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Short Review

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Determination of Neuro-Muscular, Circulatory, Pulmonary Function and Psychological Fitness among the Second Year Indian Students

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Abstract

The Principal aimed to reevaluate and detect the methods hand grip strength, pulse, arterial pressure, lung function and psychological fitness between male and female. The observation was based on some groups of Indian students of Perm State Medical University and finding the average values between these tests.

Keywords: Maximum strength; Average Vital capacity; Arterial pressure

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Introduction

Dynamometry is widely used to measure the muscle strength. It was performed with the help of dynamometer. Pulse shows the tactile arterial palpation of the heartbeat in the trained person. It can be measured at any place where palpitation can be heard e.g wrist, knee or ankle joint. Arterial blood pressure is the pressure is the column of blood in arterial system. The normal blood pressure is 120/80mm Hg and also difference between them is called pulse pressure which is 40mm Hg average. Spirometry is the most common of pulmonary function test. It is usually done to test the assessment of ventilatory function of lungs, gaseous exchange across the lung and to asses

transport gases in body. At last we followed anxiety test which measures common anxiety hours.

Materials & Method

The study's subject comprised of 76 participants in which 59 were male and 17 were girls. All the participants in the study received a explanation the purpose of the study and also their consent were taken to undergo for dynamometry, arterial Pulse, arterial blood pressure, Pulmonary Lung Function test and psychological test. 76 students were divided into 2 groups: males (M)=59 and females (F)=17, aged between 18-25 during the time period of 01-19/01/2019.

Statistical analysis

After obtaining the test result we measured the average value, mean, standard error, standard deviation etc. using the program MS-EXCEL - 2007 and statistica.

Results

We found that the (Average \pm Standard error):-
 dynamometry in Kilogram: M(41,7 \pm 1,3); F(29,3 \pm 3,0); pulse in min⁻¹: M (73,4 \pm 0,6); F(73,3 \pm 1,04); pulse pressure in mmHg: M (41,5 \pm 0,9); F (40,3 \pm 1,6); vital capacity in Litre: M (3,1 \pm 0,1); F (3,0 \pm 0,2); relative index vital capacity in % : M (70,8 \pm 2,9); F (73,6 % \pm 5,5) ; personal anxiety test RT: M (50,8 \pm 1,3); F (47 \pm 1,3) and ST: M (49,2 \pm 1,03); F (48,6 \pm 2,6)

Conclusions

From the above calculated results with respect to the participants sex, weight, height and BMI difference (\sim 12.4kg/m²) we found that there were significant differences between two groups (exception of age) in the average values of dynamometry- (\sim 19kg) and average vital capacity(\sim 0.03L).

Comparison of indicators of students of Russian groups of our university.

[1] This reflects smaller anthropometric data and respiratory system results for students of Indian groups of the same age.

[2] This reflects the incomplete adaptation of Indian students to the conditions of their stay in Perm in 2017 - 2019 year.

NAME _____ GROUP _____ DATE _____
 SCALE REACTION AND PERSONAL ANXIETY HOURS

Depending on well being

1-There is not so 2-Perphaps 3- Right 4- It is true

1	I am calm	1	2	3	4
2	I am not threatened	1	2	3	4
3	I am not in tension	1	2	3	4
4	I feel regret	1	2	3	4
5	I am sad	1	2	3	4
6	I care out possible failures	1	2	3	4
7	I feel relaxing	1	2	3	4
8	I am concerned	1	2	3	4
9	I feel free to	1	2	3	4
10	I feel a feeling of internal satisfaction	1	2	3	4
11	I am not sure about myself	1	2	3	4
12	I am nervous	1	2	3	4
13	I do not find place	1	2	3	4
14	I am screwed	1	2	3	4
15	I do not feel stiffness, tension	1	2	3	4
16	I am pleased with	1	2	3	4
17	I am concerned with	1	2	3	4
18	I am too excited and I am not in my own	1	2	3	4
19	I am excited / happy	1	2	3	4
20	I am pleased	1	2	3	4

Depending on how I feel usually

1	I feel allowances	1	2	3	4
2	I very fast get tired	1	2	3	4
3	I am easily cry	1	2	3	4
4	I would like to be same happy man, like others	1	2	3	4
5	I lose because I could not make quick decisions	1	2	3	4
6	I feel myself vigorous person	1	2	3	4
7	I am calm, cool headed and assembled	1	2	3	4
8	Waiting for the difficulties very much worries me	1	2	3	4
9	I too worry because of nothing	1	2	3	4
10	I am quite happy	1	2	3	4
11	I take everything close to my heart	1	2	3	4
12	I do not have enough confidence in myself	1	2	3	4
13	I feel myself in safety	1	2	3	4
14	I try to avoid critical and hard situation	1	2	3	4
15	I have spleen melancholy	1	2	3	4
16	I am pleased with	1	2	3	4
17	All sorts of distracts care about me	1	2	3	4
18	I strongly worry frustration, that could not be forgot easily	1	2	3	4
19	I am balanced person	1	2	3	4
20	I cover strong worries, when think about affairs	1	2	3	4

References

1. Savkin VV, Zyryanova VA, Pakhomova NV, et al. 2011. System approach, indicators of health and habitual motor activity at students during performance of valological (recreational) program. Perm Medical Journal. 6: 120-128.
2. Savkin VV, Trapeznikova VV. 2015. Monitoring and prediction of psychophysiological status and progress of students 1-11 of the course of Medical University. Hygiene and Sanitation. 1: 104-108.
3. Normal physiology methodical recommendations to practical studies. MD

Berg, VD Tyutyunchikov, EV, Kadyrov V. Savkin. [and others]; Ed. M. D. Berg. Ed. 2nd, re-slave. Perm, 2013.-164.