

PSYCHOLOGICAL SUPPORT AND A SPORT INJURY SITUATION

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Abstract

The purpose of this article is to outline general issues of practical aspects of sport psychology and show a model of psychological effect in case of injury. Significance and value of sport psychology are evaluated mainly by its enhance impact on performance efficiency. Principal concerns are: breaking personal competence barriers, achieving better results, managing stress situation etc. Main focus of psychological activity is to effect one's efficacy in sport performance. However, it does not mean that psychologist's work is limited to sport competition only. The results of good psychological training do not only have immediate connotation. They can be perceived after competitions and in non-sport related situations. An exemplary situation is one directly linked to sport activity, but consequences are experienced out of sport arena-namely sport injury and its treatment. Serious injury is a traumatic experience for an athlete and can turn into the cause of various frustrations. Consequences can be very extensive: from problems to attain previous level of performance up to 'sport death'. Psychological support program is based on three pillars: education, social support and mental training. Skills acquired during psychological training become useful in rehabilitation. They can both bolster and facilitate recovery itself and ensure a faster and improved return to sport. Accurate psychological intervention should result in athlete's self reliance. The effects of which go beyond 'now and here' situation, or even further than sport.

Key words: psychological support, sport performance, sports injury, support program, return to sport

Psychological support and a sport injury situation

This article is divided in three parts. The first part presents general information regarding applied sport psychology, principal problems a sport psychologist deals with and exemplary forms of psychological effects. The second part is devoted to psychological support in professional sport. It presents stages of mental training and the most important psychological factors applied to success in sport. The last part illustrates the possibility of application of specific psychological techniques as well as ways of support in the work with an injured athlete.

The use of sports psychology in sport practice

Significance and the value of sport psychology are evaluated mainly by its enhance impact on performance efficacy. Primary concerns of sport psychology are: breaking personal competence barriers, achieving better results, managing stress situations *etc.* Practical aspect of sport psychology involves various ways of intervention. From so called 'brief counseling' up to different forms of support, or even to a therapy.

'Brief counseling' is a set of techniques allowing a quick response to sudden or sometimes even critical situations. The purpose of these techniques is to react as fast as possible and to manage unpredictable circumstances *e.g.* equipment failure, competition postponing or break, sudden change of weather conditions *etc.*

There are four stages of brief counseling: clear defining, suggestion of certain solutions and verification, setting detailed goals as a base for applying changes, and the last stage: operation planning.

When we talk about support we mean social support. It is considered as a form of social interaction with exchange of information, emotions, tools and material goods. It can be one or two - way exchange. It enables problem solving for one or both involved. An important condition of successful support is adequate identification of personal needs (1). Psychological intervention includes various ways of support: informational, instrumental, self confidence and emotional (2). Informational support helps to understand both the problem and own position. It is also a feedback from person's actions.

Other supportive way is instrumental support which is a form of instruction. These are clues how to deal with a specific situation (*e.g.* during a warm up, or a break). The third way of support is self confidence support. An individual receives information which rises self esteem as well as prevents negative effects of criticism. Emotional support, however, focuses on emotion control, mood and self evaluation enhancement. It strengthens the feeling of being understood and accepted.

The presented chapter helps to realize how many different ways of an athlete support exist. In practice the specific ways of support are not used separately but they cooperate. The main target of psychological involvement is to raise the participant's effective-

ness in competition. However, it does not mean that psychological work is only limited to events during competitions. Psychologist can have a crucial contribution to situations out of sports arena. Trauma as a result of physical injury is such an example.

Psychological support in professional sport

The main aim of professional sport is that an athlete, by acquiring certain psychological features and skills, reaches such a psychophysical state that will enable him to achieve top results. Not surprisingly, the principal tasks of a psychologist's focus are on the athlete's mental preparation to sport competitions. The preparation is perused in three stages:

- a) stage of general mental preparation: an athlete learns how to relax and concentrate as the base for development of positive changes and ability to control behavior and emotions,
- b) stage of specialized mental techniques training: an athlete becomes acquainted and trained in psychological exercises which develop the skill of idea-motor training and focus of attention typical for each sport discipline,
- c) stage of mental preparation to participation: at this stage idea-motor training is used to improve technique and tactic, arousal control during performance and ability to activate self-confidence.

There are many benefits of psychological training. On one hand, it involves focus and perception skills improvement, ability to control emotions. On the other hand, it results in energy efficacy, effective rest, or motor precision improvement (3).

To be effective a psychologist must answer a question: which psychological factors does success in a specific discipline depend on and whether it is an autonomous factor or it is determined by the level of sport skills.

Some sport psychologists enlist psychological features which in their opinion, guarantee success in sport. It is worth mentioning the opinion of American psychologist (Taylor, see 4), who created a pyramid of success based on Maslow's needs pyramid. It consists of five levels. At the basis lies **motivation**. As a propelling mechanism it is crucial for any kind of activity, it is responsible for adequate energy administration, being consequent in target achieving, and for resisting competitive motifs. Master motivation is: lack of excuses, responsibility for result, perceiving weaknesses as challenge, ability of setting and achieving personal goals. The other levels are: **confidence**, **arousal control**, **focus**, and **emotion control**. The aspects mentioned by Taylor are key issues of sport psychologists' work.

One of the most important abilities acquired by an athlete during a psychological training is the skill to apply an imagination training, called imagery. The athlete generates images (at any time, and place) by the use of as many senses as possible, and visualize himself in

sport performance. To use efficiently this kind of training it is essential to learn techniques which improve body consciousness and control over vegetative functions. I mean both classic techniques as autogenic training, progressive muscle relaxation, breathing exercises, and various types of biofeedback techniques.

A sport psychologist can counsel how to manage difficult situations basing on abilities acquired during a psychological training. Psycho – regulative techniques improve psychological resistance and facilitate emotion control and fear management. Cognitive fear is caused by anticipation of eventual consequences or failure committing or suffering a defeat. A sport psychologist prepares an athlete for coping with difficult and unpredictable situations such as disadvantageous referee's decisions, uncomfortable opponent's style, making up for loss, maintaining advantage, keeping thorough engagement till the end of competition. Apart from competitions, it is an ability to deal with victory and loss, injury, sudden or scheduled end of career. The effects of a good psychological training have not only immediate significance. They are recognizable after competitions as well as in non-sport related situations.

What an athlete learns during a psychological skills training is essential not only because of his target, which is a sport peak achievement. It so happens that an athlete on his way to success frequently experiences situations which result in discouragement, desperation or even in a break down. Therefore, psychological skills turn out to be very useful. Let us analyze an exemplary situation and find out what role does a sport psychologist play in the work with an injured athlete.

Psychological support in sport injury

A sport psychologist is required to be acquainted with the sport and certain discipline specification, to know the basis of anatomy and physiology and to be familiar with the use of measurement and monitoring equipment. These abilities also apply to a situation when an injured athlete is given support. It means that a sport psychologist before taking any steps, should examine circumstances and first of all, should know the details of injury occurrence, as well as the way of treatment and return to training and competitions.

The first important issue concerns factors which predispose injuries. In their analysis it is worth noticing the fact that some of them are direct in its nature and are difficult to predict, *e.g.* other competitor's behavior. Others, however, affect indirectly. From a psychological point of view they are particularly important. These are so called 'factors predisposing injuries' such as: age, training intensity, inappropriate warm up, previous injuries and their incomplete healing, abusing rules, technical state of sport field, psychophysical condition, which is linked to stress resistance, level of fear, degree of focus, overesti-

mating own possibilities, impulsiveness (5). In most of the cases it is possible to prevent negative effects of mentioned above factors, *e.g.* change a warm up, play according to rules *etc.* Talking about age, I mean, namely, lack of experience (young athletes) or decline in immunology system due to overtraining, and previously experienced injuries (about older athletes).

The second issue relates to kinds of injuries. The same as competitions have various ranges (since internal sparing up to championships) so injuries may have different significance to the athlete and his future career. Undoubtedly, physical trauma puts him in a difficult situation and hinder achievement of his goals. The athlete may never return to a previous level of sport performance. In the worst scenario an injury may stop sport career, and consequently a sport death for the athlete.

According to Heil (6), there are five categories of injury severity and different consequences of psychological nature are correlated with them:

- light injury – requires treatment but without a break in training;
- medium injury - relatively more severe, collides with training requirements and constrain from participation;
- serious injury – requires long absence, operation and stay in a hospital;
- injury disabling sport participation-due to seriousness or time of occurrence the injury makes an athlete unable to return to a previous level of performance;
- catastrophe – an injury which cause permanent dysfunction.

The way an athlete perceives his injury, evaluates it and gives importance to it results from many factors. It is impossible to mention all of them, however, certainly relatively constant psychological features of an athlete, time and circumstances, severity and consequences should be taken into account. According to Heil (7) an injury can be perceived as:

- Challenge – an athlete is focused on defeating an injury;
- Enemy – which wants to destroy you;
- Punishment - for past sins, offences and neglecting;
- Syndrome of an inborn weakness;
- Discharging from requirements and responsibilities;
- Irreversible loss;
- Manipulation tool in order to satisfy various needs.

In literature about psychological aspects of response to a sport injury much place is devoted to issues concerning the reaction to injury (8-10). It might be seen as a process divided into several stages (11):

- Negation and isolation
- Anger
- Negotiation
- Depression
- Acknowledging or resignation

The basic assumption of this concept is that change of stages is not a linear process in time but a circle which can repeat (12).

Return to sport can cause big problems. It is accompanied by the fear whether an athlete regains the position and level of performance from preinjury, or if the competence went too far ahead. The fact whether an athlete regains the pre injury level, or achieves even better results depends on how the particular stages of rehabilitation were pursued.

Firstly, it is important that an athlete has an open and accessible information source about his injury (information support). It is one of the factors which decide if the athlete adheres actively to the process of healing and becomes a member of rehabilitation team. A doctor's role is to positively and realistically inform the injured athlete about rehabilitation process. The athlete should have confidence in recovery (self confidence support). Confidence is so important for the fact that it directly influences injured athlete's efforts during rehabilitation. Initially, injured athletes tend to focus on the negative aspects of the injury rather than on positive aspects of rehabilitation.

Rehabilitation is based on three facets (for review see 13). Specialized rehabilitation of injured area, general physiological rehabilitation, consisting of conditioning training, modeling and maintaining motor features. The third facet is a psychological one. Omitting or neglecting any of mentioned facets can cause incomplete recovery and appearance of secondary problems. These may be reinjury, lowered level of physical condition hindering the demonstration of technical skills, or lack of confidence in personal competence, and fear of reinjury, or defensive behavior during competitions.

Specific difficulties and problems appear at different stages of rehabilitation.

Fear, uncertainty and acceptance problems dominate the phase right after the injury. The application of risky solutions *e.g.* pain blockers and pain killers might be necessary. The actions undertaken at this stage should facilitate the acknowledgement of a new situation by the athlete (emotional support). The injured athlete's engagement into setting of rehabilitation program and its time may be helpful (instrumental support). This way an athlete ensures he is an equal partner and can influence the final effect (self confidence support). It is worth educating the athlete about similarities between rehabilitation and sport performance (self confidence support). Following features and skills in sport performance, such as:

persistence, focus, ability to overcome obstacles or setting goals have a significant role in the process of healing. They facilitate a successful rehabilitation. If possible, it is useful to identify rehab partners-just as training partner. They can motivate, control and in a sense, be responsible for each other. It is important in a long term rehabilitation.

As the rehabilitation proceeds, goals change. At an advanced stage of rehabilitation certain goals and tasks should be set and be more and more training-like, still however, under the control of a medical team. A physical preparation trainer can be consulted and, as far as possible, the elements of training leading to improvement of physical condition should be included. Just as an injured athlete needs to become familiar with his new situation, he also needs time to regain confidence in his value as an athlete. At this stage self confidence support is essential, it helps in building up confidence and belief in return to sport.

There are two dangers in return to sport situation too early return or over postponed return. In the first case, an athlete returns to sport independently of a doctor and trainer's approval. In the second, although the medical team and trainer's positive opinion, an athlete is not ready to resume sport activity. Identification of this state demands the use of an appropriate support.

Apart from educational and social support, the third pillar which psychological support program is built on, is mental training (14,15).

Skills acquired during psychological training are very useful in the process of rehabilitation. They can not only accelerate and improve the process of healing, but also ensure a faster and improved return to sport.

Imagery contributes to mental training and can be used as a compliment to rehabilitation. In the initial period, right after injury, X-rays photos or anatomy models can be used to educate an athlete about nature of injury. It can facilitate a 'control' over an injury and protect against negative thoughts. If the trainer learns about the injury as well, an athlete will feel more confident and accepted. In the follow up stages an athlete should imagine the process of healing or his state after recovery, instead of focus on injury only. It can serve as a positive rehabilitation imagery supplement to what comes next. It bolsters a right attitude towards rehabilitation and enhances goal setting.

Skills acquired during the relaxing techniques practice and those related to deep feeling and body consciousness can be useful during rehabilitation.

An athlete generates an image of an activity he is unable to perform at the moment.

Although, there are controversies about the mechanisms underlying the basis of healing imagery, their positive influence on recovery is uncontested.

The most probable and frequent effect of healing imagery is fear reduction.

If, during the break caused by injury, an athlete participates in training, and pays attention to new tasks and tactics and later exercises them in his imagery, then his return to the level of performance from pre injury period is easier and more confident.

Organizing injured athletes at different stages of rehabilitation process into appropriate groups is an effective means of motivating. They share their experience, success and support one another.

One of the setbacks of injury is pain which being nagging itself can also be barrier to effective rehabilitation. Pain increases muscular bracing and at the same time pain perception. And this way the mechanism of vicious circle activates. There are several strategies of pain management. Fernandez and Turk (14) specified four techniques having dissociative quality such as external focus of attention, pleasant imaginings, neutral imaginings, and rhythmic cognitive activity. Besides dissociative techniques Fernandez and Turk classified two associative techniques: pain acknowledging and dramatized imaginings. Dissociative techniques are more frequently used and are easier to administrate. They involve directing attention to external stimuli such as music, element of surrounding or landscape. Pleasurable images can concern a favorite place, person. Neutral imagining entails imagining habitual activities –climbing stairs, chess play. Simple and rhythmic cognitive activities – repeating alphabet backwards or counting from 100 to 1.

Associative method can be based on imagining the feeling of complete anesthesia. A patient observes the pain separated from emotions and generates the image of pain removal by blood circulation. Dramatized imaginings involve seeing oneself as a hero where pain is related to triumph.

One of the most serious problems appearing during rehabilitation is a fear of reinjury or reagravation. Fear intensification can slow rehabilitation and hinder return to sport and actually increase the probability of reinjury. Adequate goal setting and social support during rehabilitation can help in resolving the problem.

It is necessary to educate the athlete that the experience of fear is something normal. How we deal with the fear is a real problem, not the fear itself. The athlete should learn about his present health condition and his progress in rehabilitation so far. Real improvement in the nearest future should be outlined and psychological training reducing fear be implemented.

Techniques used in sport psychology in work with athletes can be successfully utilized in other professions such as surgery, air traffic control, and piloting. Anywhere there is no place for a mistake. Proper psychological support should lead the athlete to self-reliance. The effects should go beyond the situation 'now and here' and even further than sport.

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