

Exercise Participation and Perceived Health Status of Academic Staff in Tertiary Institutions in Calabar Metropolis, Cross River State, Nigeria

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Abstract

This study examined the relationship between exercise participation and perceived health status of academic staff of tertiary institutions in Calabar Metropolis, Cross River State, Nigeria. The descriptive survey design was adopted for the study. A sample of two hundred and thirty-eight (238) academic staff members was surveyed from a population of two hundred and sixty-four (264) senior lecturers in the Faculties of Education of two public universities in Calabar Metropolis. Data was collected with the use of a questionnaire titled "Exercise Participation and Perceived Health Status Questionnaire" (EPPHSQ). The questionnaire was validated by an expert in Health Education and two (2) others in Test and Measurement in the University of Calabar. Cronbach alpha method was used to establish the reliability of the instrument. The coefficient obtained was 0.711, which showed high reliability of the research instrument. Pearson product moment correlation statistical tool was utilized for data analysis. The finding of this study reveals that there is a significant positive relationship between exercise participation and the perceived health status of academic staff in the study area. Based on this finding, it was recommended that Health Educators should intensify their efforts in sensitizing academic staff on the need to continue participating actively in various exercises in order to help them live healthily and maintain a sound mind in a healthy body.

Keywords: exercise, participation, health, status, staff

Introduction

Nowadays globally, people tend to be less active on a physical level due to their way of life which tends to have been influenced by work nature, technological breakthroughs and advancement in modern/urban life which have made lives easier, enabled individuals to accomplish more with lesser movements, and in turn made lives more sedentary. Physical inactivity has been disclosed to be a salient health threat of the twenty first century. According to Kumar (2017), physical inactivity is currently the fourth leading risk factor for increasing mortality rate globally. Likewise, studies from other scholars identified inactivity as one of the most significant causes associated with increased risk of cardiovascular diseases, disability, reduced quality of life, and of course death (WHO, 2022; Downward & Rasciute, 2020; Cicognani et al., 2014; Casey et al., 2011). In fact, statistical evidence from WHO (2022) indicates that people who are not physically active to a sufficient extent have a 20% to 30% increased risk of death compared to people who are sufficiently active. Also, about 1 in 4 adults do not meet the global recommended levels of physical activity (World Health Organisation, 2022). Irrespective of one's discipline, profession/occupation, and/or age groups, the potential threat posed by physical inactivity has thus ignited the continuous and sustained interest of scholars on the subject matter, because health and wellbeing is constantly a concern to all. In this light, Freitas et al. (2021) alluded that emerging evidence have shown strong empirical and theoretical correlation between physical activity and positive health related outcomes. In other words, regular participation in physical activity and exercise tends to have a beneficial influence in promoting health and wellbeing.

Regular physical activity is widely recognized as a vital component of a healthy lifestyle which is often associated with numerous benefits such as longer and better quality of life, reduced risks of a variety of diseases such as diabetes, hypertension, cancer, depression obesity, stroke, arthritis, osteoporosis, and many psychological and emotional benefits such as the enhancement of thinking, learning and learning skills, among others (World Health Organization, 2022; Matthews et al., 2019; Rezende et al., 2016; Warburton et al., 2006). According to Anderson and Durstine (2019), one way to ascertain how physical activity and exercise improve health is by comparing the effects of physical exercise to medication use on heart rate at rest and during exercise. The authors noted that beta-blockers, which are often used to treat different cardiovascular diseases, have similar effects on the heart as physical activity and exercise do. According to them, beta-blockers will lower resting, submaximal, and maximal exercise heart rates. Whereas except for maximal heart rate, physical activity and exercise produce the same effect. Moreover, while conventional medications treat symptoms by altering physiological functioning in a synthetic manner, physical exercises cause the physiological systems of the body to function optimally. Thus, daily exercise acts as a natural treatment and prevention for many diseases (Anderson & Durstine, 2019).

As recommended by the World Health Organization, adults between the ages of 18 and 64 years are expected to do at least 150–300 minutes of moderate-intensity aerobic physical activity, or at least 75–150 minutes of vigorous intensity aerobic physical activity, or a combination of moderate and vigorous-intensity activity throughout the week, in order to obtain substantial health benefits. Collado-Mateo et al. (2021) opined that even though the benefits of regular exercise are widely known, the various exercise guidelines established

by WHO lack information regarding strategies that will enable individuals maintain such levels of physical exercise over time, or strategies to motivate sedentary individuals to start exercising. Hence, it seems that neither the knowledge of the benefits of exercise nor the setting of minimum thresholds of exercise are effective driving forces to reduce physical inactivity (Collado-Mateo et al., 2021).

From a scholastic perspective, physical activity and exercise are two different yet interwoven concepts vital to healthy and graceful life. The term physical activity is often referred to as any movement of the body produced by skeletal muscles that require the depletion of energy for the purpose of a progressive health benefit (Westerterp, 2013; Hoeger & Hoeger, 2002). Physical activity includes all forms of movements ranging from activities such as running, dancing, cycling, swimming, stretching, walking, weight lifting, and recreational activities like playing soccer, tennis or basketball, among others. In general, exercise is a subset of physical activity. Exercise is denoted as any intentional activity that is planned, structured and repetitive, performed for the purpose of training, fitness or bodily modification. In other words, it could be said that physical activity is simply exercise being done in a casual manner, whereas exercise is an organised, planned, structured and repetitive form of a physical activity. Kumar (2017) expressed that some physical activities can have a number of diverse physical outcomes. According to the author, running and cycling increase aerobic fitness or stamina; weight training or using resistance bands increase muscle strength; yoga and stretching exercises increase flexibility and balance. This current study categorised physical exercise into aerobic and anaerobic activities. Aerobic-activities refer to moderate to vigorous intensity exercises like cycling, brisk walking, swimming and running that require more oxygen than inactive behaviours, and thus promote cardiovascular fitness and other health benefits. Whereas, anaerobic exercises are intense physical activities that require the breakdown of energy sources in the absence of sufficient oxygen, and are usually repetitive and short in duration. Examples include various kinds of exercises such as Calisthenics, Flexibility (Stretching), Isokinetic, Isotonic, Muscle-fitness.

Despite the fact that epidemiological studies have established the relevance of physical activity and exercise to health, participation in regular exercise seems to be a complex behaviour that tends to be influenced by factors such as health and mobility issues, personal motivation, genetic factors, social and physical environments (Adegboyega, 2021), as well as one's occupation/profession among others. Admittedly, individuals in certain occupation are faced with unique challenges that tend to hinder their regular engagement in exercise. For instance, tertiary institutions employ academic staff who perform a crucial role in educational development and research advancement. Accordingly, Mushemeza (2016) opined that academic staff in tertiary institutions perform the role of educating students, contributing to the intellectual growth of society by conducting and publishing research regularly, as well as carrying out administrative tasks and community service. Performing these job roles often make them susceptible to high workloads, increased sedentary behaviours, and occupational stress as well as psychological and emotional distress/disability (Akah et al., 2022; Osaat & Ekechukwu, 2017; Sharma et al., 2018; Osifila & Aladetan, 2020; Amini-Philips & Okonmah, 2020), which may result to the neglect in personal health and wellbeing, and consequently lead to adverse health consequences.

Health itself is a very delicate issue/concept. The concept has been defined differently by various experts in different fields. A holistic and generally accepted definition was the one given by the World Health Organization in 1947 as – “a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity”. From this definition, it is relevant to understand the concept of “state of health” and “health status”. In standard practice, scholars often agree that “health status” and “state of health” are two interwoven, yet different concepts.

According to Lamb et al. (2020), “state of health” refers to an individual’s current health condition at a particular time which can change from time to time. Whereas, health status is a more stable health condition/indicator which is more enduring; often associated with one’s health history, which may be disturbed by temporary or chronic ailment. According to the authors, these two concepts are practically interwoven in many situations. As such, whether a person considers his or her current health state as good or bad is likely to depend both on the individual’s current condition, as well as its relationship to the person’s normal health history/status. They further noted that even though exercise participation could result in improvements in both health status and health state, exercise seems less likely to prevent an individual from catching colds and being injured on the road than to improve their general condition from which illnesses and accidents will then produce temporary deviations (Lamb et al., 2020).

As noted earlier, several studies have explored and established the relevance of exercise in promoting health. However, limited studies have focused attention on academic staff in tertiary institutions. Given the unique demands and challenges faced by this group, it is pertinent to examine the relationship between exercise participation and health status within this context. The current study seeks to bridge this research gap by examining the level of exercise participation and health status of academic staff in tertiary institutions with regards to health indicators such as body mass index, self-perceived health, and stress levels. This study is relevant because it will not only extend the current literature on the link between exercise participation and health status, but will equally enable researchers and policymakers to identify potential areas to enhance the health and wellbeing of academic staff. Furthermore, the understanding of challenges and facilitators of exercise participation among academic staff in tertiary institutions can lead to the formulation of institutional policies aimed at promoting a healthy attitude towards exercise, consequently leading to a healthier and more productive academic workforce with an increased job satisfaction and improved quality of education provided.

Hypothesis

Ho1: There is no significant relationship between exercise participation and the perceived health status of academic staff in tertiary institutions.

Methodology

The study adopted a survey research design. This research design examines situations as they occur at the time of an investigation. The study examined exercise participation and perceived health status of academic staff in tertiary institutions in Calabar Metropolis, Cross River State – Nigeria. The purpose of this study can be achieved using the survey research design. The population of this study comprised all lecturers from the rank of

Senior Lecturer and above in the Faculties of Education in the University of Calabar and University of Cross River State. The target population of this study is about 264 academic staff from the rank of senior lecturer and above who are still actively involved in academic activities in the public universities in the study area.

The study sample comprised two hundred and thirty eight (238) respondents, representing 90 percent of the study population that were randomly selected from the Faculties of Education in two public universities in Calabar Metropolis. This was done through stratified random sampling technique. A structured questionnaire was the instrument used for data collection. It was titled “Exercise Participation and Perceived Health Status Questionnaire” (EPPHSQ) and divided into two sections. Section A elicited information on respondents’ personal data. Section B was developed using four-point modified Likert scale. For positively worded items, Strongly Agreed (SA) was scored 4, Agreed (A) 3, Disagreed (D) 2 and Strongly Disagreed (SD) 1. The reverse scoring was used for items that were negatively worded. It contained twenty items that measured the variables of the study. Items 1-10 measured exercise participation while item 11-20 measured perceived health status of academic staff. The instrument was subjected to validity by an expert in Health Education and two (2) others in Test and Measurement. Cronbach alpha method was utilized to test its reliability. The result obtained was 0.711. The hypothesis was tested using Pearson Product Moment Correlation.

Presentation of results

Ho1: There is no significant relationship between exercise participation and perceived health status of academic staff in tertiary institutions.

The independent variable in this hypothesis is exercise participation while the dependent variable is the perceived health status of academic staff. Pearson product moment correlation statistical tool was employed for data analysis. The result obtained is presented in table 1.

Table 1: Pearson product moment correlation analysis of the relationship between exercise participation and perceived health status of academic staff in tertiary institutions in Calabar Metropolis, Cross River State (N = 238)

| Variables | Mean | SD | Calc-r | P-value |
|---|-------------|-----------|---------------|----------------|
| Exercise participation | 15.482 | 1.783 | 0.367* | 0.000 |
| Perceived health status of academic staff | 28.788 | 2.487 | | |

*Significant at 0.05; df = 236

The result of analysis presented in table 1 showed that the calculated r-value is 0.367 while the p-value is 0.000 at 0.05 level of significance with 236 degree of freedom. The null hypothesis was rejected as the p-value is less than alpha. Therefore, there is a significant positive relationship between exercise participation and the perceived health status of academic staff in tertiary institutions in Calabar Metropolis of Cross River State

Discussion of the findings

The finding that was obtained from analysis of data and testing of hypothesis one in the study revealed that the null hypothesis was rejected. This implied that there was a significant positive relationship between exercise participation and the perceived health status of academic staff in tertiary institutions in Calabar Metropolis of Cross River State. The reason for this finding could be that exercise is generally believed to be a non-pharmaceutical therapy for healthy living because of its benefits to participants. The awareness about the health benefits of regular exercise has been on the increase in recent years and more individuals are getting more engaged in physical activities of their choice to keep fit and maintain a healthy living. This has witnessed a significant increase in the number of individuals including academic staff that now willingly take active part in various forms of exercises. The health benefits derived from these activities have been enormous.

The finding of this study is in conformity with that of Kumar (2017) who expressed that some physical activities can have a number of diverse physical outcomes. According to the author, running and cycling increase aerobic fitness or stamina; weight training or using resistance bands increases muscle strength; yoga and stretching exercises increase flexibility and balance. This current study categorized physical exercise into aerobic and anaerobic activities. Aerobic-activities refer to moderate to vigorous intensity exercises like cycling, brisk walking, swimming and running that require more oxygen than inactive behaviours, and thus promote cardiovascular fitness and other health benefits. Whereas, anaerobic exercises are intense physical activities that require the breakdown of energy sources in the absence of sufficient oxygen, and are usually repetitive and short in duration. Examples include various kinds of exercises such as Calisthenics, Flexibility (Stretching), Isokinetic, and Isotonic Muscle-fitness.

The finding of this study also supported that of Anderson and Durstine (2019) who revealed that one way to ascertain how physical activity and exercise improve health is by comparing the effects of physical exercise to medication use on heart rate at rest and during exercise. The authors noted that beta-blockers which are often used to treat different cardiovascular diseases have similar effects on the heart as physical activity and exercise do. According to them, beta-blockers will lower resting, sub-maximal, and maximal exercise heart rates. Whereas except for maximal heart rate, physical activity and exercise produce the same effects on human health. Moreover, while conventional medications treat symptoms by altering physiological functioning in a synthetic manner, physical exercises cause the physiological systems of the body to function optimally. Thus, daily exercise acts as a natural treatment and prevention for many diseases (Anderson & Durstine, 2019).

Conclusion

The study investigated exercise participation and perceived health status of academic staff in tertiary institutions in Calabar Metropolis, Cross River State. The result obtained from analysis of data and testing of hypothesis in the study revealed that there was a significant positive relationship between exercise participation and the perceived health status of academic staff in the study area. The implication of this finding is that participation in exercise contributes positively to the health status of academic staff in the study area.

Recommendations

Based on the findings obtained from analysis of data and testing of hypothesis in the study, the researchers made the following recommendations:

- i. Health Educators should intensify their efforts in sensitizing academic staff on the need to continue participating actively in various exercises in order to help them live healthily and maintain a sound mind in a healthy body.
- ii. Academic staff in the metropolis should be enlightened through public lectures by exercise and sport science specialists on the need to perform regular aerobics exercise to burn down excess body fat.
- iii. Exercise should be encouraged among lecturers in tertiary institutions by exercise and sports science specialists as a mode of exercise for improving physical fitness so as to improve their health for effective output in the institutions.

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