IMPACT OF UPDATED CURRICULUM CONTENT ON 6TH-7TH GRADERS’ MOTIVATION IN PHYSICAL EDUCATION

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Abstract
The purpose of the study was to determine the impact of updated curriculum content on 6th-7th graders’ motivation in physical education.

Materials and Methods. The study participants were 457 6th-7th graders from different regions of Ukraine (n = 230 girls and n = 227 boys). To determine the impact of curriculum content on school students’ motivation in physical education, the study used methods of theoretical analysis, systematization, comparison, generalization, pedagogical observations, questionnaire, mathematical statistics.

Results. The study found that the content of 2012-2017 curricula has significant advantages in terms of developing school students’ motivation for regular exercise. The impact results in a statistically significant increase in indicators of the school students’ choice of learning motive (8.5% more; t = 2.24; p ≤ 0.05-0.01), evaluation motive (5.0% more; t = 2.01; p ≤ 0.05), play motive (6.3% more; t = 2.07; p ≤ 0.05). The study determined an increase in the high level of learning motivation from 14 to 33 cases and in the above average level – from 21 to 48, as well as a decrease in the average level – from 59 to 56, the reduced level – from 21 to 17, and the low one – from 12 to 11 cases.

Conclusions. It was found that the result of the impact on school students’ motivation in physical education is the inclusion of new components into curricula. It was defined that an increase in motivation is associated, first, with the inclusion of content lines “Environmental Safety and Sustainable Development”, “Civil Responsibility”, “Health and Safety”; secondly, sections “Theoretical and Methodological Knowledge” and “Expected Results of Educational and Cognitive Activity”; thirdly, a modular system of organizing the educational process; fourth, sections “Evaluation of Learning Achievements” and “Homework”. The result of the impact of updated curriculum content is the enhancement of school students’ motivation in physical education, first of all through educational (cognitive) and social motives.

Keywords: education, curriculum, lesson, motivation, school students.

Introduction
Studying the impact of physical education on the formation of a harmoniously developed personality and human health (Iermakova, 2014); conceptual ideas for modeling the processes of education and development of children’s and adolescents’ motivation in physical education (Khudolii, & Ivashchenko, 2013); factors that influence the effectiveness of teaching physical exercises and developing physical qualities, and therefore determine the interest in exercise (Khudolii, Ivashchenko, & Chernenko, 2013; Khudolii, & Titarenco, 2013) remain extremely relevant not only in Ukraine.

Researchers from Algeria (Kenioua, & Boumasjed, 2016) note the importance of developing schoolchildren’s health by integrating them into entertainment and competitive activities, which will help to increase motivation in physical education. Radzimińska, Weber-Rajek, Lulińska-Kuklik, Kazmierczak, and Moska (2016) focus on the implementation of health promotion programs for Polish school students, emphasizing the important role of an active lifestyle, habits
and patterns of behavior as factors developing motivation for physical activity. In our study, we also relied on research papers analyzing the content of physical education curricula in different countries, including the physical education curriculum in Poland (Turchyk, Vateba, & Biriuik, 2009), the content of physical education in educational institutions of the USA (Osadchaya, 2004), the peculiarities of physical education in Canada, Germany, the USA (Danylova, 2010; Sapargasimova, & Pluzhnov, 2017).

The Ministry of Education and Science of Ukraine developed the foundations of the Education Standard “New Ukrainian School” (Hrynevych, Lyashenko, Krutsevych, Shyyan, et al., 2016), in which, starting from the 2017-2018 academic year, Physical Education is taught according to an updated content (Physical Education Curriculum for 5th-9th Grades of General Education Schools, approved by the Order of the Ministry of Education and Science No. 1407 of October 23, 2017). An important factor in updating the curriculum content (updating the curriculum in accordance with the Order No. 52 of the Ministry of Education and Science of Ukraine of January 13, 2017 and the Order No. 201 of February 10, 2017) is its focus on developing and socializing school students’ personality, shaping their national identity, general culture, worldview orientations, ecological style of thinking and behavior, creative abilities, exploratory and survival skills, ability for self-development and self-education in the conditions of global challenges, by means of physical education.

In our opinion, a focus of the curriculum content can help increase motivation in physical education. We believe that it is not enough to carry out pedagogical correction of the motive, enhance its manifestations, but it is necessary to create a certain curriculum and organizational-methodological basis for its implementation. Only then the motive becomes strong and will help develop the need for physical activity in school students.

We failed to find data on the attempt to determine and scientifically substantiate the impact of a curriculum content on school students’ motivation in physical education. After all, the formation of learning motivation is one of the main conditions for ensuring the quality of the educational process, including physical education, the relevance of which depends on updating the content of education.

The purpose of the study was to determine the impact of updated curriculum content on 6th-7th graders’ motivation in physical education.

Materials and Methods

Study Participants

The respondents were 457 6th-7th graders (230 girls and 227 boys) from different regions of Ukraine (Kharkiv, Kyiv, Khmelnytsk, Donetsk, Luhansk, Chernihiv Regions).

Study Organization

To determine the impact of curriculum content on school students’ motivation in physical education, we adapted and used M. Ginsburg’s test “Research on Learning Motivation” (Zaniuk, 2002). The study determined the dominant motives of learning activity in physical education lessons (learning, social, positional, evaluation, play, external motives). The questionnaire included the following points: 1. “I try to learn better to...” (get a good grade, I like physical entertainments, know more about the effects of exercises on the body); 2. “Learning and knowledge are necessary for...” (self-development: to know and be able to, to be respected and appreciated, to win games and competitions); 3. “If I get a high grade...” (teacher and parents will be glad, I will understand the impact of exercises on the body); 4. “I like being praised for...” (homework, correctly performed physical exercises, personal traits and positive emotions, teamwork); 5. “My goal is...” (good grades, teacher’s praise, understanding the effects of exercises on the body); 6. “The most interesting thing is...” (learning new motor actions, communication with peers, teamwork, assessment of motor achievements, play activities); 7. “I study learning material well if...” (I try to improve my grade, I like it and understand the impact of exercises on the body, it will help improve health); 8. “I am more active if...” (I want to learn more about the impact of exercises on the body, it will help improve health, it is interesting, I will be a team member, teacher’s praise); 9. “My success depends on...” (interest in a grade, attention to explanation, communication with peers, mood, manifestation of motor abilities); 10. “If learning material is not clear to me (difficult), I...” (remember the explanations in previous lessons, ask the teacher or peers for help, rest and try again).

The questionnaire results were interpreted as follows: learning motive – 5 points, social motive – 4 points, positional motive – 3 points, evaluation motive – 2 points, play motive – 1 point, external motive – 0 points. The sum of points on the questionnaire: 90-80 – a high level of learning motivation, 79-65 – above average, 64-40 – average (normal), 39-20 – reduced, 19 or less – low.

Statistical Analysis

The analysis and interpretation of the study results were carried out together (6th and 7th grade girls and boys) by calculating the reliability coefficient and the degree of probability of difference, using the Student’s T-Test.

Results

This study conducted an analysis of physical education curricula for 5th-9th graders of general secondary education institutions at different stages of their improvement (first of all, 2012-2017), that is at a time when certain changes were made in the structure of curricula and their content was improved.

In this regard, we have reason to believe that the update of curricula content has had a positive impact on the development of school students’ motivation. The analysis of the questionnaire results shows a certain dynamics in the school students’ choice of priority motives under the influence of the curriculum content of 2012-2017 in comparison with that of 2008-2009 and earlier (Fig. 1).

The study found a statistically significant increase in indicators characterizing the choice of learning motive, evaluation motive, and play motive. In particular, 8.5%
more students choose the learning motive and consider it a priority ($t=2.24; p<0.05$), which we tend to explain by the development of cognitive interest in physical education (strive to study, learn new things about the impact of exercises on the body development, express the need to acquire knowledge, motor abilities and skills, etc.). The evaluation motive is chosen by 5.0% ($t=2.01; p<0.05$) and the play motive by 6.3% ($t=2.07; p<0.05$) more students. This is due to a change in approach to evaluating motor performance. Evaluation involves not only a quantitative result of the learning standard, but also a focus on the performance quality of an exercise, a motor task (evaluation is a criterion of self-awareness, honesty, diligence, not just a measurement of the performed task). The development of motives is also determined by the adequacy of students' ideas about the functions of physical education. Thus, the play motive (desire to participate in active and sports games, games with rules of fair play) encourages and boosts learning activity based on play and communication, helps to satisfy the need for physical activity, but not at the expense of learning quality.
A lower motivation in physical education is observed in the social (learning as a socially significant factor, awareness of the usefulness of learning), positional (increasing a social status, aiming for a corresponding social activity), and external (following established norms) motives. In our opinion, this is because school students are guided by situational factors and not necessarily conscious motives. Although, the social motive in combination with the learning (cognitive) one are crucial in ensuring the quality of education.

Characterizing the indicators of development of levels of students' motivation in physical education, we present the results of manifestation of the learning and social motives (Fig. 2, 3). It is the learning and social motives that are crucial in ensuring the quality of schoolchildren's physical education. An increase in the high level of learning motivation (90-80 points) is characterized by an increased number of choices from 14 to 33 (from 11.0 to 20.0%); the above average level (79-65 points) – from 21 to 48 choices (from 16.5 to 29.1%). Along with this, there was a decrease in the average level (64-40 points) from 59 to 56 choices (from 46.5 to 33.9%), the reduced level (39-20 points) – from 21 to 17 choices (from 16.5 to 10.3%), and the low one (19 or less points) – from 12 to 11 choices (from 9.5 to 6.7%).

A similar dynamics is observed in the development of levels of social motive of learning activity. The indicators of the high level increased from 15 to 20 choices (from 21.4 to 23.5%) of respondents, the above average level – from 24 to 27 (from 31.8 to 34.3%), the average level – from 15 to 23 (from 21.4 to 27.1%). At the same time, the indicators that characterize the reduced level of motivation decreased from 12 to 11 (from 12.9 to 17.1%) and the low level – from 5.8 to 4.7%.

A less pronounced dynamics is observed when comparing the levels of evaluation motive and play motive, which indicates, in our opinion, that 6th-7th grade students are not yet sufficiently aware of their importance in ensuring the quality of education, they are guided by situational factors, not necessarily conscious motives.

**Discussion**

The development of school students' motivation in physical education continues to be relevant in scientific discourse. Of particular interest are research findings of authors who consider the structure and content of physical education in the context of developing the motivational sphere of personality as a polymotivated concept of the functions of education.

The results of our study are consistent with scientific views of Richards, and Levesque-Bristol (2014) who emphasize the importance of structuring curricula so that they develop the need for lifelong learning. The authors consider it appropriate to create an educational environment that would contribute to the formation of a sense of one's own activity in implementing the tasks of education through meeting vital needs, strengthening internal motivation. At the same time, Hryban (2012); Nesterova, and Pavliuk (2014) note that the lack of school students' motor activity is mainly a social, not just a biological phenomenon. In this regard, motivation to exercise should also be determined by understanding the impact of motor activity on functional changes in the body on the basis of free choice of the kind of motor activity, which is provided by the updated curriculum content.

The necessity for updating the content and improving the structure of curricula is confirmed by studies of Uvarov, Belaid, and Yakhyavi (2016). Having analyzed the experience of organizing physical education in educational institutions of European countries, the researchers emphasize the need for a balanced impact of both motor and intellectual components of physical education.

The authors' scientific views are consistent with the findings of other authors' studies emphasizing that one of
the conditions for motivation development is increasing the amount and quality of knowledge in physical education, objectivity in assessing motor achievements, taking into account priorities (interest, enthusiasm) in choosing a kind of motor activity (Kondakov, Kopeikina, Balyshueva, Uusatov, & Skrug, 2015); using various interactive motor and health-developing technologies (Ha, Lonsdale, Lubans, & Ng, 2018), influence of parents’ example on the formation of motivation for physical exercises (Sukys, Majauskienė, Cesnaitienė, & Karanauskienė, 2014).

Scientific views on overcoming certain psychological and pedagogical "barriers" that hinder the development of school students’ motivation in physical education, especially in primary and secondary schools, are relevant in the context of our study. The authors note that they should be overcome by forming subject-subject relations, elective curricula, teachers’ ability to reduce obstacles that hinder the development of motivation (Mowling, Brock, Eiler, & Rudisill, 2004). Mehmeti, and Halilaj (2018) point out the need to increase motivation for physical activity, suggesting that curricula should provide the implementation of measures promoting the development of both personal motor abilities and teamwork skills, the reduction of anxiety, fear of failure in mastering biomechanically difficult movements.

Thus, the findings showed that relatively low growth of students’ motivation in physical education results from the structure and content of the curricula introduced into schoolchildren’s physical education before 2012). These curricula practically did not take into account students’ priorities, interests and desires regarding the kind of physical activity; individual features of physical development and motor fitness; objectivity and evaluation motive regarding the results of motor performance.

The factors that contributed to increasing school students’ motivation in physical education include changes in the curricula implemented since 2012-2017.

The improvement of the curricula content is associated primarily with the introduction of sections “Theoretical and Methodological Knowledge” (knowledge, value, activity components), “Expected Results of Educational and Cognitive Activity of School Students” (student characterizes, gives examples, masters, follows rules, etc.), and “Organization of Educational Process”. The implementation of these sections contributed to the formation of school students’ abilities and skills to exercise independently; the differentiated approach taking into account the state of health, the level of physical development, motor fitness, gender; the development of interest in physical exercises; the expansion of organizational forms, means, methods and techniques of education and upbringing.

An important argument in increasing school students’ motivation in physical education is the introduction of the “Homework” section for independent physical exercises aimed at increasing physical activity during leisure, achieving a recreational and health-improving effect.

In improving the content of curricula, an important role is played by the change of approaches to the “Evaluation of Learning Achievements”, when taking into account personal achievements, level of activity and participation in sports competitions, physical education and health-improving events during a school year. Based on these indicators, the teacher can apply various systems of additional (bonus) points. At the same time, failure to meet the standards for reasons independent of the student (disproportionate physical development, missing classes for a valid excuse, etc.) is not a reason to reduce the final grade. Thus, a grade is a certain criterion of self-awareness, honesty, diligence, quality of exercise performance, and not just the achievement of a certain motor result, or control standard, “a grade for the sake of grade”.

The 2017 curriculum takes into account students’ acquisition of key life competencies, which, first of all, contributed to developing educational (cognitive) and social motives, which are a priority in ensuring the quality of the educational process, as well as through physical education.

Conclusions

It was found that the result of the impact on school students’ motivation in physical education is the inclusion of new components into curricula. It was defined that an increase in motivation is associated, first, with the inclusion of content lines “Environmental Safety and Sustainable Development”, “Civil Responsibility”, “Health and Safety”; secondly, sections “Theoretical and Methodological Knowledge” and “Expected Results of Educational and Cognitive Activity”; thirdly, a modular system of organizing the educational process; fourth, sections “Evaluation of Learning Achievements” and “Homework”. The result of the impact of updated curriculum content is the enhancement of school students’ motivation in physical education, first of all through educational (cognitive) and social motives.

Conflict of interest

The authors declare no conflict of interest.
References


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ВПЛИВ ОНОВЛЕНОГО ЗМІСТУ НАВЧАЛЬНИХ ПРОГРАМ НА ВМОТИВОВАНІСТЬ УЧНІВ 6-7 КЛАСІВ ДО ЗАНЯТЬ ФІЗІЧНОЮ КУЛЬТУРОЮ

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Авторський вклад: A – дизайн дослідження; B – збір даних; C – статаналіз; D – підготовка рукопису; E – збір коштів

Реферат. Стаття: 8 с., 3 рис., 24 джерело.

Мета дослідження – визначити вплив оновленого змісту програм на вмотивованість учнів 6-7 класів до занять фізичною культурою.

Матеріали і методи. У дослідженні брали участь учні 6-7 класів із різних регіонів України кількістю 457 осіб (n = 230 дівчат та n = 227 хлопців). Для визначення впливу змісту програм на вмотивованість учнів до занять фізичною культурою використано методи теоретичного аналізу, систематизації, порівняння, узагальнення, педагогічні спостереження, анкетування, математичної статистики.

Результати. З’ясовано, що зміст програм 2012-2017 рр. має суттєві переваги в контексті вироблення в учнів мотивації до систематичних занять. Результатом впливу є статистично достовірне зростання показників у виборі учнями навчального мотиву (на 8,5% більше; t = 2,24; p ≤ 0,05-0,01), мотиву оцінки (на 5,0% більше; t = 2,01; p ≤ 0,05), ігрового мотиву (на 6,3% більше; t = 2,07; p ≤ 0,05). Визначено зростання високого рівня мотивації навчання з 14 до 33 випадків та вище середнього – з 21 до 48, а також зменшення середнього – з 59 до 56, зниженого – з 21 до 17 та низького – з 12 до 11 випадків.


Ключові слова: освіта, програма, урок, мотивація, учні.

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