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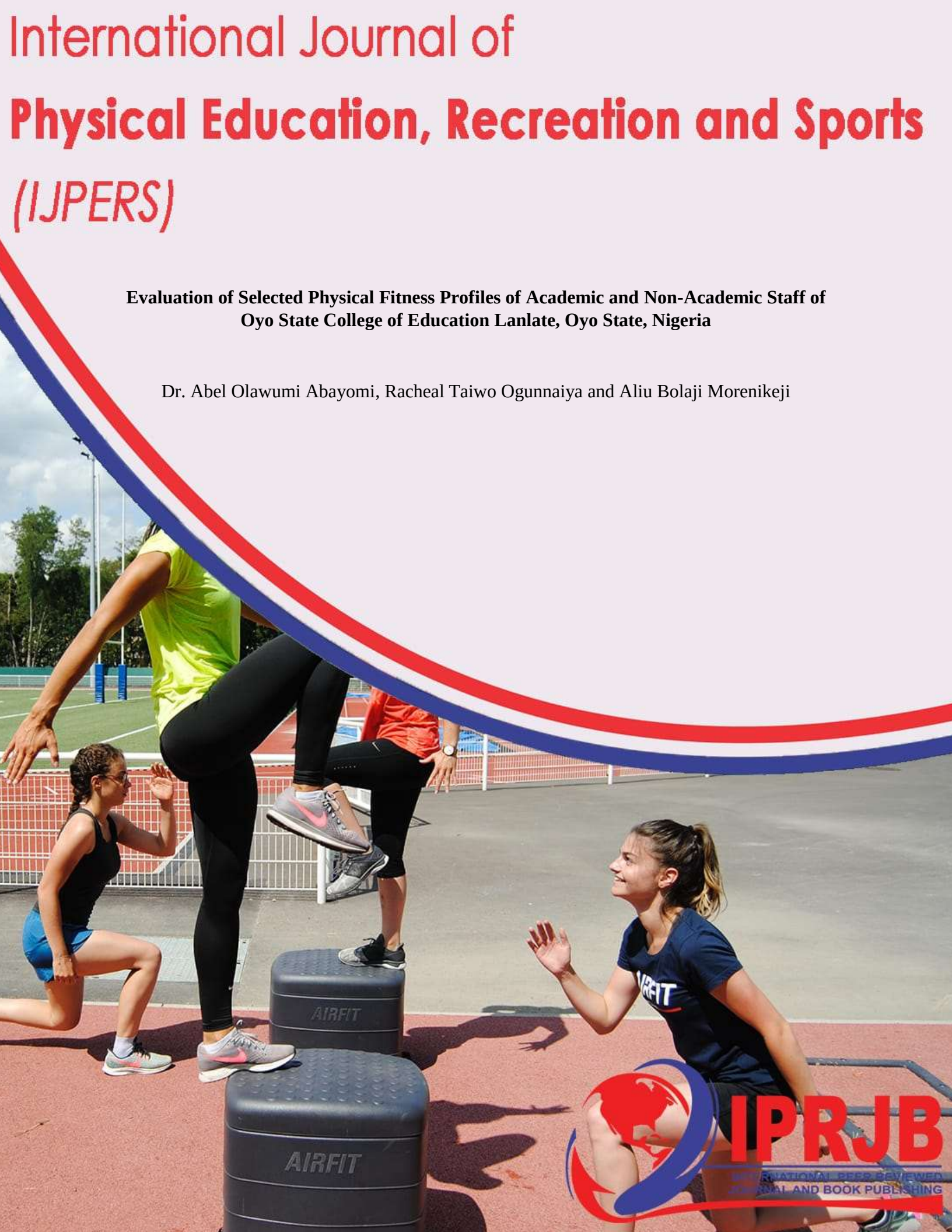

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Abstract

Purpose: The purpose of this study was to evaluate selected physical fitness profiles of Academic and Non-Academic Staff of Oyo State College of Education, Lanlate, Nigeria.

Methodology: The study made use of ex-post facto research design. The population for the study comprised of one hundred and ninety (190) staff that conveniently participated in the study within a span of sixteen weeks. 83 academic staff and 107 non-academic staff constituted the sample for the study which was purposively selected. The components of health fitness (flexibility, muscular endurance and muscular strength), physiological fitness (heart rate, systolic blood pressure and diastolic blood pressure) and motor fitness (agility, speed and leg power) were assessed using appropriate field tests and instruments.

Findings: The study revealed that heart rate, systolic blood pressure and diastolic blood pressure correlated positively with motor fitness of academic and non-academic staff in Oyo State College of Education, Lanlate. The result also showed that flexibility, muscular endurance and muscular strength play a significant role with motor fitness of academic and non-academic staff of Oyo State College of Education, Lanlate. The findings also revealed that academic and non-academic staffs of Oyo State College of Education possess low level of physical fitness.

Unique Contribution to Theory, Practice and Policy: The study recommends that adequate attention should be given to the development and training of motor fitness variables because they contribute significantly to health and physiological variables of the participants in this study. This unique contribution of the findings of this study support the Social Cognitive Theory (SCT) that individuals believe they can successfully engage in fitness activities because they have observed others within their social or work environment engaging in fitness-related behaviour and which has influenced their choice of participation.

Keywords: *Evaluation, Physical Fitness Variables, Academic, Non-Academic*

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INTRODUCTION

Physical fitness plays a prominent role in our daily activities particularly when it comes with productivity in the work place. Every individual should aspire to attain optimal physical fitness because it contributes immensely to healthy and functional life. The fact that physical fitness is core to longevity, mental and emotional wellbeing of the individual is not debatable at all. Physical fitness is the ability of an individual to carry out daily activities with optimal strength and alertness without excessive tiredness and with ample energy reserve for recreation and emergencies. It demands that for one to be physically fit, one must have more energy and motivation than one's occupation and leisure interests' demand. Otinwa (2010) defined physical fitness as the ability to last, bear up and to persevere under difficult circumstances where an unfit person would give up. It is the opposite of being fatigue from ordinary effort of lacking the energy to efficiently perform in life's physical activities. But today as a result of automation and challenges in lifestyles, physical fitness is now seen as a measure of the body's ability to function efficiently, adequately and effectively in work and leisure activities, to be healthy, to resist hypokinetic diseases and to meet emergency situations in life (Blom, Zhang and Kolbo,2010).

Physical fitness components have been generally categorised into Health-related components and Performance-related components. The Health-related components include muscular strength, muscular endurance, cardiorespiratory endurance, flexibility and body composition. Performance-related components on the other hand include power, speed, agility, coordination, balance and reaction time. Health-related components could be described as the most desirable and important measurable components because of their direct relationship to the physiology of the body. Regular participation in physical activity like brisk walking will develop the health-related components which invariably make a person to have lower risk of certain diseases like cardiovascular diseases, diabetes, cancer and osteoporosis (Pronk, Martinson, Kessler, Beck, Simon and Wang, 2004).

According to Owolabi (2015), every person needs a high level of physical fitness in order to avoid and combat ravaging health problems of obesity, high blood pressure, elevated blood glucose, hyperlipidemia, diabetes, especially type 2, stroke and coronary heart diseases. Therefore, individuals who are physically active are healthier and are able to maintain the most optimal body weight and are not prone to cardiac and any other health related problems. Thus, this will improve the quality of life of individuals and productivity in work place is enhanced and loss of man-hour due to frequent visits to hospital is minimized. In a study conducted by Alla and Ajibua (2012 showed that the academic staff of tertiary institutions have more free time to expend on leisure activities than the non-academic staff. Academic staff by nature of their work are researchers whose schedule of duty or academic activities are not restricted to normal school hours which enabled them to have more free time for leisure activities.

The current technological advancement has obviously affected the lifestyle of people, both in developed and developing countries. Literature has indicated a great reduction in physical activity and locomotion among people due to mechanization and substitution of job performance facilities for the physical effort (Okeneye, 2002; Eshraghi, Kashef and Mehri, 2012; Joshua, Samson-Akpan, Eyo and Joshua, 2012). According to Elendu and Akpan (2012), one of the preventive approach to non-communicable diseases and means of ensuring quantity and quality of life is through regular participation in appropriate physical activity and sport. Centre for Disease Control

(CDC) (1999) had reported that more than 60 percent of the adults did not exercise regularly and 25 percent of them were not active at all.

Therefore, regular and appropriate physical activity could promote health by reducing the risk of death through reduction in occurrence of heart diseases, reduction of blood pressure, blood cholesterol, risk of colon and breast cancers, as well as reduction in the risk of developing diabetes. Exercise in several ways contribute to human happiness, posture, mood, decreased anxiety, depression and elevated level of self esteem among others (Ntui, 2000; Pierce, 2008; Adeogun and Dansu, 2006; WHO, 2010; Berman and Snyder, 2012). Physical exercise has been widely reported as a sure route to physical fitness and a significant contributor to good health status (Adeogun and Dansu, 2006; Bulugbe and Oloyede, 2007; Akeredolu and Adefuye, 2008). Etuk (2007), Onohwakpor and Eboh (2006), posited that regular physical and sporting are generally lacking among Nigerians. They further assert that lecturers in particular do not take part in regular physical activity. A related study in Iranian Universities comparing active and inactive staff general health using the General Health Questionnaire revealed that women and married academic staff enjoyed better health than their counterpart.

WHO (2010) describes physical activity as any bodily movement produced by skeletal muscles that require energy expenditure. These include activities undertaken while working, playing, carrying out household chores and engaging in recreational pursuits. Regular moderate intensity physical activity, such as walking, cycling or participating in sports has significant benefits for health. Physical activity provides opportunities to improve health, prevent diseases and disability and enhance quality of life (Journal of Paediatrics, 2008). Health and fitness parameters are known to improve with increases in physical activity. Muscular endurance, muscular strength, cardio-respiratory endurance, flexibility, body composition, speed, agility are some of the health and fitness indicators which correlate with physically active lifestyles (The Cooper Institute, 2013).

In the study conducted by Badaki, Matazu, Sani, Olarinoye-Awujoola and Ladani (2022) on evaluation of health-related physical fitness components profile of academic and non-academic staff of Federal University Dutsin-Ma, Nigeria, it was revealed that both the academic and non-academic staff do not possess high profile of physical fitness with emphasis on their body composition, muscular endurance, flexibility and muscular strength which are necessary for quality living. A similar study carried out by Quomariyah and Djannah (2019) on health status and physical activity among academic and non-academic staff in higher education showed that the majority of Universitas Ahmad Dahla (UAD) staffs are physically active and overweight. No significant health problems were found and individual social and environmental factors were identified as factors that can support and inhibit physical activity. According to Mwangi and Rintaugu (2017) in their study conducted on physical activity and health related physical fitness attributes of staff members in a Kenyan Public University showed that majority of staff members in the institution are not physically active enough and that they are below the recommended health and fitness status.

Social Cognitive Theory (SCT): Social Cognitive Theory was developed by Albert Bandura in the 1960s.Social Cognitive Theory, also known as Social Learning Theory, emphasizes the role of observational learning and social interactions in shaping human behaviour. It suggests that individuals learn and model behaviours by observing others and their beliefs about their own

abilities (self-efficacy) play a significant role in determining whether they will engage in a particular behaviour. SCT can be used to assess physical fitness profiles by examining how academic and non-academic staff perceives their own abilities (self-efficacy) regarding physical fitness. It can help identify if individuals believe they can successfully engage in fitness activities and whether they have observed others within their social or work environment engaging in fitness-related behaviours, which can influence their own choices.

Another study conducted by Pronk, Martinson, Kesler, Beck, Simon and Wang (2004), the researchers analyzed health and lifestyle factors in 683 workers in various occupations completing a health risk assessment. Levels of physical activity, estimated physical fitness and obesity were then compared with indicators of job performance, as rated by the workers themselves. More physically active workers reported higher work quality and better overall job performance. As physical fitness increased, so did the quantity of work performed. In addition, more fit workers needed to expend less extra efforts to do their work.

The study was an evaluation of selected physical fitness profiles of academic and non-academic staff of Oyo State College of Education, Lanlate. The study considered Physiological variables (Heart Rate, Systolic Blood Pressure and Diastolic Blood Pressure), Motor fitness variables (Agility, Speed and Leg Power) and Health fitness variables (Muscular Endurance, Muscular Strength and Flexibility).

Statement of the Problem

Physical fitness is a core factor in enhancing high productivity among workers especially among the Colleges of Education in Nigeria. However, findings from research works on physical fitness among workers in Colleges of Education have shown that most staff (academic and non-academic are not physically fit and this affects them in discharging their duties efficiently and effectively. The overall effect of this is that students and learners in Colleges of Education do not benefit maximally from their staff. Previous studies on this topic have tried to do critical analysis of the staff physical fitness on a general note that is, assessing the fitness of both academic and non-academic staff together without taking care of their peculiarities. Most of these studies have provided useful insights into the physical fitness of staff in Colleges of Education but failed to do a correlation study of physical fitness of academic and non-academic staff. Previous studies conducted looked at the physiological, fitness and motor variables of the participants but have not done correlation studies of motor variables versus physiological and fitness variables. This study would fill this gap by correlating the motor fitness variables with physiological and fitness variables. Also, there is no known study, to the best of the researchers' knowledge that is done specifically on Oyo State College of Education Lanlate, Oyo State, Nigeria

Research Hypotheses

The following research hypotheses were tested.

Ho_1: There will be no significant relationship in the Physiological variables (Heart Rate, Systolic Blood Pressure and Diastolic Blood Pressure) to motor fitness of academic and non-academic staff in Oyo State College of Education, Lanlate.

Ho_2: There will be no significant relationship in the health fitness variables (flexibility, muscular endurance and muscular strength) to motor fitness of academic and non-academic staff in Oyo State College of Education, Lanlate

METHODOLOGY

The ex-post facto Research Design was used for the study. The design was considered the best because the researchers did not manipulate the independent variable and the participants were not assigned to treatment group.

The population for the study comprised of one hundred and ninety (190) staff that conveniently participated in the study, which include 83 academic staff and 107 non-academic staff. Purposive sampling technique was used by the researchers to pick the participants for the study based on certain characteristics possessed by the population. The components of health-related and performance-related fitness profiles were assessed using appropriate field tests and instruments. Muscular endurance with Burpee test, Muscular strength with Hand Grip Dynamometer, flexibility with Sit and Reach test, Agility with Illinois Agility Run test, Speed with 50 meters Dash, Leg Power with Vertical Jump, Heart Rate with Stethoscope and a Stopwatch and Blood Pressure with Stethoscope and Sphygmomanometer. Descriptive statistics of mean, standard deviation, percentage and Correlation Matrix were used in the study. All the hypotheses were tested at 0.05 level of significance.

Permission: The protocol to carry out the study was obtained by getting an ethical permission from the Management of Oyo State College of Education, Lanlate,

Procedure for Data Collection: All measurements for the study took place in the College Sports Ground. Measurements were made with standardized equipment using appropriate recommended procedure. Measurements covered a period of four months and the order of testing was done in such a way that no test influenced the other.

RESULTS

Table 1: Data Analysis of Socio-Demographic Characteristic of the Respondents (Academic Staffs)

The descriptive statistic adopted in analyzing the demographic variable was the simple percentage (%).

Demography	Frequency	Percentage %
Gender		
Male	67	80.7
Female	16	19.3
Total	**83**	**100.0**
Age		
40-50	71	85.5
51 and above	12	14.5
Total	**83**	**100.0**
Height		
150-170	77	92.8
171 AND ABOVE	6	7.2
Total	**83**	**100.0**
Weight		
50-70	59	71.1
71 AND ABOVE	24	28.9
Total	**83**	**100.0**

Table 1 shows the demographic information of the respondents selected for this study. The table shows that majority 67 (80.7%) of the respondents were male while the remaining 10 (19.3%) were female. From the table, 71 (85.5%) were 40 -50 years old, while the remaining 12 (14.5%) were 51 years and above. Also, 77 (92.8%) of the respondents height are 150-170 and 6 (7.2%) of the respondents height are 171 and above. The table further shows that, 59 (71.1%) of the respondents weight are 50-70 and 24 (28.9%) of the respondents weight are 71 and above.

Table 2: Data Analysis of Socio-Demographic Characteristic of the Respondents (Non-Academic Staffs)

The descriptive statistic adopted in analyzing the demographic variable was the simple percentage (%).

Demography	Frequency	Percentage %
Gender		
Male	69	64.5
Female	38	35.5
Total	**107**	**100.0**
Age		
40-50	74	69.2
51 and above	33	30.8
Total	**107**	**100.0**
Height		
150-170	82	76.6
171 and Above	25	23.4
Total	**107**	**100.0**
Weight		
50-70	88	82.2
71 and Above	19	17.8
Total	**107**	**100.0**

Table 2 shows the demographic information of the respondents selected for this study. The table shows that majority 69 (64.5%) of the respondents were male while the remaining 38 (35.5%) were female. From the table, 74 (69.2%) were 40 -50 years old, while the remaining 33 (30.8%) were 51 years and above. Also, 82 (76.6%) of the respondents height are 150-170 and 25 (23.4%) of the respondents height are 171 and above. The table further shows that, 88 (82.2%) of the respondents weight are 50-70 and 19 (17.8%) of the respondents weight are 71 and above.

Hypotheses

$H0_1$: There will be no significant relationship in the physiological variables (Heart rate, systolic blood pressure and diastolic blood pressure) to Motor fitness of academic and non academic staff in Oyo State College of Education, Lanlate.

Table 3: Summary of Correlation Matrix Showing the Relationship between the Study Variables

Variables	Mean $\bar{x}$	SD	1	2	3	4
Motor Fitness	88.19	8.88	1.000			
Heart rate	80.08	9.859	.315**	1.000		
Systolic blood pressure	110.97	16.84	.340**	.590	1.000	
Diastolic blood pressure	87.27	8.394	.282**	.316	.854	1.000

**. Correlation is significant at the 0.05 level (2-tailed)

The table 3 above reveals the inter-correlation matrix on relationship that exits among physiological variables (heart rate, systolic blood pressure and diastolic blood pressure) and dependent factor (motor fitness) of academic and non academic staff in Oyo State College of Education, Lanlate; heart rate ($r = .315$, $p<0.05$) had significant relationship with motor fitness, systolic blood pressure ($r = .340$, $p<0.05$) had significant relationship with motor fitness and diastolic blood pressure ($r = .282$, $p<0.05$) had significant relationship with motor fitness of academic and non academic staff in Oyo State College of Education, Lanlate. This implies that heart rate, systolic blood pressure and diastolic blood pressure play a significant role with motor fitness of academic and non academic staff in Oyo State College of Education, Lanlate.

$H0_2$: There will be no significant relationship in the health fitness variables (Flexibility, muscular endurance, muscular strength) to motor fitness of academic and non-academic staff in Oyo State College of Education, Lanlate

Table 4: Summary of Correlation Matrix Showing the Relationship between the Study Variables

Variables	Mean $\bar{x}$	SD	1	2	3	4	5	6	7
Motor fitness	88.19	8.88	1.000						
Flexibility	11.73	2.52	.221**	1.000					
Muscular endurance	26.78	6.47	.415**	.303	1.000				
Muscular strength	59.38	13.31	.125**	.086	.154	1.000			

**. Correlation is significant at the 0.05 level (2-tailed)

The Table 4 above reveals the inter-correlation matrix on relationship that exits among (flexibility, muscular endurance and muscular strength) and dependent factor (motor fitness) of academic and non-academic staff in Oyo state college of Education, Lanlate; flexibility ($r = .221$, $p<0.05$) had significant relationship with motor fitness, muscular endurance ($r = .415$, $p<0.05$) had significant relationship with motor fitness, muscular strength ($r = .125$, $p<0.05$) had significant relationship with motor fitness, of academic and non-academic staff in Oyo State College of Education, Lanlate. This implies that flexibility, muscular endurance, muscular strength, play a significant role with motor fitness of academic and non-academic staff in Oyo State College of Education, Lanlate.

RESULTS AND DISCUSSIONS

The findings of this study revealed that there was low and moderate inter-correlation matrix between physiological and motor fitness of academic and non-academic staff of Oyo State College of Education, Lanlate. Findings show that inter-correlation matrix for muscular strength and flexibility with motor fitness was .125 and .221 which shows low correlation. Whereas correlation for muscular endurance with motor fitness was .415 which means moderate relation was found. Also, findings show that inter-correlation matrix for diastolic blood pressure and heart rate with motor fitness was .282 and .315 respectively, which means moderate relation was found. In the same vein, the table shows the inter-correlation matrix for systolic blood pressure with motor fitness to be .340 which also reveals that a moderate correlation was found.

This finding was in agreement with the study conducted by Badaki, Matazu, Zani, Olarinoye-Awujoola and Ladani (2022), which found that both academic and non-academic staff of Federal University of Dutsin-Ma, Nigeria, do not possess high profile of physical fitness with emphasis on their body composition, muscular endurance, muscular strength and flexibility which are necessary for quality living. It was also found that the level of their actual involvement in physical fitness activities was very low. This study also support the study conducted by Mwangi and Rintaugu (2017) on physical activity and health-related fitness attributes of staff in a Kenyan Public University that majority of staff in the institution are not physically active enough and they are below the recommended health and fitness status.

Likewise, this research finding was in line with the result obtained by Amirtash (2003) which showed that 55 percent of the academic members of Tehran and Tarbiat Moallem Universities do not have physical and sportive activities in their life. The reason for this was due to failure to allocate proper facilities and work hours for the academic members. As a result of this, sports and physical education planners are encouraged to consider the particular conditions of university lecturers in the timetable preparation for the sport places. The study also agreed with the finding of Eshraghi, Kashef and Mehri (2012) which revealed that out of 250 Iranian academic staff, 195 were physically active while 51 were physically inactive. Research by Patience, Samson- Akpan, Mary, Eyo and Akon (2013) carried out among academic staff in Nigerian universities found low levels of participation by academic staffs. Non- involvement in physical activity by academic staff is supported by King, Carl and Haskell (1988).

This research findings was in contrast with the research carried out by Devi (2016) which found negligible relation for systolic and diastolic blood pressure with vertical jump among college men students of Adigrat university, Ethopia. Also very high correlation was found in the flexibility of badminton players motor performance in the study conducted by Yadav (2017).

SUMMARY AND CONCLUSION

Conclusion

From the study findings, it was clear that motor fitness variables significantly play a critical role in influencing the health and physiological fitness variables of the participants. The study concluded that both academic and non-academic staffs of Oyo State College of Education, Lanlate do not possess good motor, physiological and health fitness. This is because there was low to moderate correlation between physiological and motor variables, and also between health fitness variables and motor fitness variables.

Recommendations

- The College management should set a day aside every week from 4.00pm to 6.00pm where members of staff will participate in sporting activities in order to improve their level of physical fitness.
- The College management should also make provisions for in-door and out-door sports equipment and facilities for the use of staff during their leisure time.
- Competitions should be organized in some sports by the College management between academic and non-academic staffs so as to encourage their active participation in sports and games.

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