

117 - SPORT PSYCHOLOGY AND OPTIMIZATION IN HIGH PERFORMANCE SPORT

EVANDRO MORAIS PEIXOTO

Pontifícia Universidade Católica de Campinas – PUC Campinas
São Paulo - Brasil evandro.mp@puccampinas.edu.br

ELISA MEDICI PIZÃO YOSHIDA

Pontifícia Universidade Católica de Campinas – PUC Campinas – São Paulo - Brasil
eyoshida@puc-campinas.edu.br**INTRODUCTION**

Sport is a phenomenon which is assuming increasingly greater importance in today's society. It is a product and at the same time an event that transforms the culture into which it is introduced. Consequently, sports-related financial investments reach huge sums of money in an upward spiral which accords ever greater importance to sporting events and the athletes involved (REIN, 2008). In parallel, social and scientific investments are emerging for the training of future athletes. So contemporary sport is establishing itself as a complex phenomenon that is developing with footprints in a variety of areas of knowledge, the so-called Sports Sciences (Angelo; Rubio, 2007; Rubio, 2004). These comprise a set of disciplines, amongst which figure anthropology, philosophy, sport psychology and sociology, as well as sports medicine, physiology and biomechanics.

One of these sub-areas, psychology, began its research studies around a century ago. Currently, its studies have been focusing on situations involving motivation, personality, aggression and violence, leadership, the group dynamic, athletes' wellbeing, thought processes and feelings and several other aspects of the practice of sport and physical activity (Angelo; Rubio 2007; Rubio, 2002, 2004). Another topic of growing interest concerns the potential contribution of psychology towards high-performance sport, where the increasingly balanced, technical level of athletes and teams, accords great importance to the athletes' emotional state, particularly at times of decisive games (Rubio, 1999).

Although initial studies in sport psychology have been taking place over a not inconsiderable period of time, in Brazil this field of work is seen as something novel and not deeply explored. In actual fact, it has only gained a certain prominence in our milieu since the 1990s, when psychologists were brought into national teams, particularly soccer. The lack of insight as to the possible contribution of the psychologist towards good sporting performance also extends to the sports directors, coaches and athletes, who are unclear about how they might benefit in their day-to-day routine from the work of these professionals (Rubio, 2000, 2002). Nevertheless, it is understood that bringing together psychologists to work in conjunction with sports teams does not occur by chance. It coincides with the appreciation of sport as a social event in which four basic skills are required for it to be practiced at high levels. Physical Skill, which corresponds to excellence of physical condition; Technical Skill, which is related to skills or deficiencies when faced with the foundations and abilities which the athlete possesses in order to be able to practice sports; Tactical Skill, which relates to the capacity to assimilate game plans, positioning and roles defined by the coach, and Emotional Skill, which begins in early childhood and which depends on a good family structure as well as a continuous and healthy process of education (CAPECE, 2008).

It can be seen, therefore, that psychological skills come to be recognized as having a place of prominence in an athlete's performance, seeing as they are reflected in each of the skills described previously, all of which justifies the importance of the psychological preparation of those individuals involved in high-performance sport (MARKUNAS, 2003). Despite this recognition, a false notion still prevails that psychological preparation in high-performance sport will occur as a result of opportune initiatives such as motivational lectures delivered to teams going through rough patches in a particular competition or when significant achievements are threatened by problems with relationships between team members. In a gradual and hesitant fashion, one is beginning to see working initiatives with long-term objectives, in which technical teams can count on the effective participation of a psychologist, even in the more junior ranks. According to Korsakas; Marques (2005), this picture is directly linked to the slow development in the area, when compared to the other sports-related sciences. Given this situation, this study aims to discuss some of the working possibilities of sports psychologists in the context of high-performance sport, by understanding the potential contributions and needs of this professional with the technical teams.

FROM INTEGRATION TO INTERVENTION

The entry of psychology and the psychologist into the sporting arena can be seen initially through the simple physical presence of a professional on the technical team. It is not sufficient, however, to just be on a team, it is necessary to be integrated into it. It is understood that, for this to take place, integration occurs through an attitude of recognition amongst the professionals; it is a question of a psychical position of mutual acceptance. A place for dialogue is required vis-à-vis the knowledge of the other professionals, where experiences can be exchanged, collaborating to produce a more comprehensive work, in a quest to attain better results at the end of a process, built on the participation of all. When the psychologist is integrated properly, greater benefits are obtained, not just for the athlete who presents a particular problem, but also for the technical team which gets to rely on an additional tidbit of knowledge which is beneficial to it. To this end, it is necessary to conduct a work whose outcome translates into positive results that are universally recognized.

The first step in the work of a psychologist in a sports team is characterized by the carrying out of a psychological assessment. The psychological assessment of athletes can be considered as one of the more visible procedures in sports psychology, and one of which the technical staff and sports directors have great expectations. However, it also becomes one of the great concerns of professionals in the area as it involves ethical procedures dictated by the Federal Psychology Council (RUBIO, 2001).

Specifically in terms of high-performance sport, psychological assessment is steered towards the quest for the qualification and quantification of emotional states in specific day-to-day sporting situations such as: periods of training and competition, the aim being to obtain information about levels of psychical processes and interpersonal relations that may contribute towards the optimization of athletes and teams (RUBIO, 2007). This should be conducted by means of a contextualized psychological diagnosis. That is to say, a psychological diagnosis which pulls together information provided by other professionals on the technical staff – physical trainer, physical therapist, coach, amongst others. This notion of working

together is the line of thinking for the planning of psychological interventions that aim to better prepare the athlete to face his/her difficulties and be able to attain maximum performance. In fact, it is only when psychological diagnostic data are analyzed in a contextualized way through the perceptions of the team members, that the psychologist manages to provide supporting data for the coach to better outline training and development plans for the athletes, and for the latter to be able to develop their potential more effectively.

In the context of sport, the aim of the psychological diagnosis is to conduct a review of the specific aspects of the athlete's personality, issues relating to the participation of the individuals in team sports and the relationship with the chosen category. To these ends, the professional can resort to procedures that involve interviews and psychological testing, group evaluations with the aim of assessing the level of development of an individual's functions and abilities, given the sport he/she practices. In this sense, Gimeno, Buceta; Pérez-Llantada (2007) state that the questionnaires answered by the athletes themselves correspond to important tools that provide supporting information to the sports psychologist since they can provide guidance, clarify or support assumptions raised via other procedures or even be useful in identifying athletes that present greater psychological difficulties in specific situations, such as in training camps organized by sporting federations. It can also be seen that the questionnaire is an easy-to-understand tool which provides access to information such as feelings and attitudes, that are not always capable of being observed through behavioral assessment (ANSHEL, 1987; WEINBERG; GOULD, 1999). In addition, it offers numerical results that make it possible to perform research studies, the results of which could bring new developments to the area.

Another important point in the psychological diagnostic process concerns the need to investigate athletes' personality in global terms. In other words, it is necessary to find out the limitations and deficiencies of the athlete, but also the positive characteristics of his personality when confronted with competitive situations, which are usually sources of intense stress. Both the negative aspects and the positive resources of an athlete's personality should in turn be analyzed in non-competitive situations by trying to understand his relationship patterns, family and social demands, amongst other situations that occur in an athlete's personal life. This evaluation is particularly relevant when considering that disequilibrium in these day-to-day factors can have a direct impact on the athlete's sporting performance (DE ROSE, DESCHAMPS; KORSAKAS, 2001). An evaluation which integrates the positive and negative aspects tends to favor more positive reactions in the subjects involved, leading them to react less defensively to the process of psychological diagnosis and, consequently, the presence of the psychologist on the team. Therefore the psychologist comes to be seen as a useful element in helping the athlete to achieve better results, even in those moments when it is considered that he is going through a good phase, thus opening up a new field of work, namely the optimization of sporting performance. In this scenario, psychological intervention will be presented as a component of sports training, in conjunction with the physical, technical and tactical elements.

According to Balague, as quoted by Korsakas; Marques (2005), this systemic view of sports training in turn guides the psychologist in terms of his interventions. That is, they should be in harmony with team goals and objectives and not planned in a segmented fashion. In other words, psychological preparation shall at no time take away from the other abilities which make up the athlete as a whole. Balague also proposes that psychological intervention should be developed according to a process built on what she called preparatory, competitive and transitory macro cycles, (KORSAKAS; MARQUES, 2005). Moreover, these preparatory macro cycles can be subdivided into two stages: general and specific. In the former, the objective is to develop psychological abilities that are fundamental to the physical training phase while in the latter stage, the effort is directed towards maintenance, honing and greater control over functions developed in the previous stage. It is believed that, in this stage, the main content of psychological preparation will be directly associated with the development of physical abilities, where aspects such as motivation, pain thresholds, self-knowledge, self-efficacy and the establishment of positive group relationships will be emphasized.

The aim of the pre-competitive stage included in the competitive macro cycle is to develop the psychological skills required for the period of competition. The work to be performed in the competitive period, on the other hand, is directed towards the maintenance and adaptation of these abilities to specific situations arising from the competitive period. Note that the interventions carried out in this stage are strictly related to technical and tactical abilities with the aim of contributing to a better assimilation of what is being worked on by the technical team. The techniques employed in this stage include the techniques of communication, establishment of competitive routine and mental training.

Finally, the goal of the transitory macro cycle is to rebalance and recover the psychological apparatus in relation to the abilities worked on in earlier periods, as well as the evaluation of the competitive period and individual and group self-assessments. This stage of the periodization of psychological preparation is regarded as a time to regroup, that is to say, a period of transition that will reestablish the psychical strength of the athletes prior to embarking upon a new period of training. In this stage, the interventions conducted may be based on relaxation techniques, evaluation of results and ludic techniques.

It is believed, therefore, that the periodization of psychological preparation develops out of the direct link to preparation in the other abilities: physical, technical and tactical abilities, since the athlete, faced with a competitive situation, will be extended to the full. Accordingly, this division between areas takes on a totally didactic character since, from the moment that the athlete is seen as a whole, the possibility of fragmented work is no longer an issue. In this regard, Korsakas; Marques (2005) highlight the importance of professionals involved in the sporting context: coaches, physical trainers, physical therapists, doctors, amongst others, being sensitive to the emerging need for interdisciplinarity in sporting preparation, by taking into consideration psychological abilities in addition to the physical, technical and psychological abilities, in the quest to optimize the performance of the athletes and the teams of which they are a part. To this end, "the understanding of preparation in high-level sports psychology is already at a stage of development that goes far beyond lectures, talks and medical treatment" (p. 199).

FINAL CONSIDERATIONS

As highlighted in the objectives of this paper, it was sought to present a number of forms of psychologist involvement in a sporting context. To this end, certain fundamental characteristics were considered for the realization of this work, such as the need for this professional to be integrated into the technical team where, based upon a relationship of trust between professionals, the contributions arising from psychological theory and practice can be incorporated into the knowledge of other professionals for the development of sports training as a whole. In this setup, the psychologist is seen as one more member of the technical team who, working jointly with other professionals in day-to-day team situations, seeks to achieve long-term results through psychological preparation and no longer quick fixes by means of opportune, largely unstructured actions.

Finally, it is to be hoped that this study attracts the attention, not just of psychology professionals involved in sporting activities, but also all professionals directly or indirectly connected with sports science, through the need for greater development of interdisciplinarity in the area of sports training. This appears to be the most promising course in the quest for the optimization of sporting performance.

BIBLIOGRAPHY

- ANSHEL, M. H. Psychological Inventories Used in Sport Psychology Research. *The Sport Psychologist*, 1, 1987 pp. 331-349.
- ANGELO, L. F.; RUBIO, K. Sobre testar e avaliar em psicologia do esporte. In: ANGELO, L. F.; RUBIO, K. (Org.) *Instrumentos de Avaliação em Psicologia do Esporte*. 1st ed. São Paulo: Casa do Psicólogo, 2007 pp. 11-12.
- CAPECE, S. *Psicologia dos esportes: do fundamento ao rendimento*. 1st ed. São Paulo: Nouvelle, 2008.
- DE ROSE, D. JR., DESCHAMPS, S.; KORSAKAS, P. Situações de stress no basquetebol de alto rendimento: fatores extracompetitivos. *Revista Brasileira de Ciência e Movimento*. 9(1), 2001 pp. 25-30.
- GIMENO, F.; BUCETA, J. M.; PÉREZ-LLANTADA, P. Influencias de las variables psicológicas em el deporte de competición: evolucion mediante el cuestionario Características psicológicas relacionadas com el rendimiento deportivo. *Psicothema*, 19(4), 2007 pp. 667-672.
- KORSAKAS, P., MARQUES, J. A. A. A preparação psicológica como componente do treinamento esportivo no basquetebol. In: D. DE ROSE Jr; V. TRICOLI (Org.) *Basquetebol: uma visão integrada entre ciência e prática*. 1st ed. Barueri: Manole, 2005 pp. 173-201.
- MARKUSAS, M. Periodização da Preparação e do Treinamento Psicológico. In: K RUBIO (Org.) *Psicologia do esporte: teoria e prática*. 1st ed. São Paulo: Casa do Psicólogo, 2003 pp. 33-56.
- REIN, I. *Marketing esportivo: a reinvenção do esporte na busca de torcedores*. Porto Alegre, RS: Bookman, 2008.
- RUBIO, K. A psicologia do esporte: histórico e áreas de atuação e pesquisa. *Psicologia Ciência e Profissão*, Brasília, 19(3), 1999 pp. 60-69.
- RUBIO, K. O pontapé inicial. In: K. Rubio (Org.) *Psicologia do Esporte: interfaces, pesquisa e intervenção*. 1st ed. São Paulo. Casa do Psicólogo, 2000.
- RUBIO, K. Origens e evolução da psicologia do esporte no Brasil. *Revista Bibliográfica de Geografia y Ciencias Sociales*, 7(373), 2002
- RUBIO, K. Rendimento esportivo ou rendimento humano?: O que busca a da psicologia do esporte? *Psicol. Am. Lat.* [online]. 1, 2004 pp. 1-6.
- RUBIO, K. A avaliação em psicologia do esporte e a busca de indicadores de rendimento. In: Angelo, L. F.; Rubio, K. (Org.) *Instrumentos de Avaliação em Psicologia do Esporte*. 1st ed São Paulo: Casa do Psicólogo, 2007 pp. 13-26.
- SILVA, A. M. F.; ANGELO, L. F. (2007). POMPS – Profile of Mood States. In: Angelo, L. F.; Rubio, K. (Org.) *Instrumentos de Avaliação em Psicologia do Esporte*. 1st ed. São Paulo: Casa do Psicólogo, 2007 pp. 175-191.
- WEINBERG, R. S.; GOULD. *Foundations of Sport and exercise psychology*. 2nd ed. Champaign Human Kinetics, 1999.

Evandro Morais Peixoto

Address: Rua. Liliane Regina, 3 – Vila Cretti

Carapicuíba – São Paulo – Brazil.

Tel.: (11) 6711-4423

E-mail: evandro.mp@puccampinas.edu.br

SPORT PSYCHOLOGY AND OPTIMIZATION IN HIGH PERFORMANCE SPORT**ABSTRACT**

Sport is a phenomenon which is assuming increasingly greater importance in today's society. It is a product and at the same time an event that transforms the culture into which it is introduced. It is developed based on a variety of areas of knowledge, the so-called Sports Sciences. As part of this set of disciplines, sport psychology has been experiencing the demands of this area of involvement in the sense of contributing towards the optimization of athlete performance in at least the four basic skills required for practicing it at high levels: Physical, Technical, Tactical and Emotional. Accordingly, the main aim of this study is to present several forms of intervention by the sports psychologist in the context of high-performance sport. It is maintained that sports training integrates psychological preparation with physical, technical and tactical preparation since it is believed that the psychological conditions are most likely to be directly associated with the development of each one of these abilities. In this perspective, a new field of involvement can be observed for sport psychology: the contribution to the optimization of sporting performance where the psychology professional gets to be another member of the technical team, working in conjunction with the other professionals, in the day-to-day realities of the team. This contribution is realized by means of psychological assessment and a psychological preparation and contributes towards long-term results. Therefore it is a question of an integration that differs from that usually observed in sporting teams, in which the psychologist carries out instant interventions or opportune actions in specific situations.

KEYWORDS: psychological intervention; sport psychology; performance

PSYCHOLOGIE DU SPORT OPTIMISATION DE HAUTE PERFORMANCE DANS DU SPORT**RÉSUMÉ**

Le sport est un phénomène qui prend de plus en plus d'importance dans la société d'aujourd'hui, devenant à la fois un produit et aussi un événement de transformation de la culture. Il se développe en fonction de différents domaines du savoir, les prétendues sciences des sports. Dans le cadre de cet ensemble de disciplines, la psychologie du sport reçoit aussi des demandes de ce domaine du connaissance, dans le sens de contribuer à l'optimisation des performances de l'athlète au moins en quatre compétences de base pour la pratique de haut niveau: compétences physiques, techniques, tactiques et émotionnelles. Ainsi, cette étude a visé à fournir quelques formes d'intervention utilisées par le psychologue du sport dans le contexte sportif de haute performance. On fait valoir que l'entraînement sportif intègre la préparation psychologique à la préparation technique physique et tactique, car il est entendu que les conditions psychologiques sont directement liées au développement de chacune de ces compétences. Dans cette perspective, on peut observer un nouveau champ de la psychologie du sport: la contribution à l'optimisation des performances sportives en tant que professionnel rejoint l'équipe comme un autre membre qui travaille en étroite collaboration avec les autres professionnels, dans le sein de la réalité quotidienne d'une équipe. Sa contribution se fait par moyen de la pratique de l'évaluation psychologique et de la préparation psychologique, et contribue avec de résultats de long terme. Il s'agit donc d'une insertion différente de celle qui est observée plus fréquemment dans les équipes sportives, où le psychologue effectue des interventions immédiates et des actions ponctuelles dans des situations spécifiques.

MOTS-CLÉS: intervention psychologique; psychologie du sport; performance

PSICOLOGÍA DEL DEPORTE Y OPTIMIZACIÓN EM EL DEPORTE DE ALTO RENDIMIENTO**RESUMEN**

El deporte es un fenómeno que toma proporciones cada vez mayores en la sociedad actual, convirtiéndose en un producto y también un acontecimiento transformador de la cultura en que está inmerso. Se desarrolla sobre la base de diversas áreas del conocimiento, las cuales son conocidas como Ciencias del Deporte. Como parte de este conjunto de disciplinas, la Psicología del Deporte ha recibido las demandas de esta área de trabajo en el sentido de contribuir para la optimización del rendimiento del atleta por lo menos en cuatro habilidades básicas para la práctica de alto nivel: físicas, técnicas, tácticas y emocionales. Por lo tanto, este estudio tuvo como objetivo principal presentar algunas formas de intervención del psicólogo del deporte en el contexto del deporte de alto rendimiento. Se argumenta que un entrenamiento deportivo integra la preparación psicológica a la preparación física técnica y táctica, ya que se entiende que las condiciones psicológicas están directamente relacionadas con el desarrollo de cada una de estas habilidades. En esta perspectiva, se puede observar un nuevo campo de la Psicología del Deporte: la contribución para la optimización del rendimiento deportivo cuando el psicólogo pasa a integrar el equipo técnico como un miembro más que trabaja en estrecha colaboración con otros profesionales en la realidad cotidiana. Su contribución se realiza a través de la evaluación y preparación psicológicas y contribuye con resultados a largo plazo. Por lo tanto, se trata de una inserción diferente de lo que se observa con mayor frecuencia en los equipos deportivos, donde el psicólogo realiza intervenciones inmediatas y acciones puntuales en situaciones específicas.

PALABRAS CLAVE: intervención psicológica; psicología deportiva; rendimiento

PSICOLOGIA DO ESPORTE E OTIMIZAÇÃO NO ESPORTE DE ALTO RENDIMENTO**RESUMO**

O esporte é um fenômeno que toma proporções cada vez maiores na sociedade atual, tornando-se ao mesmo tempo um produto e também um evento transformador da cultura onde está inserido. Desenvolve-se com base em diversas áreas do conhecimento, as denominadas Ciências do Esporte. Como parte deste conjunto de disciplinas a psicologia do esporte tem recebido as demandas desta área de atuação, no sentido de contribuir com a otimização do desempenho do atleta ao menos em quatro competências básicas para a prática de alto nível: Competência Física, Técnica, Tácticas e Emocionais. Desta forma, este trabalho teve como objetivo principal apresentar algumas formas de intervenção do psicólogo do esporte no contexto esportivo de alto rendimento. Defende-se que um treinamento esportivo integre a preparação psicológica à preparação física, técnica e táctica, uma vez que se entende que as condições psicológicas estariam diretamente ligadas ao desenvolvimento de cada uma dessas habilidades. Nesta perspectiva, pode-se observar um novo campo de atuação para psicologia do esporte: a contribuição para a otimização do rendimento esportivo, quando o profissional da psicologia passa a integrar a equipe técnica como mais um membro, que trabalha em conjunto com os outros profissionais, no real cotidiano de uma equipe. Sua contribuição se realiza por meio da avaliação psicológica e da preparação psicológica, e contribui com resultados de longo prazo. Trata-se, portanto de uma inserção diferente da que se observa mais comumente em equipes esportivas, em que o psicólogo realiza intervenções imediatas e ações pontuais em situações específicas.

PALAVRAS CHAVE: intervenção psicológica; psicologia do esporte; desempenho