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## **ANXIETY PREVENTION IN PRIMARY SCHOOL CHILDREN, WHO PLAY SOCCER**

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**Key words:** primary school children, soccer, anxiety, motivation.

**Annotation.** The purpose of this study is to identify soccer's impact on the state of anxiety and to improve the motivation level in order to reduce anxiety in children of primary school age. The experiment was carried out in two stages. At the first stage, soccer players and non-soccer players were compared for the presence of their anxiety level's manifestation. The second stage included comparing data of two groups of soccer players, in one of which the anxiety level was reduced by increasing motivation. Results of the study indicate the fact that soccer sessions have a positive effect on the anxiety level's decrease. The suggested method, direct application of conversations on patriotic topics and psychotechnical games contribute to the significant anxiety decrease in children of primary school age.

**Introduction.** In primary school age, games with achieving the known result and identifying the winner (sports games, soccer) become more and more significant. Games, which are played with pleasure by the adults, are of great interest for children. The game allows them to master high social motives of behavior, impacts the development of motor abilities, has a positive effect on the development of practical mind, improves children's health, develops courage, assertiveness, motivation and other useful personal qualities [3, 4].

Thus, the game contributes to overcoming feelings of anxiety and also strengthens self-confidence.

The purpose of this study is to identify soccer's impact on the increase of motivation level, on the decrease of the state of anxiety in children of primary school age.

**Methods and organization.** The pedagogical experiment included two stages. It was carried out on the base of sports school in Irkutsk and secondary education school.

At the first stage, the group of pupils, who play soccer (GS), and the group of pupils, who do not play soccer (GN), participated in the study. The Phillips test was

carried out to estimate the level of school anxiety and to estimate the effect of soccer classes on the anxiety level's decrease.

On the second stage, two groups of 9-10 years old pupils, who play sports (the experimental (EG) and control (CG) groups), participated in the study. For the EG topical conversations were carried out for approximately 15 minutes before every class, without taking up training time, in a separate room located outside the gym, using the suggested method, on the following directions:

- patriotic topics. Video footage about famous soviet soccer players and players of later time periods were shown. The information was also given about athletes of other sports, their fates, how they succeeded and accomplished feats, and about heroes of our homeland;

- conversations, which form positive personal qualities of schoolchildren: politeness, responsibility, benevolence, sociability, respect and acceptance of values of the family and society;

- conversations, aimed at forming a positive microclimate in the group. Psychotechnical games, including dozens of exercises, which help pupils to develop imagination, trust themselves and their sensations, feel their partner and interact with other people, concentrate attention and increase the self-regulation level (N.V. Tszen, Yu.V. Pakhomov, 1999), were applied. The Phillips test for estimating the school anxiety level and the test, developed by N.G. Luskanova, for estimating the level of school motivation, were conducted.

**Results and discussion.** School anxiety is the term, which includes different aspects of persistent emotional problems in school. It is expressed in worrying, increased discomfort considering studying situations in class, anticipating bad attitude to yourself, negative assessment from teachers, peers, lack of confidence in the correctness of your behavior [2].

It was revealed on the first stage, that the group of soccer players (GS) had a decreased anxiety level – 40,92%, at the same time, the group of schoolchildren, who do not play sports (GN) has the increased anxiety level – 54,87% (P<0,05) (Table 1).

Table 1

Average anxiety indicator in groups of soccer players and non-soccer players

GS	GN	t	P
40,92±4,96	54,87±1,94	2,62	p<0,05

At the second stage, in order to decrease the anxiety level in children, who play soccer, the method of increasing the motivation level was used. A motivated person easily achieves intellectual, athletic and creative success. If a child understands, that they are capable of doing a certain task, then the degree of feeling

success becomes higher and the child becomes less anxious. Thus, motivation to learn becomes more significant and helps the pupil to perform the task with persistence and assertiveness, to feel more confident in achieving set goals.

As a result of the study on the school motivation test, it was revealed that pupils of the EG, who were training according to the suggested method, were more motivated at the end of the pedagogical experiment and had positive dynamics ( $p < 0,05$ ) (Table 2).

Table 2

Average results of changes in motivation in the EG and CG

	EG	CG	t	P
Before the experiment	17,5±1,06	18,57±1,22	0,66	$p > 0,05$
After the experiment	22,14±0,55	20,7±0,74	2,25	$p < 0,05$

Test results were divided into five levels. The first one is the highest level of motivation, the fifth – the lowest level. At the beginning of the experiment, 28,6% of pupils of both the CG and EG had the fourth level – low school motivation, 7,2% of pupils in the CG and 42,9% in the EG had the third level – positive motivation, 64,3% of pupils in the CG and 28,6% in the EG had “good” school motivation. At the end of the experiment, 42,9% of pupils of the CG and 14,3% in the EG had the third level; 85,7% of pupils in the EG and 57,2% in the CG had the second level and “good” motivation (Table 3).

Within the structure of good motivation in children of the EG, during the study, a number of pupils with “good” motivation increased almost three times: at the beginning of the experiment it was 28,6%, at the end of the experiment it was increased up to 85,7% (Table 3).

Table 3

Identifying motivation abilities of primary school children of CG and EG (in points)

Name	EG – beginning of the experiment	EG – end of the experiment	CG – beginning of the experiment	CG – end of the experiment
High	-	-	-	-
Good	28,6	85,7	64,3	57,1
Positive	42,9	14,3	7,2	42,9
Low	28,6	-	28,6	-
Negative	-	-	-	-

The obtained results show that method for increasing motivation to engage in sports classes also had an impact on changes in school motivation. At the beginning of the experiment, the CG and EG had a lowered level of anxiety ( $< 50\%$ ). In the EG this indicator was 40,92%, in the CG – 45,81% ( $p > 0,05$ ). As it was mentioned

before, children, who play soccer, are less anxious than non-soccer players (Fig. 1).

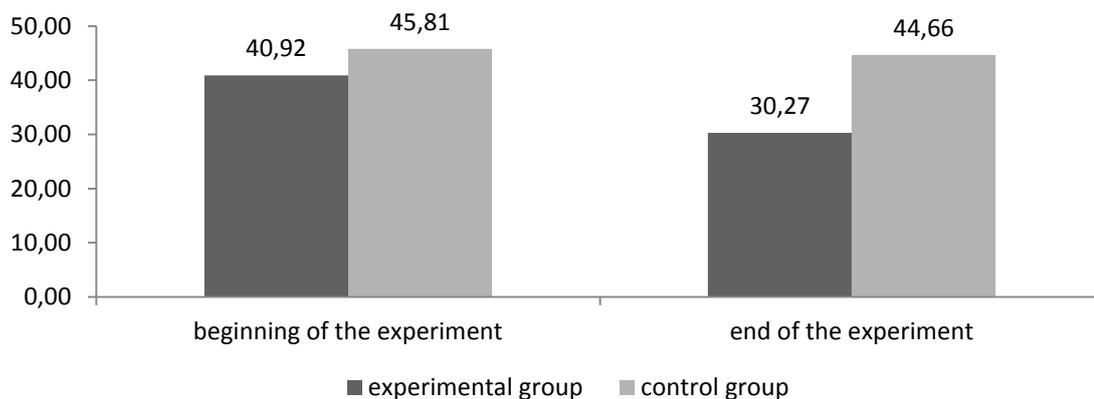


Fig. 1. Anxiety indicators according to the test at the beginning and the end of the experiment between EG and CG, %

According to this test, the less is the revealed percentage of disparities, the less anxious children are. At the end of the experiment, indicators changed significantly ( $p < 0,05$ ): in the EG – 30,27%, in the CG – 44,66%, in the EG anxiety was decreased by 26%.

Table 4

School anxiety indicator in EG and CG according to stages of the study (factor contents, %)

	General anxiety in school	Experiencing social stress	Frustration of the need for success	Fear of self-expression	Fear of knowledge check situation	Fear of not meeting expectations of others	Low physiological resistance to stress	Problems and fears in relationships with a teacher
EG before	42,19±7,28	37,67±5,12	35,19±3,9	52,37±7,22	58,32±7,86	58,57±7,37	35,71±11,12	43,75±4,66
CG before	48,86±5,47	37,14±4	37,97±4,15	56,61±7,75	62,54±5,87	63,57±6,67	31,45±7,75	46±5,07
t	0,73	0,08	0,49	0,41	0,43	0,5	0,32	0,33
	$p > 0,05$	$p > 0,05$	$p > 0,05$	$p > 0,05$	$p > 0,05$	$p > 0,05$	$p > 0,05$	$p > 0,05$
EG after	25,0±4,84	33,86±3,1	23,09±3,02	38,52±6,16	36,83±7,07	20,6±5,63	14,34±5,06	29,04±4,68
CG after	44,24±7,85	46,75±4,92	38,84±5,81	50±6,54	61,19±7,56	54,29±7,97	22,86±6,46	45,54±6,02
t	2,09	2,22	2,4	1,28	2,35	2,63	1,04	2,17
	$P < 0,05$	$P < 0,05$	$P < 0,05$	$p > 0,05$	$P < 0,05$	$P < 0,05$	$p > 0,05$	$P < 0,05$

According to the study's structure, the conducted test is divided into 8 factors. According to three of them, in EG and CG the average value had an increased

anxiety, there was no significant difference between groups ( $p>0,05$ ). At the end of the experiment, there was a significant difference in six factors ( $p>0,05$ ). The anxiety level was decreased in the EG. At the end of the experiment, the decreased level of anxiety was revealed in all factors (Table 4).

At the same time, the anxiety level remained the same in the CG. In some cases, it has become slightly higher. This fact allows considering the fact that our method had a positive effect on decrease of anxiety. We have received results, which give us the right to state the positive effect of our method, aimed at the decrease in the anxiety level in primary school age.

At the end of the experiment, following results were revealed: testing of children in the EG and CG showed how soccer classes and the suggested method impact positively on the anxiety level decrease. Therefore, children are better at learning, less distracted by extraneous stimuli and do not experience discomfort when reaching a qualifying standard and when interacting with the trainer and other team members [1]. Such child is able to learn faster new motor actions, and the learning process would be more comfortable to them and bring the desired result.

**Conclusion.** According to results of the study, it was revealed at the first stage of the study that according to the state of school anxiety, pupils, who play soccer, are less anxious in everyday school life than non-soccer players.

At the second stage of this study it was revealed that soccer players of the EG have motivation of attending classes increased by 26,5%. Pupils become more confident, gain moral and physical satisfaction from soccer classes. Moreover, the number of pupils with “good” motivation increased three times, motivation to learn increased by 30%, positive attitude towards the teacher also increased by 14%. By increasing motivation in the EG, we decreased the anxiety level by 26%, which became 30,27%, in the CG it became 44,66%, which means that it was not changed. In six factors out of eight, the anxiety level was decreased in the EG in comparison with the CG ( $p<0,05$ ). It indicates a positive impact of the suggested information in the method of soccer players training. Thus, when achieving high motivation, the anxiety level decreases in pupils, and the less anxious pupil perceives better the process of learning different motor actions and skills in young age.

### References

1. Druzhinin V.N. Children's mental health / V.N. Druzhinin // M.: Tv. Centre. – 2012. – 164 p.
2. Miklyaeva A.V. Anxiety in school: diagnostics, prevention and correction/ A.V. Miklyaeva, P.V. Rumyantseva // Saint Petersburg: Speech. – 2004. – 248 p.
3. Nemov R.S. Psychology of education: textbook for students of higher education establishments in two books. Book 2 / R.S. Nemov // Moscow: Enlightenment: Vldos. –1994. – 496 p.

4. Khil'ko M.E. Development psychology: short lecture course / M.E. Khil'ko, M.S. Tkacheva // Moscow: Urait. – 2012. – 194 p.

#### **Spisok literatury**

1. Druzhinin V.N. Psikhicheskoe zdorov'e detej / V.N. Druzhinin // M.: Tv. TSentr. – 2012. – 164 s.

2. Miklyaeva A.V. Shkol'naya trevozhnost': diagnostika, profilaktika, korrektsiya / A.V. Miklyaeva, P.V. Rumyantseva // Sankt-Peterburg: Rech'. – 2004. – 248 s.

3. Nemov R.S. Psikhologiya obrazovaniya: uchebnik dlya studentov vyssh. ucheb. zavedenij. V 2 kn. Kn 2/ R.S. Nemov // Moskva: Prosveshchenie: Vlados. – 1994. – 496 s.

4. Khil'ko M.E. Vozrastnaya psikhologiya: kratkij kurs lektsij / M.E. Khil'ko, M.S. Tkacheva // Moskva: Yurajt. – 2012. – 194 s.

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