



Coach Information Supply

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Design of the study

The project was initiated by the Federal Institute of Sport Science; it is integrated in the so-called “Coach Campaign” of the German Olympic Sport Federation.

In this campaign, high priority is given to the information supply of coaches, which results from the fact that professional expertise and scientifically based information (knowledge) are basic requirements for the successful work of coaches.

The key focus of the study was on the following questions:

1. Which sources of information are available to coaches?
2. Which sources of information are preferred by coaches?
How much time do they have for the search of information?
3. How do coaches assess these various sources?
What is the information they get? (Is it useful in their everyday work?)
4. What kind of information do coaches need for their work?
How can technical information meet the requirements of coaches?
5. Which concepts can be used to improve the supply of information for coaches?

Expert interviews, diary analyses and a quantitative survey involving 1,571 top-level coaches helped to elucidate their handling of information as well as their requirements in this context. The target group included a high percentage of coaches working with well-trained athletes (51% world-class athletes, 38% national top athletes). 75% of the participating coaches work as full-time coaches.

Topics and contents of reviews, general training guidelines and internet services were analyzed with a view to determine the quality of the information supplied.

Selected results

1. Coaches in Germany have a sound scientific education and a high level of experience

- > German top-level coaches have an extraordinary high level of education (university education) even if compared to international standards
- > they have a high degree of professional expertise
- > most of them have been top-level athletes themselves, thus being able to look back on comprehensive personal experience in this field
- > top-level coaches actively participate in the transfer of knowledge by lecturing at advanced training courses

2. More than 25% of top-level coaches rarely use information services

- > when looking at current practices when handling information, coaches can be clustered into four different groups (always relating to the overall time available): the elite group, i.e. those who make above-average use of the various sources of information, those who make limited use of the various sources of information, those who rather rely on their visual perception and personal experience and those who belong to the group of average users.
- > more than a quarter of the coaches (27,4%) belong to those who rarely use information services

- > they invest half the time to acquire information than the “elite” group
- > approx. 45% of those who rarely use information services say that the information offered in their special sport discipline is poor
- > coaches who rarely use information services are inadequately linked to their colleagues and do also not benefit from the information exchange with related institutions
- > approx. one third of those who rarely use information services never took the opportunity to join an experienced coach and watch him in his work (job shadowing)
- > consequently, the lack of information finally goes along with a lack of communication

3. There is an interrelation between information supplied in a specific sport discipline and Olympic success

- > coaches in disciplines which are less successful on the Olympic level say that the supply of relevant data and information is inadequate in their association
- > in associations which do not send athletes to the Olympic Games more than 70% of the coaches hold this view; in associations having 0-1 point/participating athlete it is more than 40% (points of the various nations (ranking 1-8) divided by the number of starts during the Olympic Games in 2006 and 2008)
- > coaches coming from associations which are successful on the Olympic level take the opposite view: less than 20% of coaches in disciplines with more than 4 points/competition complain about inadequate information supply in their association
- > consequently, there is a direct relation between the rating of the information supply in a special discipline and the success achieved by the athletes and coaches

4. Transfer of scientific findings shows considerable deficits

- > coaches criticize that scientific research is too far from their every-day work
- > they have considerable reservations against scientific innovations since – from their point of view – scientific research projects do not have a clear focus on the requirements of their practical work.
- > accompanying research activities are the exception to the rule. Existing projects are assessed positively by the coaches thus helping to increase the general acceptance of scientific findings.

5. High levels of strain and stress, not much time to get additional information

- > coaches generally work between 50 and 60 hours every week
- > one third of the entire working time is invested in driving from one place to another and various organizational tasks
- > only 25% are invested in the search, acquisition and exchange of information
- > since coaches spend more time in their cars and offices they have less time to continuously acquire updated information

6. New information technologies are rare

- > when looking at the publication and distribution of information, there is a clear predominance of traditional information systems; innovative technologies are rare
- > relevant online articles or publications are hardly to be found
- > coaches rarely search in sport-science data banks
- > internet platforms for coaches do not meet the requirements of top-level coaches
- > multimedia teaching and learning material is available only in exceptional cases
- > there is no specific input for mobile information systems

- > when looking at the various modes of access, however, traditional searching for information has been replaced by searching via search engines
- > most of the coaches don't have the chance to use innovative information systems since these have not yet been installed in their associations
- > involvement of top-level coaches in the research process (example Australia)
- > continuation and development of process-related research as realized, for instance, in the German Institute for Research and Development of Sports Equipment (FES, Berlin) or the German Institute for Applied Research in Training (IAT, Leipzig)

Selected recommendations

1. Optimized supply of information and transfer of knowledge in the associations

- > introduction and development of links between theory (science) and practice, for instance by involving scientific coordinators as has already been realized in some of the associations
- > adaptation of scientific findings to meet the requirements of practical work and distribution of findings with a special focus on the professional profiles of the various target groups
- > guidelines and quality standards for basic training schedules and optimization of existing schedules (example Nordic Skiing)
- > improved concepts and handouts for the planning and realization of training units (especially for young athletes)
- > improved quality of advanced training courses: clear focus on special requirements and target groups by inviting experienced coaches and experts

2. Support of applied research projects analyzing the requirements of top-level sports

- > intensification of applied research in both problems repeatedly named by top-level coaches (enable athletes to achieve peak performances on the day of the competition, mental representation of movements, technique / coordination) and in the sport-science disciplines (science of training, science of movement, psychology); there is a general deficit in scientific knowledge

3. Introduction and development of social networks designed to facilitate the exchange of information and to preserve the broad experience of coaches – improved skills in time and task management

- > introduction and development of mentor and trainee programs for coaches
- > experienced and successful coaches as multipliers
- > more time for the supply, acquisition and exchange of information by minimizing organizational and bureaucratic tasks

4. Development of technologies to handle information/knowledge

- > installation of a digital information system for coaches as basic innovation for the future handling of information/knowledge (preserve and provide decentralized data) including linked-up mobile systems
- > priority: installation of a visual information system to optimize analyses in training, competition and sports games also with a view to improve training and advanced training programs
- > pilot projects with Social Software to encourage the exchange of information among coaches

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