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Influence of inner speech to emotional stress in athletes

At the end of each sport season and after each next competition the expertise of athletes, general degree of training and competitiveness increase jointly with the number of criteria for comparing their performances. This progress sets a high bar for athletes, their coaches and sport psychologists demanding development of new physical and mental exercises. Training only muscles is not enough for success of an athlete; nowadays complex measures are required to ensure stress resistance of a sportsman [3, page 6] in routine exercises and during competitions.

Timeliness: Main problem of modern sports, on my opinion, is inability of a coach to ensure an athlete's actual level of mental and emotional conditions, i.e. to teach athletes how to get themselves into shape of combat poise and how to unlock their potential when required. Competition is perceived by any athlete as a hazardous situation, and in physical aspect hazard is even less perceived, compared to mental one.

Competitions stipulate over-motivation [4, page 112]. First of all and most of all, athletes are concerned for their results. On the second place are level and prestige of competitions, which are factors of great

importance. Third matter is activity itself, performance. The fourth is reaction of surrounding people, other teams, teammates of certain athlete, conclusion of the coach, and the last mentioned is the most valuable. Sometimes athletes who failed in the most prestigious competitions (European and World) after calming words of their coach and feeling coaches' support overcome dissatisfactory results more easily, and even confess that they have feelings like if they had won. Situation could be vice versa, when winner of international competitions bumps up against negative conclusion of the coach. In this case stress does not disappear, and could even increase. Athletes need to know how to correct level of their own emotional stress.

Aim: to define the peculiarities of inner speech for athlete mental condition regulation.

Object: mental regulation in sports.

Subjects: inner speech as a factor for regulating an athlete's mental conditions.

Work provision: inner speech could be an important factor for an athlete's mental conditions regulation and differs depending on athlete's sex and qualification.

Analyzed works by G.D. Babushkin, E. Jackobsone, Y.F. Nazarenko. A.M. Ryabkov, V.N. Smolentsev, I.G. Shutls etc. show the significance of the matter of mental regulation [2, page 67], explained by the following facts:

1. Reasonable share of athletes of different qualification are unable to mobilize themselves in conditions of general activities of competitions.
2. The higher is the athletes' level of mental regulation, the more efficient is competitive activities thereof.
3. Athletes' behavior during competitions and the character of their pre-start and start conditions are defined by the level of development of their mental regulation skills.

Modern psychology considers two aspects of mental regulation:

1. Ability of an athlete to manage his/her own thoughts, feelings, actions;
2. An athlete's activities in use of mental regulation powers at training, competitions, which promote optimal performance of own physical and technical abilities. [5, page 78].

Thus, analysis of the matter of mental regulation in sports allows defining separate directions of developing mental self-regulation skills,

principles, and peculiarities of self-commands used in sports.

Selection: 41 athletes, members of combined team of Ukraine on Taekwon-Do ITF, in the age of 16 – 25 years old, 19 female and 22 male.

Qualification: candidates in masters of sports – 7 make athletes, masters of sports – 14 female and 10 male, masters of sports of international class – 5 female and 6 male.

The research applies the following methods:

- Emotional stress method by Imidadze
- Author's survey "Self-commands"

Aim of the research was to study the influence of inner speech on the level of an athlete's emotional stress. In this connection the author performed several surveys: during training process, before the competitions, during the competitions.

Analyses of the received data:

1. First of all, the selection should be divided into female and male athletes.
2. Average emotional stress indexes of female and male athletes than should be compared.

Indexes of emotional stress of female and male athletes from our selection are described by the tables (Table 1.1, Table 1.2)

The Table 1.1 demonstrates:

First: index of emotional stress of female athletes during the trainings makes = 12.26 and the same index for male athletes is only 11.27, so female athletes have higher level of emotional stress.

The second: indexes of emotional stress before the competitions are 17.95 for female and 13.91 for male athletes; female thus have higher index of emotions stress, they show higher responsibility for competitions and possible results.

Third, indexes of emotional stress for female and male athletes during an event, 11.74 and 11.77 respectively, are almost equal.

Table 1.1.

Average emotional stress indexes of female athletes

Sex	Subject of study	EStraining	EScompetitions	ESafter
Total female	Mean	12.26	17.95	11.74
	N	19	19	19
	Std. Deviation	4.605	3.456	3.603

Table 1.2.
Average emotional stress indexes of male athletes

Sex	Subject of study	EStraining	EScompetitions	ESafter
Total	Mean	11.27	13.91	11.77
male	N	22	22	22
	Std. Deviation	4.267	4.185	3.146

Table 1.3 and Chart 1.1 demonstrate that female athletes before competition more often use self-command “control your mind”, 10 coincidences for 19 women, and male athletes prefer self-command “beat”. Jointly female and male athletes more often use self-command “control your mind”, 16 coincidences for 41 cases.

Such often use of self-command “control your mind” could be explained as follows: in many cases of international competitions even adults athletes with rich experience and perfect physical conditions could lose their head having just entered the competition place. They use self-command “control your mind” to support themselves and tell it aloud to support their teammates, and the coach does the same to control the team.

Table 1.3.
Comparison of the quantity of self-commands used by female and male athletes

Sex * Self-commands Crosstabulation				
Sex	Self-commands			Total
	beat	control your mind	easy	
Female	3	10	6	19
Male	10	6	6	22
Total	13	16	12	41

Tables of coherence we used to see the distribution of self-commands between female and male athletes, and to reveal possible unique cases.

We have chosen all the selected persons and calculated the quality of concisions of their self-commands.

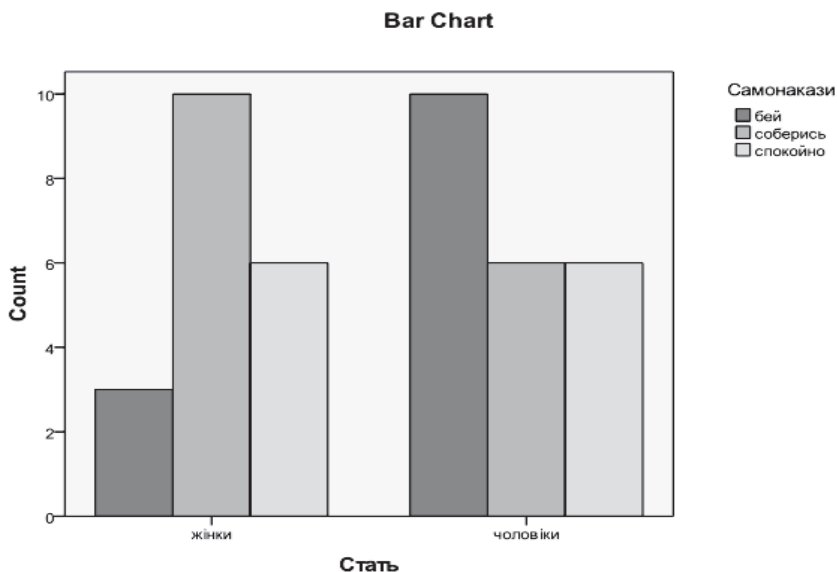


Chart 1.1 Comparison of self-commands used by female and male athletes

Table 1.4.

Comparison of women and men is depending on the level of emotional stress before the competitions.

Sex * Self-commands Crosstabulation				
		Level EC		Total
		Middle Level EC	High Level EC	
Sex	Female	5	14	19
	Male	14	8	22
Total		19	22	41

Table 1.4 shows that the majority of women have high ES level (aged from 16 to 25) in 14 cases out of 19. Men, on contrary, mostly, 14 out of 22, have middle index of ES (under 15).

This is due to more responsible relation of female athletes to the competitions and possible result. This is directly connected with the coach, because female and male athletes are trained by different coaches. The second is less impulsive and demanding, thus stress of female team is higher than the same of male team.

For more reliable result Pearson's index has been used Table 1.5.

Table 1.5.

**«Chi-Square Tests» Pearson index "Chi-Square" = 5,711a
Level of significance Asymp. Sig. (2-sided) = 0,01.**

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5.711a	1	.017		
Continuity Correctionb	4.308	1	.038		
Likelihood Ratio	5.876	1	.015		
Fisher's Exact Test				.028	.018
Linear-by-Linear Association	5.571	1	.018		
N of Valid Cases	41				

Conclusions:

1. Variety of functions of inner speech, conditions stimulating occurrence thereof and, especially, defining the importance of self-commands for athletes' arbitrary actions raise the question of possibility and necessity of special development and mental training of inner speech in athletes, especially self-commands, which should promote conscious study of arbitrary actions and successful control thereof in process of sports activities [1, page 61].

2. Researches show that inner speech of athletes is aimed at their activities in the whole range thereof and has different functions [1, page 68], among them: function of synthesis and analysis, connected with athlete's orientation in manner of his / her own motions and circumstances; function of generalization, connected with securing the information collected in process of study technique and defining key moments of doing exercises; it also has functions of regulation and estimation connected with doing motions. It has been discovered, that regulating function of inner speech is expressed in form of words called self-commands, containing the results of certain circumstances consideration and athlete's own command to perform the actions required.
3. Having analyzed the collected data we have made an interesting conclusion: female athletes have higher level of emotional stress before competitions and more often use self-command "control your mind" to mobilize themselves and to increase their ES to the optimal level and finally win better places (the majority of first and price places are won by female team compared to male one).
4. Male athletes before competitions mostly have middle ES levels and use self-commands "beat" and "control your mind". Interesting that male athletes with higher ES level more often use self-command "beat", and in 30% of cases – "easy". May be, due to high ES level they are unable to perform their tasks completely and cool themselves in such manner. High ES level is odd for these 30% of male athletes and they try to decrease it. Those with average ES indexes use self-commands "beat" and "control your mind" to concentrate upon the tasks of current moment and to keep the ES level on this average level, close to those typical for period of trainings and post-competition periods.
5. The research has not revealed any significant differences connected with qualification, but it could be due to insufficient presence of representatives of each qualification in our selection.

Perspectives of the research could be as follows: to define the peculiarities of self-commands depending on qualification; to consider special program of research devoted to development and mental training of different functions of inner speech and athletes skills in application thereof; the possibility of using the results by sports psychologists for better preparation of athletes to competitions.

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Abstracts

ANNA GRYSCHENKO. **Wpływ mowy wewnętrznej na stres emocjonalny u sportowców.** W artykule zaznaczono, że mowa wewnętrzna ma swoje własne cechy w zależności od płci i kwalifikacji. W artykule przedstawiono wewnętrzną mowę jako czynnik regulacji stanu psychicznego sportowca; opisano wyniki badań przeprowadzonych z reprezentacją Ukrainy Taekwon-do podczas treningu, przed i po nim. Wyniki badań wskazują, że funkcja regulująca mowy wewnętrznej przejawia się w postaci słów- samonakazów, które różnią się w zależności od płci. Autorka wnioskuje, że samonakazy sprzyjają świadomemu opanowaniu arbitralnymi działaniami i skutecznemu zarządzaniu nimi w działalności sportowej.

Słowa kluczowe: psychoregulacja, samoregulacji, mowa wewnętrzna, samonakazy, stres emocjonalny.

ГАННА ГРИЩЕНКО. **Вплив внутрішнього мовлення на емоційний стрес у спортсменів.** Внутрішня мова може виступати вагомим фактором у регуляції психічного стану спортсмена і має свої особливості залежно від статі та кваліфікації. Стаття присвячена опису внутрішньої мови як чинника регуляції психічного стану спортсмена. Автор спирається на дані, отримані в результаті дослідження, проведеного зі збірною України з Таеквон-До, на тренуванні, перед і після змагань. Аналізуючи отримані дані, Г. А. Грищенко показує, що регулююча функція внутрішнього мовлення проявляється у формі слів-самонаказів, а також виявлені особливості у використанні самонаказів чоловіками і жінками. Г. А. Грищенко вважає, що спеціальний розвиток і розумове тренування внутрішньої мови у спортсменів, особливо самонаказів, сприяє свідомому оволодінню довільними діями і успішному управлінню ними в процесі спортивної діяльності.

Ключові слова: психорегуляція, саморегуляція, внутрішня мова, самонакази, емоційний стрес.

АННА ГРИЩЕНКО. **Влияние внутренней речи на эмоциональный стресс у спортсменов.** Внутренняя речь может выступать весомым фактором в регуляции психического состояния спортсмена и имеет свои особенности в зависимости от пола и квалификации. Статья посвящена описанию внутренней речи как фактора регуляции психического состояния спортсмена. Автор

опирается на данные, полученные в результате исследования, проведенного со сборной Украины по Таэквон-До, на тренировке, перед и после соревнований. Анализируя полученные данные, Г. А. Грищенко показывает, что регулирующая функция внутренней речи проявляется в форме слов-самоприказов, а так же выявлены особенности в использовании самоприказов мужчинами и женщинами. Г. А. Грищенко полагает, что специальное развитие и умственная тренировка внутренней речи у спортсменов, особенно самоприказов, способствует сознательному овладению произвольными действиями и успешному управлению ими в процессе спортивной деятельности.

Ключевые слова: психорегуляция, саморегуляция, внутренняя речь, самоприказы, эмоциональный стресс.

GANNA GRISHCHENKO. Influence of inner speech to emotional stress in athletes. Inner speech may be a significant factor in the regulation of mental state of an athlete and has the features depending on gender and qualifications. The article describes the internal language as a factor, regulating mental state of an athlete. The author draws on data from a study conducted with the national team of Ukraine Taekwon-Do, in training before event and after the event. Analyzing the data, G.A. Grishchenko shows that the regulatory function of inner speech is manifested in the form of words self-command also there are differences in the use of words self-command men and women. G.A. Grishchenko believes that special training and mental development of inner speech in athletes, especially words self-command, promotes conscious mastery of arbitrary actions and successful management during sports activities.

Key words: psihoregulyatsii, self-regulation, inner speech, samonakazy, emotional stress.