

# HOW ACHIEVEMENT MOTIVATION INFLUENCES THE ATTITUDE OF SCHOOLCHILDREN AND STUDENTS TOWARDS INDEPENDENT SPORTS ACTIVITIES

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## SUMMARY

Purpose: to determine the relationship between achievement motivation and the attitudes of schoolchildren of 11-17 years old and students of 18-21 years old to independent sports and passing control standards in the discipline \"Physical Education\". Material: 1576 schoolchildren (boys n = 780 and girls n = 796) of comprehensive schools of Belgorod, Stary Oskol, Stroitel and Shebekino (Belgorod region, Russian Federation) and 246 students (men n = 127) were surveyed. and women n = 119) Belgorod State Technological University named after V.G. Shukhov (Belgorod, Russian Federation). The questionnaire consisted of three blocks of questions: the 1st block of questions - questions aimed at determining the age, sex, place of study of the respondent; 2nd block of questions - 8 questions, allowing to assess the attitude of the respondent to independent sports activities and the desire to take control standards of the discipline \"Physical Education\"; 3rd block of questions is a test of 20 questions, developed by A.A. Rean, to assess the motivation to achieve success and avoid failures. Results: the motivation for avoiding failures was diagnosed in 5% male students and 10% female students. A direct correlation between achievement motivation and the attitude of schoolchildren and students towards independent sports activities and passing control standards has been revealed. Conclusions: there are no differences in the correlation between the relationship between achievement motivation and attitudes toward independent sports by gender. Schoolchildren and students with motivation to achieve regular self-exercise.

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Schoolchildren and students with a pronounced motivation for avoiding failures prefer a passive way of life. They do not want to pass standards on the discipline \"Physical Education\" and do not go in for sports on their own.

**Key words:** achievement motivation, schoolchildren, students, sport

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## INTRODUCTION

The decrease of motion activity of schoolchildren is one of the most topical and significant problems nowadays. The studies of the American specialists [2, 8] demonstrate that the children who have low amount of daily locomotions are much more prone to obesity. The research, carried out in Spain [6], register the correlation dependence between the degree of motion activity of children and the disease incidence. The studies of the Russian specialists have shown that the amount of daily locomotions of a present-day schoolchild is within the range 8.5-10.5 thousands of locomotions, when the recommended amount is 14.0-19.0 thousands [7]. The statistical data, presented in the current research works of the Russian specialists, confirm that about 35-40% of schoolchildren are included into special groups according to their health condition and have to pass the simplified version of the «Physical Education» program [4]. In the senior school the percentage of schoolchildren, having different health restraints, increases even more. About half of them have various noncommunicable diseases. According to the data by L.P. Makarova [7] the main cause of high-school children's health deterioration is the high mental workload and sedentary lifestyle. A number of specialists [7, 10, 11] point out the adverse role of computerization of the society and especially communication by means of social networks, which results in the considerable decrease of physical activity of schoolchildren.

One of the ways of solving this problem at the state level in Russia was the Decree «Of the All-Russia Physical Culture and Sports Complex "Ready for Labor and Defense" (GTO) », signed by the President Vladimir Putin on March, 24, 2014 [1]. Since September 2015, in all schools and higher educational institutions of the Russian Federation the students have begun passing standards of this complex. A large amount of studies, analyzing the attitude of students to the All-Russia Physical Culture and Sports Complex "Ready for Labor and Defense" (GTO), have appeared. The findings of the research demonstrate that about 50% of schoolchildren and students are not willing to pass the GTO standards. The specialists point out that one of the main causes is the lack of understanding why they should pass those [9]. In other words, these groups of population have no motivation for passing GTO standards. Based on the work by G.L. Drandrov et al. [5] it should be noted that «motivation, on the one hand, depends on the motives,

which are stable psychological formations, and on the other hand – on the situational factors of the activity, perceived and evaluated by a person. Unlike motives, the situational factors can be controllable and manageable. The pedagogically justified influence on these factors forms the motivation, which through the process and results of the activity, stimulated and directed by this motivation, results in the corresponding changes of motives...». So, it's necessary to identify the most rational and effective forms, means and methods to form the stable motives in schoolchildren and students for passing GTO standards and for the regular independent sports and physical culture activities. It's essential to take into account what type of motivation a person has. It should be pointed out that there are two polar types of motivation – the motivation to achieve success and the motivation to avoid failures. The analysis of the research works by specialists, studying the motivation and motives of doing sports and physical activities, confirm that in most cases the reasons of the lack of motivational determinants are searched without taking into account the innate psychological characteristics of a person's motivation.

**Purpose:** to determine the relationship between achievement motivation and the attitudes of schoolchildren of 11-17 years old and students of 18-21 years old to independent sports and passing control standards in the discipline \"Physical Education\" or test of the All-Russia Physical Culture and Sports Complex \"Ready for Labor and Defense\".

## METHODS

To evaluate the influence of the achievement motivation of schoolchildren and students on the motivational determinants' formedness degree for passing control standards of the All-Russia Physical Culture and Sports Complex \"Ready for Labor and Defense\" (GTO), passing control standards in the discipline \"Physical Education\" and regular physical culture and sports activities, we have carried out a questionnaire survey of 1576 schoolchildren (boys  $n = 780$  and girls  $n = 796$ ) of comprehensive schools of Belgorod, Sary Oskol, Stroitel and Shebekino (Belgorod region, Russian Federation) and 246 students (men  $n = 127$ ) were surveyed. and women  $n = 119$ ) Belgorod State Technological University named after V.G. Shukhov (Belgorod, Russian Federation). The questionnaire was developed by the teachers of the Department of Physical Education and Sports of the Belgorod State Technological University named after V.G. Shukhov. The questionnaire consisted of three blocks of questions: the 1st block of questions - questions aimed at determining the age, sex, place of study of the respondent; 2nd block of questions - 8 questions, allowing to assess the attitude of the respondent to independent sports activities and the desire to take control standards of the discipline \"Physical Education\"; 3rd block of questions is a test of 20 questions,

developed by A.A. Rean [12], to assess the motivation to achieve success and avoid failures. The results of answers to the second block of questions were interpreted through binary code, where the «no» answer was «0», and the «yes» answer was «1». The responses were summarized and the correlation analysis of the obtained results with the results of the 3rd block of questions was carried out. The polar groups' comparison method was additionally used. The respondents were divided into two groups. The first group included answers of the students, having the motivation to achieve success, and the second group – the motivation to avoid failures. The comparative analysis of the results of respondents' answers to the second block of questions has been carried out by means of Student's t-test and Fisher's F-ratio test.

## RESULTS

The answers to the block of questions, which characterize the knowledge of students about the All-Russia Physical Culture and Sports Complex "Ready for Labor and Defense", and their attitude to physical culture and sports, are presented in Table 1.

It should be noted that the result, corresponding to the «0» index, was characterized by the authors as the low degree of knowledge about the GTO complex, and the low level of interest in doing sports and physical culture activities. The index «8», on the contrary, was characterized as the high degree of theoretical knowledge and the positive attitude to physical activities and sports.

As follows from Table 1, most of respondents (about 25%) among the boys answered «yes» to 5 questions of 8 and, consequently, obtained «5» points. Among the girls most of respondents (22%) answered «yes» to 4 questions of 8, which corresponds to «4» points. It should be pointed out that both among boys and among girls the lowest number of respondents (3% of boys and 3% of girls) obtained «0» points. The highest index of «8» points was received by 9% of boys and 4% of girls.

The next stage of interpreting the obtained results was studying the distribution of the respondents' answers to the third block of questions, which characterized their achievement motivation. Let us remember that a sum of points from 1 to 7 indicates the motivation to avoid failures, and from 14 to 20 points – the motivation to achieve success. The results of responses' distribution to this block of questions are presented in the third and fourth columns of Table 1. The aggregate number of respondents who obtained from «5» to «7» points made up about 5% among boys. So, about 5% of boys have the motivation to avoid failures. It should be noted that the motivation to achieve success is registered for about 50% of respondents among boys. Among girls about 10% of respondents obtained

from «3» to «7» points, which corresponds to the motivation to avoid failures. But the number of respondents among girls, who obtained «14» points and more, made up about 50% as well.

**Table 1.** Distribution of the respondents' answers

Total points obtained	Percent distribution of respondents' answers to the second block of questions (boys)	Percent distribution of respondents' answers to the second block of questions (girls)	Percent distribution of respondents' answers to the third block of questions (boys)	Percent distribution of respondents' answers to the third block of questions (girls)
0	2,7%	3,0%	-	-
1	3,2%	7,5%	-	-
2	4,9%	13,4%	-	-
3	12,4%	18,4%	-	1,5%
4	17,8%	21,9%	-	0,5%
5	24,9%	19,9%	1,6%	4,5%
6	10,3%	8,0%	0,5%	1,5%
7	14,1%	4,5%	3,8%	4,0%
8	9,2%	3,5%	3,8%	2,5%
9	-	-	4,3%	4,5%
10	-	-	3,8%	4,0%
11	-	-	8,6%	5,0%
12	-	-	7,0%	10,4%
13	-	-	16,2%	11,9%
14	-	-	11,9%	14,4%
15	-	-	11,4%	6,5%
16	-	-	15,7%	10,0%
17	-	-	8,6%	10,0%
18	-	-	2,7%	8,0%
19	-	-	-	1,0%
20	-	-	-	-

The correlation analysis between the respondents' answers to the second block of questions and their achievement motivation determined the positive

relation between them. For boys this index made up 0.27 (at  $n=907 - P_{0,01}=0.092$ ), and for girls 0.28 (at  $n=907 - P_{0,01}=0.090$ ). Such value of correlation coefficient confirms that with the probability ratio 99% these indices are interdependent.

In addition, we carried out the comparative analysis of the polar groups according to Student's t-test and Fisher's F-ratio test. The comparison of answers to the second block of questions in two groups of boys (50 boys in each) was carried out. Group 1 included boys with motivation to avoid failures, and group 2 – with motivation to achieve success. The obtained results indicate that the average index of answers to the second block of questions in group 1 is definitely lower both according to Student's t-test and to Fisher's F-ratio test. In group 1 this index amounted to  $3.62 \pm 0.50$  points, and in group 2 –  $5.43 \pm 0.33$  points.

In a similar way the comparative analysis of answers among girls was carried out. Group 1 (with motivation to avoid failures) included 90 girls and, consequently, group 2 (with motivation to achieve success) also included 90 girls. The average value of answers to the second block of questions in group 1 amounted to  $2.82 \pm 0.32$  points, and in group 2 –  $4.49 \pm 0.27$  points. The comparative analysis of the above-mentioned indices confirms the perceptible difference both according to Student's t-test and to Fisher's F-ratio test.

The resulting data are similar to the research findings by A.A. Gorelov & E.V. Gavrishova [3]. In their research the interrelation between the motion activity and the achievement motivation is being confirmed. Besides, a number of recommendations are presented, which indicate that for the students with motivation to achieve success it is reasonable to provide more free time for independent work within the educational process in the discipline «Physical Education». And for the students with motivation to avoid failures, on the contrary, it is recommended increasing the density of motion activity at the lessons, partially using the authoritarian style of teaching and carefully involving such students into passing standards and participating in competitions.

It should be also pointed out that no correlation relationships between the athletic disciplines, preferred by the respondents, and their type of achievement motivation were determined.

## CONCLUSIONS

The motivation for avoiding failures was diagnosed in 5% male students and 10% female students. A direct correlation between achievement motivation and the attitude of schoolchildren and students towards independent sports activities and passing control standards has been revealed. There are no differences in the correlation between the relationship between achievement motivation and

attitudes toward independent sports by gender. Schoolchildren and students with motivation to achieve regular self-exercise. Schoolchildren and students with a pronounced motivation for avoiding failures prefer a passive way of life. They do not want to pass standards on the discipline "Physical Education" and do not go in for sports on their own.

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## КАКО МОТИВАЦИЈА ЗА ПОСТИГНУЋЕ УТИЧЕ НА ОДНОС УЧЕНИКА И СТУДЕНАТА ПРЕМА САМОСТАЛНОМ БАВЉЕЊУ СПОРТСКОМ АКТИВНОШЋУ

### САЖЕТАК

Циљ: одредити узајамну везу између мотивације за постигнућем и односа ученика 11-17 година и студената 18-21 године према самосталном бављењу спортом и остварењем контролних норматива у предмету „Физичка култура“. Материјал: истраживано је 1576 ученика (780 дечака и 796 девојчица) општеобразовних школа Белгорода, Старог Оскола, Строитеља и Шебекина (градови белгородске области, Русија) и 246 студената (127 мушких и 119 женских) Белгородског државног технолошког универзитета В.Г. Шухов (Белгород, Русија).

Упитник је био састављен из три групе питања: прва група – питања усмерена на одређивање узраста, пола, места школовања респондента; друга група – 8 питања која омогућавају да се процени однос респондента према самосталном бављењу физкултурно-спортском делатношћу и тежњу да се задовоље стандарди предмета „Физичка култура“; трећа група – тест од 20 питања чији је аутор А. А. Реан, за оцену мотивације према остварењу успеха и избегавању неуспеха.

Резултати: Мотивација за избегавање неуспеха је исказана код 5% студената и 10% студенткиња. Исказана је директна корелација између мотивације за постигнућем и односом ученика и студената према самосталном бављењу спортском делатношћу и остварењу контролних норматива. Закључак: нема разлике у односу између мотивације за остварењем резултата и односа према самосталном бављењу спортом у односу на пол. Ученици и студенти са мотивацијом редовно изводе физичко вежбање. Ученици и студенти са јасно израженом мотивацијом за избегавање неуспеха су склонији ка пасивном начину живота. Они не желе да остваре нормативе предмета „Физичка култура“ и не баве се спортом самостално.

**Кључне речи:** мотивација за постигнућем, ученици, студенти, спорт

## КАК МОТИВАЦИЯ ДОСТИЖЕНИЯ ВЛИЯЕТ НА ОТНОШЕНИЕ ШКОЛЬНИКОВ И СТУДЕНТОВ К САМОСТОЯТЕЛЬНОЙ СПОРТИВНОЙ ДЕЯТЕЛЬНОСТИ

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### АННОТАЦИЯ

Цель: определить взаимосвязь между мотивацией достижения и отношением школьников 11-17 лет и студентов 18-21 лет к самостоятельным занятиям видами спорта и сдачей контрольных нормативов по дисциплине "Физическая культура". Материал: обследовано 1576 школьников (мальчики  $n = 780$  и девочки  $n = 796$ ) общеобразовательных школ Белгорода, Старого Оскола, Строителя и Шебекино (города Белгородской области, Российская Федерация) и 246 студентов (юноши  $n = 127$  и девушки  $n = 119$ ) Белгородского государственного технологического университета им. В. Г. Шухова (Белгород, Российская Федерация).

Анкета состояла из трех блоков вопросов: 1-й блок вопросов - вопросы, направленные на определение возраста, пола, места учебы респондента; 2-й блок вопросов – 8 вопросов, позволяющих оценить отношение респондента к самостоятельной физкультурно-спортивной деятельности и стремление выполнять требования стандарта по дисциплине "Физическая культура"; 3-й блок вопросов-это тест из 20 вопросов, разработанных А. А. Реан, для оценки мотивации к достижению успеха и избеганию неудач.

Результаты: мотивация к избеганию неудач выявлена у 5% студентов и 10% студенток. Выявлена прямая корреляция между мотивацией достижения и отношением школьников и студентов к самостоятельной спортивной деятельности и сдаче контрольных нормативов. Выводы: нет различий в соотношении между мотивацией достижения результатов и отношением к самостоятельным занятиям спортом по признаку пола. Школьники и студенты с мотивацией достижения регулярно выполняют физические упражнения. Школьники и студенты с ярко выраженной мотивацией избегания неудач предпочитают пассивный образ жизни. Они не хотят сдавать нормативы по дисциплине "Физическая культура" и не занимаются спортом самостоятельно.

**Ключевые слова:** мотивация достижения, школьники, студенты, спорт

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