

LOOKING FOR AN OPTIMUM MODEL OF ATHLETE'S SUPPORT

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Abstract. The starting point for our research was the scheme of the structure of sports sciences included in the work of Bakker, Whiting and Brug [2]. It showed mutual relationships between sport and the four fields of knowledge: psychology, physiology, biomechanics and sociology. It is a well-known fact that a whole team of specialists co-operate with a sportsman and a coach: medical doctors, physiologists, dieticians and masseurs. The question, however, arises: what relationships should there be between them and according to what model should they act. The idea of social support seems to be useful in creating a model of supporting a sportsman. Four forms of social support were identified: emotional support, information support, instrumental support and increasing self-confidence. Bearing the above mentioned division in mind, let us take into consideration the functioning of a team supporting both a sportsman and, indirectly, also a coach. Why a coach? While supervising the training of a sportsman the coach looks for information which would minimize the possibility of making a mistake [16]. In giving an athlete emotional support, the dominant role is, undoubtedly, that of a psychologist. A psychologist, involved both directly and indirectly, through the coach, can control the atmosphere in a team or in the relationship between the athlete and the coach. The situation is different in case of information support. If we assume that this kind of support is mainly based on giving information which would help in better understanding of the situation, then it turns out that this kind of support should be given both to the athlete and the coach. This kind of information can come from a physiologist, physician, psychologist (how to cope with a difficult situation) and a specialist in biomechanics. Another form of support is instrumental support, which is, among others, a kind of instruction, for example, how an athlete should behave during a long flight involving changes in time and climatic zones in order to minimize negative physical and mental effects. Instrumental support will again have interdisciplinary character; the advice may come from specialists in various fields of knowledge. The kind of support increasing self-confidence can be given to an athlete by the coach, but also by a physiologist, or a psychologist. The above mentioned facts stress the need to work out a system of support for athletes. Such systems were prepared for sport

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psychology in Australia before the Olympic Games in Sydney (Blecharz 2001). There is no doubt, however, that one uniform model should be worked out. In Poland an attempt at organizing such a team supporting an athlete has been made in case of Adam Malysz (world champion and vice-champion in Lahti 2002, twice world champion in Predazzo in 2003, winner of silver and bronze Olympic medals in Salt Lake City 2002, and three times World Cup winner). The team consists of two coaches, a psychologist (who, at the same time, takes care of the athlete's physical fitness) a physiologist, a physician and, occasionally, a specialist in biomechanics. In Polish sport we also have Robert Korzeniowski (three times winner of the Olympic gold medals in walking) an athlete who single-handedly can manage his own perfect preparation and support. The problem, therefore is worth undertaking and particular attention should be paid to synchronizing the activities of various members of the team supporting an athlete.

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Key words: Sport results - Support for an athlete - Sport psychologist - Coach

Introduction

The most important aspect of contemporary sport is the drive to increase the level of athletes' achievements. It is an effect of sport commercialization and its great popularity. The matter of athletes' support has therefore become a matter of competition of specialists in various fields. The starting point for our considerations is the schematic presentation of the structure of sport sciences published in the work of Bakker and Brug [2] (Fig.1).

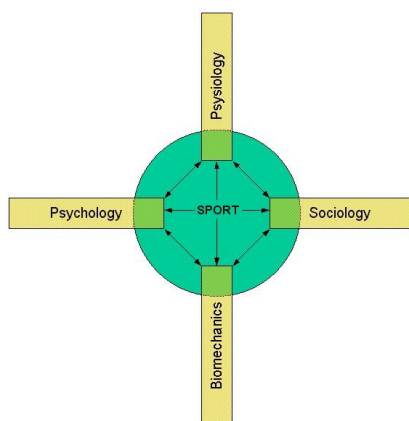


Fig. 1
Structure of sport science



The model shows interrelations between sport and the four fields of science: psychology, physiology, biomechanics and sociology. It shows the place of a psychologist in the general structure of sport and the relationship between a psychologist, medical services and the coach.

Material and Methods

It is a well known fact that the team of people cooperating with a sportsman consists of medical doctors, physiologists, psychologists, dieticians and masseurs. There are numerous publications concerning their cooperation with athletes [5,7,8,12].

Adam Małysz, Polish ski-jumping champion, winner of the silver and bronze Olympic medals in Salt Lake City in 2002, world champion and vice-champion in Lahti in 2001, twice world champion in Predazzo in 2003, and three times World Cup winner had a team of specialists who cooperated with him, consisting of a physiologist, a psychologist, who was also a masseur, a specialist in biomechanics, and a medical doctor.

The main issue, however, is the question of interrelations between the members of the team of specialists and the model according to which they are supposed to work.

The concept that seems to be useful in establishing the model of athlete's support is the concept of social support consisting of emotional support, information support, instrumental support and that increasing self-confidence. [1,3,13].

Let us discuss therefore the functioning of a team supporting an athlete and, indirectly, the athlete's coach. Why the coach? The coach is the person directly responsible for the athlete and that is why, in the process of managing the training, the coach looks for the information which would minimize the risk of making a mistake [16]. The coach functions under particular pressure exerted by the groups interested in the success of his charge. We can, in a sense, talk about the loneliness of the coach. [17].

There is no doubt about the fact that the psychologist should play a dominant role in giving an athlete emotional support, the essence of which will be managing emotional tension, attempting to give the athlete a sense of security, improving his frame of mind and self-concept. The psychologist will be involved both directly and indirectly - through the coach he can control the atmosphere in the team or in the relations coach - athlete.



The psychologist can also give instructions to other members of the team of specialists who are in direct contact with the athlete during the competitions, telling them how to behave when they notice emotional tension of the athlete, his bad frame of mind, etc. By members of the team we mean, first of all, the coach, even though we should assume that he already has this ability. It also applies to the masseur, who always accompanies the athlete. The task of the psychologist is to find out the athlete's needs regarding support, which refers not only to emotional support but also to its other forms.

Generally speaking, the task of the psychologist is to see to it that the athlete is surrounded with nice atmosphere and human kindness, which are basic factors of social support.

“Information support means the exchange of such information which facilitates better understanding of one's problem and life situation” [13]. The athlete looks for various kinds of information. It can come not only from the coach or the psychologist, but also from the physiologist or the medical doctor. The information support should be worked out by the athlete in such a way that he should be able to choose optimal forms of coping with the problem.

For example, the abilities acquired by the athlete during biofeedback training can be used on various levels of preparation for the most important competitions. Let us discuss it on the basis of our work with ski jumpers:

The formation of the specific type of attention concentration, typical of the jumpers (coming down the inrun and takeoff) and the introduction of ideomotor training can be based on the concept of transduction of information (process owing to which the body gets the information about the intensity of the stimulus). Biofeedback is a spectacular example of transduction.

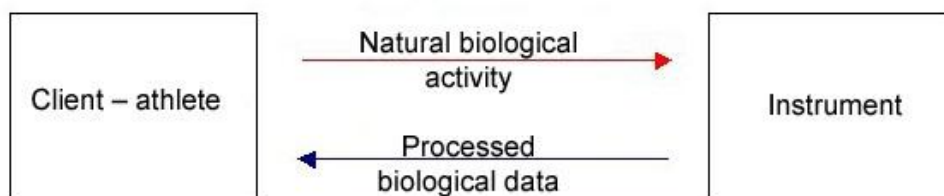


Fig. 2

Schematic presentation of biofeedback [6]



Biofeedback contributes both to the understanding of mind and body functioning and to the understanding of the way the human brain coordinates various functions of mind and body.

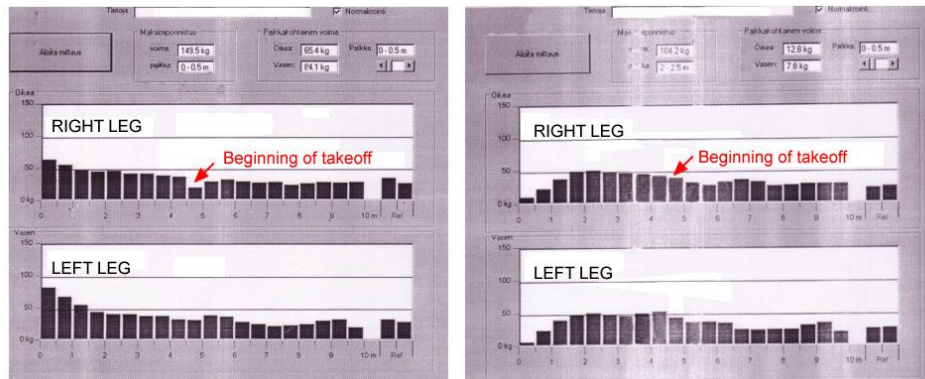


Fig. 3
Computer record of takeoff on a ski jump

The diagrams show the computer record in of the last 10m of the takeoff taken on the computerized ski jump in Kuopio (Finland). On the left we can see the picture of an almost ideal takeoff, whereas on the right – a bad takeoff, after which the jump cannot be good. This type of information should be used by athletes to correct or memorize motor habits. Psychological training based on biofeedback can be very important in preparing an athlete for using this type of information in practice.

The abilities acquired by athletes during biofeedback training can also be used during imitation exercises which aim at the perfection of the jumping technique.

In this situation the function of the coach is supposed to supply the athlete with information. A very important thing was the fact that the information is processed and passed on to the athlete by the coach who treats him as a subject, not an object of his work and with whom he has positive emotional contact (Fig.4).





Fig. 4
Imitation exercises in training a ski jumper (photo JB)

Discussion

The question, however, is who should be the coordinator and how the activities of the supporting team members should be synchronized.

In our opinion, the most important role is that of the coach supported by a psychologist. It is the psychologist's task to define the athlete's basic problems and to supervise the process of information support. This kind of arrangement assumes a perfect relationship between the coach and the psychologist. We should also remember that not every athlete is sufficiently prepared to utilise information support.

In case of instrumental support the situation is quite different. It is a kind of a set of instructions which gives definite information about how to behave in a particular situation. For instance, we inform the athlete what to do during a long

flight which lasts more than ten hours and involves changing time and climatic zones in order to minimise negative physical and mental effects.

The instrumental support will have an interdisciplinary character, although the coach's role seems to be the most important. He should dispense and coordinate instrumental support since he is the one who knows the situation and the needs of the athlete best. Besides, instrumental support also means supplying the athlete with new high quality equipment, for instance the most advanced suits for ski jumpers.

The last form that has been mentioned is self-confidence support. Owing to the information that he gets, the athlete's self-confidence increases and he has a better opinion about his own abilities and chances of success. This kind of support is closely connected with emotional support because, undoubtedly, they both complement each other and are interrelated.

It seems that the psychologist is the person whose role in this kind of support is the most important, although we must not disregard the coach, either.

While pointing out various forms of psychological influence of the team of experts upon an athlete, it is necessary to remember that the main objective of applied sport psychology is to help an athlete to achieve such mental and physical state which would result in peak performance. [10,11,14,15]. In professional sport we try to achieve such a situation in which an athlete, by getting acquainted with some psychological phenomena and mastering certain abilities, would be able to achieve that state many times.

In the process of looking for an optimum model of athlete's support we should stress the fact that not all athletes expect this kind of support. In Polish sport we have an example of Robert Korzeniowski, three times winner of the gold medal in walking, who manages his own preparation for competitions, also in the psychological aspect.

On the basis of what has been said, we can draw the conclusion that the psychological support of an athlete should be given not only during the competitions but also during the whole training process.

Unsuccessful attempts can discourage the athlete and undermine his self-confidence.

Through feedback information the coach gives the athlete instrumental support, correcting his activities and emotional support by calming him down and showing optimism regarding his further attempts.

Due to the fact that the coach accompanies the athlete on a daily basis during training and competitions, whereas the team of specialists does it only temporarily, it seems logical that the coach should synchronize the process of the athlete's



support. He should cooperate most closely with the psychologist, who should be his main advisor, on condition that he systematically takes part in the training.

The coach's role of the coordinator of the process of support is very demanding. He should possess sufficient information from the fields represented by the other members of the team to be an equal partner in discussions and to formulate problems to be solved. [4,7,9]. The awareness of the professional potential of other team members can also be, as we mentioned before, a form of support for the coach.

In our opinion, the effectiveness of the activities of the team depends on the mutual relations of its members and the ability to communicate.

It seems that at the beginning of the cooperation the team should undergo a short integration training to get to know one another better and to work out forms of communication and coordination. Each of the experts should perceive the athlete not only from the point of view of his own discipline but also the disciplines of other team members.

The constant drive for records and success characteristic of contemporary sport requires higher and higher level of perfectionism and professionalism. It seems therefore reasonable to aim at the optimisation of the process of athlete's support since only then the success on the highest sport level is possible.

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