

SECTION – VARIA

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COPING WITH STRESS AND SENSE OF EFFICACY, AS WELL AS SATISFACTION WITH LIFE IN YOUNG ATHLETES – A PILOT STUDY

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Authors' contribution:

- A. Study design/planning
- B. Data collection/entry
- C. Data analysis/statistics
- D. Data interpretation
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- F. Literature analysis/search
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Abstract:

Introduction: In research on styles of coping with stress conducted among athletes has demonstrated various variables determining these styles, e.g. age [1], gender [2], and styles of thinking [3]. Factors responsible for effective coping with difficult situations are sought, and consequently, greater satisfaction with life. In the presented report, it was recognised that one of the variables related to effective coping and thus, with life satisfaction, is self-efficacy.

Aim of research: In this work, it was decided to establish relationships between styles of coping with stress by athletes, their sense of self-efficacy and overall satisfaction with life, as well as the type of difficult situations experienced by them.

Group and method: The study comprised 40 participants, 14 women and 26 men practicing sports, 1st-year students of the Faculty of Physical Education and Sports. The mean age was 20.43 ± 1.22 years. Of the subjects, 25 people practiced individual disciplines, while 15 team sports. The questionnaire "Perception of difficult situations by adolescents in sport", the Generalised Self-Efficacy Scale, the Satisfaction with Life Scale and the Coping In Stressful Situations Questionnaire were used.

Results: The results showed a relationship between life satisfaction and the task-oriented style of coping with stress (positive correlation) as well as the emotional style of coping with stress, engaging in substitute activities, and stressful situations - except those related to academic stress (negative correlation); self-efficacy and the task-oriented (positive correlation) and emotional style of coping with stress (negative correlation) and sense of self-efficacy and satisfaction with life (positive correlation).

Conclusion: There is a relationship between the styles of coping with stress and the level of satisfaction with life as well as the level of self-efficacy among individuals practicing sports.

Introduction

Research on the determinants of coping with stress in sports activities has a long history [4-8]. This is related to the fact that stress accompanies athletes, both in their private and competitive lives. In the case of student athletes, stress is also associated with these areas of life. Thus, effective coping with stress seems to be an important element of an athlete's functioning. It becomes justified to search for conditions to cope with difficult situations, especially since the social and eco-

nomie situation, as well as the lifestyle of modern man, are subject to constant modifications.

The style of coping with stress in athletes shows a relationship, among others, with the athlete's performance [9], age [1], gender [2, 10, 11], style of thinking [3], the way of perceiving difficult situations [12] and self-esteem [13].

In the classic approach to coping with stress, Lazarus and Folkman [14] list task-oriented (problem-focused) and emotional styles. Problem-oriented strategies involve activities that target the source of difficulty

in a direct manner. Thus, in the cited studies, it is shown that this is the most effective way of coping. It is more often undertaken by men and people with a positive way of perceiving the situation, with a higher level of self-esteem. In a study among athletes from Great Britain, a relationship was demonstrated between well-being and task-oriented coping strategies (task-focused style of coping with stress) [15]. The task style (as opposed to those emotional and avoidant) is associated with greater mental resilience (also in sportspersons) [16]. Similarly, positive correlations are observed between the problem-directed coping type and satisfaction with life [17]. Emotional-oriented strategies (or more constant - style) are aimed at regulating the emotional state of a person. There are also escape strategies, although their effectiveness is very limited in time.

How people deal with stress also results from the way they assess a difficult situation. This is influenced by the overall level of satisfaction with life. The essence of the mediating variable is the sense of self-efficacy, which was observed by Lee, Kim and Wachholtz [18]. It is an important cognitive factor in shaping mental resilience [19].

Aim of research

The aim of the study was to determine the relationship between styles of coping with stress (task, emotional, avoidance) and type of difficult situations (sports, personal, academic); level of satisfaction with life and sense of efficacy in the group of athletes.

Anonymous research was group-based. The subjects were informed about the purpose of the study.

Study group

The study comprised 40 participants - 14 females and 26 males practicing sports. They were 1st-year students of Sports and Physical Education faculties at the University of Physical Education in Kraków (active athletes were selected from among the students and they made up the study group). The participants' mean age was 20.43 ± 1.22 years. Individual disciplines were practiced by 25 subjects, and 15, team sports. Due to the low female sample size, introduction of the "gender" criterion was not implemented.

Research tools

1. In the research, the author-designed "Perception of difficult situations by adolescents in sport" questionnaire was used. It allows to distinguish 3 types of situations that may constitute difficulties: related to sports, academic and personal.
2. The Generalised Self-Efficacy Scale (GSES) by Juczyński was used in the research [20]. The scale allows to measure the amount of an individual's general beliefs about the effectiveness of coping with difficulties.
3. The Satisfaction with Life Scale (SWLS) adapted by Juczyński was implemented in the study [21]. It allows to demonstrate the general index regarding sense of satisfaction with life among the examined persons.
4. The Coping Inventory for Stressful Situations (CISS) [22] was applied to identify styles of coping, treated as dispositions. It includes the following scales: TOC – task-oriented coping; EOC - emotion-oriented coping; AOC – avoidance-oriented coping. In addition, the avoidance style may be divided into 2 forms: D - distraction and SoD – social diversion.

Results

Results regarding the analysis of descriptive statistics are presented below (Tab. 1). On their basis, it can be concluded that the task-oriented style of coping with stress was dominant in the respondents: $\bar{x}=57.53$, at the level of $sd=9.06$, with the maximum value, $max=76$, and the minimum value, $min=34$. The avoidance style was ranked second: $\bar{x}=46.73$ with high variation within the group: $sd=10.53$. The maximum value here was, $max=69$, and the minimum, $min=26$. The lowest mean values were observed for the emotional style: $\bar{x}=44.53$, with high intra-group differentiation: $sd=10.96$. The maximum value was, $max=67$, while the minimum, $min=16$. More specifically, within the avoidance style, the respondents least often sought social diversion (SoD): $\bar{x}=16.7$, with the $sd=4.69$, maximum value, $max=25$, and minimum value, $min=7$. The average level of satisfaction with life in the study group was $\bar{x}=22.11$, with $sd=5.67$. The maximum value here was, $max=31$ and the minimum, $min=10$. In the case of the sense of self-efficacy, the mean was $=31.43$ with the standard deviation, $sd=3.73$. The maximum value was, $max=40$, while the minimum, $min=22$. The highest level of stress was observed in the study group with regard to sports-related stressful situations, $\bar{x}=15.23$, the standard deviation, $sd=3.7$ ($max=21$, $min=5$), with situations of personal nature ($\bar{x}=14.23$, $sd=4.04$, $max=21$ and $min=6$) and finally, academic-related stress ($\bar{x}=14.05$, $sd=3.65$, with the $max=20$ and $min=6$).

Subsequent analyses will concern the correlation between styles of coping with stress, life satisfaction, sense of self-efficacy, and the type of difficult situations.

It was found that with the increase in the level of task style, the level of satisfaction with life also increased. It was also noted that the more the respondents utilise the

Table 1. Mean, standard deviation, maximum and minimum values of examined quantitative variables

	N	Mean	Minimum	Maximum	Std. Dev.
TOC – task-oriented coping style	40	57.53	34.00	76.00	9.06
EOC - emotion-oriented coping style	40	44.53	16.00	67.00	10.96
AOC - avoidance-oriented coping style	40	46.73	26.00	69.00	10.55
D – distraction seeking	40	21.18	12.00	36.00	6.28
SoD – social diversion	40	16.70	7.00	25.00	4.69
SWLS – satisfaction with life	40	22.11	10.00	31.00	5.67
GSES – generalised sense of self-efficacy	40	31.43	22.00	40.00	3.73
Stressful situations	40	43.50	23.00	56.00	9.58
Sport-related stressful situations	40	15.23	5.00	21.00	3.70
Academic-related stressful situations	40	14.05	6.00	20.00	3.65
Personal-related stressful situations	40	14.23	6.00	21.00	4.04

Table 2. Correlations regarding styles of coping with stress, difficult situations and satisfaction with life

	SWLS satisfaction with life
TOC – task-oriented coping style	r=0.40, p=0.010
EOC – emotion-oriented coping style	r=-0.41, p=0.009
AOC - avoidance-oriented coping style	r=-0.29, p=0.071
D – distraction seeking	r=-0.41, p=0.008
SoD – social diversions	r=0.042, p=0.793
Stressful situations	r=-0.46, p=0.002
Sport-related stressful situations	r=-0.39, p=0.04
Academic-related stressful situations	r=-0.49, p=0.001
Personal-related stressful situations	r=-0.305, p=0.055

Table 3. Correlations regarding styles of coping with stress, difficult situations and sense of self-efficacy

	GSES generalised sense of self-efficacy
TOC – task-oriented coping style	r=0.53, p<0.001
EOC - emotion-oriented coping style	r=-0.59, p<0.001
AOC – avoidance-oriented coping style	r=-0.17, p=0.278
D – distraction seeking	r=-0.29, p=0.072
SoD – social diversion	r=0.09, p=0.576
Stressful situations	r=-0.20, p=0.223
Sports-related stressful situations	r=-0.06, p=0.725
Academic-related stressful situations	r=-0.20, p=0.217
Personal-related stressful situations	r=-0.23, p=0.145

Table 4. Correlations regarding styles of coping with stress and difficult situations

	Stressful situations	Stress related to sports situations	Stress related to academic situations	Stress related to personal situations
TOC – task-oriented coping style	r=-0.06, p=0.693	r=-0.04, p=0.819	r=-0.001, p=0.996	r=-0.12, p=0.47
EOC – emotion-oriented coping style	r=0.24, p=0.139	r=0.25, p=0.122	r=0.25, p=0.122	r=0.11, p=0.49
AOC – avoidance-oriented coping style	r=0.01, p=0.93	r=0.02, p=0.89	r=-0.003, p=0.986	r=0.01, p=0.922
D – distraction seeking	r=0.12, p=0.444	r=0.11, p=0.50	r=0.14, p=0.399	r=0.07, p=0.663
SoD – social diversions	r=-0.11, p=0.478	r=-0.09, p=0.559	r=-0.18, p=0.253	r=-0.02, p=0.906

Table 5. Correlations regarding sense of self-efficacy and satisfaction with life

	SWLS satisfaction with life
GSES generalised sense of self-efficacy	r=0.54, p<0.001

emotional style of coping with stress, and the more they engage in substitute activities to cope (distraction seeking), the lower their satisfaction with life.

The overall level of stress, as well as stressful situations resulting from sports and personal problems, also contribute to the decline in life satisfaction. There was no statistically significant correlation between the level of satisfaction with life and stress related to academic situations (Tab. 2).

Interesting correlations occurred in the case of self-efficacy and the other analysed variables. As it turned out, sense of efficacy correlates only with the task-oriented (positive correlation) and emotion-oriented (negative correlation) styles of coping with stress. No correlation was found between sense of self-efficacy and the avoidance-oriented coping style, as well as the different types of stressful situations (Tab. 3).

In Table 4, the correlations between coping styles and different types of difficult situations are demonstrated. As can be seen, no statistically significant correlations were noted here.

Nonetheless, it was found that along with the increase in the level of generalised self-efficacy, the higher the level of satisfaction with life among the respondents (Tab. 5).

Discussion of results

The mean results of the CISS questionnaire obtained by the respondents indicate that the predominant coping style is task-focused, followed by the avoidance-focused style, while the lowest values were indicated for the emotion-focused style. The highest level of stress in the study group was observed in the case of stress related to sports situations, then to situations of a personal nature and finally to stress connected with academic situations. The presented research results also indicate that along with the increase in the level of the task-oriented coping style, the level of satisfaction with life increased, and with the increase in the level of the emotional-focused coping style, its level decreased. The overall item also contributes to the decline in life satisfaction due to stress related to sports and personal situations. Moreover, a positive correlation was indicated between sense of efficacy and the task-oriented style of coping with stress, and a negative correlation between sense of self-efficacy and the emotional style of coping. In light of the obtained results, it may also be stated that with the increase in the level of generalised self-efficacy, the level of satisfaction with life increased.

The achieved results are consistent with those found in the research by Guskowska [23] and Turosz [24], who showed that in people training sports, the task-oriented style of coping with stress predominates. Accord-

ing to Guskowska [23], in adolescents training sports, results for the emotional style of coping with stress decrease over time, which is also confirmed in this study. Athletes with stronger coping measures, activating effective strategies, are better able to manage demands and loads, and are also less prone to various negative phenomena related to sports activities, such as burnout [25]. Hill, Hall and Appleton [25] believe that a high level of the avoidance style and a low level of task-based stress management can contribute to burnout among young athletes.

The results of research conducted by the authors also correspond to the study by Gustafsson, Hassmen, Kentt and Johansson [26], in which it is shown that exercise-related stress, which is associated with numerous requirements and training intensity, exceeding the athlete's capabilities, as well as too short durations for rest and regaining lost energy, is very threatening for athletes, because this may precede not only the phenomenon of burnout, but also the resignation from a further sports career. Moreover, it should be noted that athletes face numerous difficulties in reconciling a sports career with education, work or their family life. According to international studies [27], about 1/3 of all people aged 10 to 17 training sport, each year, abandon its performance because it requires much time and effort, preventing the successful implementation of other plans, e.g. studies. Therefore, it seems important to help players at the beginning of their sports career in combining sports activities with other areas, for example by determining a "dual careers of athletes" plan [27]. This is a set of arrangements beneficial for athletes, aimed at protecting and securing their position. It allow athletes to learn and work, teaching them various skills that can be used in various areas of life, both during their sports career and after its completion.

The style of coping with stress, however, is not related to the type of difficult situations [16]. On the other hand, in the research by Baker and Berenbaum [28], it was found that the type of situation is an intermediary variable for effectiveness of the coping strategy. It is possible that other factors play a more important role, e.g. resilience [29].

Conclusions

A relationship was found between satisfaction with life as well as self-efficacy and stress coping styles. The presented research results indicate, *inter alia*, a positive correlation between the task-oriented style of coping with stress and satisfaction with life and self-efficacy. Moreover, athletes' coping styles can play a significant role in their life satisfaction and self-efficacy. Therefore, in order for young talented competitors to not end their sports

careers prematurely and to effectively deal with stress, “dual career paths” should be effectively promoted and develop, educating not only athletes themselves, but also their entire surroundings (parents, coaches, etc.) on how to recover lost energy and create an environment conducive to constructive rest. The research was

a pilot study, but due to the extent of the topic discussed, it is postulated to further examination, which should include a different, larger number of respondents, taking additional psychological parameters of players into account, e.g. temperament, perfectionism, personality or self-esteem.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki, and approved by the Institutional Ethics Committee

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