Evaluation of selected Physical Fitness Variables of the Nigerian Police Force Lagos Nigeria

D.O.I: https://doi.org/10.4127/ch.2017.0125

Adedugbe Benjamin Oluwole (PhD)¹

¹ Department of Human Kinetics and Health, Faculty of Education, Adekunle Ajasin University P.M.B 001, Akungba-Akoko, Ondo State, Nigeria

Abstract

The physical fitness of member of the Nigerian Armed Forces NAF (Military) para-military and physical and health educators are of great importance to their mobility and health. Available studies have centered on growth, development and combat readiness of the NAF and police respectively. But none have critically examined their physical fitness characteristic (PFC) or as recommended by United Nations Military/Paramilitary fitness Norms (UNMFNS) Therefore, this study evaluated selected PF, variable age, Resting Heart Rate (RHR) Systolic Blood Pressure (SBP) Diastolic Blood Pressure (DBP) Agility and speed characteristic of officers and men of Nigerian Police in Lagos. The ex-post factor research design was employed. Purposive sampling technique was adopted to select forty (40) participants from officers (n=20) and men (n=20). Data were collected using illinois Agility run (r=93) sphygmomanometer (r=0.97) and analyses using mean, standard deviation of variance and paired t-test for significant differences in the relationship among the selected PF variable (Health and performance) speed and the

Keywords: Age, Systolic Blood Pressure, Diastolic Blood Pressure, Heart Rate, Officer and man, United nation Military fitness nouns
physiological variable. All hypothesis for the study were tested at the 95% degree of confidence interval. There were significant differences in speed, \( t=3.483, P<0.05 \) SBP \( t=2.791, P<0.05 \) Agility \( t=2.970, P<0.05 \). No significant difference in (DBP) based on the findings; Nigerian police force (both officers and men) did not measured up to the (UNMFNS)&PFC in speed Agility and SBP, There were some disparities between fitness level of officer and men of the N.P

**Introduction**

The attainment of physical fitness generally should be an aspiration of all, because of its immense contributions to a healthy and meaningful life. Physical fitness is the ability of Human body to moved with desired speed, balance agility and strength gained through proper exercise and nutrition. It is the ability to withstand whatever life throws at one in a way. Pollock and Wilmore (1994) defined fitness as an attributes that people have or achieved that relate to ability to perform physical activities. Amusa, Igbanugo and Toriola (1998) stressed that physical fitness is the ability to last, bear up and to persevere under difficult circumstances. Where an unfit individual/person would give up. The military coined the construct as the ability to physically accomplish all aspects of armed forces mission while still remaining healthy and uninjured. (Total fitness for the 21st century, 2009) Brandor (2009) adjoined to earlier proposition that physical fitness is the ability to carryout daily task with vigour and alertness without undue fatigue and with ample reserved energy to enjoy leisure time pursuits and to meet unforeseen circumstances and emergencies.

Hale and Zartman (2001) maintained that many of the physical activities which hither-to do exercise the body have been taken over by the technological improvement and advancement, whereby people now enjoy most of their free time in sedentary activities.

Physical fitness has been generally categorized into performance related components and Health related component. (HRC) (Prentice, 1999). The PRC, which include power, speed, balance, agility, coordination and reaction time are more important in the area of optimal performance in sports and games, defense, combat, protection and social security as exemplified in the activities of police and armed forces of any nation.

Health related components(HRC) on the other hand, include muscular strength, muscular endurance, flexibility, cardio-respiratory or circulo-respiratory endurance and body composition. HRC could be described as the most desirable and important measurable components in view of their direct relation to the physiology of the body (Prentice, 1999).
Physical fitness is very important to all and sundry for good health and maximum efficiency as the American College of Sports and Medicine (2000) affirms that fitness means different things to many individuals’ people, security, organization, physiologist, psychologist, medical and para-medicals personnel as the case may be. What military personnel will regards as fitness may be entirely different from what fitness meant to a medical and Health personnel.

It is pertinent to note however, that before an individual or a group of individuals can be enlisted into the military, he must possess certain level of militarily acclaimed fitness.

The Nigerian Police Force (NPF) and Armed Forces of the Federal republic of Nigeria (FRN) had their origin and Headquarters (HQ) in Lagos dated back to the pre-colonial era in 1861 and 1863 respectively (Dule, Ajayi, Bassey and Bomor, 1994) their main duties then were to maintained law and order, serve as consular guards, but the name Nigerian police did not exist until the time of independent and republic in 1960/1963 respectively.

Lagos was once the HQ of all the services in Nigeria, both military and para-military, and also once times the HQ and seat of power before it was re-located to Abuja in 1991.

The focus of this research is to evaluate and compare physical fitness variable/status of officer and men of the Nigerian Police Force, with the aim of establishing their PFC and comparing them with established norms from other part of the world.

Statement of the problem

The United Nation department of Defense Directive dated back to (1981) stated that individual service command must possess stamina and strength to perform successfully in any potential mission. (giordon, 2006). To do this, the directive mandated each military service to develop quality fitness programmes that will improve readiness and increases combat effectiveness of their personnel. In line with this policy, most countries including Nigeria have introduced various forms of fitness evaluation programmes to improve professional efficiency of their personnel. United Nations (UN) secretary General, Ban Kimoon, advocates on Nigeria becoming a permanent member of security council of the UN for her exemplary roles in peace keeping mission round the world.

However, available records show that Annual fitness evaluation exercise in the armed forces in Nigeria and police has witnessed a tremendous decline as most officers and men do not see the need for fitness test. The decline has affected the various commands to such an extent that most recent exercise held in February
every year witnessed only about thirty (30%) of the armed forces and police population in attendance. (Report: HQ NAPT Corp Dodan Barract 2012). Also, code of conduct in armed forces and police which stipulates compulsory participation in regular physical training for all, both officers and men, Non-compliance with still penalty is no more enforced. military incursion into polities and taste of power, the knack to remain in power have made them to lose focus and grip of their principal assignment which supposedly should be security, management of crises war, protection of life and properties, defense and maintenance of core value and territorial integrity of the nation, consequently the level of commitment to physical fitness development have been affected and compromised in various quarters.

Available records from various clinics and military hospital/reference hospital in the year 2012 shows an upward increase in occurrence of chronic diseases (CHD, obesity, diabetes mellitus overweight) among military personnel across the armed forces and police. This is indeed becomes worrisome, because these were sect of people that supposedly expected to protect life and properties, now getting increasingly unhealthy, the whole citizenry life and hope is in dire danger. Gordon (2006) emphases that the success and general efficiency of every military establishment to a large extent dependent upon the physical fitness and endurance condition of the unit/command.

**Research Questions**

The following research questions were generated and answered:

1. What is the physical fitness index of officers and men of Nigerian Police Force?
2. Will there be any difference between the physiological and motor variables of officers and men of the NPF

**Hypotheses**

1. There were no significant difference in the resting heart rate (RHR) and diastolic blood pressure (DBP) of officers and men of the Nigerian Police Force.
2. There were significant difference in the speeds, systolic blood pressure (SBP) and agility of Nigerian Police Force when compared with the (UNMFN’S).
3. There were also significant difference in the PFC i.e speed, SBP and agility of officers and men of NPF
Methodology

Research Design

The study utilized scientific procedures and instrument to measure age, Heart Rate, Systolic Blood Pressure (SBP) Diastolic Blood Pressure (SBP) speed and agility.

These variables were compared with established and validated standards (used as norms in this study) obtained from international journals and army physical fitness test (APFT) record. The study examined whether there were difference in the possession of these variable between officers and men. It further scrutinized the differences between them and others in the world. Hypotheses were tested at 0.05 level of significance.

Results

Data analysed and presented as Rate of follows

Demographic data of participants

<table>
<thead>
<tr>
<th>Variables</th>
<th>Status Officer/Men</th>
<th>N</th>
<th>Range Min</th>
<th>Range Max</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGES (YEARS)</td>
<td>Officers</td>
<td>20</td>
<td>18.00</td>
<td>42.00</td>
<td>27.05</td>
<td>4.67</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>20</td>
<td>18.00</td>
<td>45.00</td>
<td>30.94</td>
<td>7.19</td>
</tr>
<tr>
<td></td>
<td>Pooled Score</td>
<td></td>
<td>18.00</td>
<td>43.50</td>
<td>28.99</td>
<td>5.93</td>
</tr>
</tbody>
</table>

Table 1.1, indicated the range, Mean and standard deviation distribution of the age of Officers and men of Nigerian Police Force Lagos. The pooled age range of participant 18-44years with a mean of 28.99 +/-5.93
Table 1.2
Descriptive statistics on Heart rate of Officers and men of Nigerian Police Force Lagos

<table>
<thead>
<tr>
<th>Variables</th>
<th>Status</th>
<th>N</th>
<th>Range</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Min</td>
<td>Max</td>
<td></td>
</tr>
<tr>
<td>RHR</td>
<td>Officers</td>
<td>20</td>
<td>56.00</td>
<td>96.00</td>
<td>67.94</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>20</td>
<td>52.00</td>
<td>90.00</td>
<td>67.68</td>
</tr>
<tr>
<td></td>
<td>Pooled Score</td>
<td>54.00</td>
<td>-</td>
<td>93.00</td>
<td>67.81</td>
</tr>
</tbody>
</table>

Table 1.2 showed the heart rate value of participant. The pooled value of Officers and men of Nigerian Police Force Lagos ranges from 54.00-93.00 beat per minutes (bpm) with a mean of 67.81 +/- 9.07.

Table 1.3
Descriptive statistics on the systolic blood pressure of Officers and men of Nigerian Police Force Lagos

<table>
<thead>
<tr>
<th>Variables</th>
<th>Status</th>
<th>N</th>
<th>Range</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBP (mmHg)</td>
<td></td>
<td></td>
<td>Min</td>
<td>Max</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Officers</td>
<td>20</td>
<td>110.00</td>
<td>130.00</td>
<td>120.55</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>20</td>
<td>110.00</td>
<td>140.00</td>
<td>121.81</td>
</tr>
<tr>
<td></td>
<td>Pooled Score</td>
<td>110.00</td>
<td>-</td>
<td>135.00</td>
<td>121.18</td>
</tr>
</tbody>
</table>

Table 1.3 reveals that the pooled systolic blood pressure of the participants ranges from 110.00-135.00mmHg and a pooled mean of 121.18 +/- 6.36mmHg. The officers here have as the case may be the lowest systolic blood pressure when compared with that of others ranks.
Table 1.4  
*Descriptive statistics (D B P)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Status</th>
<th>N</th>
<th>Range</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DBP (mmHg)</td>
<td>70.00</td>
<td>90.00</td>
<td>78.15</td>
<td>4.24</td>
</tr>
<tr>
<td>Officers</td>
<td>20</td>
<td>70.00</td>
<td>90.00</td>
<td>78.44</td>
<td>3.55</td>
</tr>
<tr>
<td>Men</td>
<td>20</td>
<td>70.00</td>
<td>90.00</td>
<td>77.73</td>
<td>4.17</td>
</tr>
</tbody>
</table>

This table showed no variance between the Officers and men of Nigerian Police Force Lagos in diastolic pressure characteristics and that of (UNMPFNS).

Table 1.5  
*Descriptive statistics on agility of Officers and men of Nigerian Police Force Lagos*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Status</th>
<th>N (40)</th>
<th>Range</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGILITY (secs)</td>
<td>Officers</td>
<td>20</td>
<td>37.20</td>
<td>51.20</td>
<td>43.14</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>20</td>
<td>27.90</td>
<td>50.60</td>
<td>37.90</td>
</tr>
<tr>
<td></td>
<td>Pooled Score</td>
<td>32.55</td>
<td>50.09</td>
<td>40.52</td>
<td>4.135</td>
</tr>
</tbody>
</table>

The agility of the Officers and men of Nigerian Police Force in this study ranges from 32.55-50.09 seconds with pooled mean of 45.52 +/- 4.135 seconds. The performances of the men were better than that of the officers in this case.
Table 1.6
Descriptive statistics on speed of Officers and men of Nigerian Police Force Lagos

<table>
<thead>
<tr>
<th>Variables</th>
<th>Status</th>
<th>N</th>
<th>Range</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPEED (secs)</td>
<td></td>
<td></td>
<td>Min</td>
<td>Max</td>
<td></td>
</tr>
<tr>
<td>Officers</td>
<td>20</td>
<td>6.20-11.50</td>
<td>8.32</td>
<td>0.95</td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>20</td>
<td>5.06-10.00</td>
<td>7.63</td>
<td>0.95</td>
<td></td>
</tr>
<tr>
<td>Pooled Score</td>
<td>20</td>
<td>5.63-11.25</td>
<td>7.975</td>
<td>0.92</td>
<td></td>
</tr>
</tbody>
</table>

The participant as showed in table 1.6 had a speed range of 5.63-11.25 seconds and a pooled mean of 7.975 +/- 0.92. The men/others ranks had a better performance than the officers.

Results

There were significant difference in speed, SBP and agility of Officers and men of Nigerian Police Force Lagos and that of the (UNMFNS)

Table 2:1
*t-test analysis on the difference in speed between Officers and men of Nigerian Police Force Lagos*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Status</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Cal-t</th>
<th>df</th>
<th>P.</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPEED</td>
<td>Officers</td>
<td>20</td>
<td>8.51</td>
<td>0.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>20</td>
<td>7.97</td>
<td>0.94</td>
<td>3.483</td>
<td>38</td>
<td>0.001</td>
<td>Sig</td>
</tr>
</tbody>
</table>

The table showed the mean speed of officers and men 8.51 +/- 0.93 and 7.97 +/- 0.94 respectively. This is an indication that the men had a better speed that the officers. Also the obtained t-value was significant (t-3.483, df 38, P<0.05)
Results revealed that the officers (124.67 +/- 7.36) had higher SBP than men (121.35 +/- 7.08) obtained t-value show significant difference (t=2.791, df 38, P<0.05) Ho not accepted.

### Discussion

The needs to improve human capacities such as physiological, motor & health otherwise has led man to research into programmes that would enhance the capacities. Focusing on the Armed Forces and police appears greater than the generalities because of the important roles of defence, protection etc in which they play.

Following the computation of independent t-test for the Hypotheses, Results showed that speed, SBP and Agility were not accepted because of the significant difference between NPF and the acceptable norms and between officers and men respectively. while Age, RHR and DBP were not rejected when compared with united Nations military fitness norms.
Conclusion

Based on the following of this research work. The following conclusions were drawn;
1. There were no significant differences in Age, Height, Weight, RHR and DBP between the Nigerian Police officer and men and that of the acceptable norms.
2. There were significant differences in the SBP, speed and agility of NPF inbetween officer and men in one hand and across board and the United Nations military fitness norms in other hand
3. Men of the NPF had a better performance in speed, SBP and agility than officers.
4. Both officers and men of the NPF measured up to standard when compared to UNMFNs in the area of DBP, RHR, Age, weight and height.

Recommendations

The findings of this study gave rise to the following:
1. A physical fitness training advisory committee should be constituted in collaboration with the PT corps by the government to supervise the proper conduct of an appraisal of physical training/fitness programme within the armed forces and police/Para-military commands.
2. Nigerian armed forces/police should not adopt the fire bridge approach or rather they should not wait till the last minute when they are short-listed for peace-keeping before keeping their officers and men in good stead for such assignment.
3. The physical fitness level/status attained by both officers and men during the college/academy days, graduation and post graduation days should be sustained and encourage by all commands.
4. Health, physical fitness awareness/workshop, seminars anchored by health/exercise physiologist and medical corps of both military and Para-military should be a regular features of the Nigerian Armed Forces, police force and by the interior ministry for all their personnel.

References


Address for correspondence:
Adedugbe Benjamin Oluwole (PhD)
Department of Human Kinetics and Health, Faculty of Education,
Adekunle Ajasin University P.M.B 001, Akungba-Akoko, Ondo State, Nigeria
Phone no: +2348033190862
E-mail: emiben2001@yahoo.com