State.

A structured questionnaire titled “Questionnaire on adolescent’s participation in physical activity for health promotion” was used and its content and face validity were established through the judgement of three experts in the field of Human Kinetics, Health Education and Promotion Department. Reliability test of the instrument was established which yielded a correlation coefficient of 0.79.

Method of data collection and analysis

Ninety copies of questionnaire were administered to the respondents personally by the researchers together with two research assistants. The questionnaire was retrieved on-the-sport, therefore the total number shared was received giving a hundred per cent return rate. The collected data was sorted and the responses were tallied and presented on the frequency distribution tables. Descriptive statistics of mean and standard deviation were used to answer all the research questions. Any item with mean above or equal to the criterion mean (CM), $\bar{x} = 3.00$ was regarded as high extend (HE), on the other hand any item with mean below criterion mean ($\bar{x} = 3.00$) was low extend (LE).

Result

Here, the data collected were presented and analyzed. The results were presented according to the research questions.

Research Question 1: To what extent do social barriers affect male and female adolescent’s participation in physical activity for health promotion in contemporary Nigerian society? Data relating to this research question is presented in Table 1

Table 1: Mean and Standard Deviation on to What Extent Social Barriers Affect Male and Female Adolescent’s Participation in Physical Activity for Health Promotion in Contemporary Nigerian Society.

	Male (N=54)			Female (N=36)		
	Mean	SD	Remark	Mean	SD	Remark
1. Physical activity is done only by those who want to show up in the street.	3.00	.82	HE	3.00	1.01	HE
2. Physical activity is for social class alone.	2.33	.47	LE	2.50	1.52	LE
3. I feel shy to engage in group physical activity.	1.66	.47	LE	4.00	.00	HE
4. Low self-esteem is a barrier to physical activity.	2.33	1.25	LE	2.50	.50	LE
5. Together we succeed in any form of physical activity.	3.66	.47	HE	3.00	.00	HE
6. Adolescents from poor family background never value physical activity.	3.00	.82	HE	3.00	1.01	HE
Overall Mean	2.66	.71	LE	3.00	.67	HE

HE = High Extent, LE = Low Extent

Table 1 shows that social barrier affects adolescent male participation in physical exercise to a low extent ($\bar{x} = 2.66$, $SD = .71$) and female to a high extent ($\bar{x} = 3.00$, $SD = .67$). Both means indicated that social barriers affect male and female adolescent’s participation in physical activity for health promotion in contemporary Nigerian society. The analysis of the items shows that male adolescents rated social barrier on item 1, 5 and 6 were ($\bar{x} = 3.00$, 3.66 and 3.00 respectively) to be high. While item, 3 and 4 had mean (\bar{x}) ranging from 1.66 to 2.33 which were rated low extent (LE) by male respondents.

On the other hand, female respondents rated social barrier on item 4 to be high with mean (\bar{x}) of 4.00 while item 1, 5 and 6 had mean (\bar{x}) of 3.00 but item 2 and 4 rated low social barrier influence with mean (\bar{x}) of 2.50. From the table above, it can be inferred that social barriers affect male and female adolescent’s participation

in physical activity in Awka metropolis. Therefore, health education on physical activities is highly needed in this part of the country to assure healthy promotion.

Research Question 2: To what extent do environmental barriers affect male and female adolescent's participation in physical activity for health promotion in contemporary Nigerian society? Data relating to this research question is presented in Table 2

Table 2: Mean and Standard Deviation Responses Showing the Extent Environmental Barriers Affect Male and Female Adolescent's Participation in Physical Activity for Health Promotion in Contemporary Nigerian Society.

S/N	Item	Male (N=54)			Female (N=36)		
		Mean	SD	Remark	Mean	SD	Remark
1.	Good playing field enhances physical activity	4.00	.00	HE	3.50	.50	HE
2.	Gymnastic is only avenue for physical activity.	2.00	.82	LE	3.50	.50	HE
3.	Lack of proper security in my environment prevents my participation in physical activity.	3.00	.82	HE	4.00	.00	HE
4.	Whether good or bad environment, I must engage in one physical activity.	3.00	.82	HE	1.50	.50	LE
5.	Physical activity is done only in a well-marked field meant for that specific activity.	1.33	.47	LE	4.00	.00	HE
6.	Sexual molestation among girls sometimes occur during physical activity.	3.00	.82	HE	4.00	.00	HE
Overall Mean		2.72	.62	LE	3.41	.25	HE

HE = High Extent, LE = Low Extent

Table 2 shows that environmental barrier affects adolescent male participation in physical exercise to a low extent ($\bar{x} = 2.72$, $SD = .62$) and female to a high extent ($\bar{x} = 3.41$, $SD = .25$). Female respondents rated environmental barrier high with mean than their male counterparts. Only item number 4 rated low environmental barrier influence. This shows that males are more affected by environmental barrier than females in participating in physical activities. Health education on important of physical activities for healthy promotion in contemporary Nigerian society is vital in Awka metropolis.

Discussion

This study examined the perception of how social and environmental barriers affect adolescent's participation in physical activity for health promotion in contemporary Nigerian in Awka metropolis of Anambra State, Nigeria. From the findings of the study, social barriers affects male adolescents to a low extent while it affects the female adolescent's participation in physical activity to a high extent. Moreover, environmental barriers also affects the female adolescents higher than the male adolescents. These findings where in line with the work of Niloofar, *et al.*, (2015) who also studied about promoting physical activity participation among adolescents in Iran; they recorded also lack of safe environment and high cost of professional sports. The study documented that adolescent's physical activity participation is strongly affected by social influences. On the other hand, they lacked essential motivation on social influence. Similarly, the results of related studies show most of the teens do not meet

the regular physical activity programs (Niloofer, et al, 2015). They tend to become less physically active, and female adolescents have been found to engage in less physical activity than male adolescents.

Conclusion

Male and female adolescence in Awka Metropolis are affected by both social and environmental barriers from participation in physical activities for health promotion. However, males are affected to a low extent while the females are affected to a high extent. For enhanced adolescent's participation in physical activities these environmental and social barriers need to be tackled in order to achieve the desired adolescent participation and enhance health status of the future generation.

Recommendation

Based on the findings and conclusions of the study the following recommendations are made:

1. Environmental facilities: the government as well as communities should enhance security (example putting street lights) for the safety of adolescents in carrying out their early morning or evening physical activity programs.
2. Incentive programs: NGOs and communities can as well plan incentive physical activity programs where adolescents receive small incentive for coming out to participate in any community-based physical activity program.
3. Family and community attention: In recognition, the opinions of adolescents on the improving adolescence engagement in physical activity programs, comments showed that they are requesting for comprehensive attention of families and community especially for their interests. Besides that, they need families and community supports.
4. For enjoyment purposes: Moreover, according to some opinions; enjoyment as the one of the most effective factors for continuing participation in physical activity should be considered specifically.
5. Walking, cycling and other forms of active transportation should be accessible and safe for all; likewise, labour and workplace policies should encourage physical activity;
6. Quality physical education should support children to develop behaviour patterns that will keep them physically active throughout their lives.
7. Sports and recreation facilities should provide opportunities for everyone to do sports and schools should have safe spaces and facilities for students to spend their free time actively.

References

- Allender, G. Cowburn, G. & Foster, C. (2015). *Understanding participation in sports and physical activity: a review of qualitative studies*. Health Education Resources 21,826-35.
- Bann, D., Wills, A., Cooper, R., Hardy, R., Aihie, S. A, & Adams, J. (2014). Birth weight and growth from infancy to late adolescence in relation to fat and lean mass in early old age: Findings from the MRC National Survey of Health and Development. *International Journal of Obesity* (London); 38: 69–75.
- Blakemore, S. J. & Mills, K. L (2016). *Is adolescence a sensitive period for socio-cultural processing?* Annual Rev psycho. 65:187-07.
- Caspersen, C. J., Powell, K. E. & Christenson, G. M. (1985). Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research. Public Health Rep. 100, 126–131
- Foster, C. & Hillsdon, M. (2014). Changing the environment to promote health enhancing physical activity. *Journal of sports studies* 22:755-69.
- Hardman, E. A & Stensel, D. (2004). *Physical Activity and Health*. The evidence explained. London: Routledge.
- Macdonald, O., Rodger, S., Abbott R., Ziviani J. & Jones J. (2014). Physical activities as a dimension of family life for lower primary school children, sports, education and society. 9(3):307-25.
- Mathew, P. N. & Triton, O. (2015). Applied behavior analysis for health and fitness. Clinical and organizational applications of applied behavior analysis. Chapter22; pgs 555-582. Elsevier B.V.
- Niloofer, P., Monir, B.E., Fahimeh, R.T., Hosein, M.A., Farzaneh, H., Mehrdad, K. A., Mostafa, Q., Hamid, A. & Shirin, D. (2015). Promoting physical activity participation among adolescents: Barriers and the suggestions. *International journal of preventive medicine*; (6)12
- Peter, H., Bruce, M., Dona, C. & Jenny, C. (2003). Toward a more unified definition of health promotion; *Journal of Australia*; 14(2): 82-85.
- Piggin, J. (2020). What Is Physical Activity? A Holistic Definition for Teachers, Researchers and Policy Makers. Front. SportsAct. Living. (p. 126). <https://doi.org/10.3389/fspor.2020.00072>
- Piggin, J. (2019). *The Politics of Physical Activity*. London: Routledge.



- Tremblay, M.S., Aubert, S., Barnes, J.D., Saunders, T.J, Carson, V., & Latimer-Cheung, A.E, (2017). Sedentary Behavior Research Network (SBRN) - Terminology Consensus Project process and outcome. *International Journal Behaviour Nutrition*.14:75.
- United Nations International Children’s Fund (UNICEF) (2015). State of the world’s children. Reimagine the Future: Innovation for every child dignity report. 2015. Available at www.unicef.org/sowc2015.
- World Health Organization (2010). Promotion of sexual health recommendations for actions: preceedings of a regional consultation convened by pan American Health Organization (AHO) World Association for Sexology (WAS) in Antigua Guatemala, Guatemala may 19-20, 2000. retrieved January 27, 2017 from <http://www.paho.org/English/hca/promotionsexualhealth.pdf>
- World Health Organization (WHO) (2016). HIV/AIDS update [Fact sheet]; Available from: <http://www.who.int/mediacentre/factsheets/fs360/en>. Accessed in November 2016.
- World Health organization (2010). Child and adolescent health. Health behaviour in school aged children. (HBSC) survey.
- World Health Organisation (2018). More Active People for a Healthier World, Global Action Plan on Physical Activity 2018-2030. Geneva, UK: *World Health Organization*.
- Wright, M.S., Wilson, D.K., Griffin, S. & Evans, A. (2010). A qualitative study of parental modeling and social support for physical activity in underserved adolescents. *Health Education Res.*, 25:224–32.