

EFFECTIVENESS OF FOLK GAMES' APPLICATION IN FORMATION OF PEDAGOGIC SPECIALTIES GIRL STUDENTS' VALUE ORIENTATIONS ON PHYSICAL CULTURE

Mayevsky M.I.

Pavlo Tychyna Uman State Pedagogical University

Abstract. *Purpose:* to determine effectiveness of structurally meaningful model of formation of girl students' value orientations on physical culture. *Material:* in the research control group (28 girl students) and experimental group (30 girl students) participated. We used sociological questioning, testing of physical and theoretical fitness. *Results:* It was found that combination of four blocks (theoretical, methodic, practical and managerial) is optimal for technology of model realization. It ensures impact on physical and spiritual-intellectual sides of girl students. *Conclusions:* it is recommended to practice active immersion in folk traditions and customs of Ukraine with girl students. It permits to form girls' psychological and social readiness for conducting of cultural measures. Motor activity in personal and future professional functioning makes elements of such measures.

Key words: values, physical culture, model, girl students, customs.

Introduction

In modern pedagogic space of Ukraine the problem of non physical culture specialties students' orientation on physical culture values has still been unsolved. It is known that health condition of future pedagogues insistently signals about negative tendencies. Girls require special approaches to organization and building of physical culture trainings. In most cases they are rather far from systemic motor activity. Girls are the most critical in choice of forms and methods of trainings' organization. All these require from sports and physical culture specialists to find more effective approaches to increasing of young people interest to physical culture and sports, considering their desires.

Scientific researches of domestic scientists (N.A. Dedeliuk, S.V. Nikolayev, V.V. Zkhozhiy (2013) [19]; T.Yu. Krutsevych, G.V. Bezverkhnia (2010) [6]; V.O. Sutula, P.M. Kyzym, V.V. Shiteyev, Yu.O. Fishev, L.S. Lutsenko (2014) [11]; S.M. Futornoy (2015) [14]; A. Tsos, A. Shevchuk, O. Kasarda (2014) [16]) and foreign specialists (Chatzisarantis N.L.D., Hagger M.S. (2009) [18]; Standage M., Gillison F.B., Ntoumanis N., Treasure D.C.(2012) [21]; Aelterman N., Vansteenkiste M., VanKeer H., Vanden Berghe L., DeMeyer J., Haerens L. (2012) [17]; How Y.M., Whipp P.R., Dimmock J.A., Jackson B. (2013) [20]; Koka A. (2013) [21]) point at demand in increasing of students' motor functioning through formation of their interest and stimulation of their demands and motives for physical exercises' practicing. In general, such approaches relate to value orientations on physical culture sphere.

Application of folk games in practice of students and pupils' physical education was tested by different authors (V.M. Vakulenko [3], T.I. Kulik, T.I. Kudriashova [7], O. Tkachenko [12]). But ethno-pedagogic potential of the mentioned scientists did not contain purposeful impact on formation of students' value orientations on physical culture. In the researches by M.M. Sainchuk effectiveness of folk games for solution of such tasks was proved on example of senior pupils. But by the present time there have been declared no works on formation of pedagogic specialties girl students' value orientations on physical culture by means of folk games. It conditioned the topicality of our research.

Purpose, tasks of the work, material and methods

The purpose of the work is to determine effectiveness of the author's structurally meaningful model of formation of pedagogic specialties girl students' value orientations on physical culture

The tasks of the research: registration of changes in physical and theoretical fitness indicators, in indicators of physical health, attitude to discipline "physical culture. Separately we registered indicators of independent sport-physical culture functioning after implementation of the offered model.

Results of the researches

Pedagogic experiment implied implementation of structurally meaningful model of value orientations' for physical culture formation in pedagogic specialties girl students in process of physical education by means of

ethno-pedagogic (folk games). Pavlo Tychyna Uman State Pedagogical University was the base for those pedagogic researches. At the beginning of forming experiment we formed control group (CG – 28 girl students of pre-school education faculty) and experimental group (EG – 30 girl students of philological faculty). Both groups consisted of 2nd year students. By their health these girls related to main health group. They had no counter indications or any limitations to trainings.

In EG experimental work on formation of value orientations on physical culture was conducted in academic lessons during several semesters (3rd – 4th). At physical culture trainings special accent was made on inner setting of ethno-cultural values. It was realized through recreation of ethno-cultural system of values in process of physical exercises' fulfillment. It permitted to perceive life and spiritual experience of ancestors in aspect of modern cultural process. In CG the trainings were conducted according to traditional program.

Structurally meaningful model of formation of future Ukrainian philology teachers' value orientations on physical culture in physical education process consisted of the following blocks: theoretical, methodic and managerial. All blocks were analyzed in detail in one of the author's articles [8]. The games were selected so that they would influence on preservation and strengthening of girl students' health by opening their spiritual, mental and physical potentials. Thus, value orientations on physical culture on the base of folk motor culture were formed.

Effectiveness of realization of structurally meaningful model of value orientations on physical culture formation in philological faculty girl students was tested by comparison of indicators' changes before and after experiment (in EG and CG): physical fitness; physical health; theoretical fitness; attitude to discipline "physical culture"; independent practicing of sport-physical culture activity.

Indicators of EG and CG girl students before experiment (see table 1) witness girls of non physical culture specialties have rather weak physical qualities (low level). These indicators were in one range of data. Before experiment difference in dexterity (CG – 11.20 ± 0.11 sec.; EG – 11.21 ± 0.11 sec.), flexibility (CG – 17.3 ± 0.78 cm.; EG – 17.1 ± 0.70 cm.) was not found. Results of test for quickness (CG – 6.14 ± 0.12 sec.; EG – 5.97 ± 0.09 sec.), power abilities (by dynamometry): CG – 19.8 ± 0.46 kg.; EG – 20.8 ± 0.49 kg.), power endurance (CG – 12.4 ± 0.77 times; EG – 14.2 ± 0.92 times) and explosive power (CG – 160.9 ± 3.77 cm.; EG – 158.4 ± 4.14 cm.) point also at close to each other values between both groups. EG girls showed better results (CG – 23.6 ± 1.55 times against 29.3 ± 1.86 times in EG) only in speed-power qualities (torso rising during 30 sec.).

After forming pedagogic experiment only in physical fitness EG girl students showed confident changes in some tests (dexterity and strength). In CG actual results remained on previous level. It witnesses that type structure of physical culture girl students' training does not facilitate improvement of physical fitness. In CG we also did not register any increment in physical qualities. The highest achievement (not confident) was registered in explosive power in comparison with previous values 160.9 ± 3.77 cm. Final increment was 5 cm (165.9 ± 2.95 cm.).

Thus, analysis of physical fitness indicators (before and after pedagogic experiment) showed significant improvement of EG girls' physical condition. Though, their physical fitness corresponds to average level of senior school pupils. In CG physical fitness remained on previous level.

After pedagogic experiment, there were registered some changes in physical health of EG girls. Before experiment there was no confident difference between CG and EG. After experiment, health level of CG girls remained at previous level (below average, 5 points). In CG no index changed confidently and noticeably. Actually their indices remained close to initial data. In EG (after experiment) physical health improved by 2 levels: from low (3 points) to average (9 points). It happened at the account of confident ($p < 0.05$) improvement of power index indicator and heart beats rate restoration (HBR). Power index increased from $35.8 \pm 1.11\%$ to $42.3 \pm 1.23\%$. This result (improvement) correlates with previous data of physical fitness, where we detected undoubted growth of strength. In respect to HBR restoration: after 20 squats EG girls showed improvement of results from low level (3.11 ± 0.22 min.) to average (1.52 ± 0.36 min.). It witnesses about better functioning of cardio-vascular system.

Testing of theoretical fitness of EG and CG girl students (see table 2) at the beginning of pedagogic experiment showed that among EG girls low level dominates – 73.4%. This indicator exceeded twice CG group (32.1%). Most of CG girls demonstrated average level (67.9%) and only 23.3% EG girls showed the same. In EG only one girl (3.3%) had sufficient level of theoretical knowledge on physical culture.

Table 1. Physical fitness indicators of CG and EG girl students before and after pedagogic experiment

Physical quality	Indicators											
	Control group (n=28)						Experimental group (n=30)					
	Before experiment			After experiment			Before experiment			After experiment		
	\bar{x}	m	δ	\bar{x}	m	δ	\bar{x}	m	δ	\bar{x}	m	δ
Quickness (30 m. run), m/sec.	6.14	0.12	0.62	6.05	0.14	0.53	5.97	0.09	0.38	5.47	0.11	0.41
Dexterity (shuttle run 4 x 9 m.), sec.	11.20	0.11	0.59	11.16	0.12	0.52	11.21	0.11	0.59	9.31*	0.12	0.49
Explosive power (long jump from the spot) cm.	160.9	3.77	20.9	165.9	2.95	11.9	158.4	4.14	26.3	171.3*	3.15	20.1
Hand dynamometry, kg	19.8	0.46	2.28	20.5	0.41	2.91	20.8	0.49	2.39	25.6*	0.41	2.25
Pressing ups, times	12.40	0.77	4.32	14.1	0.75	4.82	14.2	0.92	5.17	18.5	0.83	4.37
Torso rising for 30 sec.	23.60	1.55	8.20	24.2	1.60	8.35	29.3	1.86	9.23	31.7	1.68	8.75
Flexibility (forward torso bending) cm.	17.30	0.78	4.41	17.8	0.71	4.32	17.1	0.70	4.11	19.01	0.65	3.94

Notes: *(P<0.05)

Table 2. Physical culture theoretical fitness in CG and EG

Levels of knowledge	Control group (n=28)				Experimental group (n=30)			
	Before experiment		After experiment		Before experiment		After experiment	
	n	%	n	%	n	%	n	%
Low	9	32.1	8	28.6	22	73.4	3	10
Average	19	67.9	20	71.4	7	23.3	17	63.3
Sufficient	–	–	–	–	1	3.3	10	26.7

After forming experiment theoretical fitness cardinally improved only in EG. In Cg there were practically no changes (only one girl student improved her level, passing from low level to average). Structurally meaningful model facilitated decreasing of part of girls with low level (in EG it reduced up to 10%), increasing of average level (up to 63.3%) and sufficient (up to 26.7%). Practical application of models stimulated independence and interest to physical culture knowledge. All these witness about serious rise of EG girls understanding of physical culture.

In attitude to discipline “physical culture qualitative changes took place only in EG. For them discipline “physical culture” became more interesting. Accordingly, lessons became more attractive (in this aspect girls improved their results from 1.9–2.0 points to 1.4 points). The best result implies 1 point. Physical education classes awakened demand in independent motor activity (from neutral mark 2.5 points – improvement to 1.6 points) and

wish to train additionally in sport circle (from 3.4 points to at the beginning of experiment to 1.5 – after it). It also promoted systemic character of EG girl students practicing of physical exercises. EG girls joined to kinds of physical functioning of health related character. In particular it was aerobics and rhythmic gymnastic (from 3.3% to 16.7%), sport dances (6,7%), light athletic (from 13.3% to 20%). Such form as sport cultural leisure covered 23.3%. In CG involvement in systemic physical exercises' practicing did not practically change.

So, structurally meaningful model of formation of value orientations on physical culture enriched philological faculty girl students with motor experience of folk physical culture through received by them knowledge, skills of application of games in professional and independent activity.

Discussion

The received experimental data confirm results of other scientists (O.YU. Marchenko, Марченко, 2010; A.A. Bilichenko, 2014) [2, 9] concerning usage of stimulating and limiting factors in work with girl students for their motivation for physical culture. Also we confirmed results of V. Vakulenko, 2010; I. Kulyk, T.I. Kudriashov, 2009; N.N. Sainchuk, 2012; A. Tkachenko, 2013) about effectiveness of ethno-pedagogic means (folk games) in practice of pupils' and students' physical education for formation of their motivation-values settings on motor functioning [3, 7, 10, 12].

We supplemented and expanded scientific data of B.D. Bazilchuk [1], N.I. Turchina [13], I. Gonchar [4], A.G. Gladoshchuk [5], V.V. Tsybulskaya [15], who noted that formation of value orientations and positive motivation for systemic practicing of motor functioning and sports in extra-curriculum time are influenced by organizational-methodic conditions of HEE educational process.

For the first time structurally meaningful model of formation of girl students' value orientations on physical culture by means of ethno-pedagogic was theoretically substantiated and worked out. The model consisted of such blocks as: theoretical, methodic, practical and managerial. These block influence logically and consistently on physical and spiritual-intellectual spheres of personality. They cultivate students' positive holistic attitude to physical culture. Besides we determined limiting and stimulating factors, which influence of formation of value orientations on physical culture. As limiting factors, we determined: theoretical fitness, health condition, motivation for trainings and success in trainings. As positive factors we determined: axiological, orientation on healthy life style, image of physically cultural person, communicative factor, consideration of girl students' interests to different kinds of sports and physical exercises, reliance on game traditions of Ukrainians.

Conclusions

1. Realization technology of structurally meaningful model of formation of future Ukrainian philology teachers' value orientations on physical culture in physical education process was connected with optimal combination of four blocks – theoretical, methodic, practical and managerial. It permitted to ensure influence on girl students' physical and spiritual-intellectual sides. This influence was realized through activation of girl students' understanding of traditions and customs of Ukrainians as well as through strengthening of girls' psychological and sociological readiness for conducting of cultural measures with motor functioning elements. EG girl students changed their understanding of physical culture values. In particular they improved their marks on significance of "physical culture" discipline for future work by 0.8 points – from 24 points to 1.6 points (1 – implies the best mark). Qualitative dynamic (from 2.1 points to 1.5 points) was found in their recognition that physical culture can ensure development of general culture.
2. Structurally meaningful model of value orientations' on physical culture formation influenced on physical component of philological faculty girl students. Application of this model resulted in strengthening of their health (from low to average level) and better progressing of physical qualities (especially strength). Intellectual-spiritual side also was enriched with knowledge of organization of motor cultural measures in practical work. It is confirmed by girl students' theoretical fitness. It was facilitated by basic level of knowledge of healthy life style rules, methodic of training of physical qualities and self control methods for physical exercises' practicing, (at the beginning of experiment there were 36.7% of involved in different forms of sports and physical functioning; at the end of experiment there were 86.7%).

The prospects of further researches can be implementation of additional stimuli (self control of physical condition being the most important among them) in physical education process.

Conflict of interests

The author declares that there is no conflict of interests.

Reference:

1. Bazil'chuk VB. *Organizacijni zasadi aktivizacii sportivno-ozdorovchoi diial'nosti studentiv v umovakh vishchogo navchal'nogo zakladu. Cand.Diss.* [Organizational principles of activation of students' health-related sport functioning in conditions of higher educational establishment. Cand. Diss.], LDUFK; 2004. (in Ukrainian)
2. Bilichenko OO. *Genderni osoblivosti formuvannia motivacii do zaniat' fizichnim vikhovanniam u studentiv. Cand.Diss.* [Gender peculiarities of formation of students' motivation for physical education classes. Cand. Diss.], Dnipropetrovsk; 2014. (in Ukrainian)
3. Vakulenko VM, Stiagunova OO. Rol' gendernogo aspektu u formuvanni cinnisnikh oriiientacij na ideiakh narodnoi pedagogiki majbutnikh pedagogiv. [Role of gender aspect in formation of future pedagogues' value orientations on ideas of folk pedagogic]. *Dukhovnist' osobistosti: metodologija, teoriia i praktika*, 2010; 2; 44–54. (in Ukrainian)
4. Gonchar GI. *Organizacijno-metodichni umovi formuvannia motivacii studentiv institutiv fizichnoi kul'turi do profesijno-prikladnoi fizichnoi pidgotovki. Cand.Diss.* [Organizational-methodic conditions of formation of physical culture students' motivation for professionally applied physical training. Cand. Diss.], Dnipropetrovsk; 2013. (in Ukrainian)
5. Gladoshchuk OG. *Pedagogichni umovi vdoskonalennia kul'turi zmicnennia zdorov'ia studentiv v sistemi fizichnogo vikhovannia u vishchomu navchal'nomu zakladi. Cand.Diss.* [Pedagogic conditions of improvement of students' health strengthening culture in system of physical education at higher education establishment. Cand. Diss.], Kiev; 2008. (in Ukrainian)
6. Krucevich TIu, Bezverkhnia GV. *Rekreaciia u fizichnij kul'turi riznikh grup naseleennia* [Recreation in physical culture of different population strata], Kiev: Olympic Literature; 2010. (in Ukrainian)
7. Kulik IG, Kudriashova TI. Ukrains'ki narodni rukhlivi igri iak zasib dosiagnennia fizichnoi doskonalosti studentstva. [Ukrainian motor games as method of achievement of students' physical perfectness]. *Pedagogics, psychology, medical-biological problems of physical training and sports*, 2009;3;85–87. (in Ukrainian)
8. Maievs'kij MI. Eksperimental'na model' formuvannia cinnisnikh oriiientacij na fizichnu kul'turu studentok pedagogichnikh special'nostej. [Experimental model of formation of pedagogic specialties' girl students' value orientations on physical culture]. *Visnik Chernigivs'kogo nacional'nogo pedagogichnogo universitetu imeni T.G. Shevchenka*, 2015;129:210–213. (in Ukrainian)
9. Marchenko OIu. *Formuvannia cinnisnikh kategorij osobistoi fizichnoi kul'turi u students'koi molodi. Cand.Diss.* [Formation of students' value categories of personal physical culture. Cand. Diss.], Dnipropetrovsk; 2010. (in Ukrainian)
10. Sainchuk MM. *Formuvannia cinnisnikh oriiientacij u sferi fizichnoi kul'turi i sportu uchniv starshikh klasiv u procesi fizichnogo vikhovannia. Cand.Diss.* [Formation of senior schoolchildren's value orientations in sphere of physical culture and sports in process of physical education. Cand. Diss.], Kiev; 2012. (in Ukrainian)
11. Sutula VO, Kizim PM, Shutieiev VV, Fishev IuO, Lucenko LS. Shliakhi optimizacii fizichnoi aktivnosti students'koi molodi [Ways of optimization of students' physical functioning], *Slobozhans'kij naukovosportivnij visnik*, 2014;6(44);106–111. (in Ukrainian)
12. Tkachenko O. Deiaki aspekti formuvannia igrovoi kul'turi pedagoga [Some aspects of formation of pedagogue's playing culture], *Naukovi zapiski*. 2013;120:286–288. (in Ukrainian)
13. Turchina NI. *Pedagogichni osoblivosti modelej fizichnogo vikhovannia studentiv VNZ na riznikh kursakh navchannia. Cand.Diss.* [Pedagogic features of models of HEEs students' physical education at different years of studying. Cand. Diss.], Kyiv; 2009. (in Ukrainian)
14. Futornij SM. *Teoretiko-metodichni osnovi innovacijnikh tekhnologij formuvannia zdorovogo sposobu zhittia studentiv v procesi fizichnogo vikhovannia. Cand.Diss.* [Theoretical-methodic principles of innovation

- technologies of students' healthy life style formation in process of physical education. Cand. Diss.], Kyiv; 2015. (in Ukrainian)
15. Cibul's'ka VV. *Formuvannia motivacii do profesijno-prikladnoi fizichnoi pidgotovki studentiv pedagogichnikh special'nostej na riznikh formakh navchannia. Cand.Diss.* [Formation of motivation for professional-applied physical trainings of pedagogic specialties' students at different forms of studying. Cand. Diss.], Uman; 2014. (in Ukrainian)
 16. C'os' A, Shevchuk A, Kasarda O. *Rukhova aktivnist' u motivacijno-cinnisnikh oriientaciiakh studentiv. [Motor functioning in students' motivation-value orientations], Fizichne vikhovannia, sport i kul'tura zdorov'ia u suchasnomu suspil'stv*, 2014;4;83–87 (in Ukrainian)
 17. Aelterman N., Vansteenkiste M., Van Keer H., Van den Berghe L., De Meyer J., & Haerens L. Students' Objectively Measured Physical Activity Levels and Engagement as a Function of Between-Class and Between-Student Differences in Motivation Toward Physical Education. *Journal of Sport & Exercise Psychology*; 2012;34(4);457–480.
 18. Chatzisarantis N.L.D. and Hagger M.S. Effects of an intervention based on self-determination theory on self-reported leisure-time physical activity participation. *Psychology and Health*; 2009;24;29–48.
 19. Dedeliuk N, Nikolayev S, Zakhozij V, Comparative analysis of female students physical fitness state and physical activity, *Human and Health*; 2013;7(2);3–7.
 20. How YM, Whipp PR, Dimmock JA & Jackson B. The Effects of Choice on Autonomous Motivation, Perceived Autonomy Support, and Physical Activity Levels in High School Physical Education. *Journal of Teaching in Physical Education*; 2013;32(2);131–148.
 21. Koka A. The effect of teacher and peers need support on students' motivation in physical education and its relationship to leisure time physical activity. *Acta Kinesiologiae*, 2013;19:48–62. <http://dx.doi.org/10.12697/akut.2013.19.0>.
 22. Standage M, Gillison B, Ntoumanis N & Treasure DC. Predicting students' physical activity and health-related well-being: a prospective cross-domain investigation of motivation across school physical education and exercise settings. *Journal of Sport & Exercise Psychology*; 2012;34(1);37–60.

Information about the author: Mayevsky M.I.; http://orcid.org/0000-0001-5167-9699 ; q3579qqq@meta.ua; Pavlo Tychyna Uman State Pedagogical University; Sadova str. 28, Uman, 20300, Ukraine.
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