

# Motivation to achievement and overcoming stress situations by student-athletes

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## Abstract

**Objective of the study** was to assess the relationship between achievement motivation and personal factors that determine the overcoming of stress among students with mass sports categories.

**Methods and structure of the study.** The experiment involved 25 girls and 32 boys, 1st year students of the Faculty of Physical Culture and Sports of the Pedagogical University, with mass sports categories. Achievement motivation was assessed using the methodology "Motivation for success and fear of failure" (MSF) by A.A. Rean, regulatory-personal properties were determined according to Yu.V. Shcherbatykh and the technique of "Strategy of coping with stressful situations" (SACS) Hobfall S.

**Results and conclusions.** In the group of athletes, higher rates of stress sensitivity were recorded compared to boys. It has been established that all subjects, characterized by a high level of motivation to achieve success, simultaneously have a higher level of stress resistance. In the group of young men, a connection between achievement motivation and preference for the strategy of assertive actions was revealed. The connection between the motivation to achieve success and the preference for the strategy of cautious actions and the avoidance of the strategy of impulsive actions in sportswomen is considered by us as a manifestation of their desire to control their individual personality traits, which reduce stress resistance. In both groups of athletes, an inhibitory effect of the motivation to achieve success on the frequency of the strategy of impulsive actions was noted.

Helping athletes develop effective coping strategies to control stress sensitivity and resist stress creates additional opportunities to increase their motivation and athletic performance.

**Keywords:** success motivation, stress resistance, strategies for overcoming stressful situations, students, athletes.

**Introduction.** The daily life of student-athletes is full of various stressful situations associated with both educational activities and sports [3]. In various studies of recent years, in particular in the work of O.A. Svilina, it is noted that one of the important factors that allow athletes to cope with stress is a high level of achievement motivation [5]. On the one hand, the desire for high results, achievements prompts the need to systematically overcome difficulties, prepare for competitions, which forms certain regulatory personal qualities of athletes, and on the other hand, leads to high psycho-emotional and physical stress, which manifests itself in a decrease in performance in sports, an increase in occupational injuries and illnesses [1, 2]. Under these conditions, the optimal balance between

the desire for success and the ability to withstand stress becomes especially relevant. In this study, we proceed from the assumption that the high motivation of sports activities not only contributes to the development of constructive coping behavior, but also allows us to develop such coping strategies that allow compensating for some individual-personal characteristics of an athlete that impede sports achievements. Understanding these factors will allow athletes to increase the effectiveness of sports training and the effectiveness of competitive activities.

**Objective of the study** was to assess the relationship between achievement motivation and personal factors that determine the overcoming of stress in athletes and female athletes: stress tolerance and coping

strategies.

**Methods and structure of the study.** The experiment involved 25 girls and 32 boys, students of the Faculty of Physical Culture and Sports of the Pedagogical University, with mass categories. The average age of the subjects was 18 years. Achievement motivation (AM) was assessed using the methodology “Motivation for success and fear of failure” (MSF) by A.A. Reana [4]. Questionnaire of stress resistance Yu.V. Shcherbatykh was used to determine an increased reaction to circumstances that a person cannot influence (RC), a tendency to unnecessarily complicate everything (TUC), a predisposition to psychosomatic illnesses (PPI); destructive (DC) and constructive (CC) ways of coping with stress [6]. The basic indicator of stress resistance is considered as the inverse of the general indicator of stress sensitivity (GISS). The indicator of dynamic stress sensitivity (DSS) is defined as the sum of the indicators on the first four scales, from which the value of the CC indicator is subtracted. Using the Hobfall SACS methodology (the Russian version of which was proposed by N.E. Vodopyanova, E.S. Starchenkova), strategies for coping with stressful situations were studied: cautious actions (CA), entering into social contact (ESC), seeking social support (SSS), antisocial actions (ASA), aggressive actions (AgrA), impulsive actions (ImpA), manipulative actions (MA), assertive actions (AssertA) and avoidance (Avoid) [1]. The significance of differences between the study groups was assessed using the Mann–Whitney U test. Spearman’s correlation coefficient  $r_s$  was used to determine the relationship between motivation indicators and regulatory personality traits.

**Results of the study and their discussion.** The results of the MSF methodology showed that 100% of girls and 96.3% of boys found a clear orientation towards success: the average value of the achievement motivation indicator in the group of boys is  $16.34 \pm 1.74$  and  $15.76 \pm 0.79$  in the group of girls, without significant differences between the groups ( $U_{emp}=327.5$ ).

The results of diagnostics of stress resistance are presented in the table.

The values of indicators of stress sensitivity in the groups of athletes are in the lower range of average values, with the exception of the low value of the indi-

cator of the tendency to complicate everything unnecessarily in the group of young men. It should be noted that in the group of girls, the indicators of stress sensitivity are significantly higher than the corresponding indicators in the group of boys.

The results of the correlation analysis of indicators of motivation and stress sensitivity are presented in Figures 1 and 2.

In both groups of athletes, there is a significant negative correlation between the indicator Achievement motivation and the general indicator of stress sensitivity and, therefore, a significant relationship between motivation to achieve success and stress resistance. Let us pay attention to the significant negative correlations between the Achievement Motivation (AM) indicator and the RC indicator in both groups of athletes. Of all three primary indicators of stress sensitivity, the intensity of the reaction to frustration is most determined by psychophysiological characteristics, in particular, emotional sensitivity and, accordingly, is much less amenable to self-control. Thus, a pronounced emotional response to circumstances that cannot be changed makes the greatest contribution to the relationship between stress sensitivity and AM, having a negative impact on the level of the latter.

In both groups of athletes, significant relationships were recorded between the indicator of achievement motivation and the indicators of CC, and in the group of young men - with the indicator of DC. This result indicates that the effect of AM is manifested, apparently, in the ability to develop more adequate strategies for coping behavior, and in young men, in the ability to avoid various destructive ways of coping with stress.

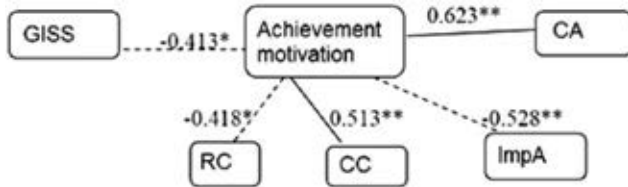
The absence of significant differences in the AM indicator ( $U_{emp}=327.5$ ) in the studied groups suggests that the high level of this motivation in athletes actualizes additional mechanisms to compensate for stress sensitivity.

Correlation analysis of indicators of motivation and coping strategies made it possible to fix a number of rare, but important, from the point of view of this study, relationships. So, in the group of girls, a significant positive correlation was established between the indicator Achievement motivation (AM) and the frequency of using cautious actions (CA), in the group of boys

*Average values of the indicators of the method of diagnosing stress resistance in groups of athletes (significance of U-criterion: \* -  $p \leq 0.05$ ; \*\* -  $p \leq 0.01$ )*

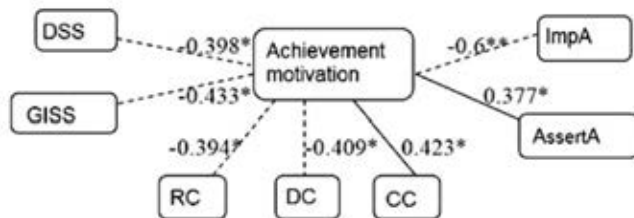
Sportsman	RC	TUC	PPI	DC	CC	DSS	GISS
Youths	18,1**	11,2**	13,5**	16,6	31,0	28,1**	59,1**
Girls	22,3	21,3	19,6	16,8	30,8	48,2	79,9

- a significant positive correlation between MA and the frequency of using the assertive action strategy (AssertA), and in both groups - a significant negative correlation. correlation of the MA indicator and the frequency of using the Impulsive Actions (ImpA) strategy (Figure 1, 2).



**Figure 1.** Correlation galaxy of the analyzed indicators in the group of female athletes (\* – the significance of the correlation at the level of 0.05;

\*\* - the significance of the correlation at the level of 0.01)



**Figure 2.** Correlation galaxy of the analyzed indicators in the group of young men (\* - the significance of the correlation at the level of 0.05;

\*\* - the significance of the correlation at the level of 0.01)

In both groups, as already noted, there is a positive relationship between AM and CC indicators. Pankratova I.A. believes that it is productive coping strategies that affect the motivation of athletes [2]. In our opinion, the established ratios of motivation and coping strategies have ambiguous causal relationships. Thus, a positive correlation of MA and AssertA in the group of young men can be understood as a manifestation of self-confidence and high self-esteem in both indicators. In turn, the positive correlation between the CA strategy and the AM indicator in the group of girls is probably due to the desire of female athletes with a high level of motivation to achieve success to control their more pronounced, compared to boys, stress sensitivity. Significant negative correlations between MA and the strategy of ImpA in both groups can also be considered as a manifestation of the influence of achievement motivation on the processes of coping with stress, requiring from the athlete not an impulsive reaction, but endurance.

**Conclusion.** Thus, if in the group of young men the connection between achievement motivation and the strategy of AssertD can be explained by the simultaneous influence of self-confidence on these indicators, then in the group of girls, apparently, the influence of a high level of AM on the preference of those strategies that allow you to control your own individual personality traits that impede achievement. This result makes it possible to understand the absence of significant differences in AM in the studied groups of athletes.

We believe that the individual-personal characteristics of student-athletes, which determine the desire for achievements and help to increase the effectiveness of productive activities - sports, educational, professional, despite physical and psycho-emotional stress, stress, failures, must be taken into account by coaches and teachers in their sports and educational activities. professional training.

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