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THE FORMATION OF SOCIAL MATURITY OF SENIOR PUPILS (IN THE CONTEXT OF THE ACTIVITY OF THE TEACHER OF PHYSICAL CULTURE)

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Abstracts

Topicality. Social maturity – a complex socio- psychological phenomenon, which includes a number of components: self-awareness, worldview, moral maturity, social feelings. Formation of social maturity and its components takes place under the influence of external and internal factors. Of particular importance is the upbringing and consolidation of the complex of personal qualities, moral consciousness and social feelings - the basis of social maturity. Social feeling is called to educate and teacher of physical education, which forms not only physical but also moral health, social activity, sense of responsibility, group intellectual, volitional, emotional and organizational unity and other important personal qualities of pupils. Therefore, we aim to identify the ways and factors of the formation of social maturity in schoolchildren under the influence of physical education classes, during which, in addition to physical, moral health, social activity, feeling of belonging to the team, feeling of a group are formed. Methods of research – analysis of scientific literature, observation, individual and group discussions, questionnaires, testing, methods of statistical processing of research results. Results of Work. We show that classes in physical education and sports allow senior students to realize the existence of many forms of socially useful activity, where they can reveal themselves, their potential opportunities, find a place for their application both professionally and in society. Conclusions. An analysis of empirical research confirms the important role of physical education and sports classes in the formation of components of the social maturity of senior pupils: self- organization, self-knowledge, volitional and moral-social qualities, group feelings, mutual help, attentiveness, communication culture, etc. The dissonance between the requirements of senior pupils about the personality of the physical education teacher of a modern school and the requirements of future teachers is revealed: students place more serious requirements than future teachers, which can affect the attitude of students to the classes themselves and the results of the work of the teacher.

Key words: pupils' youth, physical education, physical health, moral norms, social activity.

Оксана Киселиця, Юрій Мосейчук, Олена Мороз. Становлення соціальної зрілості старшокласників (у контексті діяльності вчителя фізичної культури). Актуальність. Соціальна зрілість – складне соціальнопсихологічне явище, яке включає низку компонентів: самосвідомість, світогляд, моральну зрілість, соціальні почуття. Формування соціальної зрілості та її компонентів відбувається під впливом зовнішніх і внутрішніх факторів. Особливого значення набуває виховання й закріплення комплексу особистісних якостей, моральної самосвідомості та соціальних почуттів – основи соціальної зрілості. Соціальні почуття покликаний виховувати і вчитель фізкультури, який формує не лише фізичне, але й моральне здоров'я, соціальну активність, почуття відповідальності, групової інтелектуальної, вольової, емоційної й організаторської єдності та інші важливі особистісні якості вихованців. Тому ставимо за *мету* виявити шляхи та фактори становлення соціальної зрілості в учнівської молоді під впливом фізкультурних занять, під час яких, окрім фізичного, формується моральне здоров'я, соціальна активність, почуття належності до команди, почуття групи. Методи дослідження – аналіз наукової літератури, спостереження, індивідуальні та групові бесіди, анкетування, тестування, методи статистичного опрацювання результатів дослідження. Результати роботи. Доводимо, що заняття з фізкультури й спорту дають змогу старшокласникам усвідомити існування багатьох форм суспільно корисної діяльності, де вони можуть розкрити себе, свої потенційні можливості, знайти місце їх застосування як у професійному плані, так і в суспільстві. Висновки. Аналіз емпіричних досліджень засвідчує важливу роль занять із фізкультури й спорту у формуванні компонентів соціальної зрілості старшокласників: самоорганізації, самопізнання, вольових та морально-соціальних якостей, почуття групи, взаємодопомоги, уважності, культури спілкування тощо. Виявлено дисонанс між вимогами старшокласників щодо особистості вчителя фізкультури сучасної школи й вимогами майбутніх учителів: учні ставлять більше серйозних вимог, ніж майбутні вчителі, що може вплинути на ставлення учнів до самих занять та на результати роботи вчителя.

Ключові слова: учнівська молодь, фізкультурні заняття, фізичне здоров'я, моральні норми, соціальна активність.

Оксана Киселица, Юрий Мосейчук, Елена Мороз. Становление социальной зрелости старшеклассников (в контексте деятельности учителя физической культуры). Актуальность. Социальная зрелость – сложное социально-психологическое явление, которое включает целый ряд компонентов: самосознание, мировоззрение, нравственную зрелость, социальные чувства. Формирование социальной зрелости и ее компонентов происходит под влиянием внешних и внутренних факторов. Особое значение приобретают воспитание и закрепление комплекса личностных качеств, нравственного самосознания и социальных чувств – основы социальной зрелости. Социальные чувства призван воспитывать и учитель физкультуры, который формирует не только физическое, но и нравственное здоровье, социальную активность, чувство ответственности, групповой интеллектуального, волевого, эмоционального и организаторского единства и другие важные личностные качества воспитанников. Цель исследования – выявить пути и факторы становления социальной зрелости у старшеклассников под влиянием физкультурных занятий, во время которых, кроме физического, формируется нравственное здоровье, социальная активность, чувство принадлежности к команде, чувство группы. Методы исследования – анализ научной литературы, наблюдение, индивидуальные и групповые беседы, анкетирование, тестирование, методы статистической обработки результатов исследования. Результаты работы. Доказываем, что занятия по физкультуре и спорту позволяют старшеклассникам осознать существование многих форм общественно полезной деятельности, где они могут раскрыть себя, свои потенциальные возможности, найти место их применению как в профес- сиональном плане, так и в обществе. Выводы. Анализ эмпирических исследований свидетельствует о важной роли занятий по физкультуре и спорту в формировании компонентов социальной зрелости старшеклассников: самоорганизации, самопознания, волевых и морально-социальных качеств, чувства группы, взаимопомощи, внимательности, культуры общения и др. Выявлено диссонанс между требованиями старшеклассников относительно личности учителя физкультуры современной школы и требованиями будущих учителей: ученики ставят больше серьезных требований, чем будущие учителя, которые могут повлиять на отношение учащихся к самим занятиям и результаты работы учителя.

Ключевые слова: учащаяся молодежь, физкультурные занятия, физическое здоровье, моральные нормы, социальная активность.

Introduction. Nowadays there is a sharp contradiction between the accelerated social development of modern children and the limited possibilities of social functioning. The level of opportunities for boys and girls in this period, the conditions and speed of their social development are related to the awareness of themselves and their belonging to society, the need to determine their place in society, the choice of profession, the construction of their future image, the possibility of studying in higher education institutions, the family creation, etc.

The concept of «social maturity» is relatively new in psychological and pedagogical science and there is no clear definition to date, although there are a number of publications that address this problem [1; 3; 4; 5]. The problem of the development and upbringing of social maturity is considered in the writings of native and foreign psychologists (Yu. Bardin, I. Bech, G. Hartmann, E. Golovakh, R. Gurov, K. Levin, S. Polischuk, M. Savchyn, E. Slobodsky, L. Philips, R. Khmelyuk, K. Hall, P. Jakobson); philosophers (Yu. Bardina, L. Rostova, T. Starchenko); sociologists (I. Polovynky, L. Sokhan, O. Kharcheva, V. Yadov); teachers (O. Kamenyeva, L. Kanisevska, T. Malkovska, O. Mykhailov, V. Radula).

Most researchers believe that social maturity is not a function of only one age. In many ways, its formation and manifestations depend on the conditions in which the child grows and is brought up. Therefore, adolescents and senior pupils are in sufficient social maturity, while some adults in their views and attitudes toward important aspects of human relationships remain children. We believe that social maturity is a qualitative criterion of mental development and a psychological state of self-understanding in society, an indicator of the formation of norms, rules of relations of personality with reality.

For the teacher of Physical Education, as well as for other teachers, it is extremely important to identify the social and psychological factors of forming the components of social maturity in students of the senior school age, which will enable to determine the directions and methods of psychological and pedagogical influence on this process. The relationships with others in the process of the Physical Education and in competitions of different levels, communication with them, help boys and girls to better understand their lives, their life experiences, as well as the peculiarities and achievements of their own life, to try to evaluate their own possibilities and to answer the questions of meaning of life, self-perception and self-determination.

The purpose of the research: to identify ways and factors of becoming social maturity in senior pupils under the influence of Physical Education lessons.

Material and methods of the research. To identify ways and factors of becoming a social maturity in students of the senior school age, we used a variety of methods and specific techniques: analysis of scientific literature, observation, individual and group interviews, questionnaires, testing, and methods of statistical processing of the results of the study.

Observations were conducted on the behavior of students during Physical Education classes. The subjects of observation were: the nature of relationships, communication, the attitude to the requirements of the teacher and achievements of classmates, etc. Observations helped to identify the individual properties of students, especially their behavior, the nature of the relationship to each other, individual personality traits, etc. In group and individual conversations there was an exchange of views on the following issues: sport and personality formation; sport and a healthy lifestyle; sport and physical and moral health of individual in general and in particular; potential capabilities of personality and sport; the influence of sport on boys' and girls` mental outlook; sport as a condition for the development of communicative and organizational skills and abilities of students, etc. To achieve the goal of the teacher, an atmosphere of openness, trust, discussion was created and which allowed identifying the attitude of students to physical education and sport as a subject, the importance of physical education for each of them, the impact on the development of individual qualities, emotional-sensory sphere, moral qualities and considerations, etc.

To clarify the results of observations and conversations we have developed questionnaires that contain 8 questions. The questionnaire for the polling of senior pupils will allow to reveal the influence of Physical Education and Sports classes on the formation of a social position, moral norms and qualities, outlook, on the emotional sphere, etc., the questionnaire for students (the future teachers) is aimed at revealing their thoughts about the possibilities of forming components of social maturity and social feelings, about ways and conditions for activating self-knowledge and self-improvement of students, the formation of a worldview, etc.

All participants received a mixed-form questionnaire with an instruction in which they were asked to read the questions carefully and to express their opinion in writing on each question. The questionnaire was conducted anonymously in a group form. The analysis of the results of the questionnaire was conducted on each issue separately, the group's typical answers were revealed, statistical results were presented. The participants were pupils of the 11th form of general secondary schools in Chernivtsi. The research includes 60 pupils and 40 future teachers.

The results of the research. Discussion. A poll of 11th form students (40 participants) gave us the following results:

Respondents identified several groups of character traits to the question «What personality traits do you develop at your Physical Education lessons?». The first group, called students, reflects the volitional features of the character: 70% of respondents called rivalry, 65 % – willpower, 55 % – purposeful, each second calls persistence; the second group of personality qualities contained moral and social qualities: 40 % of students call a sociability, a group feeling, an attentiveness to others, and a hard-working; every third person receives from physical activity and sports a feeling of mutual aid and reciprocity, and a fourth part of the respondents learn the rules of the culture of communication.

We received 65 % positive answers, 10 % of the answers «no» and every fourth student answered «I don't know» to the question «Do gymnastic and sports help in self-organization and self-knowledge? ».

We also found out that Physical Education and Sports lessons don't help students to know about events taking place in the country and in the world (70 % of negative responses and 15 % positive); 55 % of respondents refer positively to Physical Education and Sports lessons (like and bring benefits), 35 % of the answers are «indifferent»; 65 % believe that Physical Education and Sports are needed at upper grades, and 20 % do not «know» whether it is needed. Quantitative indicators also confirm that Physical Education and Sports indifferent form the feeling of «group»: 65 % of respondents are experiencing joy with team success, and 10 % are indifferent regard the success or failure of the class.

Describing the teacher of Physical Education and Sports, which is needed for a modern school, the respondents distinguish several groups of desirable qualities. The first group contained professional qualities: he should be a «master», be aware of various sports, to be a Sports Master or a Champion of Ukraine for some kind of sports, a highly skilled professional. To the second group they attributed physical qualities: the teacher of Physical Education and Sports should be physically healthy, hardened, and strong. The third group included moral and social qualities: good nature, honesty, justice, benevolence, compassion, being a good

person. In the fourth group, respondents included qualities that characterize the level of universal human culture: the teacher should be educated, cultural, and able to communicate, persuade in the process of communication, and have a sense of humor. The fifth group included external characteristics: it should be young, attractive, and slim. The data also indicate that Physical Education and Sports, successes and failures affect the self-replication of the respondents: 70% of the students wrote that achievements in sports or failures had a positive effect on self-knowledge and self-actualization, but 20% of answers were negative.

In parallel with the survey of senior pupils, we conducted a survey of students of 4-5 courses of different faculties (40 persons) – future teachers who are preparing not only to teach their subject, but also to conduct educational work with students at their lessons, and in the role of a class manager.

Future teachers believe that physical education lessons contribute the developing of the personal qualities of students (80%): the will, the feeling of rivalry, self-confidence, feeling of group, enrichment of knowledge. In order to help students to learn about themselves, the necessary conditions are: an individual approach (75%), support for competitive spirit, encouragement of the weak and development of their physical training level (70%), direct participation in competitions (60%). The future teachers also believe that Physical Education lessons contribute to the formation and development of students' outlooks and their own position (76%). The rest of the answers are «I do not know». Respondents also distinguish four main social feelings that, in their opinion, are formed in the students during Physical Education lessons: friendship, respect for people/for yourself, and mutual help. The future teachers believe that the teacher of Physical Education in modern school should be: physically and mentally healthy; to be an example for students, to lead a healthy lifestyle; have a sufficient level of physical readiness.

The comparison of the characteristics of a teacher of Physical Education in a modern school offered by future teachers, with those called senior pupils, suggests a significant discrepancy between the expectations of pupils and the way students see their college – future teachers. We think that this dissonance exists in reality and affects the attitude of students to physical education and the teacher, to the state of health, to the behavior of students in the lessons.

To study the influence of the most native environment on the social development of senior school students and the emergence of social maturity and its components, we studied their real and desired personal relationships, which are most actively manifested during leisure time. The results are presented in Table 1.

Table 1

Environment	oneself	with parents	with friends	with classmates	with teachers	with interesting people
With whom is spent free time	15,7	22,3	70,1	10,3	0	0
With whom would like to spend free time	4,9	19,6	61,9	19,3	2	26,7

Real and desirable partnership in leisure-time, %

The data show that the majority part of respondents prefer both real and desired communication in their free time with friends, pushing communication with their parents to second place, significantly reducing the influence of the family on the formation of the individual and his sociality. A lot of the senior pupils spend their free time alone, which is typical for this age. Pupils at senior school age are experiencing the need to stay alone for a variety of reasons. Such can be creativity, the desire to determine the meaning of life, to think about relationship, experiencing the first feeling of love, creating an image of the future, etc. In fact, a little more than a fifth part of the respondents spend their free time with their parents and even less would like to spend their free time with them. Every fourth student would like to spend his free time with interesting adults, which should pay attention to the teachers. This desire is conditioned by the fact that such communication is absent, and students experience a lack of interesting new information, which negatively affects the formation of their social maturity.

Unfortunately, such important factor as the teacher, who should direct, correct the process of development of social maturity, realization in practice of life of its formed levels, self-education, self-improvement of social orientation of the person, fell from an area of influence on social formation of pupils of senior school age. This can be explained by the fact that students talk more with teachers in the official

environment and perceive them as mostly business people and do not know the good personal qualities of their teachers, and therefore do not see them as their partners in different situations.

Communicating with peers gives them a possibility to receive support, the possibility of self-expression and recognition of their social significance. There is the need for social recognition to be the basis for the creation of a diverse range of adolescent and youth informal groups (from positive to criminal), where they can show themselves, meet the need for communication, declare themselves and their opportunities, selfrealization. The study of the motivation to create different companies is presented in Table 2.

Table 2

N⁰	Motives	%
1.	Possibility to communicate	51,5
2.	The same interests	26,7
3.	Possibility to spend time	11,7
4.	An attempt to create an own group	9,4
5.	Possibility to experience the sex, taste alcohol, drugs	9,3
6.	Possibility to escape from family disagreements	8,1
7.	Desire to throw off the adult burns	5,1

Motivation to create the informal groups, %

It is known that not all street groups spend their free time doing content-cognitive or social-valuable affairs, which would form positive personal qualities in their members, social orientation, social feelings and social maturity as a holistic psychological phenomenon. Practice shows that street companies characterize by behavioral deviations, social and even anti-social orientation, offending and criminal behavior of adolescents, attempt on alcohol and drugs.

Consequently, a Physical Education teacher, preparing his pupils to master Physical Culture in the process of sports, should pay attention to the cultivation of universal culture, which cannot exist without the developed skills of the communication culture and relationships. The use of obscene words has become a problem of current students, not only adolescents and older people. Each teacher should direct his pedagogical influence on the cleansing of speech from these words. Communicating with modern students, the teacher puts the foundation of the culture of the relationship of future generations of Ukrainians. The Physical Education and Sports lessons allow increasing the level of control and development of skills to adhere to rules of culture of relations and interpersonal communication, as there is an opportunity to expand direct personal communication in the system «teacher – students».

A socially mature person represents the social feelings of humanity, honesty, decency, responsibility for their actions to the family, collectives, parents, oneself, patriotism, and others like that. Answering the question: «What can cause you to commit a crime? », the students gave the following answers (See Table 3).

Table 3

N⁰	Motives	%
1.	Nothing can force to commit a crime	63,5
2.	The desire to protect yourself	17,4
3.	The desire to take revenge on the offense	13,7
4.	Unwillingness to lose authority in the company	3,8
5.	Constant conflicts with parents	2,5
6.	The desire to get some money	1,5
7.	Nescience of punishment	1,0

Determination of the motivation for committing a crime, %

Based on the Table data, it can be noted that about 40% of our researched people are ready to commit a crime under certain conditions that is very alarming and disturbing. The main motives for committing a crime are the assertion of oneself as a personality, a human dignity (to defend themselves, to take revenge for insults), recognition of own adulthood, that is, the reaction of behavior to the negative attitude of others to the student, as to the personality. But more than 60% of high school students said that nobody and nothing could force them to commit a crime.

The social maturity of the senior pupil depends on the formation of his morality: moral values, beliefs, deeds, experience of moral behavior, which are formed (as well as the person as a whole) under the influence of family education, educational process in school, social organizations, the closest social environment, and sources of information. That's why we used a special diagnostic questionnaire aimed at identifying the meaning of moral behavior and the level of expression of the desire to commit moral actions.

The obtained results of the study allowed distinguishing two features of the valuable attitude of high school students to moral values and four levels of the formation of the desire to exercise moral behavior.

In order to identify the level of senior students' judgments, they were asked the question: «What does moral behavior mean for you?». According to the content of the test questionnaire, it is proposed five answer variants: 1) the desire for moral behavior, the recognition of the self-worth of the personality and the equality of all people in achieving happiness and dignity of life; 2) the desire to develop the quality of moral behavior in order to be able to establish humane relations between people; 3) the importance of possessing norms and rules of moral behavior for the achievement of a vital goal; 4) a respectful attitude towards others; when people are reciprocal courteous; 5) it doesn't matter.

The analysis of judgments about the personal meaning of moral behavior enabled to reveal different types of interest in it. The results are presented in Table 4.

Table 4

N⁰	Meaning of moral behavior	11th form pupils
1.	Lack of interest	4,8
2.	Direct interest	0
3.	Practical (pragmatic) interest	14,3
4.	Practical (socially significant) interest	33,3
5.	Practical (moral) interest	47,6

Manifestation of interest in the meaning of moral behavior, %

The choice of criteria characterizing the aspiration for moral behavior has made it possible to reveal two levels of the formation of this desire in our respondents – medium and low. The results presented in Table 5 show that the majority of our respondents are characterized by an average level of formation of a desire for moral behavior, and in the rest – a low level, which, of course, negatively affects the formation of social maturity of senior pupils as a holistic psychological phenomenon.

Table 5

N₂	Levels of desire for moral behavior	11th form pupils
1.	High	0
2.	Medium	80,9
3.	Low	14,3
4.	Extra low	4,8
5.	Null	0

Levels of formation of desire for moral behavior, %

Consequently, during the period of senior pupils` studying, social maturity and its components don't reach its level of development that would meet the requirements of a society that relates to early adolescence.

The emotional and sensory realm plays an important role in forming of social maturity and social feelings of the personality as its components.

In literature, lower emotional states (fatigue, positive emotions from satisfying natural needs, etc.) and higher experiences at a conscious level are distinguished. To the second group we refer empathy, which is an important component of the social feelings of the individual. It's very difficult to study and to show all components of social feelings in one study. Therefore, we took for the study only empathy as a complex psychic (moral-emotional) phenomenon, which is a compulsory component of social feelings and social maturity.

Psychologists explain empathy as an understanding and feelings of the emotional state of another person, penetration into her experiences. We studied the formation of senior pupils' empathy levels. The sampling was formed in the light of the fact that during this period, the higher feelings, including empathy,

are mainly formed, clearly manifest in relation to the social environment and are perceived by their owners. But their development can reach different levels.

In order to detect the formation of empathy in our sampling, we used the Test Method of Tendencies of Empathy (according to I.M. Yusupov). The tests passed pupils of grades 11-A and 11-B (for 20 people in each group).

The test includes 36 questions. In the instruction for the test, it was suggested that you carefully read each question and respond to them by choosing one option from the following: «Do not know» (0 points), «No, never» (1 p.), «Sometimes» (2 p.), «Often» (3 p.), «Almost always» (4 p.), «Yes, always». The results were calculated according to the key: the number of points is an indicator of the formation of a certain level of empathy tendencies. Data that characterize the peculiarities of the formation of the empathy of senior pupils are given in Table 6.

Table 6

Level of empathy	Form		
	11-A	11-B	
Extra high	40	10	
High	10	10	
Normal	20	10	
Low	10	30	
Extra low	20	40	

Age characteristics of the empathy manifestation in senior pupils, %

The table's data represent an extremely colorful picture of the empathy manifestation in senior pupils. The characteristic of levels of the 11-th form pupils` empathy is distinguished by its contrast. Indicators of the levels of the formation of empathy in our respondents differ in the way in which collective of the class students learn. The levels of empathy in senior pupils from different classes are extremely varied. While half of the 11-A class students are characterized by extra high and high levels of empathy, these levels are characterized by only one in every fifth student from grade 11-B. There are particularly different indicators of an extra high level of empathy. In the same class, there are 2 times fewer students with normal levels of empathy and more than 2 times higher rates of low and extra low levels of the formation of compassion and sympathize, compared with the students of the 11-A grade.

The majority of people have a normal level of empathy. The results of the study indicate that this pattern does not work for the students of the senior school age. This is explained by the fact that the senior pupil is not yet fully formed personality. A lot of its structural components continue to emerge, including the emotional realm.

Consequently, the formation and manifestation of the social maturity of the senior pupil, his attitude to the outside world, in particular the social environment [2], depends to a large extent on the level of formation of the personality traits of the student, his propensity to empathy.

Conclusions. The formation of social maturity and its components is influenced by many different factors: education in the family, relationships with others, communication, education and upbringing at school, political, economic, ideological and other changes in society. One of the most important factors in the development of the senior pupils` social orientation, their moral maturity and social feelings, is physical education and sports, in which, apart from physical, moral health, social activity, feeling of belonging to a team, feeling of a group (intellectual, volitional, emotional, organizational unity), there are optimal conditions for the disclosure of abilities that are not disclosed in the study of other academic disciplines, organizational and communicative skills and abilities, moral norms and values and empathy are formed. Sports competitions of pupils at different levels instill a sense of patriotism, pride for the successes of their classmates, a sense of honor and dignity. Physical Education and Sports classes allow senior students to realize the existence of many forms of socially useful activity, where they can reveal themselves, their potential opportunities, find a place for their application, both professionally and in society in general.

Prospects for further research. Further research may be aimed at the question of shaping the social maturity of future professionals for Physical Culture and Sports.

References

1. Didyk, N. M. (2014). Rozvytok osobystisnoi zrilosti maibutnikh sotsialnykh pedahohiv [Development of personality maturity of future social teachers]. Osvitolohichnyi dyskurs, no. 1 (5), 58–69.

- 2. Izard, K. E. (1999). Psykholohiia emotsii [Psychology of emotions]. SPb., Piter.
- 3. Kon, I. S. (1989). Sotsializatsiia i vospitanie molodezhi [Socialization and education of youth]. Novoe pedahohicheskoe myshlenie. M., Pedahohika, 191–205.
- Levkivskyi, M. V. S(2005). Sotsialna zrilist starshoklasnykiv (pidkhody do formuvannia) [Social growing of senior pupils: the problem of formation]. *Onovlennia zmistu, form ta metodiv navchannia i vykhovannia v* zakladakh osvity: Zb. nauk. prats. Naukovi zapysky Rivnenskoho derzhavnoho humanitarnoho universytetu, vyp. 32, Rivne, RDHU, 85–87.
- Iedynak, G., Galamandjuk, L., Kyselytsia, O., Nakonechnyi, I., Hakman, A. & Chopik, O. (2017). Special aspects of changes in physical readiness indicators of young men with different somatotypes between 15 and 17 years of age. *Journal of Physical Education and Sport*, 17(4), art 3112690-2696. DOI:10.7752/ jpes.2017.04311 http://efsupit.ro/images/stories/30dec2017 /Art%20311.pdf

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