

Learning situations of beach handball coaches from State of São Paulo

<https://doi.org/10.11606/issn.1981-4690.v35i4p181-189>

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Abstract

Aim: to analyze the learning situations of beach handball coaches of São Paulo State (Brazil). **Methods:** Five beach handball coaches were interviewed (semi-structured), whose interviews were tabulated and analyzed based on Collective Subject Discourse method by three researchers. **Results:** coaches mentioned that the undergraduate course in Physical Education was not enough to master the specific knowledge of beach handball, but it encouraged the search for knowledge and the continuity of learning. The postgraduate degree was important by the contact with other coaches, and the courses and workshops are relevant to the improvement of beach handball knowledge. **Discussion:** coaches preferred unmediated learning situations, such as their own experiences, conversations with other coaches, observation of practices/matches and materials available on online video. **In summary,** the interviewed coaches' mentioned the importance of the mediated and unmediated learning situations to their professional formation, and highlights the preference for short and direct contents to study.

KEYWORDS: Sport pedagogy; Sports coaching; Professional learning; Team sports.

Introduction

Studies with sports coaches have shown increasing interest in recent years¹⁻³, where themes related to professional learning stand out⁴. WERTHNER and TRUDEL² analyzed the coaches' speeches on how they learn to coach, and suggested using the learning concepts proposed by MOON⁵, which considers three situations: mediated learning, unmediated learning and internal learning.

Mediated learning situation is directed by someone (as in Physical Education undergraduation), whose contents can be compartmentalized in module, offered in a medium to long term period, with hierarchical structure of knowledge in a certification system^{3,5,6}. In unmediated learning situations, there is no instructor and the apprentice (in this case the coach) has the initiative and responsibility to choose what to learn, and is also characterized by the various experiences as an athlete or coach, by observing training/matches of

other teams, in conversations with other coaches and through printed and digital content^{3,5-7}. In the internal learning situations, there is an organization of the ideas and knowledge existing in the coach's cognitive structure, starting from questions about the adequacy of knowledge to the context, whose challenge is the construction of learning during its reflection^{3,5,6,8}.

Coaches in Brazil invest in graduation as a source of initial professional learning, because in this context it is necessary to graduate in Physical Education (Bachelor's Degree), with some exceptions⁹. Undergraduate courses use different strategies and structures to develop the knowledge and skills of future coaches¹⁰. Research on the mandatory generalist nature of higher education courses in Physical Education in Brazil¹¹ revealed that less than a fifth of the programmed hours were directed to the knowledge of the sports coach¹². Therefore, the impact of the knowledge experienced at the beginning

of formal learning as a coach on their future professional development is limited¹³, which leads coaches to seek other sources of knowledge.

Two studies analyzed the professional learning of (indoor) handball coaches. CUNHA et al.³ interviewed ten coaches from the first division of the Portuguese national league, and verified the importance of mentoring, the experience as an athlete and the interactions with other coaches, presenting a multifactorial scenario, with professional knowledge built through different sources. In the Brazilian context, MODOLO et al.¹⁴ interviewed 11 school coaches and pointed out the preference for

unmediated learning situations, as coaches do not consider only the mediated learning situations as satisfactory for the specific knowledge of handball.

Considering the scope of beach handball, there is a lack of studies¹⁵⁻¹⁸, especially on the professional learning of coaches. Although there are studies that value physiological issues^{15,19}, technical-tactical preparation²⁰ and/or teaching/match analysis^{16,18}, no references were found on the professional learning of coaches. The aim of this study was to identify and discuss the preferences of beach handball coaches on learning situations and, therefore, contribute to the discussions in this gap.

Methods

Research design

For the purpose of investigating the scenario in which beach handball coaches seek their specific knowledge, qualitative research was chosen. This research design provides better access to subjective questions^{21,22}, and makes it possible to establish relationships between different learning situations. To identify such situations, a semi-structured interview was chosen, in which the researcher participates in the production of knowledge²³.

Participants

Five coaches (C1 to C5) who played the beach handball championship promoted by a state handball league participated in this study. In the State of São Paulo there have already been competitions organized by the São Paulo Handball Federation (*Federação*

Paulista de Handebol) and by independent leagues, played throughout the year in different host cities and which would be similar to the State championship.

This research project was previously submitted and approved by an institutional Research Ethics Committee. The coaches signed an Informed Consent Form, guaranteeing the confidentiality of personal information and the use of the data only for academic purposes. The characteristics of the coaches are shown in TABLE 1.

The average age of the coaches was 39 years (min=26 and max=54), all undergraduated in Physical Education for an average of 10.8 years (min=1 and max=29), with an average of 4.4 years (min=2 and max=9) as beach handball coaches, which reveals a heterogeneous scenario. Three coaches (C3, C4 and C5) have a continuing education course (*lato sensu*) in the sports area (two with handball and one with strength training).

TABLE 1 - Characterization of beach handball coaches.

Coach	Age (years)	Experience as a coach (years)	Experience as a beach handball coach (years)	Undergraduate in Physical Education (years)	Gender of teams
C1	54	25	05	29	Female
C2	32	02	02	09	Male
C3	26	03	03	04	Both
C4	32	03	03	01	Both
C5	51	11	09	11	Both

Interview and speeches analysis

As it is a semi-structured interview, the questions that emerged during its realization were incorporated into the previous questions. Thus, the guiding questions were presented in two blocks: 1) personal information (age, academic background, time as a sports trainer); 2) professional learning (situations to learn specifically about beach handball). In the second block of questions, it was possible to identify the role of graduation, of continuing education courses for the domain of specific contents, and of the situations mentioned for professional learning. All interviews were conducted by the same researcher and lasted 35:22 (\pm 10:45) minutes.

The transcription of the interviews was initiated preferably on the same day for maintaining the latency of the speeches²⁴. After the complete transcription, the speeches were tabulated and analyzed using the

Collective Subject Discourse (CSD) method, used to interpret the discourse characteristic of a collective thought (in this case the coaches) on a given topic²⁵.

This method consists of three methodological figures: central ideas (CI: description of the meaning of the discourse on a theme); key expressions (KE: literal transcriptions of continuous or discontinuous parts of the speech that reveal its essence); collective subject discourse (CSD: synthesis discourse elaborated in the first person from the KE that have the same CI)²⁵.

The CSD were built from the concepts of learning situations², and in the “Results” section they are grouped into mediated and unmediated learning situations. It is noteworthy the fact that the authors of this study are familiar with the proposed analysis method, in addition to team sports coaches. In this sense, the CSD will be presented in full, with the origin of the speeches overwritten.

Results

CSD were categorized into mediated learning situations (CSD1 to CSD3) and unmediated learning situations (CSD4 to CSD7). The mediated learning situations mentioned by the coaches were grouped into three CSD and are shown in TABLE 2.

The coaches highlighted in CSD1 some limitations and virtues of teaching in undergraduate courses, especially related to the search for specific

knowledge. CSD2 emphasized continuing education, through specialization courses, in which there is a greater emphasis on specific content of the coaches’ professional practice. CSD3, on the other hand, referred to specific courses held for the professional improvement of coaches.

TABLE 3 shows the CSD referring to the unmediated learning situations reported by beach handball coaches.

TABLE 2 - Mediated learning situations mentioned by the coaches.

CSD1	<p>Undergraduation</p> <p>“In fact the undergraduation was not enough^{C1}; encouraged to dominate to some extent^{C4} the basic knowledge^{C2} of sports development, to become an academic and understand soon how is the seek to master the contents^{C3} and to specialize ever^{C1”}.</p>
CSD2	<p>Continuing education (lato sensu)</p> <p>“The continuing education helped a lot^{C4,C5}, because I had contact with professionals from technical area and could see a lot of different contents from the undergraduation^{C4}. Brought more possibilities and explanations, but only that would not be enough^{C5”}.</p>
CSD3	<p>Specific courses</p> <p>“Today I am a level 2 coach in beach handball^{C4}; we had a levelling course too and I pretend to make a post graduation in beach handball until the next year^{C2}. Every offered extension course I want to participate^{C1}, always trying to improve and seek to study^{C1,C2”}.</p>

TABLE 3 - Unmediated learning situations mentioned by the coaches.

CSD4	Digital medias “The acquired knowledge comes through the championships recorded and watched matches in addition to following other practice sessions ^{C1,C2,C4,C5} and the internet videos for easy access ^{C2,C3,C5} ”.
CSD5	Contact with peers “I talk to some peers, the older people from handball, which helps a lot for being more experienced ^{C1,C2,C5} ”.
CSD6	Experience as coach “There are many things that we learn as a result of the experience ^{C1,C5} . I add some things from the court, the practical experience, for participating in some competitions and for working with the sport ^{C2,C3} ”.
CSD7	Lack of specific bibliography “I study alone, in beach handball there are not many literature and the literature that I could access to study handball is in spanish ^{C5} ”.

When referring to unmediated learning situations, the speeches highlighted the use of digital media (CSD4), contact with other coaches/teams (CSD5) and professional

experiences (CSD6) as means for learning. In addition, CSD7 presents a gap in the professional learning of coaches, related to the scarce materials for study.

Discussion

The aim of this study was to identify and discuss the learning situations reported by beach handball coaches. In TABLE 2 it was possible to identify that the coaches seek different mediated learning situations to build the general knowledge of their professional performance (CSD1-undergraduation) and to deepen the knowledge on specific aspects of beach handball through continuing education (CSD2) and courses offered by different institutions (CSD3).

Federal Law 9696/1998⁹ regulates the coaching profession based on the CREF / CONFEF system and, with a degree in compulsory Physical Education, Bachelor's degrees must offer broad training (Resolution 6/2018) based on concepts from different fields of science¹¹. This view of professional learning enables the coach to work with several possibilities in the training of athletes in different sports contexts¹². Considering that the process of sports training occurs in different stages^{26,27} generalist professional learning of the coach is needed.

The opinion of the coaches interviewed in this study corroborates the findings of LEMYRE, TRUDEL and DURAND-BUSH²⁸ and STOSZKOWSKI

and COLLINS²⁹, who consider undergraduation as fundamental for the construction of professional knowledge by coaches. Undergraduation in Physical Education is, therefore, a foundation to guide the search for knowledge of specific aspects of each sport, depending directly on the interests of the coaches and the specific dilemmas of their scope.

MILISTETD et al.¹² pointed out that after four years of graduation, it should not be assumed that all professionals are able to be coaches and those who want to learn more about sports should engage in training programs, usually offered by the respective Federations and/or Confederations, or even by non-governmental initiatives. Assuming that graduation does not provide the entire framework regarding the specific knowledge of beach handball (CSD1), some coaches sought continuing education courses (lato sensu) (CSD2) and/or courses promoted by different institutions (CSD3).

At the end of CSD2 it is mentioned that continuing education (lato sensu) was also not enough to master the specific contents of beach handball. A problem related to the knowledge developed during graduation is that the learning

experience in this context occurs out of context with the coach's reality, which does not fully prepare them for the job³⁰ and does not reduce the gap between theory and practice. Therefore, undergraduation plays a central role in promoting a significant knowledge base (not necessarily related to beach handball), with continuing education related to the search for a network of coaches (often more experienced) from different contexts.

CSD3 highlights the importance of different courses to deepen specific aspects of beach handball. Coaches consider these courses as a relevant source to continue engaging with their studies and to assist in planning their teams. However, these professional training programs are questionable in providing access to specific and transferable knowledge to the training environment³¹, especially due to the possible decontextualization of what is offered and the coaches' working environment³²⁻³⁴.

WILSON et al.³³ interviewed six team sports coaches at school, and pointed out that their professional learning is unique, whose mediated situations are complementary and fundamental. The training of sports coaches should not be seen as a unique and hierarchical knowledge, but it is linked to their professional environment, their particular interests and the objective values^{32,35}. The decontextualization of professional learning can result in coaches based on technocratic decisions that make them unable to understand the contexts in which they are inserted, resulting in great difficulty in leading a dynamic, complex and changing environment of the professional environment^{31,32,35}. In this sense, it is agreed with MOON³⁶ that the constructivist view of learning is directly related to the activities that learners (in this case, coaches) seek to make sense of their scope.

To fill in the gaps in mediated learning situations, the coaches mentioned different unmediated learning situations (TABLE 3), from which searches for different materials on the internet and in videos are highlighted (CSD4). In addition to the ease and convenience of accessing the content, the search is based on the needs of the coaches themselves to select the information they consider most relevant to their professional environment³⁷. These learning sources are guided by the needs noted in the professional environment or by the weaknesses in relation to specific sport content.

Interviews with coaches corroborated the importance of using the internet for professional

learning^{6,8}, mainly because coaches mention preference for videos, with short and direct analyzes of certain concepts interesting to them⁷.

Other speeches refer to the observation of training and matches of other coaches and teams (CSD5), which can happen due to the relationships established with more experienced peers, and are based on a different framework³⁸. The contact with more experienced coaches reported in CSD5 corroborates the findings of studies that show the importance of exchanging experiences to help solve problems inherent to their professional environment^{1,3,12,28,32,39,40}. The interaction with other coaches is seen as an important source of knowledge⁴¹, whose exchange of information can occur at social events and in the various manifestations of sports practice (such as competitions)³⁸. These situations tend not to be planned and happen on a casual basis, and together with reflective practice they tend to be extremely important and significant to coaches⁴².

In addition to interactions with peers, another learning situation mentioned by the coaches was their own professional experience (CSD6). Learning through professional experiences is highlighted as a key component of coach development^{3,41,42}, especially when it triggers a process of confrontation between the specific knowledge of the sport experienced in practice (as an athlete) with the knowledge experienced during the learning process³⁹. In addition, the knowledge accessed through practical experiences (such as athletes, coaches and managers) and interactions with different protagonists, are very relevant for learning⁴³.

In the last point highlighted by the speeches, it is possible to identify an important gap in the coaches' learning. CSD7 reported the difficulty of finding and/or understanding the sport-specific study materials. Such difficulty can explain the search for the different learning situations mentioned above (especially based on practical experiences), and reinforce the individual characteristic of the professional learning process.

It was not possible to identify in the findings of this study the influence of the internal learning situation, although it was highlighted by other authors^{1,3,8,14}. However, coaches seem to reflect on different aspects of their professional practice, gathering information from different situations to learn specific aspects. Graduation, therefore, consolidates itself as the starting point for professional learning (CSD1) and for the operationalization of possible solutions.

Internal learning situations are characterized as

specific moments in which coaches reflect on their practice and reorganize the knowledge they gather throughout their daily experiences. Reflection can happen during a training or game (reflective practice) and outside the context of the training or game (critical reflection); in the latter the coach cannot interfere directly, which does not make it less important^{1,39}.

Deliberate reflection activities, individual or collective, have a high potential to expand professional development³⁶, especially for sports coaches^{10,30}. They are encouraged to reflect and critically analyze their performance based on their daily experiences²⁹ and, therefore, change habits, training routines, values, beliefs and possible mistakes in their performance⁴⁴.

In general, it is understood that beach handball is a 'new' sport with practice restricted to some places. Generally, the coaches' experiences refer to (indoor) handball and the knowledge built during the undergraduation subsidizes the scope of professional practice. The process of learning to be a coach is complex and occurs throughout life, whose construction of knowledge occurs through experiences in childhood, socialization in the family, at school, at work, in the conceptions and personal interests to learn and deepen in a particular sport³⁹, in addition to the technical and tactical aspects of the game⁴⁵.

The findings of this study revealed that the coaches attach importance to mediated and unmediated situations for learning the specific contents of beach handball, even though they

mentioned the scarcity of specific materials for study. This study confirmed the need to expand studies that support the specific development of beach handball, since many of the coaches' experiences are based on handball (indoor).

This study also revealed that it is important to invest in the quality and specificity of information in mediated learning situations, either by the approach to beach handball during graduation or by investing in specific courses by the Institutions that organize it. However, unmediated learning situations can also be improved, such as the possibilities of accessing coaches of different levels, participating in experiences at other competitive levels and accessing specific content for the development of beach handball in Brazil.

A limitation of this study focuses on the analysis of coaches in the State of São Paulo. Although the five coaches who participated in all circuits organized at the State level were interviewed, they may not present generalizations to contexts in other states or the coaches who did not compete in the circuits.

Finally, the lack of studies on beach handball strengthens the importance of our findings for the construction of new arguments for the professional learning of coaches. Prospects for future studies should involve the investigation of beach handball coaches from other contexts, to seek an understanding of the reasons that lead coaches to choose certain sources of knowledge and / or learning situations.

Resumo

Situações de aprendizagem de treinadores de handebol de areia do Estado de São Paulo (Brasil).

Objetivo: analisar as situações de aprendizagem de treinadores de handebol de areia do Estado de São Paulo (Brasil). **Métodos:** foram entrevistados cinco treinadores de handebol de areia (entrevista semiestruturada), cujos depoimentos foram tabulados e analisados com base no método do Discurso do Sujeito Coletivo por três pesquisadores. **Resultados:** os treinadores mencionaram que o curso de graduação em Educação Física não foi suficiente para dominar os conhecimentos específicos do handebol de areia, mas estimulou a busca pelo conhecimento e a continuidade da aprendizagem. A pós-graduação foi importante pelo contato com outros treinadores, e os cursos e workshops foram relevantes para o aprimoramento dos conhecimentos do handebol de areia. **Discussão:** os treinadores preferiram situações de aprendizagem não mediadas, como as próprias experiências, as conversas com outros treinadores, a observação de treinos/partidas e materiais disponíveis em vídeos online. Em síntese, os treinadores entrevistados mencionaram a importância das situações de aprendizagem mediada e não mediada para a aprendizagem profissional, e destacam a preferência por conteúdos curtos e diretos para o estudo.

KEYWORDS: Pedagogia do esporte; Treinador esportivo; Aprendizagem profissional; Esportes coletivos.

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Submitted: 08/10/2020

Revised: 12/30/2021

Accepted: 01/04/2022