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THE USE OF SPORTS PSYCHOLOGY CONSULTANTS IN ELITE SPORTS TEAMS*

Joaquín Reverter-Masía,¹ Alejandro Legaz-Arrese,¹ Diego Munguía-Izquierdo,²
Marc Roig-Pull,³ Fernando Gimeno-Marco⁴ and Joan Ramón Barbany⁵

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KEYWORDS: Sport psychologist, Sports teams, Multidisciplinary team.

ABSTRACT: This study investigates the use of psychology services in teams of the top division Spanish leagues of handball, basketball, volleyball, indoor soccer, soccer and field hockey. Personal interviews were conducted to determine the composition of the multidisciplinary teams. The response rate was 81.8% (77 of 94). Though most teams have different professionals employed on a full-time basis, only 15.6% of these teams have a sport psychologist. Moreover, only three teams have a full-time sports psychologist. These results indicate that, compared to other professional services, managers and/or coaches do not perceive the need for psychological services. We discarded the hypothesis that most of the teams do not hire psychologists due to financial reasons. Sport psychology associations should reinforce the importance of the psychologist to enhance sports performance.

Correspondencia: Joaquín Reverter Masía. Facultad de Educación Universidad de Zaragoza. Sant Bosco 7. 50009. Zaragoza. España. E-mail: reverter@unizar.es

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¹ Section of Physical Educations and Sports, University of Zaragoza, Zaragoza, Spain.

² Section of Sports, University of Pablo Olavide, Sevilla, Spain.

³ Section of Rehabilitation Sciences Muscle Biophysics Laboratory, University of British Columbia, Canada.

⁴ Section of Psychology and Sociology, University of Zaragoza, Zaragoza, Spain.

⁵ Section of Physiological Sciences II, University of Barcelona, Barcelona, Spain.

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Introduction

Psychological counseling for sports teams has shown to be effective in improving performance (Donohue, Lancer, Covassin, Hash, Miller, and Genet, 2004), prevention (Johnson, Ekengren, and Andersen, 2005) and rehabilitation of sport injuries (Bauman, 2005), and also in maximizing the effectiveness of coaching skills (Jowett and Meek, 2000).

The main variables involved in the psychological training of athletes have been traditionally related to motivation (Roberts, 2001), behaviour and personality (Pelletier Fortier, Vallerand, Tuson, Brière, and Blais, 1995; Li, 1999), concentration (Brière Vallerand, Blais, and Pelletier, 1995; Pelletier, Fortier, Vallerand, Tuson, Brière, and Blais, 1995), perseverance (Pelletier, Fortier, Vallerand, and Brière, 2001), and a group of others factors related to stress control and emotional “adjustment,” such as anxiety, self-confidence, mood, auto-control, self-regulation and interpersonal social skills (Gil, Capafons, and Labrador, 1993; Cruz, 1992; May, 1992; Palmi, 1992). By evaluating athletes’ behaviours, the psychologist can determine the most appropriate strategies in order to improve athletic performance (Morgan, O’Connor, Sparling, and Pate, 1987; Nicholls, and Polman, 2005).

At present, there is a growing interest in understanding the potential influence of psychological interventions in the prevention of sport injuries (Reverter and Plaza, 2002; Podlog and Eklund, 2006). This aspect is of paramount importance, given the high incidence of injuries in elite athletes (Orchard and Seward, 2002). Both quantitative and qualitative research has demonstrated that injury can have a profound psychological impact on athletes (Johnston and Carroll, 2000). Several studies have shown the effectiveness of psychological support in order to reduce the incidence of injuries in athletes with “high risk” psychological profiles (Johnson, Ekengren, and Andersen, 2005). Similarly, others have emphasized the importance of psychological intervention in the management of the immediate emotional response at the point of injury (Carr, 2006; Martínez, García, and Olmedilla, 2006), in the anxiety response regarding treatment decisions (Carr, 2006; Martínez, García, and Olmedilla, 2006) and during the rehabilitation period (Podlog and Eklund, 2006).

Sport psychologists are also responsible for developing strategies to help coaches in the psychological management of their groups. Psychologists can help coaches determine the most appropriate strategies to improve motivation and cohesion within the group (Todd and Kent, 2004; Loughhead and Hardy, 2005), which may include stimulating the positive influence of the group leader (Loughhead and Hardy, 2005; Sousa, Cruz, Torregrosa, Vilches and Viladrich, 2006); developing athletes’ independence (Mageau and Vallerand, 2003); setting up rules (Patterson, Carron, and Loughhead, 2005) and enhancing decision-making processes and communication among athletes during competition (Hagemann, Strauss, and Büsch, 2007). At present, the optimization of athletic performance is dependent on the use of a multidisciplinary approach. This broad approach opens a new field in which coaches and psychologists work towards the same goals through the creation of an optimum work environment, specific competencies—together, thus solving potential conflicts which may arise within the group (Reid, Stewart, and Thorne, 2004).

There is a vast amount of evidence suggesting that psychological interventions in sport are of paramount importance in increasing the success of athletes involved in any sport (Nicholls and

Polman, 2007). In order to enhance the role of the sports psychologist, it is essential to integrate his work into a multidisciplinary team to optimally develop the potential capacities of the athlete (Reid, Stewart, and Thorne, 2004).

Recent advances in the field of sports psychology have shown the importance of the application of psychological techniques in the daily practice of athletic training. Nevertheless, too little is known about the extent to which psychological services are implemented in professional clubs and sports institutions. In regard to sports teams, only data from the Australian Football League (Kremer, Shen, and Tonn, 1999) and the Soccer Premier League (UK) (Pain and Harwood, 2004) are currently available.

Therefore, the purpose of this study was to determine whether elite Spanish clubs of team sports –including handball, basketball, volleyball, indoor soccer, soccer and field hockey– are currently implementing sports psychology services. In order to investigate potential factors determining the use of sport psychologists in these different sports, a comparative analysis of the composition of the multidisciplinary team will be conducted.

Methods

Participants

To accomplish the proposed objectives we decided to interview those responsible for the physical conditioning and preparation of the male teams that participated during the 2004-2005 season in the top division Spanish leagues of handball, basketball, volleyball, indoor soccer, soccer and field hockey.

For each sport the teams were divided into “class A”, which includes the teams with greater performance in their respective leagues (> 50% percentile of the standings), and “class B,” which includes the remaining teams. The standings were obtained from the official data of the respective professional leagues.

Performance level of the teams

Given the lack of criteria to determine the performance level of the different teams studied, an analysis of the performance of these teams in the two main European competitions from 2002 to 2005 seasons was conducted. A maximum of 225 points were assigned in each sport with the following criteria: (i) 1 and 3 points, for the teams eliminated in quarter-finals and semi-finals, respectively; 6 and 9 points, for the runner-up and champion teams respectively; (ii) in the most relevant competition, the number of point allocated were twofold. Spanish teams obtained the highest percentage of points in indoor soccer (40.0%), handball (36.4%) and basketball (28.4%). Spanish teams in field hockey, soccer and volleyball obtained 21.8% (third), 14.2% (fourth) and 0.44% (fourteenth), respectively. In a global analysis for all sports, Spanish teams were first with 22.6% of the possible points, followed by Italy (10.4%), France (7.1%) and England (7.1%).

Material

The survey was created by the authors, with the aid of experts in questionnaire-formatting; pilot testing was done with an informal advisory group of physical conditioning coaches. The

survey was divided into two areas of inquiry: a) the multidisciplinary team and, b) the strength and conditioning training. This paper is focused on nine items designed to analyze the multidisciplinary team. Eight close-ended questions associated with the following professionals: coach, physical conditioning coach, assistant coach, physician, physical therapist, psychologist, masseur; and one open-ended question in order to include other professionals. In addition, they had to indicate if the professionals were hired on a full-time basis. In order to consider that a team has a professional, this should have the correspondent university degree. This was not applicable for those professional profiles where the university degree does not apply: coach, assistant coach, masseur and kit-man.

The survey instrument and the research design were approved by the Committee on Biomedical Ethics of the Aragon Government, Spain.

Data collection

In order to contact the physical conditioning coaches, a letter describing the project was mailed to the address of the official headquarters of each team. The objectives of the letter were to explain the purpose of the survey, the confidentiality of information, and the researchers' motivation for conducting the survey. After two weeks, we made a telephone call to the official headquarters of the club in order to speak personally with each figure responsible for the physical conditioning preparation. For those we initially could not locate, several attempts were made to contact by telephone, letter and e-mail. All addresses and telephone numbers were obtained from the official web-pages of the clubs or from the information facilitated by the Spanish Federation of each sport. Finally, 82 physical conditioning coaches accepted to participate in the study. The remaining twelve physical conditioning coaches declined to participate, or did not respond to the e-mail, letter or telephone messages. We agreed with each physical conditioning coach a date to administer the survey, by means of personal interview. Forty physical conditioning coaches were interviewed, as we took advantage of the visits of the teams to our city and the concentration of various teams for short-term competitions. The other physical conditioning coaches were interviewed during a visit to their respective cities. Finally, five out of 82 physical conditioning coaches that accepted to participate in the study did not manage to determine a date for the administration of the questionnaire (Table 1).

All the interviews were conducted by an experienced researcher in the qualitative methods of sports science research and content analysis.

Reliability

Reliability was measured by the congruence between the test and the retest, which was performed one week later in 24 of the PCCs (four for each sport).

Statistical analysis

Statistical analysis was performed with computer software (Statistical Package for Social Sciences, Version 14.0). Data are expressed in percentages. Chi-square or Fisher test were applied in order to determine differences among sports and classes. Reliability was determined by means of a McNemar test. The α level was set at 0.05.

Results

Reliability

In the analysis of reliability, the P-value between the test and retest was 0.50 to 1.

Multidisciplinary sports science teams

Table II shows the percentage of teams with some the professionals investigated. More specifically, Table III highlights exclusively those teams with some of these professionals hired on a full-time basis.

All teams had a coach. The percentage of teams with a physical therapist, a physician, a physical conditioning coach and an assistant coach was significant (>80%). However, important differences were observed among sports: all basketball, indoor soccer, and soccer teams had on staff a licensed professional in Physical Activity and Sports Sciences, in contrast to the 53.5% of the rest of the teams ($p < 0.001$). A smaller proportion of volleyball and field hockey teams had a physician and an assistant coach ($p < 0.001$). The percentage of teams with kit-men is greater in basketball, indoor soccer and soccer (73.5%) compared to handball, volleyball and field hockey (21.9%) ($p < 0.001$). Except for soccer teams, masseurs were not usually part of the technical team ($p < 0.001$). Similarly, the services of a sport psychologist were uncommon in all the sports except for soccer ($p < 0.01$).

Most teams that have a coach, a physical conditioning coach, an assistant coach and a masseur require their services on a full-time basis. This was common in all sports, except for field hockey which requires the services of physical therapists ($p < 0.001$). In contrast, in all sports, some teams did not require physicians hired full-time. Only three teams have a psychologist hired full-time.

The percentage of class A and B teams with a psychologist is similar (17.5 vs. 13.5%). Greater differences were observed among soccer teams (50.0 vs. 28.6%).

	Handball	Basketball	Volleyball	Indoor football	Football	Field hockey
League	ASOBAL	ACB	Superleague	Honor Division	First Division	Honor Division
Number of teams n = 94	16	18	14	16	20	10
Number of teams interviewed n = 77	14	15	10	15	15	8
Total interview rate 81.8%	87.5%	83.3%	71.4%	93.8%	75%	80.0%

Table 1. Conditioning coaches response rate.

	Handball N = 14	Basketball n = 15	Volleyball N = 10	Indoor soccer n = 15	Soccer n = 15	Field hockey N = 8	Mean n = 77
Coach	100	100	100	100	100	100	100
Physiotherapist	92.9	100	90.0	100	100	100	97.4
Physician	100	100	70.0	100	100	50.0	90.9
Physical Conditioning Coach	50.0	100	40.0	100	100	75.0	80.5
Assistants Coach	85.7	93.3	50.0	80.0	100	50.0	80.5
Kit Men	28.6	60.0	20.0	86.7	73.3	12.5	51.9
Masseur	21.4	13.3	20.0	26.7	73.3	12.5	31.2
Psychologist	14.3	0.0	0.0	13.3	40.0	25.0	15.6
Other Professionals	21.4	57.1	20.0	33.3	66.7	25.0	39.0
Data are expressed in percentages							

Table 2. Percentage of teams with professionals in the multidisciplinary team.

	Handball N = 14	Basketball n = 15	Volleyball N = 10	Indoor soccer n = 15	Soccer n = 15	Field hockey N = 8	Mean n = 77
Coach	100	100	100	100	100	100	100
Physiotherapist	92.9	100	90.0	100	100	50.0	92.2
Physical Conditioning Coach	50.0	100	40.0	100	100	75.0	80.5
Assistants Coach	85.7	93.3	50.0	66.7	100	37.5	76.6
Physician	78.6	73.3	20.0	73.3	93.3	37.5	67.5
Kit Men	28.5	53.3	20.0	86.7	73.3	12.5	50.7
Masseur	21.4	6.7	0.0	26.7	73.3	0.0	24.7
Psychologist	0.0	0.0	0.0	6.7	13.3	0.0	3.9
Other Professionals	21.4	46.7	10.0	20.0	33.4	12.5	26.0
Data are expressed in percentages							

Table 3. Percentage of teams with professionals hired on a full-time basis.

Discussion

This work is the first study to determine the use of psychology services in the most popular team sports in Europe. A high reliability was obtained in all researched items, and with the exception of volleyball, the teams of the National Leagues of Spain obtained high levels of performance in European competitions. Thus, the analysis potentially represents a reflection of the use of psychology services in elite team sports.

The results show that the use of psychology services in the national leagues of handball, basketball, volleyball, indoor soccer, soccer and field hockey is limited (15.6%). In addition, only three teams (two soccer club and one indoor soccer club) required these professionals on a full-time basis. To our knowledge, to date, only one study has examined the use of psychology services in a professional league. Pain and Harwood (2004), in communication with the Football Association of England, established that during the 2002-2003 season only five clubs of the Premier League (25%) employed a consultant on a contractual basis. Even though the contractual status was not specified, their results are similar to those reported in the top division of soccer in Spain. In Spain, only 40% of soccer teams used psychology services and only 13.3% had a psychologist full-time.

Surprisingly, there is a paucity of studies investigating the use of psychologists in other areas of the development of elite athletes. Kremer, Shen, and Tonn (1999) reported that during the 1997 season, 75% of the Australian Football League employed a sports psychologist. Nevertheless, no psychologist was hired full-time. Voight and Callaghan (2001) determined that 53% of the university athletic departments of the National Collegiate Athletic Association used some sort of sport psychology consulting during the 1998-1999 season. However, only 14% of these departments had a psychologist full-time. Larson, Starkey, and Zaichkowsky (1996) found that only 24.5% of athletic trainers of the National Athletic Trainer's Association had a sport psychologist available to them as a member of the sports medicine team. Hemmings and Povey (2002) reported that less than 10% of UK physiotherapist surveyed had access to a British Association of Sport and Exercise Sciences accredited sport psychologist for referral. Carr (2006) highlighted that the United States Olympic Committee hired their first full-time sport psychologist in 1985, which now has four full-time licensed psychologists.

Data regarding the inclusion of psychologists in multidisciplinary teams during the concentrations of the different national teams in international events is also very limited. In his study, Carr and co-workers outline that the 1998 Olympic Games were the first event in which psychologists were included in the multidisciplinary boards in charge of the national teams.

According to the results of the present study, the inclusion of psychology services in Europe (Spain and United Kingdom) is less common compared to other countries such as Australia or the USA. However, comparisons should be cautiously regarded given differences between sports and the small number of studies. In any case, it is common that clubs and institutions hire a psychologist part-time or for any specified, short-term span during the season period as a counselor. Therefore, even though psychology has been progressively incorporated in sport, our study confirms that psychologists have difficulties taking part in a multidisciplinary team.

Even though some studies have highlighted the importance of the psychologist's integration into the multidisciplinary team (Reid, Stewart, and Thorne, 2004), the current scenario illustrates that psychologists are recruited only once in a while, even by the most important Spanish teams.

In spite of some conflicting results, a vast amount of studies has analyzed potential causes for the low usage of sport psychology services in different sporting institutions. The analysis leads to a variety of causes to understand why this occurs. For instance, while some clubs argue that they lack financial capacity (Pain and Harwood, 2004) others suggest that managers and coaches lack awareness regarding the services that a psychologist can bring to the team (Martin, Wrisberg, Beitel, and Lounsbury, 1997). Others have suggested that players have a negative perception about the role of sport psychologists as part of their teams (Pain and Harwood, 2004) while other studies have reported that physicians usually avoid the collaboration with psychologists in either the prevention or rehabilitation of injuries (CITA). In addition, it has been argued that one of the main factors to explain the lack of psychologists in sports is the incapacity to find the specific role of this professional within the multidisciplinary team (Pain and Harwood, 2004).

The aim of this study was not to analyze potential causes for the reduced level of participation of psychologists in the Spanish teams playing in the top leagues of collective sports. The difference found between soccer and the rest of the sports might suggest that the lack of a psychologist could be primarily due to financial reasons. However, the analysis has shown that most of the teams have a variety of professionals hired on a full-time basis. This implies that either managers' or coaches' perceptions about the role of sport psychologist in the multidisciplinary team conclude that they are not a priority. Our analysis refutes the hypothesis that most clubs do not include psychologists because of financial constraints. Even though we do not have the budget of each club, it is well known that soccer teams spend very significant sums of money to pay other professional services, and therefore it is very unlikely that the non-inclusion of a psychologist in sports may be due to financial limitations. According to Larson Starkey and Zaichkowsky (2006), associations of psychology should aim to instruct coaches, physicians and physical therapists in the importance of psychology to improve athletes' performance. The fact that most coaches lacked formal academic education might explain the absence of psychologists on Spanish teams' staff.

According to Carr (2006), departments of psychology are also responsible for the appropriate recognition of psychology as an important part to improve sports performance. The organization within sport psychology must establish required professional competencies in sports psychology (Tenenbaum, Lidor, Papaianou, and Samulski, 2003) and control who delivers sport psychology services and coordinating contacts to the world of professional sports (Sanchez Godin, and DeZanet, 2005). However, only a few countries have well-established national Sport Psychology Associations (Sanchez, Godin, and DeZanet, 2005).

Conclusions and implications

This study has shown that sports psychologists are not usually present in the multidisciplinary teams of Spanish clubs playing in the top leagues of team sports. In order to solve this problem, a well-established national sport psychology association to initiate coordinated contacts with public and private sporting institutions is necessary. In addition, the role of psychologists to enhance athletic performance should be emphasized in training programs for coaches. Replication of this study is recommended to ascertain cognate situations in other sports. Further prospective investigations might also determine variations that have occurred within the teams involved in this analysis. In the present study, 84.4% of teams reported that they were not currently using the

services of a sport psychology consultant. In the future, a study interviewing coaches and managers to determine the causes behind the lack of psychologists in their teams would be important. In turn, maybe this type of study would increase the number of psychologists in team sports.

LA UTILIZACIÓN DE PSICÓLOGOS DEL DEPORTE COMO CONSULTORES EN EQUIPOS DEPORTIVOS DE ÉLITE

PALABRAS CLAVE: Psicólogo deportivo, Deportes de equipo, Equipo multidisciplinar.

RESUMEN: Este estudio investiga la utilización de los servicios de psicología en equipos de la primera división española, ligas de balonmano, baloncesto, voleibol, fútbol sala, fútbol y hockey sobre hierba. Se realizaron entrevistas personales para determinar la composición de los equipos multidisciplinarios. El ratio de respuesta fue del 81, % (77 de 94). Aunque la mayoría de equipos tienen diferentes profesionales empleados en régimen de dedicación exclusiva, sólo el 15,6% de estos equipos tienen un psicólogo del deporte. Por otra parte, sólo tres equipos tienen a tiempo completo un psicólogo deportivo. Estos resultados indican que, en comparación con otros servicios profesionales, gerentes y / o entrenadores no perciben la necesidad de servicios psicológicos. Hemos descartado la hipótesis de que la mayoría de los equipos no contratan a psicólogos debido a razones financieras. Las asociaciones de psicología deportiva deberían proporcionar la importancia del psicólogo para mejorar el rendimiento deportivo.

A UTILIZAÇÃO DE CONSULTORES EM PSICOLOGIA DO DESPORTO EM DESPORTOS COLECTIVOS DE ELITE

PALAVRAS-CHAVE: Psicólogo do desporto, Desportos de equipa, Equipa multidisciplinar.

RESUMO: Este estudo investiga a utilização dos serviços de psicologia em equipas da primeira divisão espanhola, de andebol, basquetebol, voleibol, futsal e hóquei em campo. Realizaram-se entrevistas pessoais para determinar a composição das equipas multidisciplinarias. O rácio de respostas foi de 81% (77 de 94). Apesar da maioria das equipas terem diferentes profissionais empregados em regime de tempo integral, apenas 15,6% destas equipas têm um psicólogo do desporto. Por outro lado, só três equipas têm um psicólogo desportivo a tempo integral. Estes resultados indicam que em comparação com outros serviços profissionais, dirigentes e/ou treinadores não percebem a necessidade da prestação de serviços na área da psicologia. Foi descartada a hipótese de que a maioria das equipas não contratam psicólogos devidos a questões financeiras. As associações de Psicologia do Desporto deveriam impulsionar a importância do psicólogo para melhorar o rendimento desportivo.

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