

THE LEVEL OF PRE-COMPETITIVE ANXIETY AND SELF-ESTEEM FROM THE ASPECT OF SELECTED ATHLETIC DISCIPLINES

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- csai-2r,
- athletics,
- cognitive anxiety,
- somatic anxiety,
- self-esteem.

Abstract:

The paper investigates the issue of pre-competitive anxiety and self-esteem which level has significant impact on athletes' sport performance. The research was applied on 14 athletes who competed in two athletic disciplines: 60 meters run and long jump. Standardized version of questionnaire CSAI-2R was used for diagnosing pre-competitive anxiety focusing on intensity, frequency and direction of cognitive anxiety, somatic anxiety and self-esteem. Results indicate that athletes experienced in both disciplines, prior to competitions, lower level of intensity and frequency of cognitive and somatic anxiety to compare with the intensity and frequency of self-esteem that was on higher level. Athletes experienced prior to 60 meter run on average higher level of somatic and cognitive intensity level and lower level of self-esteem prior to long jump. Moreover; athletes prior to long jump perceived symptoms of cognitive anxiety and self-esteem as more debilitating and prior to 60 meters run as more facilitative in relation to sport performance.

INTRODUCTION

Increased level of pre-competitive anxiety and the level of stress that result in lowering of self-esteem plays negative role in stress situation experiencing by youth players in sport context. The consequence is also seen in corrupted concentration of player and his ability to react correctly on stimuli in accelerated movement demonstrations [Zusková et al., 2010]. Anxiety is a construct that is one of the most researched variable in sport psychology and that is considered to be the variable which significantly influence sport performance in athletics [Cox, 2007]. Research study [Hanton et al., 2004] showed significant increase of somatic and cognitive anxiety's intensity and frequency in youth athletes especially within time period between two hours and 30 minutes prior to competition. Within the same time period there was decrease of self-esteem's intensity and frequency. Increase of sport performance from the aspect of psychology demands from athletes to be able to recognize as well as to control the level of their pre-competitive anxiety. Great discrepancy between demonstrated performance in training and in competition indicates that athletes have difficulty to reach appropriate level of arousal to sport performance [Butler, 1996]. Regulation of athletes' emotional load is related to evocation of thoughts or behavior; however, it is important what kind of emotions athletes experience, when they experience them and how they interpret them [Richards-Gross, 2000]. Therefore, the regulation of emotional load focused on attempts to evoke, reduce, prolong, or intensify emotional experiencing and recognize behavioral outcomes as well as physiological part of experienced pre-competitive states [Gross, 1999; Gross-Thomson, 2007].

THE MATERIAL AND THE METHODOLOGY

Based on purposive sampling, the research was applied on 14 athletes (6 boys and 8 girls) who competed in sprint discipline - 60 meters run and jumping discipline - long jump. Athletes represent athletic club MŠK Kežmarok 1895 (eastern part of Slovakia). Measures were done during two athletic competitions named "From school desks to athletic stadium" held in Bratislava. We focused on pre-competitive states of athletes, especially anxiety and self-esteem. Athletes were diagnosed 20 minutes prior to start which is appropriate time period when first symptoms of pre-competitive states occur. For diagnosing pre-competitive anxiety French standardized version of CSAI-2R questionnaire was used (Martinent et al., 2010). Questionnaire consists of 16 items that evaluate intensity (from 1-none up to 4-the highest), frequency (from 1-never up to 7-always) and direction (range from -3 -debilitative, 3 -facilitative, 0 – no direction) of cognitive (5 items), somatic anxiety (7 items) and self-esteem (5 items). For calculating the level of intensity, frequency and direction of cognitive, somatic anxiety and self-esteem was used mean from central tendency measures and standard deviation from variability measures.

RESULTS AND DISCUSSION

Within result part, we focus on the analysis of intensity, frequency and direction of somatic, cognitive anxiety in relation to intensity, frequency and direction of athletes` self-esteem in two selected athletic disciplines: 60 meters run and long jump.

✓ *Cognitive anxiety and self-esteem`s difference prior to 60 meters run and log jump:*

Intensity of cognitive anxiety and athletes` self-esteem prior to 60 meters run and long jump: As results indicate (see Figure 1.), differences in average values of cognitive anxiety and self-esteem intensity prior to 60 meters run showed lower level of cognitive anxiety experiencing of intensity ($x = 1.98$; $s = 1.14$) and higher intensity of self-esteem ($x = 2.59$; $s = 1.06$). The difference between the intensity level of cognitive anxiety and self-esteem was 23.55 %. Average values of athletes prior to long jump pointed out on lower level of cognitive anxiety intensity ($x = 1.70$; $s = 0.94$) and higher level of self-esteem intensity ($x = 2.76$; $s = 0.93$). The difference between intensity of cognitive anxiety and intensity of self-esteem was 38.4%. *Athletes prior to 60 meters run showed higher level of cognitive anxiety intensity and lower level of self-esteem as prior to long jump.*

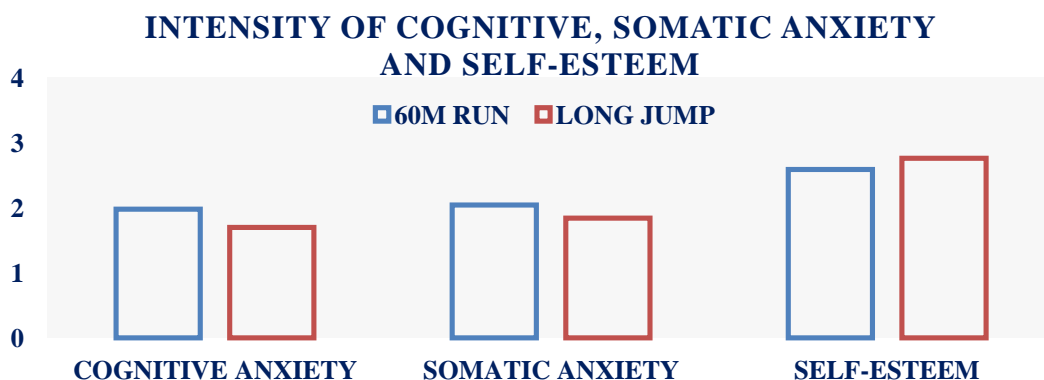


Figure 1. Intensity of cognitive, somatic anxiety and self-esteem prior to 60 meters run and long jump.

Frequency of cognitive anxiety and self-esteem prior to 60 meters run and long jump: As shown in figure (see Figure 2.), average values of athletes prior to 60 meters run indicate lower level of cognitive anxiety frequency ($x = 3.21$; $s = 2.20$) and higher self-esteem frequency ($x = 3.69$; $s = 1.9$). The difference between perception of cognitive anxiety frequency and self-esteem frequency was 13%. Average values indicate lower level of cognitive anxiety frequency ($x = 3.32$; $s = 1.83$) and higher level of self-esteem ($x = 3.63$; $s = 1.74$) in the same group prior to long jump.

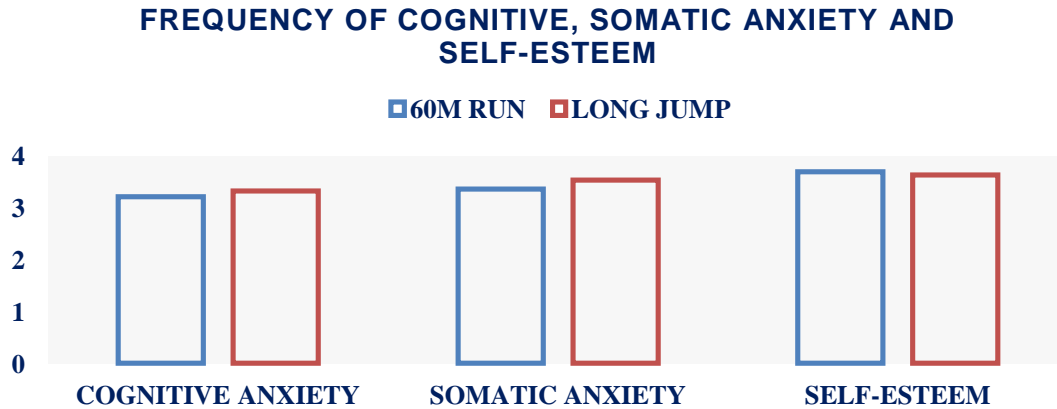


Figure 2. Frequency of cognitive, somatic anxiety and self-esteem prior to 60 meters run and long jump.

The difference was 8.54%. *Athletes before 60 meters run reached lower level of cognitive anxiety frequency and almost at the same level they perceived the level of self-esteem frequency prior to long jump.*

Direction of cognitive anxiety and self-esteem prior to 60 meters run and long jump: results (see Figure 3.) presented hesitancy of athletes prior to 60 meters run in the area of cognitive anxiety direction ($x = 0$; $s = 1.53$) as well as in self-esteem direction ($x = -0.04$; $s = 1.41$). The difference between cognitive anxiety direction and self-esteem direction was 4%. Differences between average values of the same group prior to long jump show higher level of negative perception of cognitive anxiety direction ($x = 0.32$; $s = 1.14$) comparing to perception of self-esteem perception of direction that was also in negative dimension ($x = 0.07$; $s = 1$). The difference between the level of cognitive anxiety direction and self-esteem direction was 18.93%. *Athletes prior to long jump perceived the direction of cognitive anxiety and self-esteem negatively (it means that according to athletes this state could lead to corruption of their sport performance) than prior to 60 meters run.*

✓ **The difference between somatic anxiety and self-esteem prior to 60 meters run and long jump:**

Intensity of somatic anxiety and self-esteem prior to 60 meters run and long jump: Differences of athletes' average values (see Figure 3.) prior to 60 meters run showed on lower level of somatic anxiety perception ($x = 2.04$; $s = 0.84$) and higher level of self-esteem intensity perception ($x = 2.59$; $s = 1.06$). The difference between perception of somatic anxiety intensity and perception of self-esteem intensity was 21.23%. Average values prior to long jump indicated lower perception's level of somatic anxiety intensity ($x = 1.84$; $s = 0.71$) and higher level of self-esteem's perception of intensity ($x = 2.76$; $s = 10.93$). The difference in the level of intensity perception of somatic anxiety and intensity perception of self-esteem was 33.33%. *Athletes prior to 60 meters run perceived higher intensity of somatic anxiety and lower level of self-esteem than prior to long jump.*

Frequency of somatic anxiety and self-esteem prior to 60 meters run and long jump:

As results showed (see Figure 4.), average values in athletes group prior to 60 meters run pointed out on lower level of frequency perception of somatic anxiety ($x = 3.36$; $s = 1.84$) and higher level of perception of self-esteem ($x = 3.69$; $s = 1.90$). The difference in perception of frequency of somatic anxiety and self-esteem frequency was 8.94%. Also average values in group prior to long jump indicated lower level of frequency perception of somatic anxiety ($x = 3.53$; $s = 1.17$) and higher level of self-esteem frequency ($x = 3.63$; $s = 1.74$). The difference between the perception of somatic anxiety frequency and frequency of self-esteem was 2.75%. Athletes prior to 60 meters run perceived the frequency of somatic anxiety on lower level and reached higher values in perception of self-esteem than prior to long jump.

DIRECTION OF COGNITIVE, SOMATIC ANXIETY AND SELF-ESTEEM

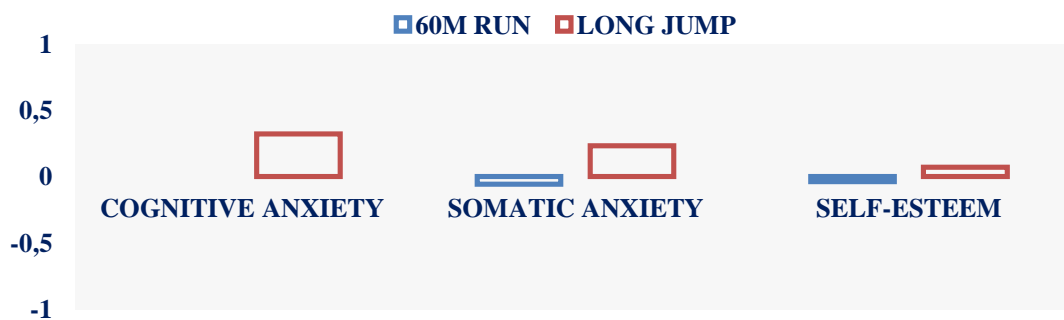


Figure 4. Direction of cognitive, somatic anxiety and self-esteem prior to 60 meters run and long jump.

Direction of somatic anxiety and self-esteem prior to 60 meters run and long jump:

differences of athletes' average values before 60 meters run indicated (see Figure 5.) lower level of somatic anxiety direction ($x = -0.06$; $s = 1.5$) than self-esteem's direction with higher level of perception ($x = -0.04$; $s = 1.41$). The difference in direction of somatic anxiety and self-esteem's direction was 1.88%. On the contrary, average values of the group prior to long jump indicated higher level of somatic anxiety direction ($x = 0.23$; $s = 1.35$) than self-esteem with lower level of value ($x = 0.07$; $s = 1$). The difference in direction's perception of somatic anxiety and self-esteem was 13%. Athletes prior to 60 meters run showed more positive perception of somatic anxiety direction while prior to long jump showed negative perception in the parameter.

Results of our research presented higher level of cognitive and somatic anxiety. High levels of anxiety could corrupt external perception of athlete that influence worsening in ability to make good decisions during competition. Moreover; results revealed that young athletes reached higher level of anxiety, especially in main season [Martinent et al., 2010]. Results of research study [Smoll et al., 1993] did not indicate statistical or size effect significance and did not show on major differences in self-esteem between measures that was also confirmed in our research.

Furthermore; results pointed out high level of athletes' self-esteem prior to 60 meters run as well as prior to long jump. High self-esteem could protect athletes against negative experiencing of somatic symptoms of anxiety prior to start [Martens et al., 1990]. Athletes in second measurement achieved higher values level of self-esteem comparing to the first measure prior to competition. High level of self-esteem experienced by players was described also in results of other authors [Burton, 1998; Craft et al., 2003; Modrono-Guillen, 2006].

Athletes with high level of self-esteem have tendency to have more positive emotions [Mellalieu et al., 2009].

As results indicated, in all monitored dimensions of anxiety and self-esteem (intensity, frequency and direction) we found out higher level of self-esteem and lower level of cognitive and somatic anxiety. These results are partially congruent with previous studies where results also indicated differences among all three mentioned anxiety factors [Abrahamsen et al., 2010, Grossbard et al., 2009].

Important finding is higher level of cognitive anxiety intensity comparing to intensity of somatic anxiety. The older athletes are, more they concentrate on external influences that results in increased level of cognitive anxiety experiencing and it is resulted in the fact that greater competing demands generate higher cognitive symptoms within pre-competitive states [Craft et al., 2003].

CONCLUSIONS

Research results indicate following findings:

- ✓ Athletes prior to 60 meters run perceived on average higher level of somatic and cognitive anxiety intensity and lower level of self-esteem's intensity than prior to long jump.
- ✓ Athletes prior to long jump reached on average higher level of cognitive and somatic anxiety frequency; on the contrary, self-esteem frequency was on higher level prior to 60 meters run.
- ✓ Athletes prior to long jump perceived symptoms of cognitive anxiety and self-esteem more negatively regarding to upcoming sport performance.
- ✓ Prior to 60 meters run, athletes perceived symptoms of somatic anxiety and self-esteem more positively regarding to upcoming sport performance.

In further research, it is important to focus the attention on the analysis of pre-competitive states from the aspect of age and gender and widen research to other athletic disciplines. From the aspect of praxis, it is inevitable to apply appropriate subjective and objective intervention methods for effective regulation of athletes' pre-competitive states.

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