

# Efficiency of use of national games of Yakut people in studies of physical training in a higher education institution

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## Abstract

The purpose of the present research is to demonstrate experimentally the positive effect of the Yakut national games on the formation of the basic physical qualities of the students of the university. The students of NEFU participated in this research. In studies of experimental groups Yakut national games with objects and without objects were included. Traditional games of Yakut people in the lessons on physical education, served as means of dynamic development of physical qualities such as strength, speed, flexibility, endurance and agility.

**Keywords:** students, national games, physical training, physical qualities, control testing.

## Introduction

Today studies on physical training in higher education institutions where the emphasis on physical preparation prevails and orientation to implementation of test standards can be only a part of all system of physical training, and after all the physical training in a complex solves problems of intellectual, moral, esthetic and labor education.

Now by data of the World Health Organization number of high school students having unsatisfactory level of a psychophysical condition (a low level of development of impellent readiness, functionality, deviations in a state of health), makes 65–68 % from the total number. Today efforts of a medical science and the public health services, directed on search of more perfect methods of diagnostics and treatment haven't led to substantial improvement of a psychophysical condition of youth (Sokolova, 1999).

Thus, at work with students the researches directed on development nonconventional for high school, but enough effective approaches of use of kinds of impellent activity are perspective, as defines an urgency of the present work directed on a solution of a problem of optimization of teaching of a subject «Physical training» as a part of general problem of perfection of physical training of students.

Today, according to a number of authors, decrease in interest or its full absence to studies on physical training, reduction of motion of students, deterioration of the state of health is observed at students of high schools, it became the precondition to carrying out of the present research (Byleeva, Grigoriev, 1985; Kujda, 2005; Shamaev, 1996; Sokolova, 1999). The great value was given to national games, especially to games which were close to labor activity by character and to the maintenance. In Yakutia it was paid much attention to search of means and methods for education of young generation. In many games motives of national customs were used.

Work is performed according to a plan of research work of the Institute of Physical Training and Sports of North-Eastern Federal University named after M.K. Ammosov, Yakutsk. Research aim is to prove positive influence of national games of Yakut people on formation of the basic physical qualities at students of high school experimentally by means of the analysis of references and carrying out of pedagogical experiment.

## Methods and the research organization

30 students of the 1st course who have been divided into 2 groups — experimental and control, have taken part in research. Studies with students of both groups on physical training were spent accord-

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ing to the educational working program for the given course and faculty (102 hours on 1 semester). National games of Yakut people have been included in studies on physical training with students of the experimental group with subjects and without subjects:

- A jump forward with capture of socks of a foot by fingers of hands. Develops movement coordination, grouping;
- Jumpings up in an emphasis lying promote development of dexterity, force, speed and endurance;
- «Lifting of a lean cow» helps to develop force of feet, coordination and balance level;
- «Watering place» develops movement coordination, mobility of joints in lumbar, knee joints and promotes dexterity development;
- «Revolving object» develops flexibility, movement coordination, force, and also develops force of the successful fellow.

- Struggle for «m yh ə», develops force of hands;
- Pulling by means of a strong round tape develops power endurance, will power and coordination.

## Results and discussion

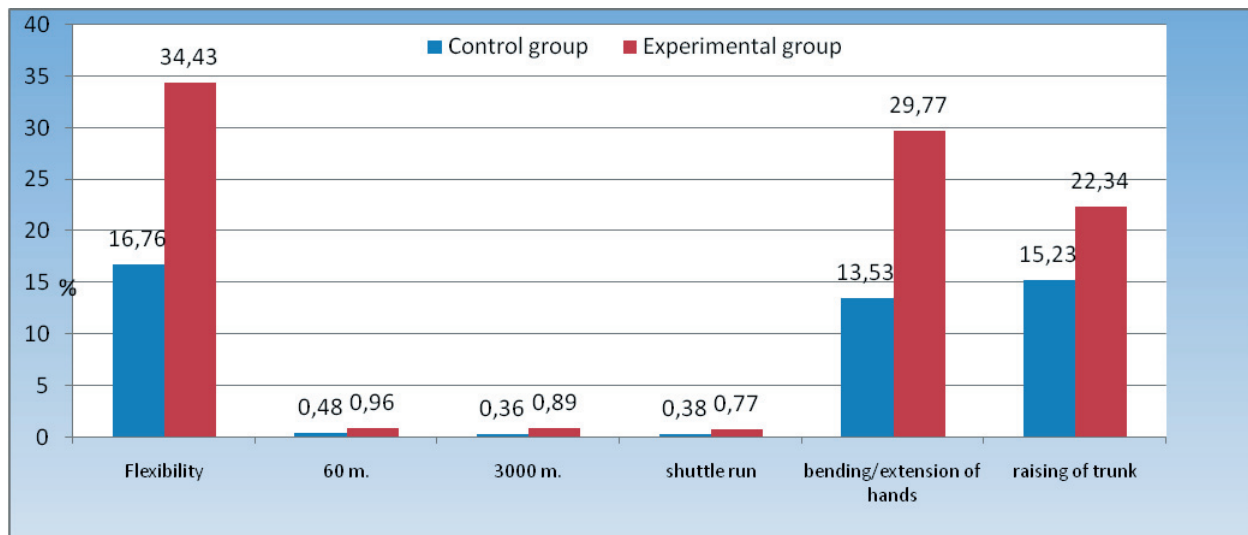
For definition of level of physical development of 1st course students following control exercises have been used: run on 60 m, second; shuttle run 4 x10, second; run on 3000 m, second; bending and extension of hands in an emphasis lying on a floor for 10 seconds, quantity of times; raising of trunk for 10 seconds, quantity of times; trunk inclinations forward from position sitting. All materials received during the experiment have been processed by methods of mathematical statistics.

**Table 1. Dynamics of indicators of the main physical qualities of students of the 1st course of NEFU of control (n=15) and experimental (n=15) groups before and after the experiment.**

№	TESTS	$\bar{X}$	$\bar{X}$	$\bar{X}$	$\bar{X}$	Difference,			
		C. E1	C. M1	C. M2	E. M2	C. in unit	E. in unit	C. in %	E. in %
1	test for flexibility	12.33	12.20	14.40	16.40	2.07	4.20	16.76	34.43
2	run on 60 m	8.31	8.36	8.27	8.28	0.04	0.08	0.48	0.96
3	3 run on 3000 m	930.33	931.33	927.00	923.00	3.33	8.33	0.36	0.89
4	shuttle run	10.39	10.40	10.35	10.32	0.04	0.08	0.38	0.77
5	raising of trunk	12.86	12.53	14.60	16.26	1.74	3.73	13.53	29.77
6	bending / extension of hands in an emphasis lying on the floor	13.13	12.80	15.13	15.66	2.00	2.86	15.23	22.34

**Table 2. Statistical processing of data of control (n=15) and experimental (n=15) groups before and after experiment.**

	Experimental group								Control group							
	$\bar{X}$	$\bar{X}$	$\sigma^2$	$\sigma^2$	$\sigma$	$\sigma$	$S_{\bar{X}}$	$S_{\bar{X}}$	$\bar{X}$	$\bar{X}$	$\sigma^2$	$\sigma^2$	$\sigma$	$\sigma$	$S_{\bar{X}}$	$S_{\bar{X}}$
	M1	M2	M1	M2	M1	M2	(t=1)	(t=1)	M1	M2	M1	M2	M1	M2	(t=1)	(t=1)
test for flexibility	12.2	16.4	6.17	3.11	2.48	1.76	0.64	0.45	12.33	14.40	10.66	7.54	3.26	2.74	0.84	0.70
run on 60 m	8.36	8.28	0.04	0.04	0.20	0.20	0.05	0.05	8.31	8.27	0.07	0.06	0.27	0.26	0.07	0.06
3 run on 3000 m	931.33	923.66	82.52	72.66	9.08	8.52	2.34	2.20	930.33	927	39.95	41.28	6.32	6.42	1.63	1.65
shuttle run	10.40	10.32	0.018	0.017	0.13	0.13	0.03	0.03	10.39	10.35	0.01	0.01	0.10	0.10	0.02	0.02
raising of trunk	12.53	16.26	8.98	5.35	2.99	2.31	0.77	0.59	12.86	14.6	5.40	3.97	2.32	1.99	0.60	0.51
bending / extension of hands in an emphasis lying on the floor	12.8	15.66	6.74	5.80	2.59	2.41	0.67	0.62	13.13	15.13	7.26	6.12	2.69	2.47	0.69	0.63



**Figure 1.** Sizes of a relative gain of values of the studied indicators of physical development of students of the 1st course of experimental and control groups (in % to sizes of these indicators registered at the beginning of a semester).

According to tables 1 and 2, and figure 1, by the end of the semester improvement of such physical qualities as speed, dexterity, endurance, force is noted at students of both groups. However the most expressed statistically significant changes of indicators were noted at the end of a semester at students of the experimental group.

## Conclusions

Games compensate deficiency of motion, promote improvement of a psychological condition, form aspiration to systematic exercises of physical training, and are healthy lifestyle promotion. Certainly, introduction of national games of Yakut people in studies on physical training at the university will promote increase of the general physical readiness and a state of health as a whole.

Today the further researches connected with development of the program on physical training of students in higher education institutions taking into account interests are actual. Undoubtedly, studying of problems of education of requirements and motives to studies of physical exercises is also important. All specified questions are subjects of our further researches.

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