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Sport psychology in the physical culture sciences. A review

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Abstract

Background and aim. The important role of sports psychology is often emphasized. But not everyone is aware that it applies to the entire area of physical culture. The aim of this article is to present the role of sports psychology and the positioning of this discipline in physical culture sciences. **Material and method.** The collected material consisted only of the works of sports psychologists available in Poland. The method of source materials analysis was

used. Analysis with deductive reasoning and synthesis with inductive reasoning were used. **Results.** The importance of sport psychology for the sciences of physical culture and its theoretical and practical tasks are presented. **Conclusions.** Sport psychology is a discipline in the field of physical culture sciences. It deals with theoretical (research, education, diagnosis, analyzes, interventions, counseling) and practical (mental training) mechanisms and laws governing the psyche and human behavior in sport, physical education, tourism and recreation, rehabilitation and health training, using knowledge in the field of psychology and physical culture.

Key words: sport psychology, physical culture, mental training, sports psychologist

Introduction

Psychology is a science that studies humans. The aim of psychology is to analyze human behavior and mental processes in the broadly understood human nature. The internal processes of the individual and the interactive processes taking place in the social and physical environment are subject to observation. Psychology as a science developed from the areas of sociology, anthropology, philosophy, and biology, and developed its own experimental methods. Psychology is one of the social sciences. The basic empirical research methods are: experiment and observation. The most common subject of research is internal behavior, i.e. mental processes and emotions; and external behavior, i.e. actions taken by the individual. Psychologists complement the research on human nature with research in the animal world. Such an approach allows psychologists to determine to what extent a given phenomenon is universal, to what extent a given phenomenon has biological roots and whether the genesis of a phenomenon is based on human nature or culture [1, 2, 3, 4].

Currently, numerous studies in the field of psychology are carried out in many research centers around the world. These studies concern various fields of psychology. Due to the subject of interest, psychology can be considered in various dimensions: business, experimental, economic, clinical, communication, personality, penitentiary, work, industrial, family, developmental, judicial, social, sports, environment, transport, image, educational, management, health and neuropsychology, parapsychology, psychodietetics, psychotherapy, coaching, etc. These areas are determined by modern research directions, i.e.:

- biological approach - the subject of research is the brain, nervous and endocrine systems;
- psychodynamic approach - internal drives are the subject of research;
- behavioral approach - the subject of research is the external and internal behavior of the individual;
- cognitive approach - the subject of research are the processes of thinking, perception, remembering and processing information;
- humanistic approach - the subject of research is the world of internal experiences of an individual and their responsibility for their own life (psychology of subjective experiences of an individual and not of objective facts observed by a scientist);
- evolutionary approach - the subject of research is all human behavior (physical and mental) aimed at adapting to the environment [5, 6, 7, 8, 9].

The aim of this article is to present the significant role of sports psychology and the position of this discipline in physical culture sciences. Only the works of sports psychologists generally available in Poland were analyzed. The method of source materials analysis was used in the work. Analysis with deductive reasoning and synthesis with inductive reasoning were used.

Theoretical tasks of sports psychology

Since the second half of the twentieth century, the psychology of sport and physical activity has grown from its precarious beginnings to a mature academic field of certain value, one of the applied branches of psychology, supported by countless texts, international journals and professional associations. The following should be distinguished here: International Society of Sport Psychology, Association for Applied Sport Psychology, American Psychology Association - Division 47), International Society of Mental Training and Excellence, as well as continental organizations, incl. European Federation of Sport Psychology and Physical Activity, convening congresses, exchanging experiences on new theories, research results and practical solutions, marking the future of the discipline.

The European Federation of Sport Psychology and Physical Activity defines the psychology of sport as a field dealing with the basics, processes and effects of psychological regulation of sport-related activities by an individual or several people acting as subjects of

activity [10]. In this definition, as sport, the European Federation of Sport Psychology and Physical Activity understands the broadly understood physical activity: competition and recreation; education or health improvement. Therefore, the subject of interest in sports psychology are all subjects of physical activity, i.e. all persons related to physical culture: athletes, coaches, teachers, parents, viewers, judges, activists, physiotherapists and others. In this sense, the psychology of sport may focus only on the behavior of these people or take into account other mechanisms of human mental functioning, such as emotions, cognitive processes, motivational and sensorimotor processes [11, 12].

Qualified sport is a training ground for human abilities in all aspects: physical, mental, physiological and technical. The specificity of this activity is a public performance, i.e. a situation in which, due to observation and evaluation, we perform subjectively and objectively easy tasks better, and difficult ones - worse. Sports training has, among others make the task to be performed by the player - at least in a subjective opinion - treated as easy [13].

Winning is one of the proofs of coaching effectiveness. But effective training is not only about competition. Effective coaches also help their players acquire and improve new skills. They show how to derive joy from sports rivalry and shape self-esteem. They know how to teach young people technical and tactical skills. In addition, they teach and show by their own example the skills that players will need to function effectively in social life. Training others is actually a learning process, but it is also more than that. Coaches not only guide their pupils through the process of learning technical, tactical and life skills, but also help their players demonstrate these skills [14].

The role of the trainer and the interpersonal bond between the trainer and the player are significant here. The basis of interpersonal behavior is interaction, exchange of behavior, goods, opinions, experiences, observations, emotions and feelings. It requires personal involvement, without the presence of another person. The examples of task-oriented cooperation of trainers observed in the research include: a joint discussion on the selection of technical elements for individual competitions, a conversation about a recently watched film from the competition, eating meals together, sharing comments on the performance of a training task. The content exchange is directly related to the interaction between the coach and the player and is evidence of a well-functioning coach-player relationship. The main function in these relationships is feedback. The more often you act for the benefit of the

player, the more frequent and intense the mutual exchange of positive content and the greater the awareness. The relationship of interpersonal relations is built by both sides. Therefore, a properly functioning teacher-pupil system is based on the following elements:

- independent action for the benefit of another person, cooperation between the trainer and the competitor to achieve training goals and meet physical needs,
- active cooperation and constructive exchange of information on sports activities and personal life,
- a clear level of mutual trust and respect based on a thorough knowledge of the needs, feelings and goals of the other person,
- subjective importance of the assigned interpersonal relationship in the sports and personal field [15].

However, the tasks of a sports psychologist include:

- conducting research related to the psychological aspects of playing sports;
- psychological education of all people involved in practicing sports, psychology students and self-education of practicing psychologists;
- practical application of knowledge in diagnosis and analysis as well as intervention and counseling [10].

Scientific research in the field of sport psychology is essential to understanding the psychological underpinnings of activity regulation in the context of sport and physical activity. Education in this area must occur at different levels of education and specialization, i.e. professional, academic and school. The application, i.e. the knowledge and competences of sports psychology in the field of diagnosis and measurement, is used in recruiting and selecting talented athletes, testing their abilities, assessing their needs, etc. On the other hand, intervention and psychological counseling must be supported by cooperation with all members of the training staff [16, 17, 18, 19, 20].

Practical tasks of sports psychology

The starting situation is the most difficult element in the area of assertive situations, in which the player's behavior comes down to defending his rights, ie the right to win [21, 22]. Competitors subject to starting pressure differ not in the level of training, but in the ability to

make right decisions and control emotions. Therefore, the goal of cooperation between athletes and psychologists may include shaping the Integral Posture of Optimal Startup Readiness - IPOGS, i.e. in accordance with the structural model of posture, mastery by athletes of the art of controlling thoughts (cognitive functioning) and emotions (psychophysical functioning) and behavior (psychomotor functioning) in order to obtain maximum resistance and mental strength, as well as minimize the risk of making a mistake in the most difficult moments of the competition [23, 24, 25].

In the applied sports psychology, the most important and broadest practice is systematic mental training, which prepares the athlete for the competition in terms of psychology. These are systematically prepared models of conduct, taking into account all psychological, sports and non-sports conditions relating to a given player [26-37]. Such programs often contain a wide variety of techniques, such as goal setting and elevating mental processing and performance in sports. Most models of this training include elements related to adequate preparation in terms of relaxation, motivation, concentration, visualization, self-confidence, mental resilience and emotional control [38-57].

Mental training, like any other deliberate training, is characterized by two aspects [58]:

- it is a systematic, long-term, controlled and regular process, which requires the development of plans, their implementation, evaluation of the course and effects and - if necessary - modification, as occasional activities are not targeted training;
- through training, the structural or functional adaptation necessary for efficient and effective operation is sought.

Moreover, the sports psychologist himself plays a dominant role in providing an athlete with emotional support [59]. He is involved directly and indirectly through the coach, he can control the atmosphere in the team or the relationship between the athlete and the coach. It is different in the case of information support. If we assume that this kind of support is mainly about providing information that could help to better understand the situation, then it turns out that this kind of support should be given to both the athlete and the coach. Such information may come from a physiologist, physician, sports psychologist, and a specialist in biomechanics [60-61].

Another form of support is instrumental support [62], which is, inter alia, a kind of instruction on, for example, how an athlete should behave during a long flight, taking into account changes in time zones and climates in order to minimize negative physical and mental effects. Instrumental support will therefore be of an interdisciplinary nature; advice may come from specialists in various fields of knowledge. Support that increases self-confidence can be provided to an athlete by a trainer, but also by a sports physiologist or psychologist [63].

Specific psychological help, provided as part of a brief intervention in specific circumstances, requires from a sports psychologist appropriate skills, experience and compliance with the applicable rules:

1. understanding and willingness to help,
2. hearing the competitor and following his reasoning, without giving advice and judging,
3. cooperating with the player and appreciating his knowledge and experience.
4. participation in important sports events at the full disposal of the player, especially in key moments,
5. adapting to training plans, the needs of the player and coach,
6. to behave in a way that helps reduce stress for the player and coach,
7. avoiding negativity, relieving tensions and appreciating the seriousness of the situation,
8. treating difficult situations as challenges, looking for creative solutions to problems,
9. creating action plans in cooperation with the player and presenting them in a simple, communicative way [64, 65].

In the literature on sports psychology, several models characterizing the mental training process in a sport have been presented. One of the pioneers was Puni [66, 67, 68, 69], who assumed that mental preparation - apart from physical, technical and tactical preparation - is an important element of the athlete's preparation. Puni's model assumed two stages: general preparation and special preparation for individual competitions. General preparation should include training in basic psychological skills (motivation, goal-orientation, determination, perseverance, initiative) and moral development (patriotism). And special preparation, depending on the short or long-term perspective, must lead to the development of the optimal state of readiness for use. In cases of fever or starting apathy, intervention is necessary.

Unestahl's preparation scheme [70] belongs to the classic approach to the mental training model. The first stage is general mental preparation. The athlete learns to achieve a state of relaxation, concentration, and the ability to control behavior and emotions. The second stage is specialized mental preparation. Visualization exercises, specific concentration of attention, mental resistance, willpower are carried out here, and these exercises are included in the course of sports training. The third stage is mental startup preparation. The competitor trains mental training programs focused on specific starting events through visualization, control of arousal, building self-confidence and restitution combined with the visualization of start and success.

Another important model was developed by Thomas [71]. He distinguished seven phases in the process of enhancing mental achievement. The first phase assumed goal orientation, i.e. the reasons for the consultation and determination of the player's involvement. In the second phase, it was necessary to analyze a given sport discipline from the perspective of psychology, physical culture sciences, knowledge and experience. In the third phase, the athlete had to be mentally assessed using psychological methods, techniques and research tools. The fourth phase assumed the conceptualization of the obtained results, and the fifth - the training of psychological skills, incl. control of arousal, emotions, self-confidence, concentration of attention, visualization, etc. In the sixth phase, the use of mental skills was realized. In the seventh phase, the process of enhancing mental achievement had to be evaluated.

A convenient practically and at the same time empirically rooted model of optimal functioning is the so-called "Circle of Excellence", proposed by Orlicek [72]. The psychological basis of optimal performance here is, in short, commitment (passion, love of the represented discipline of achievement) and self-confidence (self-confidence) and faith in the sense of what the performer accomplishes. This basic self-reflection on oneself and the domain of one's own achievements is directed (updated) with the help of five psychological skills:

1. full concentration on the task (e.g. focusing on the task resulting in a complete blending into the experience "here and now"),
2. positive perceptions (e.g. maintaining positive expectations regarding the level of task performance from a declining time perspective),

3. mental readiness (e.g. optimal attitude to learning in training and to competing in competitions),
4. disturbance control (e.g. ability to deal with negative stimuli, starting situations, life events),
5. constructive assessment (e.g. the ability to draw positive conclusions from mistakes and failures).

In the process of mental training, each of the above-mentioned elements of the Circle of Excellence becomes a project of several phases, carried out in a methodical way, from simpler tasks and questions, to pre-start plans and rituals.

Later, Nowicki [73, 74] proposed a model of the directions of psychological impact focused on the coach and the player. In the case of a coach, the aim is to develop communication skills with players and members of the training staff, shaping the attitudes and attitudes of players, managing a sports group, and emotional self-control. On the other hand, the direction of psychological impacts on the player first concerns psychological diagnosis and monitoring (analysis of the level of achievement, interview, observation, psychomotor tests, personality structures). Then the problem is formulated, i.e. the potential psychological abilities of the player are specified, their strengths and weaknesses - the weaknesses are corrected (working with the problem), the strong ones are raised to a higher level (potential release) - and individual psychological training programs are developed. Psychological strategies are used during sports competitions based on motivation, concentration, relaxation, emotional control, visualization, biofeedback, etc. Finally, there is a need to monitor and evaluate the effects. This allows you to adjust the exercises to the current level of training of the player and allows for a possible correction of the training programs used.

Also Krawczyński and colleagues [75] proposed their model of comprehensive psychological preparation. In the first stage, it assumes a preliminary diagnosis consisting in determining all the causes and conditions for undertaking activities related to the psychological preparation program. In the second stage, diagnosis and monitoring should be carried out - individual and group assessment - using all available methods, techniques and research tools. The third stage involves conceptualization, i.e. the formulation of tasks related to the development of a player's psychological potential based on the quantitative and qualitative analysis of the collected data. The next stage is the implementation of activities called the Program of the Practical Action [31, 34]. It consists in acquiring knowledge and

skills in the following spheres: cognitive, emotional, behavioral, ethical and social, psychological skills training, psychosomatic recovery, and crisis or injury interventions. The last stage is evaluation and correction, i.e. the assessment of the measures applied and possible changes or corrections to the program at each of its stages.

Conclusions

Sports psychology is a specialty bordering on the discipline of psychology in the field of social sciences and the discipline of physical culture sciences in the field of medical sciences and health sciences. This means that the psychology of sport theoretically (research, education, diagnosis, analyzes, interventions, counseling) and practically (mental training) deals with the mechanisms and laws governing the psyche and human behavior in sport [76, 77], physical education [78], tourism and recreation [79], rehabilitation and health training [80] using the knowledge of psychology and physical culture. The influence of the social system of psychology on a specific field of physical culture is expressed in the psychology of sport [81] and therefore it is located in the field of physical culture sciences. All intellectual values in the field of psychology and physical culture are to some extent used in theoretical and practical work by sports psychologists, mental trainers, coaches, athletes, parents of young athletes, activists and physically active people.

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