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Impacts of Physical Exercise on Mental Well Being of Local Government Employees in Oyo Town, Nigeria

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Abstract

The study examined impact of physical exercise on mental well being of local government employees in Oyo town, Oyo state, Nigeria. The population of study comprised of all employees in the existing three local government in Oyo metropolis on unified grade level 07 and above. Multi stage sampling technique was used to select one hundred and twenty (120) respondents used for the study. The instrument used for data collected for the study was researcher structured questionnaire which was validated and tested with the use of test-retest method. A reliability coefficient of correlation of 0.79r was obtained. In all three (3) research hypotheses were drawn and tested with the use of chi-square (χ^2) statistical method at 0.05 alpha level of significance. The finding of the study reveals that participation of local government employees in physical fitness exercises have much impact on their mental alertness. Also, participation of local government employees have impact on reduction of work stress. Based on the findings above, it is recommended that local government should endeavour to make provision for establishment of recreational centre within the local government for better fitness exercises.

Introduction

One of the cheap means for employers of labour to promote their employee health and productivity is exercise. Therefore, involving in physical exercise is a cheap way to remain healthy and strong. Exercise is related to positive mental health as seen and associated with relief of symptoms of depression and anxiety (Lander, 2012). Marc (2010) reiterated that the success of any company depends heavily on the productivity and performance of its employees. Physical exercise like recreational activity has significant roles to play in promoting mental health in work arenas and in turn enhance maximal employees' productivity.

In the opinion of various researchers, there may be inherent health problems that employees in the work place may be suffering from like, obesity (depending on the nature of work), back pain, stress, high blood pressure, depression, and fatigue among others. It is unfortunate to discover that many employees were not actively participated in physical exercises for some reasons. In the study of Victor (2012), several employees gave reasons why some of them do not engage in physical exercise at work. Some of them say that there is no enough time, my boss will not permit me, there is no fitness centre in the working environment, there may not be time to

eat lunch and some bosses do not believe in exercise in the working place. Upon all, Sharky (2002) described physical exercise as a safe, potential and low-therapy which has a positive effect on mood, well-being in general and infrequent symptoms of stress and depression.

According to Lander (2012), several literatures provide ample evidences that a definite relationship exists between exercise and improved mental health. In getting employees to be more active, at work, many chronic conditions could be prevented, and billions of dollars in health care costs could be saved (Martinson, 2003). Among the economic benefits of good fitness training or organized physical activity and wellness programmes for workers include lowered healthcare cost, reduced chronic disease risk, decreased rate of illness, injury and disability, reduced absenteeism, increased employee productivity and efficiency, improved morale; and lower stress levels and enhanced retention of healthy employees (Marc, 2010; Cohen, 1992). There is an increased association between fitness centre at work and worker productivity in which the participants have lower frequency of lost days (Burton, McCalister, Chen and Edington, 2005).

Pronk, Martinson and Kessler (2004)

asserted that physical activities can help increased worker productivity through reduced absence and increased job performance. The result of the study carried out by Beyrouiti and Jaber (2011) shows that, 80 percent of their participants strongly agreed that exercise helped them to be more productive at work and relax better at home. About 70 percent of them were of the opinion that exercise helped them concentrate on assigned tasks, enjoy their work better and think more clearly about work-related problems. In a study done in one hospital, it was discovered that training resulted in a significant fitness improvement for the exercise group (Beyrouiti and Jaber, 2011).

Burton, Conti, Chen, Schultz and Edington (1999) study on role of different risk factors related to health and disease and their relationship with employees' productivity in which they discovered that there is an inverse relationship between health risks and workers' productivity. Employees with higher level of cardiovascular endurance have greater cardiovascular efficiency, tend to feel less tired, may enjoy work better, and therefore feel more satisfied at work (Pauly, Palmer, Wright and Pfeiffer, 1982).

Physical exercise among employees is viewed as an alternative or adjunct to traditional interventions such as psychotherapy or drug therapies (Victor, 2012). Donatelle, Snow and Wilcox (1999) expressed health values of exercise as reduced risks of injury, back and neck pain, better self-control, self-efficacy, and improved self-esteem; more positive outlook on life, and interpersonal relationships; improved cardiovascular endurance, muscle strength and flexibility; and decreased rate of death and illness from infectious and chronic diseases. Exercise as affirmed by Marc (2010) helps to protect against the development of chronic diseases, support healthy bone density, support healthy weight management, increases heart and lung function, and has a positive effect on cholesterol levels and blood pressure.

One of the most serious health-related problems in the work place impacting on-the-job accidents, absenteeism and lowered productivity is fatigue. Also, with the fatigue, another common energy zapper is lack of exercise which has the potential of affecting employees' productivity (Marc, 2010). Exercise, according to Colcombe and Kramer (2003); Van-Praag, Christie, Sejnowski and Gage (1999); Pretty, Hine and Peacock (2006) improves cognitive function, learning and memory. Unresolved

stress, whether physical, mental, or emotional in nature, has a negative effect on health. Regular or continuous stress weakens the immune system, increases the likelihood of illness, and slows the healing process. In order to cushion this effect, it is imperative to engage in regular cardiovascular exercise (Marc, 2010). Lee, Folsom and Blair (2003) in their study affirmed that, high intensity exercise can reduce the risk of stroke by 64 percent. In addition, 30 minutes daily moderate physical activity, couple with a 5-10 percent reduction in body weight produced a 58 percent reduction in diabetes (Knowler, Barret-Connor, 2002).

Excessive workload in the working place is capable of making employees feel bore and depressed occasionally. Depression is costly to the health care system in that depressed individuals annually spend 1.5 times on health care than non-depressed individuals, and those being treated with anti-depressants spend 3 times more on outpatient pharmacy costs than not on drug therapy (Simon, Vonkorff and Barlow, 1995). Exercise was shown to produce anti-depressant effects when: a) the exercise training programme was longer than nine weeks and involved more sessions; b) exercise was of longer duration, higher intensity, and performed in a greater number of days per week (Craft, 1997). Martinsen (1994) opined that exercise has anti-depressant effects only for those who are initially have mild to moderately depression.

According to Craft (1997), in using only clinically depressed subjects, it was found out that exercise produced the same effects as psychotherapy, behavioural interventions, and social contact. Exercise may be a positive adjunct for the treatment of depression since exercise provides additional health benefits. For example, exercise increased muscle tone and decreased incidence of heart disease and obesity that behavioural interventions do not (Lander, 2012). Marc (2010) added that exercise decreases muscle tension, can enhance feelings of well-being, improves ability to handle stress, and elevates mood. The meta-analysis shows that the larger effects of anxiety reduction are shown when: a) the exercise is aerobic (for example, running, swimming, cycling) as opposed to non-aerobic (for example, handball, strength-flexibility training); b) the length of the aerobic training programme is at least 10 weeks and preferably greater than 15 weeks; and c) subjects have initially lower levels of fitness or higher levels of anxiety. The higher level of anxiety includes coronary and panic

disorder patients (Meyer, Broocks, Hillmer-Vogel, Bandelow and Ruther, 1997) (Kugler, Seelback and Kruskemper, 1994).

Research Questions

- 1) Will participation in physical fitness exercises have any significant impact on mental alertness of local government employees in Oyo town, Oyo state?
- 2) Will participation in physical fitness exercises have any significant impact on stress reduction among local government employees in Oyo town, Oyo state?
- 3) Will participation in physical fitness exercises have any significant impact on maintenance of health and well being of local government employees in Oyo town, Oyo state?

Research Hypotheses

- 1) Participation of local government employees in physical fitness exercises will not have significant impact on their mental productivity in Oyo town, Oyo state.
- 2) Participation of local government employees in physical fitness exercises will not have significant impact on reduction of work stress in Oyo town, Oyo state.
- 3) Participation of local government employees in physical fitness exercises will not have significant impact on their physical well being in Oyo town, Oyo state.

Material and Method

The study employed descriptive survey method. The study population comprised of all employees in the existing three local governments in Oyo metropolis; but unified staffs (Grade level 07-

16) were considered because they were at the forefront of most activities whether as supervisors, head of sections, units, departments and local government administration. Simple random sampling technique was used to select four (4) departments similar in nature in each local government area within Oyo metropolis (representing 50% of all existing departments) namely, Primary Health Care, Finance and Supply, Personnel Management and Environmental Health Services.

Multi-stage sampling technique was used to select ten (10) employees in each department and each local government making a sample size of one hundred and twenty (120) respondents for the study. A researcher's structured questionnaire of close ended type titled "IPEMWLGE" was used as the only instrument for the study. The questionnaire was validated by two experts in the fields of Exercise Physiology and Sport Administration. The instrument was pilot tested with twenty similar from two departments not included in the study. A reliability co-efficient or $r = 0.79$ was obtained which made the instrument reliable enough for the study. Copies of the questionnaire were administered with the help of three trained research assistants. The respondents were given enough time to elicit their responses through questionnaire and on the spot collection were done and this gave a retrieval rate of a one hundred percent.

Results and Discussion of findings

Hypothesis 1: Participation of local government employees in physical fitness exercises will not have significant impact on their mental productivity in Oyo town, Oyo state.

Table 1: Impact of physical fitness exercises on mental productivity of local government employees

S/N	Item	Yes	No	Row Total	Crit. X ² Value	Cal. X ² value	Df	Dec
1	Engaging in physical exercises in the workplace promotes rational thinking	81 67.5%	39 32.5%	120 100%	5.9 9	43. 10	2 0	Si g.
2	Participation in recreational activities aids memory attention capacity	47 39.2%	73 60.8%	120 100%				
3	Participation in physical exercises stabilizes mood and promotes agility among employees	95 79.2%	25 20.8%	120 100%				
Total		223	137	360				

Table 1 above shows that the calculated Chi-square value of 43.1 is greater than the critical value of 5.99, established at 0.05 level of significance. The tested hypothesis one was significant. It implies that participation in physical exercises in the workplace have impact on mental

alertness of local government employees and enhanced their mental productivity in Oyo town.

Hypothesis 2: Participation of local government employees in physical fitness exercises will not have significant impact on reduction of work stress in Oyo town, Oyo state.

Table 2: Impact of physical fitness exercises on reduction of stress mental productivity of local government employees

S/N	Item	Yes	No	Row Total	Crit. X ² Value	Cal. X ² Value	Df	Dec
1	Stress in the workplace can be reduced through active participation in physical exercises	82 68.3%	38 31.7%	120 100%	5.9 9	7.9 0	2 0	Si g.
2	Participation in an organized fitness programme in the workplace is capable of decreasing fatigue	62 51.7%	58 48.3%	120 100%				
3	Participation in physical exercise has anti-depressant effect on body	75 62.5%	45 37.5%	120 100%				
Total		219	141	360				

Table 2 above shows that the calculated Chi-square value of 7.90 is greater than the critical value of 5.99, established at 0.05 level of significance with degree of freedom of 2. The hypothesis two was significant. It implies that participation in physical exercises in the work place have impact on stress reduction among local government employees and

enhanced their mental productivity in Oyo town.

Hypothesis 3: Participation of local government employees in physical fitness exercises will not have significant impact on their physical well being in Oyo town, Oyo state.

Table 3: Impact of physical fitness exercises on physical well being on mental productivity of local government employees

S/N	Item	Yes	No	Row Total	Crit. X ² Value	Cal. X ² Value	Df	Dec
1	Planned fitness programme for employees is capable of shedding excess weight	86 71.7%	34 28.3%	120 100%	5.9 9	18. 40	2 0	S i g.
2	Risk of developing chronic diseases like hypertension, diabetes, stroke among others can be prevented through regular physical exercises	59 49.2%	61 50.8%	120 100%				
3	Boredom at work can be improved through active involvement in physical exercises	76 63.3%	44 36.7%	120 100%				
Total		221	139	360				

Table 3 revealed that the calculated Chi-square value of 18.40 is greater than the critical value of 5.99, established at 0.05 level of significance. The hypothesis three is significant. It implies that participation in physical exercises in the workplace influenced health status of local government employees and enhanced their mental productivity in Oyo town.

Discussion of findings

The result in table 1 shows that 81(67.5%) respondents were of the opinion that engaging in physical exercises in the workplace promotes rational thinking. Also, 95(79.2) respondents concurred that participation in physical exercises stabilizes mood and promotes agility among employees. On the contrary, only 73 representing 60.8% of respondents were at variance that participation in recreational activities aids memory attention capacity. This finding was in agreement with the findings of Beyrou and Jaber (2011) whereby about 70 percent of their respondents were of the opinion that exercise helped them concentrate on assigned tasks, enjoy their work better and think more clearly about work-related problems.

The result in table 2 shows that 82(68.3%), 62(51.7%), 75(62.5%) respondents were of the opinion that stress in the workplace can be reduced through active participation in physical exercises; participation in an organized fitness programme in the workplace is capable of decreasing fatigue; and physical exercise has anti-depressant effect on body respectively. This result affirmed the finding of Marc (2010) that exercise decreases muscle tension, can enhance feelings of well-being, improves ability to handle stress and elevate mood.

As shown in the table 3 above, 86(71.7%) of respondents were of the opinion that planned fitness programme was capable of shedding excess weight. Similarly, 76(63.3%) respondents were of the opinion that boredom at work can be improved through active involvement in physical exercises. On the contrary

opinion, 61 representing 50.8% of respondents objected that risk of developing diseases like hypertension, diabetes, stroke among others can be prevented through regular physical exercises. This finding corroborates the assertion of Marc (2010) that exercise support health weight management, increases heart function. It can still be inferred from the this study that local government employees were not knowledgeable enough about vital roles of exercise in protecting against the development of chronic diseases like high blood pressure (hypertension, diabetes, stroke to mention a few).

Conclusion

The above findings showed that participation of local government employees in physical activities and fitness programmes in the workplace is capable of promoting mental alertness, reduce stress and improve their health and well being health status which in-turn enhance mental productivity at work.

Recommendations

Based on the findings of this study, it is hereby recommended that:

- 1) Local government chairmen, Heads of Local Government Administration (HLA) and other important functionaries should endeavour to make provisions for the establishment of recreational centre within the local government premises for better participation of their employees in physical activities and fitness programmes as a means of motivating them at work and promote their health.
- 2) National Union of Local Government Employees (NULGE) at each local government branch should sensitize and organize con-current seminars for their union members on the importance of physical exercises and fitness in the

workplace.

- 3) Each local government branch NULGE executives should integrate into their annual plan erection of mini recreational/health fitness centres whether free of charge or with the collection of token amount.
- 4) Health workers at various local government should endeavour to sensitize workers on need to always exercise themselves to promote their health and well being.
- 5) Periodic medical check up and screening should be carried out to determine exercise need of workers and exercise target zones.

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