DETERMINING THE FITNESS LEVEL OF THE STUDENTS THROUGH THE PHYSICAL ACTIVITY INDEX QUESTIONNAIRE

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Abstract
One way to determine individual fitness level is through the physical activity index questionnaire, which may be a reference to the individual possibilities at a time. The research hypothesis was that by the questionnaire for physical activity index we can determine the fitness level of the subjects. The study involved 71 students from Faculty of Physical Education and Sport. The questionnaire was applied subjects in the month of April 2015. By dividing on the years of study and gender resulted 6 analysis groups of which two were located at very good level (first and second years male), two at good level (third year male and second year female) and the last two weak level (first and third years female). So it is noticeable that the male overall situation is a trend from good to very good, while the female is a decreasing trend - from good to poor. Study are limits on the number of participants (71), but it can be a benchmark for other studies aimed at the youth and students fitness.

Keywords: fitness, students, questionnaire

Introduction

The evaluation of the educational act is actions that realize the reporting results in an activity specific to certain criteria in order to make a correct decision (Champy, P., Étevé, C., 1994, p. 415).

The criteria underlying the assessment must lead to issuing a value judgment (by means of pedagogical diagnosis) that would reveal the strengths and weaknesses assessed in order to identify learning difficulties and find solutions in this regard (De Landsheere G., 1992, p. 302).

Epuran M., 2005, p. 175 believes that "evaluation is the process by which judgments are made on the results of measurements, judgments that take into account certain criteria and which are simultaneously to measure". According to the author are summative, formative, process, product, criterial, normative assessment types, each with specific processes of interpretation and evaluation in education is generally made on the the basis of notes that can be subjective (the assessment is made based on key) or objective (when set precise rules).

Evaluation is a natural step through optimizing the activity is desired in order to meet the objectives and to raise the level of knowledge and ability required to perform driving tasks successfully.

One way to determine individual fitness level is through the physical activity index questionnaire, which may be a reference to the individual possibilities at a time. The questionnaire parameters are the intensity, duration and frequency, each of which is scaled by 4 (duration) or 5 levels (intensity, frequency), and 4 or 5 being the maximum and 1 the minimum (Table no. 1).

Parameters	Scoring	Type of activity
Intensity	5	The effort that leads to rapid breathing and sweating.
	4	Effort that increase the respiratory rate and sweating.
	3	Effort above average.
	2	Moderate effort.
	1	Easy effort
Duration	4	Over 30 minutes.
	3	20-30 de minutes.
	2	10-20 de minutes.
	1	Bellow 10 minutes.
Frequency	5	Daily or almost daily.
	4	3-5 times per week.

	3	1-2 times per week.
	2	Several times a month.
	1	Less than once per month.

Table no. 1 Questionnaire for assessing fitness level
(Dumitru, G., 1997, p. 59)

Physical Activity Index is obtained by multiplying the scores of each parameter:
I.A.F. = Intensity X Duration X Frequency (points)
Findings fitness level based on the responses to the questionnaire has the following scale (Table no. 2).

Scoring	Rating	Fitness level
81-100	Very active lifestyle	Excelent
61-80	Active and healthy	Very good
41-60	Acceptable	Good
20-40	Insufficiently active - relatively sedentary	Weak
>20	Sedentary	Very weak

Table no. 2 Assessment of fitness based on the questionnaire
(Dumitru, G., 1997, p. 59)

To achieve real and useful information for establishing physical activity program that answers must be truthful and accurate; underrating or overrating any responses implicitly and personal possibility may have negative repercussions in implementing the program effectively driving leisure activities.

Material method
The research hypothesis was that by the questionnaire for physical activity index we can determine the fitness level of the subjects.
The study involved 71 students from the study program of Physical Education and Sport Faculty from Physical Education and Sport, Stefan cel Mare University of Suceava, whose distribution was as follows: first year - 23 male, 7 female; second year - 22 male, 4 female; third year - 12 male, 3 female.
It should be mentioned that in their academic activity includes 8 hours of practical activities for first year subjects,13 hours for the second year subjects and 8 hours for third year subjects, and some of the participants are practicing various sports, which means additional between 6 and 10 hours of training per week.
The questionnaire was applied to the subjects in the month of April 2015.

Results and discussions
After the questionnaire data was centralized and mathematical statistics was performed by calculating the following parameters: arithmetic mean, maximum, minimum, standard deviation, coefficient of variation.
The results were analyzed according to the study year and gender (table no. 3).

Statistical paramethers	1st year		2nd year		3rd year	
	Male	Female	Male	Female	Male	Female
X	63,17	39,57	65,09	54,00	50,17	33,33
Max	100	80	100	80	64	64
Min	16	18	32	32	18	18
S	29,52	21,35	19,53	22,03	14,00	26,56
CV	46,73	53,96	30,00	40,80	27,90	79,67

Table no. 3 Distribution of the statistical parameters on the years of study and gender

At the male subjects in the first year individual values were in the range 16-100, the arithmetic mean being 63.17 points, but the standard deviation and coefficient of variation values indicated small homogeneous of the group. The subjects in the second year the group average was 65.09 points, individual values ranging between 16 and 100 points, while the values of standard deviation and coefficient of variation were better than those in the first year, but they indicate also small homogeneous group. Subjects of third year obtained the worst result - 50.17 points (minimum-16 maximum-64) and the homogeneity of the group is small in terms of values standard deviation and coefficient of variation (Table no. 3, figure no. 1).
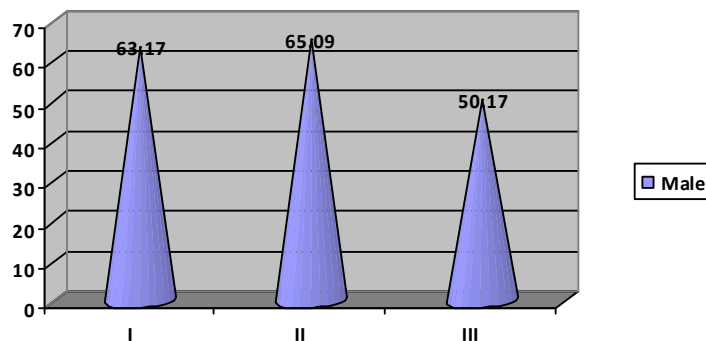
Figure no. 1 – The results for male at questionnaire

Corroborating the results of the questionnaire interpretation is noted that the first and second year students in very good physical condition, and for the third year level is good.

In the women at each year of study the group homogeneity is low, and the highest average recorded in the second year - 54 points (minimum-32, maximum-80), then the first year - 39.57 points (minimum-18, maximum-64) and the third year - 33.33 points (minimum-18, maximum-64) (figure no. 2).
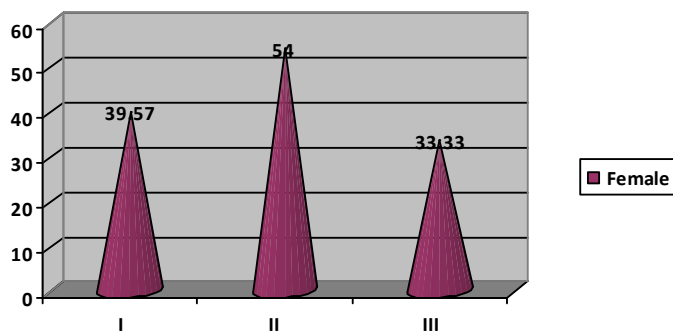

Figure no. 2 – The results for female at questionnaire

In light of the interpretation of data from the questionnaire, the fitness of the subject is a good one for the second year of study, respectively a weak for first and third years of study, in terms of arithmetic average analysis because they are specific cases where its level fits to very good (60 points), good (41-60 points), low (20-40 points) and very low (below 20 points).

Conclusions

Results on the questionnaire of respondents may be influenced by subjectivity, although completing lain were asked to make a realistic analysis of an individual level.

I noticed for each year and gender influence the number of hours of practices from academic curricula on their score. The second year of study which had 13 practical hours weekly in the program have obtained the best results, followed by the first and then third year of study (who had the same number of hours per week - 8).

By dividing on the years of study and gender resulted 6 analysis groups of which two were located at very good level (first and second years male), two at good level (third year male and second year female) and the last two weak level (first and third year female).

According to the research participants age recommendation as increasing exercise intensity, duration and frequency respectively that have the effect of increasing the index above 80 points, ie to have a very good fitness. Study are limits on the number of participants (71), but it can be a benchmark for other studies aimed at the youth and students fitness.

References

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