

## Training needs among sport technicians

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Despite the fact that during the last ten years ongoing training has become usual among Spanish workers, some labour fields are still out of this trend. Our study analyses training needs of 507 Sport Technicians classified in eight different sport specialities: Rhythmical Gymnastics (58), Athletics (70), Swimming (68), Handball (76), Volleyball (81), Football (74), Basketball (80). The results show some vital structural shortages: the initial training they receive is general and lacks specific content. The programs are weak, obsolete and far from these workers needs. For those reasons the study concludes with some basic recommendations for the development of the range of professions that Sport Technicians can carry out.

*Estudio de las necesidades formativas de los técnicos deportivos.* A pesar del hecho de que durante los últimos diez años la formación continua ha llegado a ser habitual entre los trabajadores españoles, algunos campos profesionales han quedado al margen de esta tendencia. Nuestro estudio se centra en las necesidades de formación de 507 técnicos deportivos clasificados en ocho especialidades diferentes: Gimnasia rítmica (58), Atletismo (70), Natación (68), Handball (76), Voleibol (81), Fútbol (74) y Baloncesto (80). Los resultados muestran algunas deficiencias estructurales vitales: la formación inicial que reciben es general y carece de contenido específico. Los programas son débiles, obsoletos y alejados de las necesidades de estos trabajadores. Por esas razones el estudio concluye con algunas recomendaciones básicas para el desarrollo profesional dentro del marco de tareas que los técnicos pueden desarrollar.

Insisting on the changes that are taking place in our world may seem unnecessary. However, it is convenient to point out that, as Saari, Johnson, McLaughlin and Zimmerly (1988) and Tannenbaum, and Yükl (1992), claim, these changes have to do with three important dimensions.

- The first dimension is of demographic nature, and it affects the sport field because of the massive participation of mature people, the presence of women in high competition and the multicultural composition of the sport teams. These changes should affect the training of technicians, on contents, processes and teaching methodologies.
- In second place, a surprising technological increase is taking place in the sport field. This rise brings about new training needs for the technicians who implement them.
- Finally, we have to highlight the tendency, more and more important, of placing the sport activity in international environments. This supposes for the technician new responsibilities and knowledge about work and financial or technical aspects or simply, of a certain country.

The work of a sport technician is more and more sophisticated and technologically complex (Salanova, Peiró, Grau, Hernández and Martí, 1993). Moreover, as Peiró y Munduate (1997) claims, every technician needs interpersonal abilities to be efficient within work groups. Taking all these changes into account, the sport technician training has to face some challenges that require new views, approaches, strategies and methodologies (Hernández, A. y Anguera, M.T, 2001).

Traditional forms of management Sport Technicians have been replaced by more collaborative approaches that emphasize coordination, sharing of responsibilities and the participation of the sportsmen's in the decision processes. New emphasis is given on interpersonal and group dynamics at the all sports. Understanding the role of Sport Technicians, and how its relates with performance effectiveness has become increasingly important (Gil, J; Capafons, A. y Labrador, F. 1998).

Thus, despite the existence of a great deal of studies on Training Needs, it is surprising that a sector, such as the sport one, undoubtedly with a cultural and social impact, has important shortcomings when it comes to the studies on training needs of its professionals (Tharenou, 1991; Salanova and Grau 1999). For this reason we seek to analyse their training needs in order to improve the most neglected aspects with regard to the subject under discussion.

As it happens with other sectors, the sport field is very dynamic and innovative, not only because of the ongoing introduction of new technologies, but also because of the variety of activities it is used for nowadays. For this reason sport technicians have often to face a lot of pressure, to adapt to changing conditions, and to ke-

ep discipline and concentration under difficult circumstances (Gil, J; Capafons, A. y Labrador, F; 1998). Training can contribute a lot, helping the sportsman to plan such events beforehand, becoming a modernisation tool and the best ally of a sector to be effective and competitive.

The aim In our study is to analyse the special features of this group to determine the training needs in the field of the Sport Technicians and to analyse and to spread how the knowledge acquired by training is used. We want to analyse the impact of the Training Needs of Sport Technicians on the working methodology that they develop with their players and to improve the quality of the training that Sport Technicians receive.

We analyse the different social and formative elements that have relation with the sport activity of these professionals, the level of technical training that these professionals have, with the reference of a set of variables, such as the training, the level of participation in ongoing training programs, the methodology that their sportsmen develop, the assessment of their performance, the economic remuneration and their sociodemographic data: age, sex, studies, attitudes towards training and the main ideas of an intervention plan in this field, to improve the situation of the Sport Technicians (Treasure, D.C., Monson, J, y Lox, C.L. 1996)

Method

The data that appear on the following pages, refer to the Sport Technicians. The object of analysis ascends to surveys answered by 507 Sport Technicians.

The data collected have been fo three dimensions. The first dimension is of demographic nature; the second place, a surprising technological increase and finally, we have to highlight the tendency, more and more important, of placing the sport activity in international environments.

Procedure

The study was introduced as one investigating cooperation work teams. Previously semi-structured interviews were carried out by psychology. Reponses were noted down and later typed up. The aim for these interviews was elaborate the questionnaire. Respondents answered a questionnaire. Each respondent was allowed 30 minutes of free time to fill in the questionnaire. The response was 100 per 100. All sport technicians participated voluntarily in the study.

Instruments

The research team selecting aspects of the training outstanding in relation to the quoted objectives elaborated a questionnaire. The questionnaire consists of 78 questions gathered in the research areas previously quoted: data of the Sport Technicians, information about the training they receive and about their sport practice, their work situation and information about their attitudes towards the training needs (Grau, Gimeno, Agut. and Cifre, 1997).

There are questions of three kinds: open, closed and with multiple choice. The first questionnaires were filled in February of 2000, concluding in June of the same year. Each respondent was allowed 30 minutes to fill in their questionnaire. There was 100% response. All sport technicians participated voluntarily in the study.

The data obtained in the inquiry has been contrasted by discussion groups of experts. Different professionals had formed these groups: university teachers, training technicians, sport technicians and sport psychologists. This analysis tool requires a certain level of agreement among the participants. This means an added difficulty to their timetables and agendas.

Data analysis

Codification tasks began with a detailed analysis of the questionnaire questions. The information was recorded in the computer program S.P.S.S. to analyse the descriptive and comparative statistics.

In addition to the frequencies distribution, we obtained the tables of different special intersections, means and whole distribution. It all has allowed us to obtain the data referred to in the results section.

The questionnaire and six expert groups provided us with qualified views. Discussion in groups, had been used, more than for data collection, as a guarantee and support of the obtained data. We have analysed in group the current situation in relation to the objectives of this study. Moreover, some possible solutions for the Technicians have been proposed in the groups.

Sample

A sample was drawn that was representative of the diferents Sports from Spain. In order to maximize the power of our analyses, we decided to draw a large sample of seven sport professionals: Rhythmical Gymnastics (58), Athletics (70), Swimming (68), Handball (76), Volleyball (81), Football (74), Basketball (80). The selected sample is important enough to meet the strictest standards of exhaustiveness, reliability and validity in the current research. All respondents were working at the time they complete the questionnaire.

The selected sample is made up of Sport Technicians from Spain. To make sure that the sample is representative, we took a total population of 507 professionals. As we said above, the sample is big enough to guarantee the generalisation of the obtained data.

Notice in table 2, the higher rate of participation of volleyball technicians (15.98%) and basketball (15.78), as well as the lower rate of rhythmical gymnastics (11.43%).

The average age is 23.7, and males (62.9%) outnumber females (37.1%). The number of males is higher in most sports, with the exception of Rhythmical Gymnastics; in this case most technicians are females.

The experience of technicians is between 4 and 7 years. For them, their activity as coaches is in second place, complementing

Table 2  
Number of participants by sport categories

Sport categories	Number of participants	Rate
Rhythmical Gymnastics	58	11,43
Athletics	70	13,81
Swimming	68	13,41
Handball	76	15,00
Volleyball	81	15,98
Football	74	14,59
Basketball	80	15,78

it with studies or another principal job. Definitively, a lot of them begin to work as coaches when they are students and, in many cases, as we will see, without the specific sport qualification.

Sport Technicians work mainly with schoolchildren (more than 70% work with children under 14), and their main aim is «To introduce children in sport practice» (57%). Their Sport qualification is different depending on the sport. 50% of them have received local or regional training. 20% of them that participated in the inquiry do not have any specific qualification.

Most technicians receive some kind of remuneration for their work as coaches. The activity as coaches is usually a complement to their main occupation, in most cases studies (more than 50%). Moreover, almost 60% do not have a contract and they devote no more than ten hours a week. However, more than 70% earn some remuneration for their work.

A very large percentage of these coaches, in spite of earning some remuneration, do not have any kind of labour contract. Moreover, when they have this contract, it is temporary, mainly part time. We find an exception in athletics, in this case the Administration contracts more than 60% of school sport technicians.

### Results

The study group is made up mainly of people with training in the sport field (federations), highlighting a worrying fact: 21% of technicians do not have any qualification. And More than 70% of Technicians do not have any kind of specialised qualification in Physical Education.

Generally, Sport Technicians take little part in programs and activities of ongoing training, although most of them acknowledge important needs in most of the subjects. They usually take part in training activities annually (47%), only a few monthly (20%), and a large number of them sporadically (32%).

Sport Technicians usually consider the contents of their training very important. With the exception of the subject «laws» (its valuation is low to average – low), the rest of the subjects and contents are considered important by technicians (high to – very high valuation).

It is specially outstanding that Rhythmical Gymnastics technicians highly value most subjects, in comparison with the others sports, in particular collective ones. We find statistically significant data for the following subjects: «anatomical bases», «psychological bases», «sociological foundations», «laws», «first aid», «methodology» and «physical training». So, there are not such statistical differences only in the subjects «sport rules», «technique», «tactic», and «team leading». This fact makes it clear that the Rhythmical Gymnastics technicians are those who value most the contents of their initial training.

Some comparisons between individual and collective sports are also significant: They are clear in the subjects «anatomic bases» and «physical training» (in this subject we except athletics and handball, respectively), and in the item referred to, the importance given to the physical contents. It seems evident that, in this case, this inequality is caused by the relation between formative contents and aspects about physical performance, the most important factor in the individual sports.

The inner structure of each group of sports can explain why sport technicians of collective sports give more importance to technique and tactic. In collective sports tactic and activity are what really matter, but in individual ones the important factor is physical performance.

In the case of the subject «rules», it is considered more important by technicians of collective sports (except Rhythmical Gymnastics). We find an explanation, on one hand, in the ongoing evolution of the rules typical of collective sports, evolution that is more decisive than in the individual sports. On the other hand, in collective sports, knowing the rules is vital for the rest of technical, tactic... knowledge to be applied. This fact has hardly any importance in individual sports (for example, in a 100 metre race, the starting moment is practically the only rule to follow, etc.).

A last significant detail, for the lack of contrast, is that «team management» is given the same importance in every sport. However, it could be expected that this subject was more highly considered in collective sports, in which the coach's intervention (changes, tactics...) is very usual.

Most training courses use a mixed methodology, combining active and directive methodologies in the training. As a general rule, we can talk about a tendency towards mixed methodologies, over directive ones or active ones. Although this is not much explicit information, at least it implies that active methodologies are not widely accepted and that they are not used as the only methodologies. Applying these first results to the performance models, we find sport technicians training a «traditional – conservative» model. This model is far from the «nonconformist – critical» one, with an innovative and creative approach.

Definitively, at a methodological level, sport technicians combine the best of every behaviour model, but with more specific characteristics in each sport that will be considered and explained in the respective studies. These technicians usually follow authoritative, traditional and conservative models in their training and occasionally, more fun and amusing models.

They demand some information about Tests, specific evaluation and typical instruments used differently from traditional observation, subjective test.

Finally, the results show some vital structural shortages: the initial training they receive is general and lacks specific content. The programs are weak, obsolete and far from these workers needs.

There is a lack of connection between the different subjects. While some contents appear several times, other subjects are discussed briefly. Many subjects are considered separately. Seminars for sport technicians are too concentrated, that is why Sport Technicians get tired very rapidly, lose concentration and attention, and therefore motivation for taking part in a more active way. They do not have enough time either to assimilate the worked contents, or to analyse practice exercises that solve efficiently the doubts of the Sport Technicians.

### Discussion

Our results show that the training Sport Technicians receive is insufficient, and its approach is not right. It is focused on too traditional aspects of the elite competitive sport, not adapted to non-competitive and social sport views.

Sport Technicians are not prepared to develop their teaching abilities or to be able to motivate athletes. They are not given enough strategies and resources to achieve this, didactic and pedagogy are scarcely considered in their training as technicians (Kraiger, Ford, and Salas, 1993).

There is not a handbook for the Sport Technicians that unifies concepts and criteria, similar actuation lines based in pedagogical models according to each level of sport preparation.

Because of the important shortages in Level 1 courses, many Sport Technicians are obliged to perform Level 2. This Level 2 should be for those Sport Technicians really motivated to develop their sport careers. The lack of players has negative effects on school sport, which is becoming a mixed category where teams with

very different approaches compete. Sport Technicians who seek participation, recreation and learning coexist with those with a much more competitive approach, who seek victory whatever the cost. This makes us think about the need of setting up different kinds of organisation models for school sport and for federation sports.

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