

PERCEIVED PHYSICAL ACTIVITY BENEFITS BY UNIVERSITY STAFF IN SOUTH-EASTERN NIGERIA

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Abstract:

This study determined perceived physical activity benefits by staff in two Federal Universities located in the South-eastern part of Nigeria. A descriptive survey design was adopted. A total of 600 University staff from two Federal Universities in Southeastern Nigeria (mean age= 39.2, SD= 15.71) participated in the study. Samples were specifically selected based on categories of gender and staff cadre (teaching and non-teaching). A structured and validated questionnaire was the instrument used for data collection. Staff generally perceived physical activity as beneficial to disease risk reduction, improved social, emotional, and physical health but not as beneficial to spiritual health. Taken as a whole, there was no significant difference in overall perceived Physical activity benefits based on gender (males: $\chi=3.33$; $SD=1.99$, and females: $\chi=3.29$; $SD=2.2.60$; $t(598)=.642$, $p.521$, two tailed). However, both teaching and non-teaching staff differed significantly on perceived physical activity benefits (Teaching staff: $\chi=3.34$, $SD=2.31$ and non-teaching staff $\chi=2.78$, $SD=2.46$; $t(598) = .099$, $p.027$, two tailed). It was concluded that Staff in Federal universities in the Southeastern part of Nigeria perceived physical activity positively as a means for improving and maintaining physical, social and emotional health and reduction of disease risks. It was concluded that staff are boldly aware of the importance of physical activity to general health. The physical activity promotion implications for University staff were discussed within the framework of the findings.

Key Words: Physical Activity, University, Physical activity benefits, Health promotion, Lifestyle, Behaviour.

Introduction

Physical Activity (PA) has remained one of the foremost means of optimizing health and wellbeing among diverse populations. Strong epidemiological evidence indicates that Physical activity provides a significant cost effective way of improving public health across the population of all ages and conditions with a wide range of physical, social and mental health benefits (Biddle, Gorely & Stensel, 2004). Despite these acclaimed advantages regarding benefits of physical activity, inactivity and sedentary lifestyle have in contrast posed serious challenge to public health in both high-income countries (HIC) and low and middle-income countries (LMIC) particularly in countries experiencing rapid urbanization as both are now implicated as one of the leading risk factors for global mortality, (Global Advocacy for Physical Activity [GAPA], 2011; World Health Organization [WHO],2002, 2010).

In order to prevent the negative effects of physical inactivity, Corbin, Lindsey, Welk, and Corbin (2002) urged lifestyle behaviour change as the best method of preventing illness and early death in our society. As a result, major interest in health promotion and wellness research to improve habitual participation in physical activity has shifted to a positive lifestyle behaviour approach (Biddle, Gorely& Stensel, 2004; GAPA, 2011; Okafor, 2006).

Research has identified demographic variables, knowledge, attitudes and beliefs about physical activity, personal, interpersonal factors and environmental policy as some important mediators to PA participation (Dishman, 1994; Lovell, El Ansari & Parker, 2010). However, Buckworth and Dishman (1999), Nahas and Goldfine (2003) maintained that two cognitive variables of 'perceived benefits' and 'perceived barriers' were major determinants of participation in PA. According to them, participation in physical activity can positively be influenced by perceived benefits, while lack of participation on

the other hand may be influenced by perceived barriers and concluded that perceived benefits or otherwise determine to a large extent the outcome of PA behaviour of participation or non-participation.

A number of researches on PA behaviour have been conducted in University setting to gain insight into determinants of PA, however, most of the studies were among students. For example, in one study Daskapan, Tuzun, and Eker (2006) found that “lack of time due to responsibilities related to the family and social environment” were most perceived barriers to PA among Turkish University Student. Another study, Taha, (2008), reported that majority of male and female students knew that physical activity is protective against diseases in general (92.9% and 91.8% respectively) and in the prevention of obesity (69.4% and 78.5%) but had poor knowledge about the role of physical activity in the prevention of diabetes mellitus and hypertension. Significantly more male students than female students practiced physical activity 3 or more times per week (45.6% versus 33.7%). A similar study, Lovell, El Ansari and Parker (2010) identified significantly higher perceived benefits (Physical performance) from exercise than perceived barriers to exercise among non-exercising female students in the United Kingdom. Conversely, the greatest perceived barrier to exercise was physical exertion, which was rated significantly higher than time expenditure, exercise milieu, and family discouragement barriers. In Nigeria, Umeifekwem (2011) found that most students in Federal Universities located in the southeastern part of Nigeria reported being aware of health benefits of PA but had significantly low participation rate in routine PA, in addition, males indicated more awareness of health benefits of PA and participated more than their female counterparts.

The promotion of Physical activity in workplaces especially in government establishments as a means of promoting public health has in recent times become a subject of significant interest among researchers. According to Nugent (2008) this may not be unconnected with the findings that public servants including staff in university setting are progressively being influenced by modernization, automation and urbanization with its attendant outcome of decreased physical activity, sedentary living and resultant hypokinetic disorders. As a result, Quintiliani, Sattelmair and Sorensen (2008) posit that Physical activity programmes which are based on health promotion initiatives in workplaces has potential to impact greater population of employed adults and improve health outcome through multiple levels of influence directly as in creating opportunities for physical activity or indirectly, through social support and social norm.

Knowledge of physical activity behaviour which possibly explains why individuals start, persist, dropout, become addicted to physical activity or adopt inactive and sedentary lifestyle is essential to understanding and formulation of evidence based PA policy for work places. The World Health Organization has raised concerns regarding insufficiency of national data and guidelines on PA for health among low and middle income class in workplaces including the University environment and argued that lack of such data constituted a major drawback to formulating and initiating sustainable PA programmes policy in workplace environments (World Health Organization, 2002). Lovell, El Ansari, and Parker (2010) maintained that research which advances our knowledge of any of the PA determinants has strong potential to better inform PA promotion interventions and in consequence support positive physiological and psychological public health outcome.

Regrettably, only few researches have been conducted with regard to physical activity among University staff in Nigeria. For example, Omolawon and Sanusi (2006) found that occupational demands and lack of sports facilities and equipment were the major barriers to low participation in sports and physical activity, in a study of perceived determinants associated with low participation of the university's academic staff in sports and physical activity in University of Ibadan South-west Nigeria. In another study, it was revealed that varying degrees of hypokinetic diseases were prevalent among staff in tertiary institutions in Nigeria (Adegun & Konwea, 2009). These findings exacerbate the need therefore to understand and further describe University staff perceived physical activity benefits.

This study therefore sought to determine perceived benefits of physical activity among staff in some universities in the Southeastern part of Nigeria. Two hypotheses of no significant difference with regard to perceived PA benefits and participation between gender and staff category guided the study.

Methods

The descriptive survey research design was utilized for this study.

Participants: A sample of 600 staff, from two Federal Universities located in the Southeastern part of Nigeria participated in the study. Age ranged from 23-55 years with mean age of 39.2, SD= 15.71. Convenience sampling technique was used to draw participants for both gender and staff category in order to attain relative representation of different strata of the staff population in the two universities.

Instruments: A two-section structured and validated questionnaire “Perception About Physical Activity Benefits Questionnaire” PAPABQ facilitated the collection of self-reported data. Cronbach alpha coefficient yielded 0.76 which was considered high enough for this study. Section A of the questionnaire collected demographic data, while Section B obtained information on respondents’ responses regarding perception about physical activity benefits on four-point scale of ‘Strongly Agree’ (SA), ‘Agree’ (A), ‘Disagree’ (D), ‘Strongly Disagree’ (SD). Possible scores ranged from 4 = Strongly Agreed (highest perception) to 1 = Strongly Disagreed (lowest perception). The means of individual PAPABQ items were computed for all participants to facilitate the description of the overall levels of perceived PA benefits. Perception mean score of 3.00 and above was interpreted as high and therefore positive, meaning that sample supposed that particular item of PAPABQ was important outcome for participation in PA. Mean score between 2.00 and 2.99 was interpreted as neutral meaning that respondents generally indifferent and have neither positive nor negative perception regarding the item in question. However, mean Score between 1 and 1.99 was regarded as low and interpreted as negative perception, meaning that PA was not considered a factor in improving that particular aspect of Health.

Data Collection and statistical analysis: Research assistants were trained to personally administer the instrument for data collection to ensure high return rate. Approved of the study was obtained from the Research ethics committee of the University. Frequencies, means and percentage were employed to describe the collated data, while test of significant difference (t-test) was used to verify the null hypotheses. SPSS, version 13.0 for windows was used for all data analyses.

Results

Table 1. Gender and Staff Category Distribution of the Respondents Staff category

Gender	Teaching Staff	Non-Teaching Staff	Total
Male	161 (26.83%)	175 (29.17%)	336 (56%)
Female	115 (25.17%)	149 (24.8%)	264 (44%)
Total	276 (46%)	324 (54%)	600 (100%)

Table 1 presents the categorization of gender and staff that participated in the study. Of the 600 study participants, 276 (46%) representing the teaching category were composed of 161 (26.83%) males and 115 (25.17%) females, while, 324 (54%) representing the non-teaching staff was made up of 175 (29.17%) males and 149 (24.8%) females. With regard to gender categorization, there were overall, 336 (56%) males 264 (44%) females.

Table 2. University Staff Perception about Physical Activity Benefits

	Item(s)	Over all	Mean Values			
			Gender		Staff Category	
			Male	Females	Teaching	Non-Teaching
1.	Physical activity reduces the risk to several disease conditions.	3.54	3.48	3.00	3.59	3.58
2.	Involvement in the recommended levels of physical activity is good for sustenance of general good health	3.47	3.46	3.47	3.56	3.42
3.	Participation in physical activity is beneficial to physical health.	3.77	3.83	3.69	3.75	3.79

4.	Participation in physical activity is beneficial to social health.	3.49	3.46	3.53	3.40	3.56
5.	Participation in physical activity is beneficial to emotional health.	3.35	3.33	3.38	4.60	3.24
6.	Participation in physical activity is beneficial to spiritual health.	2.14	2.07	2.21	2.19	2.08
Grand mean		3.29	3.27	3.21	3.52	3.28

The study sought to determine perceived physical activity benefits of university staff. Table 2 reveals that staff generally held positive perception that physical activity 'is specifically beneficial to physical health' (mean 3.77); 'reduces several disease conditions', (mean 3.54); 'improves social health' (mean 3.49); 'is critical to sustenance of general good health' (mean 3.47); and 'enhances emotional health' (mean 3.35). On the other hand, respondents held indifferent view to the idea that 'physical activity benefits spiritual health' (mean 2.14). Generally, staff perceived physical activity as being beneficial to health (grand mean 3.29).

Similarly, a related pattern of responses was evident (Table 2), in specific categorizations of male and female staff, and teaching and nonteaching staff. The results indicated that specific categorizations of staff perceived physical activity as generally beneficial (males, grand mean: 3.27; females, grand mean: 3.21; Teaching staff, grand mean: 3.52; non-teaching staff grand mean: 3.28) but did not consider physical activity as beneficial to spiritual health (males, grand mean: 2.07; females, grand mean: 2.20; Teaching staff, grand mean: 2.19, non-teaching staff, grand mean: 2.08).

Table 3. T-test of Significant Difference on Perceived Physical Activity Benefits across Gender and Staff Category

Dependent Variable	Gender	Group Statistics							
		N	F	Sig.	t	Mean	SD	df	Sig. (2-tailed)
Perceived Physical Activity Benefits	Males	336	9.80	.002	.521	3.33	1.99	598	.521
	Females	264				3.29	2.60		
	Teaching	276	.847	.810	2.21	3.34	2.31	598	.027*
	Non-Teaching	324				2.46	2.46		

* Significant

Table 3, indicates that t-test statistic yielded statistically significant difference in perceived PA benefits between teaching and non-teaching staff (Teaching staff: $\chi=3.34$, $SD=2.31$ and non-teaching staff $\chi=2.78$, $SD=2.46$; $t(598)=.099$, $p.027$, two tailed), Consequently, the hypothesis was not supported. Contrariwise, no statistically significant differences in perceived physical activity benefits were found between male and female (males: $\chi=3.33$; $SD=1.99$, and females: $\chi=3.29$; $SD=2.2.60$; $t(598)=.642$, $p.521$, two tailed).

Discussion

The findings of this study show that University staff across gender and staff category generally held positive perception about physical activity benefits. Interestingly, the finding generally corroborated those in related studies, Taha, (2008) and Umeifekwem (2011) which established that higher proportion of university students recognized and were aware of the protective properties of PA against diseases and consequent health benefits. Buckworth and Dishman (1999) had observed that two cognitive variables of perceived benefits and perceived barriers are significant determinant of physical activity levels and they possibly explain why individuals start, persist, dropout or become addicted to physical activity. These findings are important because they appear to indicate that many more people are becoming confidently aware of the importance of PA to physical health and thereby inclining towards habitual PA lifestyle by their expression of perceived benefits. More so, the findings are

indication that PA lifestyle awareness campaign efforts on the direct benefits of PA to health by diverse national and international health agencies and Organizations, governmental, non-governmental and other donor agencies are yielding positive results. Other factors which may not have been unconnected with the result of this study are the level of education and the university academic and social environment within which the study participants operate. It may not therefore be surprising that most of these staff held positive perception towards PA benefits because the University setting is characteristically an academic environment where the pursuit for information and knowledge essentially is paramount. The staff positive perception about benefits of PA may be explained by the easy accessibility to information on the important values of PA as a result of working in the University environment.

The findings reveal furthermore that males did not significantly differ from their female counterparts in perceived PA benefits scores. This finding is consistent with that of Adegun and Konwea, (2009) in a related study that found no difference between male and female respondents in the prevalence of reported disorders associated with lack of physical activity and sedentary lifestyle among tertiary institution staff in South-West Nigeria. This finding therefore suggests that gender may not be a strong factor in determining perceived PA benefits among University staff.

On the other hand, perceived physical activity benefit scores differed significantly between teaching and nonteaching categories of staff. Since the result indicates discrepancy in perceived physical activity between teaching and non-teaching staff categories, efforts on continued awareness campaign need to be scaled up and with particular consideration to staff category especially at the planning stages.

Participants across all the dimensions of study did not perceive PA as beneficial to spiritual health. This result may be explained by the fact that culture of the society and the dominant belief system prevailing play important role in explaining transcendent concepts such as spiritual health. Most of the people living within the geographical area of this study hold the view that what enlivens the human spirit is divine rather than physical. Therefore, the finding was not unexpected but rather unforeseen because Yoga, (an eastern system of physical activity) has been widely acknowledged as a practice which advances spiritual as well as physical wellbeing.

Significance of the Study

This study has successfully characterized perceptions of different categories of university staff regarding benefits of PA in Southeastern part of Nigeria, which is an important step in formulating and designing any sustainable PA programme for any work setting. The findings of this study has contributed to national baseline data on Physical Activity for health which subsequently will culminated into a foundation upon which concerned governmental and non-governmental agencies such as WHO, UNESCO etc will formulate and initiate future sustainable PA programmes in Academic workplaces. The findings reveal that although both teaching and non-teaching staff held positive perception about benefits of PA, their perceived benefits scores significantly differed. The implication is that PA promotion designers and implementers should consider staff category as an important factor when planning physical activity health promotion programmes in University workplaces.

The findings of this study is of further practical significance to University authorities in South-east Nigeria and beyond as they are better informed that there exist staff category differences with regard to perceived PA benefits. As a result, it becomes imperative to consider diverse sub-populations within the University community while considering, initiating and implementing future university-wide policies on PA programme promotion and/or active participation among staff.

Conclusions

The major finding of this study revealed that staff of the University in Southeastern Nigeria holds positive perception regarding health benefits of physical activity across the categories of gender and staff cadre. It is therefore concluded that these findings are important as they appear to indicate that many more staff are becoming confidently aware of the importance of PA to physical health and thereby suggesting the possibility of inclining towards habitual PA lifestyle by their expression of perceived benefits. This has implications for the promotion and establishment of organized physical activity programmes which are unfortunately lacking in most Universities. It is recommended that University authorities proactively initiate sustainable physical activity programmes that will motivate staff and

provide them with the opportunity to further progress not only from holding positive perception regarding benefits of PA but to actively engage in the actual behaviour of habitual participation in PA. In the light of the above recommendation, relevant Educational Institutional authorities, Health and Physical Education specialists, professional associations and other Allied professional organizations should advocate and pursue policies, strategies and PA programmes directed at developing and promoting Physical Activity among Staff in University work places. University authorities should synergistically engage through consultancy arrangement the services of professional physical educators in their establishments to design and implement physical activity programme templates that will meet the needs of all staff.

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