STUDY RESULTS ON ESTIMATION OF NON-SPECIALIZED PHYSICAL TRAINING UNIVERSITY STUDENTS IN HUNAN PROVINCE

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Abstract. Highlights the results of the implementation of national standards of physical fitness assessment of students specialized universities Chinese province of Hunan. Discovered that the main negative factors that reduce the effectiveness in this area are the following: lack of unified management of the process of introducing national standards of physical fitness assessment of students; shortcomings in the quality and quantity of equipment for evaluation, the low level of mastery of the teaching staff of the methodology and insufficient use the results of monitoring the health of the students in the further education; misallocation of time for testing and evaluation in terms of physical health. Substantiates the importance of the rational organization of the assessment system, outlined the main directions of improving the effectiveness of the implementation of national standards of physical fitness of students.

Keywords: evaluation, physical fitness, standards, student.

Introduction

As the level of education in PRC progresses and becomes more profound, the interest of higher educational institutions, society and family to the problem of students' physical training and health widens, the attention to the researches in this field increases. The period of study at university is one of the most important in the life of a man. This period is not only the time of man's views of people and the world gradual formation but also the period of his physical and health peak level. Thereby a positive foundation for happy and healthy life, future study and work is embedded. Usual age of students is within 18-22 years, i.e. the basic period of organism's growth and development has already passed. At this stage, the factors, worsening physical status, inevitably influence on subsequent life quality and personality development. That is why, the study of students' physical training and health is of significant practical importance.

In China, large-scale work on study of physical training began in 1970-s. In July, 2007 Ministry of education, State administration on physical culture and sports published "State standards of students' physical training". The five years experience of their implementation in the students' physical training of non specialized higher educational institutions of Hunan province permits to generalize the results of work in this sphere.

In China, Tsyn Kay [1], Tsi Lunbo [2], Sun Sue [3], Van Hun [4], Fu Tsilan [5] deal with analysis of different aspects of realization of governmental programs on implementation of higher educational students' physical training standards. In Japan, the same problems are raised in works by K. Khirata [6]. In Ukraine, some questions, connected with determination of local population's physical level, are touched upon in the work by V. Mudrik [7]. This problem has been sufficiently studied in detail on example of other countries [8-12]. And with it, the necessity to use the experience of other research workers with regard to Hunan province is quite evident, that requires carrying out the corresponding researches.

Puprose, tasks of the work, material and methods.

The purpose of the research is generalization of experience of state standards of non specialized higher educational institutions students' physical status estimation implementation in province Hunan.

Results of the research.

The present paper is devoted to non specialized higher educational institutions of Hunan province (Hebay and Chansha cities and districts). We use the method of selective analysis. In the research the data of the following higher educational institutions have been used: 1) Southern university, Pedagogical university of Hunan province; 2) trade institute of Hunan province, southern university of forestry; 3) university of management, Chansha city, agrarian university of Hunan province, first pedagogical institute of Hunan province, trade and economical college of Hunan province, trade and technical institute of Hunan province, institute of labor safety of Hunan province. Among ten of these higher educational institutions there are educational institutions of different types and levels.

A special sociological questioning of 20 scientists, 30 vice chancellors on sports, heads of physical and health status of higher educational institutions students centers in Hunan province was carried out. A questioning among the students of 48 non specialized higher educational institutions (12 institutions of bachelor level and 36 higher special technical institutions) was conducted.

Also 5 educational levels were considered and sorted, then two higher educational institutions were selected from every level and on the base of these institutions questionnaires were developed and prepared.

In order to ensure the reliability of questioning, the research was conducted twice with time gap of 15 days. The reliability level of the second questioning was r-0.95, p<0.01, thus the repeated indicators coincided with the above mentioned.

On the base of new "Standards" the level of physical and health status is estimated by the indicators of body development, body functioning, physical and athletic abilities. The content of estimation and students' participation in the estimation of physical status are shown in tables 1& 2.

Table 1

Indicators of "State standards of students' physical status" control

Description of program	Indicators of control	Mark	Notes
Body	Height & weight indicators	10	Mandatory measurement
Body functions	Indexes of weight and lung volume	20	Mandatory measurement
Endurance	1000m running (male), 500m running (female), exercises with ladder	30	One item by choice
Flexibility, strength	Bending in sitting position, ball throws to target, torso lifting abdominal muscles training (female), chin-ups (male), index of weight lifting.	20	One item by choice
Speed, dexterity	50m running, long jumps, skipping, basketball, football, volleyball	20	One item by choice

Table 2

Percentage of students' participation in estimation of Physical status

Control indicators	Mark	Notes	Estimation in %-
Height & weight indicators	10	Mandatory measurement	88.3
Indexes of weight & lung volume	20	Mandatory measurement	83.4
1000m running (male), 800m running (female), exercises with ladder	30	One item by choice	47.2 \ 52.8
Bending in sitting position, ball throws to target, torso lifting abdominal muscles training (female), chin-ups (male), index of weight lifting.	20	One item by choice	22.6 \ 13.9 \ 24.7 \ 38.8
50m running, long jumps, skipping, basketball, football, volleyball	20	One item by choice	22.1 \ 35.5 \ 6.7 \ 18.0 \ 5.2 \ 12.5

Table 2 shows that there is no clear understanding of estimation program in higher educational institutions; though indicators of height & weight, index of weight & lung volume are mandatory for control, percentage of their measurement is 88.3%, 83.4%, i.e. in some institutions these indicators are not estimated. At the same time, the measurements of some optional items of program are repeated.

Application of reliable equipment for estimation promotes accuracy of estimation, statistics, analysis, creating of feedback and etc. That's why availability of reliable equipment can ensure successful estimation of physical and health status. The research showed that during estimating there were 40.95 of equipment faults from time to time and 7.9% of regular faults. The data show that practically in half of cases, when equipment is used for estimation, technical faults, that significantly hinders the estimation of physical status, appear. On the base of our observations it can be noted that in some higher educational institutions students could not receive digital estimation data in due time, because the malfunctioning of equipment had not been eliminated in proper time. That is why control over equipment in the process of estimation is a basic condition of its successful conducting and the pre-condition of its efficiency and data reliability. For long time, when technical equipment was used for estimation, the level of data accuracy and reliability was too low to ensure successful estimation. It is necessary to choose the program items which can be replaced or change the method of estimation. If to achieve the aim of the students' health improvement, higher educational institutions shall mandatory ensure provision of proper equipment and its quality.

The results of the researches showed that 50.3% of higher educational institutions did not provide the students with "Handbook on qualifying standards and exercises for students' physical training". In many institutions only one form of informing about physical status estimation exists: this is professionals' information during classes. That is why instructive work is mandatory among students, they should be assisted to understand the significance of their health and the aims of sports exercises; they should understand that estimation of physical status is carried out in order to promote their classes by tempering, to raise their health level. If not to pay attention to instructive work, the aim of students' health improvement will not be achieved.

The research discovered that 77% of higher educational institutions carried out control during estimation process. When answering the question, whether students resort to abuses during estimation, positive answers were received only from 3.7% of students.

The researches showed that 34.3% did not execute any control after estimation physical status; 51.2% have no

system of informing about estimation of students' physical and health status. With this, 61.1% provide feedback with students about the results of their physical status estimation, 12.5% and 4.3% submit estimation results to higher authorities and to parents. As per "Standards" "after finishing of estimation it is necessary to execute statistical calculations, analysis of results and summarizing; ensure continuous functioning of feedback, guarantee that higher educational institutions, professors, students and parents should know the results of estimation; the inspiring role of estimation must be completely realized". Thus, it is possible to control students' physical and health status in proper time and eliminate eventual problems.

The research showed: 13.2% of professors have clear understanding of estimation criteria and 10% have clear understanding of separate items of estimation program (see table 3).

Table 3

The level of professionals' knowing of qualifying standards

Professor can give clear answers to the questions about qualifying standards of physical status estimation.					Professor can give clear answers to the questions about separate items of estimation program				
Very clear	Clear	Usual	Not clear	Quite vague	Very clear	Clear	Usual	Not clear	Quite vague
57	192	142	31	8	43	148	188	37	14
13.2%	44.7%	33.1%	7.2%	8%	10.0%	34.5%	43.8%	8.5%	3.2%

If to judge by the results of the research the professors' skill to use technical equipment still do not meet the requirements of physical status estimating. One of the reasons is that professors, probably, were not specially trained, the other reason is that in spite of the fact that estimation operations are not difficult, the requirements to some of them are extremely strong and it calls for special professor's attention

Only 37.5% of professors made corrections of educational process considering students' achievements after estimation of their physical status. Considering different aspects, it can be noted that as on to day the professors' level does not meet the requirements of physical status estimation. The only chance to ensure favorable conditions of physical status estimation is to conduct professors' training, which should cover the modern content of physical status estimation.

In the course of research it was found that there is connection between students' knowing of estimation program and their self control abilities, e.g.,16.5% of students support and 49.4% do not object to item " if indicators of your lung volume are low do you think that it is necessary to intensify breathing exercises'; 14.5% of students support and 52.6% do not object to item " if indicators of exercises with ladder are unsatisfactory do you think that their intensity and length must be increased"; 14.8% support and 45.59% do not object to item "if the level of your compressing power is low, do your think it is necessary to be more persistent in power exercises". Besides, the research revealed some divergence between students' knowing of the program and their self-control abilities. For example, 26.8% of students object to and 5.6% flatly object to item "if your physical status indicators are higher than usual, do you agree that you have good nutrition and good health". In the whole, by the results of research, we can specify the following problems of physical status estimation, which exist in non specialized higher educational institutions of the province:

1) management;
2) insufficient quality and quantity of equipment for estimation;
3) achievements of estimation;
4) information about estimation;
5) control over estimation;
6) professional adequacy of professors;
7) time of estimation;

In the course of research we determined the difficulties and obstacles, which appear during physical status estimation and among them we may specify both: the factors depending on students and the factors, conditioned by environment. In the present work we request to evaluate these factors as very important, important, relatively important, not very important and unimportant and mark them from 1 to 5. By the results of this questioning average mark for every factor is given in table 4.

Table 4

Factors which influence on estimation of physical status

No	Factor	Mark
1.	Management	4.774
2.	Quality and quantity of equipment for estimation;	4.516
3.	Achievements/ successes of estimation	4.258
4.	Information about estimation	4.232
5.	Control over estimation	4.161
6.	Professional adequacy of professors	4.025
7.	Time of estimation	3.863

Summary.

In the whole, a positive trend in realization of estimation program is observed in Hunan province, in general the items of the program are fulfilled. But in practice some problems are met, such as insufficient quality and quantity of equipment, tardiness of feedback, insufficient control, professors' professional adequacy, inexpediency of estimation time distribution. Exactly analysis of the mentioned drawbacks' reasons and resources for their elimination is considered by us as the future direction of researches of implementation of state standards of students' physical status estimation in higher educational institutions of our province.

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