

**EVALUATION OF PHYSICAL FITNESS
CHARACTERISTICS OF OFFICERS AND MEN
OF THE ARMED FORCES IN LAGOS, NIGERIA**

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CERTIFICATION

I certify that this research was carried out by **Benjamin Oluwole ADEDUGBE** under my supervision in the Department of Human Kinetics and Health Education, Faculty of Education, University of Ibadan, Ibadan, Nigeria.

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DEDICATION

This Doctoral thesis is dedicated to the Glory of God Almighty, who out of His love, mercy and provisions sees me through this noble course.

It is also dedicated to my family, (sweet mother) Chief Eunice Abike Adedugbe, the sweet memory of my late father, Daniel Ajikeola Adedugbe and to my darling wife Emilia Uwem Adedugbe, my son Master Daniel Bamidele Adedugbe, my two beautiful daughters (Princesses) Faith Omowale Adedugbe and Victoria Iyanuoluwa Adedugbe

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ABSTRACT

The physical fitness of members of the Nigerian armed forces is of great importance to their mobility and health. Available studies have centred on growth, development and combat readiness of the Nigerian Armed Forces (NAF) but have not critically examined their Physical Fitness Characteristics (PFC) as recommended by the United Nations Military Fitness Established Norms (UNMFNs). Therefore, this study evaluated Resting Heart Rate (RHR), Systolic Blood Pressure (SBP), Diastolic Blood Pressure (DBP), Agility, Speed, Leg Power, Flexibility, Muscular Endurance, Maximum Oxygen Consumption (MaxVO_2), Percent Body Fat (%BF) and Body Mass Index (BMI) characteristics of officers and men (OM) of the armed forces in Lagos, Nigeria.

The *ex-post facto* research design was employed. Purposive sampling technique was adopted to select 186 participants from officers (n=49) and men (n=137) of the Nigerian Army (n=64), Navy (n=64) and Air force (n=58). Data were collected using Skin-fold Callipers (r=0.99), Sphygmomanometer (r= 0.97), Illinois Agility Run (r=0.93), 1.5mile Run/Walk (r= 0.72), Sit-Up (r= 0.92), Sergeant Jump (r= 0.70), BMI (r=0.69) and Flex box (r= 0.90). Three research questions were answered, and nine hypotheses tested at 0.05 level of significance. Data were analysed using paired t-test, Analysis of Variance and Scheffe post-hoc test.

There were significant differences between the RHR (t=4.167, p<0.05), DBP (t=5.958, p<0.05), agility (t=63.283, p<0.05), leg power (t=22.316, p<0.05), flexibility (t=18.944, p<0.05), MaxVO_2 (t=20.937, p<0.05), and BMI (t=3.786, p<0.05) when compared with UNMFNs. Significant differences were recorded in SBP (t=2.791, p<0.05), agility (t=2.970, p<0.05), speed (t=3.483, p<0.05), muscular endurance (t=3.510, p<0.05), MaxVO_2 (t=1.084, p<0.05) and BMI (t=2.296, p<0.05) between Officers and Men of the Armed forces. There were significant difference in SBP ($F_{(2,183)}=4.917$, p<0.05), agility ($F_{(2,183)}=57.583$, p<0.05), speed ($F_{(2,183)}=11.526$, p<0.05), leg power ($F_{(2,183)}=9.237$, p<0.05), flexibility ($F_{(2,183)}=18.923$, p<0.05), MaxVO_2 ($F_{(2,183)}=9.775$, p<0.05), %BF ($F_{(2,183)}=66.461$, p<0.05) and BMI ($F_{(2,183)}=5.176$, p<0.05) among the groups. Scheffe post hoc showed that the mean difference in SBP was between Army and Air Force ($\bar{x}=3.98$); agility was among the three groups [Army and Navy ($\bar{x}=8.17$), Army and Air force ($\bar{x}= 2.94$), Navy and Air force ($\bar{x}= 5.24$)]; speed [Army and Air Force ($\bar{x}=0. 68$), Air force and Navy ($\bar{x}=0.71$)]; leg power between [Army and Navy ($\bar{x}=7.97$), Navy and Air force ($\bar{x}=5.13$)]; flexibility between [Army and Navy ($\bar{x}=4.22$), Army and Air Force ($\bar{x}=5.52$)]; MaxVO_2 among [Army and Navy

(\bar{x} =7.67), Navy and Air Force (\bar{x} =8.04)], %BF among [Army and Navy (\bar{x} =6.86), Army and Air Force (\bar{x} =4.33)] and BMI between [Army and Navy (\bar{x} =10.64), Army and Air force (\bar{x} =9.07)].

Nigerian armed forces did not measure up to the UNMFNs PFC in speed (Norm = 4.8seconds), percent body fat (Norm = 15.7%) and muscular endurance (Norm = 38rep. / min.). Also, there were significant disparities between fitness levels of the different armed forces groups and OM across the groups. Hence, physical fitness training advisory committee should be constituted within the armed forces to supervise the proper conduct and appraisal of physical fitness training programme of the forces.

Keywords: Physical Fitness Characteristics, Nigerian Armed Forces. Officers and Men, United Nations Military Fitness Norms

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