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Effective Decision-Making for Extreme Situations in Sports Coaching

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Abstract: The study examines the features of the professional activities of sports coaches. As this profession involves experiencing extreme situations, uncertainty, risk, time pressure and critical choices that affect a person's emotional state, hindering his rational thinking, and eventually a person may lose control of the situation, it is important to identify basic measures to normalize the relevant professional activities. The relevance of the study is due to the need to form professional competence in the activities of a sports coach, which is associated with physical training and direct responsibility for the health and sometimes the lives of their athletes.

In order to understand the behavioral aspect in extreme situations that occur in sports training, the basic theoretical principles of sports coaches 'response to extreme situations were considered, researchers' conclusions on the behavior of sports coaches were analyzed and effective approaches to decision-making by coaches in extreme conditions were identified.

To achieve this goal, methods of analysis and synthesis, descriptive method and content analysis method were used. The results of the study became the basis for determining the conceptual basis for the effectiveness of decision-making by coaches in extreme situations.

Keywords: *coping behavior, hyperexcitability, physical culture, stress, destructiveness.*

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Introduction

The relevance of the current study lies in identifying the behavior of a sports coach in extreme situations and stems from the importance of physical training in the context of society. Physical health is of undisputed value for a person because health is a fundamental, supreme condition for life (Maksymchuk et al., 2020a; Maksymchuk et al., 2020b; Sitovskyi et al., 2019). Throughout the history of mankind, people have been taking care of their physical health. To secure the survival of their kind in the often hostile environment of the wilderness and scarcity of food resources, the prehistoric society had to be strong, and possess endurance. During the Middle Ages, nations sought expansion and waged endless wars, which also shaped the idea of the need for physical might. Therefore, throughout history, mankind formed a belief in the need for physical health as a characteristic feature of physical culture. (Demchenko et al., 2021; Palamarchuk et al., 2020; Bakhmat et al., 2019; Halaidiuk et al., 2018; Maksymchuk et al., 2018).

Today, sports have become increasingly popular, and people have a wide range of sports activities that help develop speed, coordination, and stamina (Prots et al., 2021; Kosholap et al., 2021; Nikolaienko et al., 2021; Khatsaiuk et al., 2021; Ovcharuk et al., 2021; Komogorova et al., 2021). Coaches are respected in society because they achieve sports goals and this characterizes their work as purposeful, persistent and strong-willed. These characteristics have become an indicator of the personality capable of commitment and self-realization in society. Sports coaching research is still building a critical mass of interest because on the one hand, coaches' behavior is predictable and the results are expected, and on the other hand, coaches are responsible for the health of their athletes during training, which is quite extreme.

Extremity is a situation that reveals an individual's behavior and reaction to threats and dangers that arise in their life (Glanz et al., 2002). This situation is a criterion for the most effective human behavior in overcoming issues that arise suddenly and can eventually form a strong personality that overcomes obstacles.

Such a personality is of great interest for research, which determined the relevance of the problem and determined the topic of our work "Effective decision-making for extreme situations in sports coaching".

The purpose of this article is to analyze and examine the way extreme situations impact the effectiveness of decision-making by sports coaches.

A theoretical framework for research on decision-making efficiency in extreme situations

An extreme situation is a set of conditions that may pose a threat to life and causes an individual to experience emotional distress or mental anguish. The distressed condition brings about anxiety and stress due to the fact that an individual caught up amidst such a situation loses control over it and is stressed out. This condition is viewed as hostile to a person, but at the same time, they cannot escape it because this is a part of the personal experience that person goes through. Events that cause an extreme situation are extraordinary and unpredictable and bring about manifestations of emotional negativity or anxiety because they are important for the individual and characterize their emotional perception pattern (Ananiyev et al., 1980). In other words, the same situation may cause different or even polarized responses in different people.

Often, an extreme situation is represented by a problem or a difficult task at hand that an individual is supposed to resolve to relieve the tension and overcome the anxiety. A feature of the problem that arises in an extreme situation is its rapid solution (Imel, 1998). That is, an extreme situation requires a split-second and effective decision. If a decision taken does not resolve the problem that arose, this problem will be aggravated and the entire situation will get even worse. Therefore, in the context of our study, it is important to identify favorable aspects of making effective decisions in an extreme situation.

Sports competitions take place in excessive physical tension that is bound to plunge both athletes and coaches into stressful experiences. The actions of athletes are aimed at maintaining lasting performance standards and achieving victories, which forces them to systematically monitor their actions, behavior and achievements, exerting physical and psychological efforts to achieve their goals. Such efforts affect the emotional state and require the right decisions that determine the appropriate actions to achieve the goal (Paulhus et al., 1997). Therefore, it can be argued that sports activities are extreme and cause anxiety in athletes and their coaches, necessitating the right decisions to reduce stress and depression in athletes.

To study the peculiarities of the stress responses and decision-making in extreme situations of the sports activity we analyzed the theoretical basics developed by the scientists in the field. The scientific analysis of sports coaching by E. Gogunov (2000), and E. Berne (1992) has indicated that there is a constant struggle between two tendencies:

impersonal, characterized by the orientation of the coach to perform narrow professional sports and pedagogical tasks, and subject-professional, characterized by the focus on the values of pedagogical humanism, creativity, professionalism, where the coach acts as an agent who manifests their individuality and focuses on creating new forms of social life.

Relying on the studies by L. Kalashnik (2013) and L. Sushchenko (2003) we attempt to build a consistent picture of coaching as a creative process determined by the content of the inner world of the coach, as well as the strength of their spirit, the desire to actualize their inner calling and fulfill their life mission through sports and success of their students (Hobfoll, 2001). In other words, sports coaching acts as a unique pedagogical process, where each successful coach has their differences in the way they form the personality of the pupil and the unique features of each sports team.

Based on the analysis of research and the conclusions of scientists, it can be argued that sports activities are accompanied by the extremity, which leads to anxiety, stress and depression, and sometimes, even to aggressive or conflicting destructive behavior (Lebedev, 1989; Stoliarenko, 2002; Smirnov & Dolhopolova, 2007). Hence, the strategic task for sports coaches, which is effective decision making in extreme conditions with the purpose of coping with the destructive manifestations of athletes' behavior during training or competing.

Research on coaches' decision making efficacy in extreme situations

Sports pursuits are one of the manifestations of social development in the physical culture conceptual framework and are to be regarded as a human achievement throughout the course of history. Sport mobilizes the activities of people in the direction of physical culture while conceptualizing and substantiating the introduction of the physical education system. Physical education involves the introduction of methods, forms and technologies in the educational process that are effective for the formation of a person's value attitude to their physical health (Miasishchev, 1960)

Sport dwells on the fundamental value components, which are training, conditioning and competition. It also implies certain behavioral standards that are perceived as a part and parcel of professional sports life. The key figures in sports competitions are the athlete and the coach, who determines the basic approaches in the organization of sports competitions and athlete's conditioning with the view of optimizing the performance of

the athlete and minimizing the risk of injury and illness (Frydenberg, 2002). Thus, coaching is an extremely important element in the formation of physical culture and sports. Their decisions are often game-changers in actual sporting events.

The coaches' professional practice is determined by the purpose of preparation for sports competitions. The coach organizes the activities of the athlete on their path to sports competitions. This involves systematic training using certain methods and technologies to achieve the athlete's goal in sports competitions. The coach's practical involvement is not confined to the mere development of athletes' physical capabilities through the designed and systemic exercises. The coach leads their athletes through a holistic system of physical education with an arsenal of psychological and pedagogical technologies, methods and forms of work (Vasyliuk, 1999). The result of effective professional activity of the coach is the change and progress of athlete's performance under the influence of training that improves their performance and increases the possibility of success in certain sports competitions.

The coaches' job is of crucial importance for the formation of the athlete's personality. The level of accomplishments in sports activities of the athlete is determined by how well their body and mind are adapted to the special requirements of the relevant type of sports activity. Coaching is important in educating the worldview of the athlete, building necessary traits of character, behavior and attitude. Athletes perceive their coach as a mentor, a leader who leads by example since the vast majority of coaches in the past were athletes in their respective sport (Stoliarenko, 2002). Therefore, the actions of the coach require a special professional approach, where psychological and pedagogical basics of education and training are given special attention.

Thus, coaching is a serious system of the holistic educational process. Since sports competitions represent an extreme situation where, often, reputation and the entire athlete's career are at stake, the coach's decisions must be as effective as possible to achieve success and form a person capable of self-realization in society. Thus, among the factors that influence the coaches' decision-making, we can point out subjective and objective ones, or those that result from the circumstances beyond coaches' control (Sushchenko, 2003). For instance, a coach cannot influence the procedure of the competition, referees' responses or decisions; a coach cannot solicit some special conditions for their athletes and the way the

athlete is perceived by teammates, judges, or rivals. These are objective factors. However, there are also those factors that stem from the attitude of the coach themselves. In particular, the coaches' level of knowledge and skills, their psychological take on participation in competitions, their motivation to win (Gygli et al., 2019). These are very diverse factors yet they are interrelated. Thus, subjective factors can affect the objective ones. For instance, they may impact the process of competition because these factors are psychologically preconditioned. Therefore, they can change the course of the competition, and control behavior in extreme situations. The objective factors can determine the coaches' psychological attitude and shape their personal interest in the change of conditions.

In coaches' perception, extreme situations arising in the course of professional practice are non-standard situations that may cause their emotionally unstable response, worries and anxiety, influence their decision making, alter their professional performance capacity.

In the course of our research, we have found that coaches typically demonstrate two responses to stress-causing situations, which are specific and non-specific (Gardner, 1983). In this way, a nonspecific response is determined by three stages: mobilization or the alarm stage, disorder, and deformation, which change sequentially, depending on the personal experience of the coach.

The alarm stage does not last long but is rather intense. At the same time, the effectiveness of the decisions is higher, the decisions are made faster. The coach is able to make an alternative decision and expects it to generate certain results.

At the stage of disorder or avoidance, decision-making tends to grow more impulsive. The coach may fail to understand the consequences of their decisions, and, therefore, these consequences are less manageable and effective and can prove to be wrong and cause destructive behavior.

At the stage of deformation or hyperarousal, the coach's decisions are completely emotional and unpredictable, which means that the coach does not realize the consequences of their decision. This decision is accidental and does not meet the conditions required for its implementation (Giddens, 1991). Thus, such a decision is completely wrong and can lead to negative consequences.

Having carried out the research we identified the relationship between extreme situations that accompany sports competitions and training and coaches' decision-making in such situations, which are mostly non-specific.

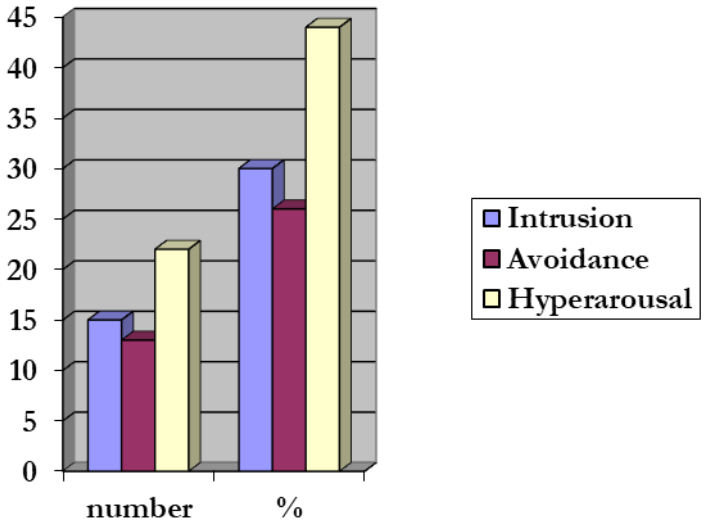


Fig. 1. *Stress indicators in extreme behavior based on The Impact of Event Scale by D. Weiis* (2007) *(developed by the authors)*

We conducted a survey to identify stress in sports coaches in the event of extreme situations during sports competitions. We involved 50 coaches in various sports. The "Snowball" was chosen as the sampling method. We turned to the coaches of the local football team, and they attracted their acquaintances and, in this way, we generated 50 independent opinions for our survey. We have identified the most effective method for determining the level of stress in extreme situations that affect coaches' decision-making, "Scales for assessing the impact of a traumatic event" in the interpretation of D. Weiss (2007) (fig. 1).

As can be seen from the survey, coaches tend to experience stress in extreme situations, so their decisions will mostly be ineffective in achieving the goal. Thus, according to the results, it can be stated that coaches experience hyperarousal as a manifestation of stress, which is confirmed by the rate of 44%. "Intrusion" is another manifestation of the coaches' destructive behavior in an extreme situation.

Upgrading professional skills will significantly benefit the way sports coaches perceive extreme situations and the way they control their decisions, which together will undoubtedly facilitate professional performance (Haan, 1977). Therefore, taking appropriate measures for the formation of the

coaching competence we see it necessary to build the following qualities that will contribute to effective decision-making in extreme situations:

- Knowledge of methodological features of training
- Knowledge of theoretical approaches in training
- Knowledge of practical principles of training
- Ability to make decisions quickly and constructively
- Ability to authoritatively influence students
- Ability to predict the consequences of their decisions.

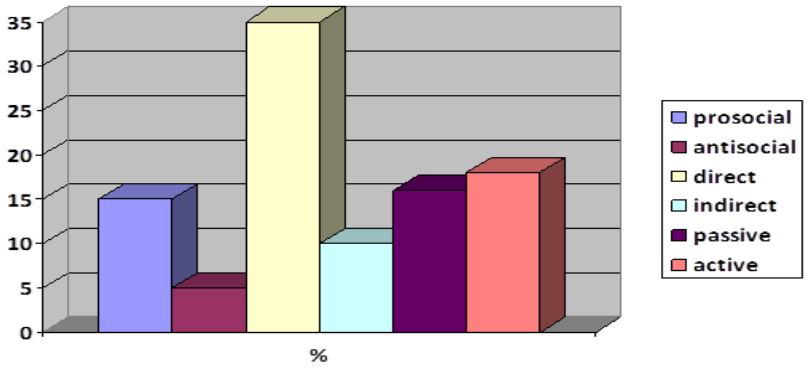


Fig. 2. *Coping behavior indicators of coaches while dealing with stress (developed by the authors)*

We have determined that to overcome the stress arising from the decision-making process of a sports coach in an extreme situation, the most effective is the implementation of coping strategies (Hobfoll, 2001) (fig. 2).

Thus, based on the study, we determined that the main means for effective decision-making by sports coaches is based on overcoming stress that arises in an extreme situation. The most favorable measure to overcome stress is to determine coping behavior.

Conclusion

We conducted a study to determine the effectiveness of decision-making by sports coaches in extreme situations that arise in professional practice.

Thus, we have identified the main goal that was to explore effective solutions and the task, which was to identify the most effective ways to overcome destructiveness in decision-making in extreme situations.

We have analyzed the main approaches to extreme situations in professional sports coaching work. Based on the findings, it was determined that sports competitions and training are characterized by extremity due to

their unpredictable nature. Therefore, the professionalism of coaches is still the major condition for resolving problems in extreme situations.

It was, in the meantime, determined that extreme situations have destabilizing effect leading to emotional instability and distress. Therefore, we conducted research on the manifestations of stress in such situations. The study found that the most progressive indicator of stress in coaches in an extreme situation is hyperarousal.

Based on the analysis of the signs of stress in coaches, we have identified measures called to relieve stress and anxiety, and we have determined that the coping strategies that will help to overcome stress during training and sports competitions would be the most effective.

Eventually, we have determined that effective measures for making the right decisions in extreme situations are professional competence and certain coping strategies that help to overcome the stressful experience of extremity in coaches.

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