

Perceived Influence of Leisure Time Physical Activities on the Promotion of Health among Retired Civil Servants in Nsukka Local Government Area of Enugu State

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Abstract

Promoting physical activity has been identified as a key public health strategy to improve good health in advanced age. Many individuals may not engage in sufficient physical activity due to low perceived benefits. This study investigated the perceived influence of Leisure Time Physical Activities (LTPA) on the promotion of health of Retired Civil Servants in Nsukka Local Government Area of Enugu State. Descriptive survey design was used for the study. The population comprised 1,865 retired civil servants who are registered and are attending the monthly meeting of the Association of Retired Civil Servants. A sample of 329 was drawn from the above population using the Taro Yamane formula. A questionnaire with a reliability index of 0.79 was the instrument for data collection. The research questions were answered using mean and standard deviation, while the hypotheses were tested using the t-Tests and ANOVA. A criterion mean of 2.50 was set. The results revealed that the respondents demonstrated high level of perception of the positive influence of LTPA on life enhancement ($\bar{x}=3.24$), physical performance ($\bar{x}=2.64$), ones psychological outlook ($\bar{x}=2.58$), social interaction ($\bar{x}=2.61$), and preventive health ($\bar{x}=2.56$). The findings of the study also revealed that there is significant difference between male and female retired civil servants on perceived influence of LTPA on promotion of health ($t\text{-cal.} = 2.93, p = .004$). The result also showed that there was no significant difference in the mean ratings of the respondents based on age ($F\text{ cal.} = .610, p > .05$). The researchers recommend that interventions could help increase the perception of the retired female civil servants of the need for LTPA in their lives.

Key words: Leisure Time, Physical Activity, Retired Civil Servant, Perception

Introduction

Increasing leisure time physical activity (LTPA) is a major target of public health programmes throughout the world. This is because human health can be improved upon through participation in LTPA. Physical activity has been defined as any bodily movement produced by skeletal muscles that result in energy expenditure (Bouchard, Blair, & Haskell, 2006). It comprises all types of muscular activities that increase energy expenditure substantially (Shephard, 2003). Furthermore, physical activity encompasses two categories namely: exercise and structured sport (Sylvia- Bobiak & Caldwell, 2006). Sylvia- Bobiak and Caldwell further stated that in addition to exercise and structured sport, physical activity can also be categorized into active leisure, which includes any volitional activity that results in energy expenditure undertaken during one's free time. Leisure time physical activity includes exercise, sports, recreation or hobbies that are not associated with activities as part of one's regular job duties, household activities or transportation (US Department of Health and Human Services, 1996). LTPA includes commuting, non-exercise, exercise and sports (Bouchard, Blair, & Haskell, 2006). It is part of a healthy lifestyle and has positive health effects across various age cohorts, ethnic populations and chronic diseases (Kushi,

Fee, Folsom, Mink, Anderson, & Sellers, 1997). LTPA has been identified as a leading health indicator to be targeted by prevention programmes (US Department of Health and Human Services, 2000). Participation in leisure time physical activities has been shown to reduce depression and anxiety, produce positive moods and enhance self esteem and self concept, facilitate social interaction, increase general psychological well being and life satisfaction as well as improve cognitive functioning (Haworth, 2008). All healthy adults aged 18-65 years need moderate-intensity aerobic physical activity for a minimum of 30 minutes on five days a week; or vigorous-intensity aerobic activity (like race walking, jogging, or running; swimming laps, tennis, aerobic dancing, bicycling, jumping rope, heavy gardening, hiking uphill or with a heavy backpack) for a minimum of 20 minutes on three days each week (Haskell, Lee, Pate, Powell, Blair, & Franklin, 2007).

The benefits of leisure time physical activities notwithstanding, recent statistics indicate that most individuals in many developed countries are insufficiently physically active to obtain these health benefits (US Department of Health and Human Services, 1996). This insufficiency in regular leisure time physical activity is therefore a cause for concern in many countries. Obviously, encouragement of more active lifestyles is an important component of both national and international public health recommendations (World Health Organization, WHO, 1995). According to the Centre for Disease Control and Prevention (2014) health promoting lifestyle choices can reduce the risk of developing chronic diseases and the causes of premature death. Promoting physical activity therefore has been identified as a key public health strategy to improve good health in advanced age.

Changes in leisure behaviour are most likely to occur during periods of life transition, when individuals' roles, relationships and ecological contexts are altered (Raymore, Barber, & Eccles, 2001). Older people are among the groups who can benefit most from physical activity, yet levels decline with age. Understanding why individuals do not participate in sufficient leisure time physical activity is a complex issue. Many individuals may not engage in sufficient leisure time physical activity due to the level of the perceived benefits individuals hold on its promotion of their health. Nahas and Goldfine (2003) reported that perceived benefits and barriers to exercise are important mediators of physical activity behaviour change. This is consistent with the tenets of the Health Belief Model which posits that an individual's readiness to engage in preventive health behaviour is a function of their perceived threat associated with that behaviour, (which in this case is physical inactivity), and an assessment of the relative costs (barriers, difficulties or hindering factors) and benefits associated with the adoption of that specific preventive health behaviour. In other words the Health Belief Model proposes that the likelihood of an individual engaging in health behaviour (i.e. LTPA for example) depends largely on their perceived benefits of engaging in leisure time physical activity.

There are life events that may affect engagement in leisure time physical activity in a population, one of which basically is retirement. Retirement is the point where people stop employment completely (Okechukwu & Ugwu, 2011). It can also be conceptualized as a process that separates an individual from a job role (Atchley, 1980), or as termination of a pattern of life and a transition (Ahmad, 2007). The age of retirement varies from country to country but it is generally between 55 and 70 years. In Nigeria the age of retirement ranges from 60 to 70 years, depending on the establishment (Okechukwu & Ugwu, 2011). There are three ways through which a civil or public servant may retire or give up his office. These according to Nwajagu (2007) are voluntary retirement; statutory retirement and Compulsory retirement. By statute on attaining the age of sixty years chronologically one is bound to retire or on completing thirty-five years in the service one is similarly qualified to retire from the service. The retired civil servants are therefore people who have been withdrawn from active service based on chronological age (Ugwu, 2006). They are popularly referred to as senior citizens or the elderly. Hayward and Zhang (2010) categorized the elderly into three major groups: young old (65-74 years), old-old (75-84 years) and oldest old (84 years and above).

Retirement is another phase of life. It is a transition from active involvement in the world of work, to active enjoyment of the world of leisure. Retirement from work markedly increases free time and thus potentially increases engagement in leisure-time physical activity. There are usually changes in physical activity after transition to retirement (Touvier, Bertrais, Charreire, Vergnaud, Hercberg & Oppert, 2010). A four-year follow-up study conducted in Scotland by Berger, Der, Mutrie and Hannah, (2005) showed that there was slight increase in LTPA among those not in employments. Findings of a study conducted by Slingerland et al. (2007) showed that retirement from work markedly reduced commuting and did not increase leisure-time physical activity, although the physical activity measure changed during the follow-up. Findings of a study by Chung, Domino, Stearns and Popkin, (2009) in USA using a measure of vigorous activity during sports or physical labour showed that among the subjects studied, retirement did not increase vigorous physical activity but vigorous activity increased with retirement from a sedentary job.

It can be deduced from the foregoing that many studies have been carried out on leisure activity involvement in many parts of the world. However, observations have shown that Nigerians were involved in both active and passive leisure activities in the past (Ojeme, Iyawe, & Oshodin, 2000). According to Ojeme, Iyawe, and

Oshodin, leisure time physical activities among the local people of Nigeria included wrestling, dancing and acrobatic activities. Alla and Ajibua (2012) reported that staff of tertiary institutions in Ogun State involved in activities that require physical or mental exertion such as basketball, swimming, squash, tennis, hunting, fishing, draught, scrabble, and chess. Participation in physical activity among Nigerians as reported by Ajibua (2012) is decreasing. This may likely be as a result of mechanization and computerization of work in most workplaces. The findings of Ajibua (2012) substantiated those of Talabi, Ajayi-Vincent, Adesina and Aribamikan (2010) who noted that physical activity is no longer part of daily lives in Nigeria, because cars have replaced walking, elevators have taken the place of stairs, while washing machines have replaced manual laundry, mobile communication and various remote controls have reduced the general movement of people. According to Ajibua, Alla and Oyerinde (2014) the effect of these technological advancements has placed individuals in a state of inactivity and sedentary lifestyle with concomitant increase in diseases and subsequent fatalities.

The effect of physical inactivity is much in Nigeria. Chronic diseases caused by physical inactivity accounted for 24% of all deaths (WHO, 2005). The WHO also estimated that Nigeria lost 400 million US dollars in national income to premature deaths due to heart disease, stroke, and diabetes. It was projected that these losses caused by sedentary lifestyle will reach eight billion US dollars by 2015. What is distressing about these statistics therefore is that the solution to prevent these deaths has been with us for decades, which is regular participation in leisure-time physical activity (Ajibua, Alla & Oyerinde, 2014). This therefore necessitated this study on the perceived influence of leisure time physical activity on the promotion of health of retired civil servants in Nsukka Local Government Area, Enugu State.

The purpose of this study was to investigate the perceived influence of Leisure Time Physical Activities (LTPA) on the promotion of health of Retired Civil Servants. Specifically, the study sought to determine:

1. the perceived influence of LTPA on life enhancement of retired civil servants in Nsukka LGA;
2. the perceived influence of LTPA on physical performance of retired civil servants in Nsukka LGA;
3. the perceived influence of LTPA on social interaction of retired civil servants in Nsukka LGA;
4. the perceived influence of LTPA on psychological outlook of retired civil servants in Nsukka LGA; and
5. the perceived influence of LTPA on preventive health benefits of retired civil servants in Nsukka LGA.

The following hypotheses guided the study:

1. There is no significant difference between the mean ratings of male and female retired civil servants on the perceived influence of LTPA on the promotion of health of retired civil servants.
2. There is no significant difference between the mean ratings of retired civil servants on the perceived influence of LTPA on the promotion of health of retired civil servants based on age.

Methods

Descriptive survey research design was used for this study. It is deemed appropriate for the study as it describes events as they are, without any manipulation of what caused the event or what is being observed (Springer, 2010). This design was used by Lovell, Ansari, and Parker (2010) to study the perceived exercise benefits and barriers of non-exercising female university students in the United Kingdom.

The population of the study comprised 1,865 registered retired civil servants in Nsukka Local Government Area, who normally meet at Government Field Nsukka. The sample size of 329 retired civil servants was determined using the Taro Yamane formula for a finite population. A questionnaire tagged Perceived Influence of Leisure Time Physical Activity Questionnaire (PILTPAQ) was the instrument for data collection. The validity of the instrument was established through the judgment of three experts in the Department of Human Kinetics and Health Education, University of Nigeria, Nsukka. Cronbach Alpha was employed to ascertain the reliability coefficient of the instrument. The correlation coefficient index of 0.79 was obtained. The instrument was therefore considered reliable.

Three hundred and twenty-nine copies of the questionnaire were administered and collected on the spot to ensure high return rate. After thorough screening of the retrieved copies of the questionnaire a total of 324 were dully completed and thus were used for data analysis. The Statistical Package for Social Sciences (SPSS, version 20) was used to analyze the data. Data were analyzed using mean and standard deviation. The response options of Strongly Agree, Agree, Disagree and Strongly Disagree were assigned values of 4, 3, 2 and 1 respectively. In determining the perception of the respondents, mean score for each item or grand mean for each cluster was used. The criterion mean value was accomplished by summing up 4, 3, 2, and 1 and dividing by 4 (i.e. $4+3+2+1=10\div 4=2.50$). This was used to answer the research questions. Student t-test was used to test the two null hypotheses at 0.05 alpha level.

Results

Table 1

Mean Ratings of Retired Civil Servants on Perceived influence of LTPA on Life enhancement (n=324)

Perceived influence of LTPA on Life enhancement	Mean	SD
1 LTPA influence one's disposition	3.46	0.58
2 LTPA influence one to sleep better at night	3.55	0.50
3 LTPA influence level of fatigue	3.50	0.50
4 LTPA influence one's self-concept	3.46	0.55
5 LTPA does not influence mental alertness	3.47	0.54
6 LTPA influence one to carry out normal activities without becoming tired	3.45	0.56
7 LTPA does not influence the quality of my work	1.58	0.62
8 LTPA influences overall body functioning	3.50	0.50
Cluster Mean	3.24	0.54

Data in Table 1 show that retired civil servants had an overall mean response of 3.24 (SD=0.54) which is above the criterion mean value of 2.50. This means that the retired civil servants perceived that LTPA influenced life enhancement. However, the table shows that retired civil servants had mean responses above the criterion mean of 2.50 for the following items: influence on one's disposition (\bar{x} =3.46; SD=0.58), influences one to sleep better at night (\bar{x} =3.55; SD=0.50), influences level of fatigue (\bar{x} =3.50; SD=0.50), influences self concept (\bar{x} =3.46; SD=0.55), does not influence mental alertness (\bar{x} =3.47, SD=0.54), influences one to carry out normal activities without becoming tired (\bar{x} =3.45, SD=0.56) and influences overall body functioning (\bar{x} =3.50, SD=0.50). This implies that retired civil servants demonstrate high level of perception of the positive influence of LTPA on life enhancement. The SD values, which ranged from 0.50 to 0.62, showed that the responses of the respondents were close to one another.

Table 2

Mean Ratings of Retired Civil Servants on Perceived influence of LTPA on Physical Performance (n=324)

Perceived influence of LTPA on Physical performance	Mean	SD
9 LTPA influence one's muscle strength	3.44	0.53
10 LTPA does not influence one's level of physical fitness	1.43	0.49
11 LTPA influence muscle tone	3.40	0.55
12 LTPA influence functioning of the cardiovascular system	3.38	0.59
13 LTPA does not influence stamina	1.47	0.55
14 LTPA influence flexibility	3.36	0.64
15 LTPA influence physical endurance	3.20	0.71
16 LTPA does not influence one's body physique	1.46	0.55
Cluster Mean	2.64	0.57

Data in Table 2 show that retired civil servants perceived that LTPA influenced physical performance (Grand mean = 2.64 > 2.50; SD = 0.57). The Table further shows the item mean responses which were above the criterion mean as follows: LTPA influence one's muscle strength (\bar{x} =3.44, SD=0.53), LTPA influence muscle tone (\bar{x} =3.40, SD=0.55), LTPA influence functioning of the cardiovascular system (\bar{x} =3.38, SD=0.59), LTPA influences flexibility (\bar{x} =3.36, SD=0.64) and LTPA influences physical endurance (\bar{x} = 3.20, SD=0.71). This implies that the retired civil servants are of the view that these items positively influence physical performance, hence promoting health. The Table further shows that the SD values range from 0.50 to 0.71. This shows that the responses of the respondents were close to one another.

Table 3

Mean Ratings of Retired Civil Servants on Perceived influence of LTPA on Psychological outlook (n=324)

Perceived influence of LTPA on Psychological outlook	Mean	SD
17 LTPA influence feelings of stress and tension	2.94	0.76
18 LTPA does not influence mental health	1.50	0.58
19 LTPA influence one's sense of personal accomplishment	3.28	0.69
20 LTPA does not influence one's feeling of relaxation	1.66	0.67
21 LTPA influence one's feelings of well being	3.41	0.57
Cluster Mean	2.58	0.65

Table 3 show that retired civil servants perceived that LTPA influenced their psychological outlook (Cluster mean = 2.58 > 2.50; SD = 0.65). This means that retired civil servants are of the view that LTPA influenced their psychological outlook. The Table further shows that retired civil servants had mean responses above the criterion mean of 2.50 in the following items: LTPA influence feelings of stress and tension (\bar{x} =2.94, SD=0.76), LTPA influence one's sense of personal accomplishment (\bar{x} = 3.28, SD=0.69) and LTPA influence one's feelings of well being (\bar{x} =3.41, SD= 0.57). This implies that the retired civil servants agree with the statements of the items. Table 3 also shows that the SD values which range from 0.57 to 0.76 shows that the responses of the respondents were close to one another.

Table 4
Mean Ratings of Retired Civil Servants on Perceived influence of LTPA on social interaction (n=324)

Perceived influence of LTPA on social interaction	Mean	SD
22 LTPA does not influence contacts one makes with friends	1.58	0.65
23 LTPA influence types of people I enjoy staying with	3.41	0.58
24 LTPA influence the way to meet new people	3.00	0.90
25 LTPA does not influence type of entertainment I enjoy	1.62	0.68
26 LTPA influence level of acceptance by others	3.44	0.56
Cluster Mean	2.61	0.67

Results in Table 4 show that retired civil servants perceived that LTPA influenced their social interaction (Cluster Mean = 2.61 > 2.50; SD = 0.67). This means that retired civil servants are of the view that LTPA influenced their social interaction. Table 4 further shows that retired civil servants had mean responses above the criterion mean of 2.50 in the following items: LTPA influence types of people I enjoy staying with (\bar{x} =3.41, SD=0.58), LTPA influence the way to meet new people (\bar{x} =3.00, SD=0.90) and LTPA influence level of acceptance by others (\bar{x} =3.44, SD=0.56). This means that retired civil servants agree with the statements. Also, the standard deviations range from 0.56 to 0.90.

Table 5
Mean Ratings of Retired Civil Servants on Perceived influence of LTPA on preventive health (n=324)

Perceived influence of LTPA on preventive health	Mean	(SD)
27 LTPA does not prevent heart attacks	1.65	0.67
28 LTPA influence one's level of blood pressure	3.22	0.75
29 LTPA does not influence longevity	1.89	0.69
30 LTPA influence one's cholesterol level	3.50	0.56
Total	2.56	0.66

Table 5 show that retired civil servants perceived that LTPA had influence on preventive health (Cluster Mean = 2.56 > 2.50; SD = 0.66). The Table further shows that retired civil servants had mean responses above the criterion mean of 2.50 in the items that stated that LTPA influence one's level of blood pressure (\bar{x} = 3.22, SD=0.75) and LTPA influence one's cholesterol level (\bar{x} =3.50, SD=0.56). This implies that retired civil servants agree with the statements. However, the table further shows that the respondents had mean response below the criterion mean of 2.50 in the following two items: LTPA does not prevent heart attacks (\bar{x} =1.65, SD=0.67) and LTPA does not influence longevity (\bar{x} =1.89, SD=0.69). These statements were structured in negative terms, which when reversed implied positive responses. Therefore it implies that the respondents are of the view that LTPA does influence the prevention of heart attacks as well as influencing longevity. The SD values which range from 0.56 to 0.75 shows that the respondents' responses were close to one another.

Table 6
Result of T-Test Analysis Testing the hypothesis of no significant difference between the mean ratings of male and female retired civil servants on the perceived influence of Leisure Time Physical Activity on promotion of health (n=324)

Variable	Gender	N	\bar{x}	SD	t-cal	Df	P-value
Perceived	Male	182	84.14	4.275	2.93	322	.004
	Female	142	82.80	3.75			

Data in Table 6 show the t-calculated and the corresponding p-value for perceived influence of LTPA (t-cal. = 2.93, p = .004). Since the p-value is less than .05 level of significance, the null hypothesis of no significant

difference between the mean ratings of male and female retired civil servants on the perceived influence of LTPA on the promotion of health is therefore rejected. This implies that the perceived influence of LTPA on health promotion by retired civil servants in Nsukka Local Government Area differ based on gender.

Table 7
One-Way Analysis of Variance (ANOVA) Testing the Hypothesis of no significant difference between the mean ratings of retired civil servants on the perceived influence of Leisure Time Physical Activity on promotion of health of retired civil servants based on age (n=324)

	Sum of Squares	Df	Mean Square	F	P-value
Between groups	20.617	2	10.308		
Within groups	5421.269	321	16.889	.610	.544

Table 7 shows that the calculated F -value of .610 and the corresponding p-value of .544 is greater than .05 ($p > .05$) level of significance at 2 and 321degrees of freedom. The null hypothesis of no significant difference between the mean ratings of retired civil servants on the perceived influence of LTPA on promotion of health of retired civil servants based on age is therefore accepted. The implication of this is that age does not have influence on the perception of retired civil servants on their perceived influence of LTPA on promotion of health.

Discussion

The findings of the study showed that retired civil servants perceived that LTPA had positive influence on life enhancement, physical performance, psychological outlook, social interaction, and preventive health. This finding supports the finding of Ajayi (2002) that people have started to appreciate the relative relationship between physical activity involvements and longevity. Ajayi further reported that longevity is a motive for participation in physical activity. This finding is in line with the findings of Hutton et al. (2009) who reported that all participants in the five focus groups in their study agreed that physical activity is important. Also, Lovell, Ansari and Parker (2010) found that most of their respondents either ‘agreed’ or almost ‘strongly agreed’ with the benefits of LTPA items.

The test of hypothesis of no significant difference between the mean ratings of male and female retired civil servants on the perceived influence of LTPA on the promotion of health revealed that the p-value is less than .05 level of significance. This hypothesis was rejected. This implies that the perceived influence of LTPA by retired civil servants in Nsukka Local Government Area differ based on gender. This is because gender differences have frequently been reported by researchers with men exercising more than young women (Allied Dunbar National Fitness Survey, 1992). Also Steptoe et al. (1997) reported that Leisure time physical exercise is one of the few health-related behaviors that are typically more prevalent among men than women.

Result of One-Way Analysis of Variance (ANOVA) testing the hypothesis of no significant difference between the mean ratings of retired civil servants on perceived influence of LTPA on promotion of health of retired civil servants based on age revealed that the p-value of .544 is greater at 0.05 level of significance ($p > .05$). The null hypothesis of no significant difference based on age was therefore accepted. The implication of this is that age does not significant influence the perception of retired civil servants on the influence of LTPA on promotion of health. This finding is in line with that of Sebastião et al. (2013) who reported that no differences regarding mean number of reported barriers were found between age groups.

Conclusions

The study examined the perceived influence of LTPA on the promotion of health of retired civil servants in Nsukka Local Government Area, Enugu State. The findings indicated that they demonstrated high level of perception of the positive influence of LTPA on life enhancement, physical performance, ones psychological outlook, social interaction, and preventive health. The study also revealed that there is significant difference between male and female retired civil servants on perceived influence of LTPA on the promotion of health. The result also showed that there was no significant difference in the mean ratings of the respondents based on age.

Recommendations

Based on the conclusions, the researchers recommend that interventions could help increase the perception of the retired female civil servants on the need for active involvement in LTPA.

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