

Developing Students' Psychological Readiness to Make Decisions in Extreme Coaching Situations

Oksana KHURTENKO¹,
Anatolii SHULDYK²,
Maya ZUBAL³,
Iryna RAYTAROVSKA⁴,
Alla SENYK⁵,
Kseniia BEREZIAK⁶

¹ Vinnytsia Mykhailo Kotsiubynskyi State Pedagogical University, Vinnytsia, Ukraine, kseniaxyrtenko@gmail.com

² Pavlo Tychyna Uman State Pedagogical University, Uman, Ukraine, shuldikav@meta.ua

³ Kamianets-Podilskyi Ivan Ohienko National University, Kamianets-Podilskyi, Ukraine, zupal@kpnu.edu.ua

⁴ Kamianets-Podilskyi Ivan Ohienko National University, Kamianets-Podilskyi, Ukraine, skaraita@gmail.com

⁵ West Ukrainian National University, Ternopil, Ukraine, Allisiya@gmail.com

⁶ Lviv State University of Life Safety, Lviv, Ukraine xmber@meta.ua

Abstract: *Most prospective coaches are not fully ready to manage sports teams under extreme conditions and cannot make quick decisions in difficult situations. The article aims to develop students' psychological readiness to make decisions in extreme coaching situations. The formative experiment involved 50 students (25 respondents in the experimental group; 25 respondents in the control group). It became possible to develop operational readiness in prospective coaches by conducting special classes on the development of decision-making skills, self-reflection, self-regulation (theoretical classes and a set of exercises aimed at developing the necessary qualities). The final stage of the experiment shows that the number of EG students with a high level of anxiety has decreased by 16%. At the same time, the expert assessment shows that their capacity for self-regulation in extremely competitive situations has increased by 20%. The group of students' leading motives includes the following: to achieve the set goals; to win; to enjoy the team's victory; to prove oneself and test one's abilities as a coach in extreme situations. In extreme professional situations, the leading motives behind coaches' decisions involve achieving the set goals and enjoying the team's victory. There were no significant differences in decision-making motivation among students (both males and females). However, almost every third student has a low level of motivation for competition.*

Keywords: *prospective coaches; managing sports team; self-reflection; self-regulation; motives behind decisions; team's victory.*

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Introduction

Many researchers have already studied psychological readiness of individuals for various activities in extreme conditions, scientists and revealed its structure, mechanisms and improvement pathways (Bakhmat, et al., 2019; Bezliudnyi, Kravchenko, Maksymchuk, Mishchenko, & Maksymchuk, 2019; Chamata, 1960; Diachenko & Kandybovich, 1981; Kandybovich, 2000; Levitov, 1963; Tomchuk, 2003). Apart from studies by Volianiuk (2006) and Prokhorova (1998), a particular issue of coaches' psychological readiness to organize sports activities has not been covered properly. Nowadays, there is no research aimed at developing the psychological readiness of students (prospective coaches) and physical education teachers to make management decisions in extreme sport-related situations.

The factors determining the extremity of coach's activities are as follows: 1) sudden and unexpected occurrence and the manifestation of extreme situations during competitions; 2) disruption of normal life, a certain threat to health (injuries, health deterioration); 3) unusual and new situations during competitions, which were caused by the opponent; 4) uncertainty about the opponent's behaviour and tactics; 5) excessive or inadequate information about the opponent's behaviour; 6) high dynamics of competitions and lack of time to assess situations, make decisions and act accordingly; 7) coach's high social responsibility for the results of competitions; 8) coach's discomfort of certain restrictions during competitions.

Currently, various psychological schools are actively developing special techniques and training programmes on personality development (Belova, 2004; Halaidiuk, et al., 2018; Maksymchuk, et al., 2018). However, it was American psychotherapist F. T. Melges (1982) who developed the first most thorough programme of this type. Melges (1982) actively used the future mode in contrast to the representatives of psychoanalytic and existentially humanistic areas, who mainly employ the categories of the past and the present when working with patients. He claimed that the future actively influenced the present and, therefore, developed psychotherapy focused on the reconstruction of the future. His psychotherapy is based mostly on the principles of futurization and temporal organization.

He understood self-futurization as the visualization of future opportunities and transfer of expected pictures of the future into the psychological present of the individual. At the same time, a temporal organization can be corrected using feedback, connections with images with

the past, use of available environmental factors to remind about the images of the future, rehearsals of the future (rather close and distant). Rehearsals of the future are carried out with the help of role-playing games or psychodrama of the future.

One can also use the methods of active imagination in the professional development of prospective coaches, given an important role of images of the desired future and specific mechanisms of advanced regulation of life.

Constructing detailed images of one's future and oneself as a specialist is considered to be one of the modern approaches to stimulating professionalization (Belova, 2004). The use of self-futurization has some positive effect on the stages of professional training of prospective coaches in higher education institutions (HEIs).

An independent inclusion of individuals in the professional space involves correcting professional ideas, assessing one's capabilities and taking into account the compliance of one's professional activities with personal interests (Virna, 2003; Poviakel, 2003; Semychenko, 1992; Maksymchuk, et al., 2020; Melnyk, et al., 2019; Sitovskyi, et al., 2019). If this inclusion is rather passive, it can lead to the distortion of professional ideas; the prevalence of pragmatic values over self-realization, as well as the development of various psychological defences (the devaluation of the profession, the transfer of interests to the sphere of non-professional activities and even students' refusal to follow the chosen career path).

The well-developed mechanisms of reflection and mental self-regulation are necessary for coaches' successful decision-making in extreme situations. Mental self-regulation implies coaches' ability to manage mental states (anxiety, aggression, frustration) and resistance to various obstacles during competitions. It is important to note that the development of reflection, self-awareness and self-regulation mechanisms are one of the most important aspects in modern psychology of activity under special conditions.

Materials & methods

Research methods include the following: theoretical methods: comparison, analysis and generalization of the relevant psycho-pedagogical literature on professional training of prospective coaches; modelling used to justify theoretical approaches to the problem of one's psychological readiness to work under extreme conditions; empirical methods: observations, oral and written surveys (conversations, interviews,

questionnaires), testing (Eizenko's self-assessment tests on mental states; Milman's tests on motivation and mental reliability in sports; Spielberger-Khanin's test on personal anxiety; tests on decision-making in extreme situations), experiment (ascertaining and formative stages), analysis of sports situations and expert assessment methods used to study the dynamics in the development of students' psychological readiness to make decisions under extreme coaching conditions; mathematical methods, correlation analysis and methods for checking the reliability of differences in the studied indicators used to process, analyze and interpret the obtained results.

The objects of the formative psychological influence are chosen the following: mental and personal characteristics of students who deviate from a model of a successful coach and makes effective decisions in extreme managerial situations. Given this, the guideline for developing a professional coach is a certain norm, a system of indicators describing a fairly high level of cognitive, motivational and operational components of one's psychological readiness to work in non-standard situations. It is possible to implement the formative experiment on the development and correction of certain indicators of this readiness only through the use of personality-oriented technologies of professional development. They include special classes on the development and self-development of psychological indicators inherent in a high level of such readiness; technologies for developing psychological competency in prospective coaches; designing and analyzing alternative scenarios, situations and algorithms of one's professional behaviour in extreme situations; personality-oriented training sessions aimed at improving students' professional psycho-pedagogical competency.

It is important to note that the authors of the article monitored the process of students' professionalization during all the stages of the experiment on the development of the qualities they will need in their future professional activities. Such monitoring lies in tracking the development of empirical indicators of psychological readiness in prospective coaches. It has made it possible to identify and record results that are both positive and negative. Thus, students have found out about their personality strengths or weaknesses and, subsequently, launched the processes of self-regulation, self-correction and self-reflection.

One of the stages of the formative experiment implies using the self-futurization technique in professional coaching (Volianiuk, 2006), as well as the methods for constructing students' behaviour in extreme situations in the future. This technique allows one to actualize one's activity in the construction and implementation of possible professional situations, events since the image of the desired future and individual acts of coaches'

behaviour act as a stimulus for self-development and self-realization. The use of such technologies in professional training requires that students should make significant efforts to master this technique and restructure both professional self-awareness and consciousness in general.

Future activities and behaviour under extreme professional conditions were designed using the following procedures: interpreting emotional states, levels of experience; reconsidering past decisions; planning temporal organization of future extreme activities; practising in decision-making in similar situations with the help of role-playing elements.

The programme of subject-oriented psychological development of futuristic skills and abilities is based on the experience of organizing psychological-technological activities aimed at shaping and designing professional intelligence in the search for adequate ways to solve the existing problems (Badalova, 2003); active socio-psychological training in groups following the system of relevant methods (discussion, role-playing games) (Yatsenko, 2004); the cultivation of semantic attitudes and values-based orientations towards innovative activity (Bocheliuk, 2004). This programme consists of three stages and is aimed at expanding and enriching students' professional self-awareness; creating the self-concept of a professional coach"; acquainting students with the basic life strategies: well-being, success, self-realization; motivating students to reconsider their views, concepts and understanding of a professional plan (Volianiuk, 2006).

The experiment also used the techniques facilitating the development of special skills and abilities, such as psychological competency (self-regulation, self-reflection, resistance to psychogenic factors and obstacles during competitions).

In general, the formative experiment meant solving many problems, including the development of reflexive abilities, a meaningful analysis of coaches' activities in extreme professional situations, the search for optimal solutions, the use of personal reserves, the promotion of the necessary professional characteristics, self-regulation, self-reflection. The experiment involved 50 third-year students (25 respondents – the experimental group (EG), which was divided into two subgroups of 12 and 13 respondents; 25 respondents – the control group (CG)). It was conducted during the academic year. It must be noted that the experimenters have chosen third-year students since they tend to demonstrate a certain decrease in the development level of most indicators of such psychological readiness. Besides, third-year and fourth-year students, to a greater extent than younger students, study special sports courses, methods for conducting various

classes, competitions, which, together with experimental influence, has had a positive effect on their professional development.

The EG students had the opportunity to correlate themselves and their capabilities with a variety of non-standard conditions, situations and determine solutions and their behaviour.

The experimental verification of the programme for developing students' psychological readiness for decision-making in extreme situations consisted of three stages.

The first stage was preparatory. It involved compiling a data bank of specific extreme situations in professional activities. They were used during the organization of group analysis and discussions. Also, it was essential to develop relevant methodologies to identify students' level of psychological readiness to creatively solve extreme professional situations. They were employed at the beginning and end of the formative experiment.

The second stage of the experiment was psychodiagnostic. It made it possible to determine the levels of professional readiness to solve professional problems in both the CG and EG students, as well as their characteristics related to the factors in the development of a certain level of psychological readiness to make decisions in extreme professional situations.

The third stage is the formative experiment. It lies in studying the effectiveness of specially organized psycho-pedagogical influence aimed at increasing the level of students' psychological readiness to make decisions in extreme coaching situations. It was essential to develop students' professionally significant personality traits determining their psychological readiness to creatively resolve extreme situations within the developed psycho-pedagogical programme. The latter includes the following:

- measures aimed at developing and improving the motivational and cognitive component of such psychological readiness: theoretical classes conducted to deepen the knowledge about the management theory, psycho-pedagogical principles of team management in extreme activities, self-futurization psychotechnics, simulation of coaching activities in extreme situations, special seminars on the psychology of activities under difficult professional conditions, analysis of real sports situations, discussions on the algorithms of effective coaching activities under non-standard conditions;

- measures directed at developing the operational component of psychological readiness to make decisions under extreme conditions of sports activities: 1) practical classes conducted to develop students' managerial skills in extreme situations to clarify the necessary tasks; choosing priority goals; assessing the situation, making logical management decisions; planning and setting appropriate tasks for subordinates; stimulating and

organizing subordinates' activities under different conditions; controlling and correcting their performance; individual counselling; 2) role-playing management games with a wide range of management tasks and initiative to perform roles (the above-mentioned classes were conducted in the form of group discussions and "brainstorming" to resolve specific extreme sports situations with their subsequent discussion); 3) analyzing the bank of extreme situations typical for coaching activities; 4) socio-psychological training sessions on the development of mental self-regulation; 5) measures aimed at intensifying students' independent work in terms of shaping and developing the skills needed to solve problems in the context of coaching activities under extreme conditions (they were organized together with psychologists and university teachers).

Consultations are an integral part of individual work with students. The authors of the article organized consultations in the form of a dialogue. In this case, they understand such interaction as the outwardly expressed equality of positions and internal content of both the psychologist and the listener. On the one hand, it was important not to put pressure on the listener and force them to make contact. On the other hand, it was vital for the authors of the article to adequately assess themselves, their psychological readiness for such dialogues and developed the corresponding skills. Moreover, their activity implies that we were psychologically open to EG students (after removing their psychological defences and striving for natural behaviour). Finally, they tried to be active during conversations: asking questions, creating permissible communicative provocations, denying or agreeing, admiring or expressing negative assessments.

During the consultations, the authors of the article attempted to build their work in such a way that the responsibility was bilateral. From their side, this responsibility was measured by professional knowledge and experience, as well as a serious attitude towards psychological counselling. They encouraged students to feel responsible for the outcomes of these consultations and be willing to make some effort to resolve or regulate problematic situations.

The leading principle of psychological counselling is considered to be the idea that the student must be internally ready to speak with a psychologist. Therefore, it is undesirable to insist on consultations if the listener refuses to do so.

If, after collecting preliminary socio-psychological information about the student, the authors of the article saw the need for consultations, they used their right to organize a consultation for some particular students.

Influence measurements can be of various types: interpretation providing a new vision of the situation based on theories or personal experience of a psychologist; directive recommendations; self-disclosure; feedback; a logical sequence; an influential summary; open and closed questions; the reflection of feelings; resumes. The directed influence during individual psychological work is also implemented by such techniques as the reference to authority (familiar coaches and sportsmen), the appeal to literary sources, the reference to scientific data. Besides, one needs to rely on the facts of everyday life.

The authors of the article employed different interaction schemes, including 1) the interaction on equal terms – the best option in individual counselling, which means achieving congruence and compliance with the listener; 2) the interaction from the “top” position when one imposes one’s point of view on the listener; 3) the interaction from the “bottom” position when the listener imposes their point of view and openly tries to manipulate. Total time of individual psychological work with one student amounts to 9-15 classes conducted once or twice a week. One class lasts from 1 to 1.5 hours. Besides, individual psychological work consists of three stages (initial, main, final), each of which has its specific goals and specific means of achieving it.

The initial stage lies in establishing emotional contact with students. Its goals are as follows: to create stable relations between them and the psychologist for further effective work; to realize interpersonal problems, as well as problems in mastering the future profession and taking actions in extreme coaching situations. The main task of this stage is to establish emotional contact with students with average and low levels of psychological readiness to make decisions in extreme sports situations.

The initial stage of individual psychological work with students includes 1-2 classes. During it, the authors of the article managed to collect the maximum information about each listener, their needs and interests, values and life orientations, professional awareness. Also, they used the following techniques: empathic and active listening, invaluable acceptance, adjustment.

The main stage implies psychological education of students and cultivation of their interest in the profession. The main tasks of this stage are as follows: to ensure psychological education of students; to identify the motives for behind the desire to become physical education teachers, coaches; to reorient them towards a personal state and behaviour; to simulate problematic situations and search for the optimal ways to solve

them; to encourage them to understand their needs to make effective decisions in extreme situations. The second stage lasts 3-5 classes.

The final stage means consolidating students' ability to constructively solve professional problems. Its goals are the following: to analyze goals, select the patterns of behaviour and develop an ability to change them; to consolidate students' ability to constructively solve problems which may occur during the performance of their professional duties by coaches; to change themselves positively.

In general, the methodology of the formative experiment involved parallel activities with students, both individual and group ones.

Group work involved special classes (lectures, seminars) aimed at deepening students' knowledge about the management theory, psychopedagogical principles of team management in extreme activities, self-futurization psychotechnics, simulation of coaching activities in extreme situations, analysis of real sports situations, discussions on the algorithms of effective coaching activities under non-standard conditions; practical classes aimed at developing students' managerial skills in extreme situations; role-playing (discussions, brainstorming) so that they can resolve specific extreme sports situations and discuss them; analysis of extreme situations typical for coaching activities; socio-psychological training sessions on the development of the skills needed to solve problems in the context of coaching activities.

Such work has provided students with the opportunity to master new concepts and terms of professional interaction, familiarize themselves with the rational ways of solving professional situations and acquire skills of effective professional communication within a sports team. The planned group work of developing psychological readiness for professional coaching activities also included group psychocorrection.

Group psychocorrection differs from the individual one in that it is characterized by the group effect ensured by the integration of relations in the group. In turn, group integration allows one to reach the deep levels of positive disintegration of the subject's personal structure. The group effect is manifested imitation when the self-disclosure of some members of the group initiates the self-disclosure of others. It plays an essential role in group psycho-correctional work with students. After all, students can learn not only from their experience but also from the experience of their colleagues by developing the ability to analyze group material. In this case, one launches the mechanisms of imitation, identification and catharsis creating a special professional environment. The integration of the training group has helped the participants to reduce anxiety, tension and feelings of psychological threat. However, such integration played only a supporting role concerning

the goals of psychoprophylaxis and psychocorrection, and positive disintegration was directly related to personal changes in the participants.

It must be noted that individual participants dealt with the problems of personal and professional identification, power and influence of people on each other, their goals and needs, mutual friendship and closeness throughout the whole cycle of the group's development.

Professional identification is an integral part of one's professional identity. It involves the adoption of leading professional roles, values and norms, as well as the presence of motivational structures encouraging one towards effective practice. At the same time, underdeveloped professional identification, despite a high level of theoretical training and practical skills, does not allow the specialist to feel confident when performing professional functions since it causes the mechanisms of psychological protection, which significantly interfere with the case.

One should pay special attention to the organization of various types of socio-psychological training sessions with higher education students to enable the psycho-correction of each individual and their behaviour in extreme situations, as well as teach them complex types of professional activities. The contribution of such activities to solving the problems of the subject's professional development consists of careful development and multilateral verification of their various forms. The most common forms of professional training sessions in psychology are 1) functional sessions – training mental processes and functions; 2) perceptual sessions – increasing the adequacy and multimodality of professional perception; intellectual sessions – developing creativity and strategic thinking; special sessions – developing professionally significant skills; reflexive sessions – developing a problematic vision of oneself, one's activities; elaborating various forms and levels of a reflexive attitude towards the profession.

Results

The results of the experiment show that 80% of EG students noted a positive effect on their knowledge, views on the content of professional coaching activities and the qualities needed to make decisions in extreme situations. Relevant experts confirmed these changes in students. Also, their motivation has changed rather positively, compared to CG since their views and attitudes towards coaching activities became more realistic.

One can also observe more significant changes in all indicators of the operational component of psychological readiness to make decisions in extreme coaching conditions in EG compared to CG. Indeed, EG students

demonstrate statistically significant differences at the final stage of the formative experiment (at $p < 0.01$) in the following indicators:

- 1) Ability to self-regulate behaviour and mental states – $1_{emp1} = 3.983$;
- 2) Ability to act quickly and make decisions – $1_{emp2} = 4.748$;
- 3) Ability to manage a sports team – $1_{emp3} = 3.264$;
- 4) Ability to comprehend complicated situations creatively – $1_{emp4} = 3.418$;
- 5) Ability to anticipate the consequences of decisions – $1_{emp5} = 5.911$;
- 6) Speed, productivity and flexible thinking – $1_{emp6} = 6.719$.

The formative experiment has had a positive effect on the development of EG students' skills of mental self-regulation and behaviour under difficult conditions, as can be seen from Tables 1 and 2.

Table 1. *The features of changes in the indicators of mental reliability of EG students and CG during the formative experiment, %*

Groups of students	Indicators of mental reliability	Stages of the experiment	Levels of manifestations		
			Low	Average	High
CG	Competitive emotional and	start	76.0	24.0	0
		finish	72.0	24.0	4.0
	Self-regulation	start	44.0	36.0	20.0
		finish	36.0	40.0	24.0
	Stability-Interference	start	32.0	68.0	0
		finish	28.0	72.0	0
EG	Competitive emotional and	start	80.0 -	20.0	0
		finish	32.0	48.0	20.0
	Self-regulation	start	48.0	36.0	16.0
		finish	20.0	44.0	36.0
	Stability-Interference	start	28.0	72.0	0.0
		finish	24.0	48.0	28.0

Table 2. *The manifestations of anxiety and aggression in EG and CG students in extreme situations (according to Eizenko's methodology), %*

Groups	Stages	Anxiety		Levels of aggression		
		No	Yes	Low	Average	High
CG	start	40.0	56.0	16.0	56.0	28.0
	finish	44.0	52.0	16.0	60.0	24.0
EG	start	40.0	60.0	20.0	56.0	24.0
	finish	56.0	44.0	40.0	52.0	8.0

Compared to CG, EG students have improved their resistance to various obstacles in sports, as well as their ability to manage emotional states in extreme situations. Relevant experts have also confirmed positive changes in these indicators in EG at the beginning and end of the experiment.

Finally, the formative experiment indicates a significant decrease in the level of students' destructive mental states manifested in extreme coaching situations. The levels of anxiety and aggression in EG students have decreased significantly (see Table 2).

Discussion & Conclusions

The scientific value of the obtained results is as follows: *for the first time*, the structure of prospective coaches' psychological readiness to make decisions in extreme professional situations has been offered; the content of its components has been determined and the programme for developing such readiness in prospective coaches has been developed; the psychological features of coaching in extreme conditions, as well as the factors and levels of students' psychological readiness for this activity, have been *specified*; the techniques and means of increasing the level of motivational, cognitive and operational readiness have been *further developed*; a set of relevant psychodiagnostic techniques has been arranged.

Regarding the practical value, the obtained results can be used by university teachers, psychologists and coaches to implement optimal support for professional training of prospective coaches, athletes.

Professional coaching includes extreme situations requiring prospective coaches to comprehend them creatively, make prompt decisions and have a capacity for mental self-regulation. The model of psychological readiness for decision-making in extreme situations consists of motivational, cognitive and operational components. Such aspects as high dynamics of activity, uncertainty concerning the opponent's behaviour, the lack of the

necessary information and high social responsibility constitute the development level of one's psychological readiness to make decisions in extreme conditions.

The article studies the motivation structure of students (Years 1-4) and teachers motivating them to make decisions in extreme situations. The group of students' leading motives includes the following: to achieve the set goals; to win; to enjoy the team's victory; to prove oneself and test one's abilities as a coach in extreme situations. In extreme professional situations, the leading motives behind coaches' decisions involve achieving the set goals and enjoying the team's victory. There were no significant differences in decision-making motivation among students (both males and females). However, almost every third student has a low level of motivation for competition.

Concerning the structure of cognitive readiness, prospective coaches still have somewhat vague knowledge about the role of reflection and lack theoretical and methodological knowledge about decision-making under non-standard conditions. They do not know how to assess their professional capabilities as a coach. According to relevant experts, the level of their professional knowledge is between 3 and 4 points on a five-point scale.

Besides, the article proves that students **(Years 1-4) demonstrate low levels of the** operational component of psychological readiness to make decisions under professional conditions. It is manifested in their inability to make managerial and operational decisions in extreme situations, low emotional and volitional resistance to overcome destructive mental states, obstacles and the lack of mental self-regulation skills. A high level of personal anxiety is inherent in the average of every third and aggression – in every fourth student.

The programme developed and verified during the formative experiment is aimed at raising students' awareness of the social significance of coaching, providing them with professionally important information, boosting their motivation and explaining them a system of adequate knowledge about professional activities in extreme situations.

It must be noted that the operational readiness of prospective coaches was developed by conducting special classes on the development of decision-making skills, self-reflection, self-regulation (theoretical classes and a set of exercises aimed at developing the necessary professional qualities). Compared to the beginning of the research, the number of EG students with a high level of anxiety has decreased by 16% and their capacity for self-regulation in extreme situations has increased by 20% at the final stage of the research.

Future research should study the psychology of one's readiness for decision-making in extreme coaching situations. The possible areas of study are the following: the influence of one's typological traits on the success of the specified activity; the specified readiness of coaches in various kinds of sports; the dynamics of such readiness during further professionalization of university graduates.

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