

# SPECIALIZATION OF HANDBALL PLAYERS: SPEECHES OF SCHOOL TEAM COACHES

*Especialización de jugadores de balonmano: opinión de los entrenadores de equipos escolares*

*Especialização de jogadores de handebol: opinião de treinadores escolares*

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## Abstract

The aim of this study was to identify and discuss the recommended ages for the specialization of handball players, through the opinions of coaches who work in the U-14 and U-17 school teams. Ten coaches were interviewed from a city of the state of São Paulo, and the speeches were analyzed based on the Collective Subject Discourse (CSD). It was possible to identify a preference to specialize goalkeepers to the U-16 team and court players in the U-18 team. The results make it possible to understand the sports training process and to plan the long-term specialization in handball.

**Keywords:** Sport pedagogy; Sports specialization; Handball; Sports coaches.

## Resumen

El objetivo de este trabajo fue identificar y discutir el proceso y las categorías más recomendadas para la especialización de jugadores de balonmano, a través de las opiniones de entrenadores de equipos escolares en las categorías sub-14 y sub-17. Se entrevistó a diez entrenadores de un municipio en el estado de São Paulo, donde se analizaron los discursos basados en el método del Discurso del Sujeto Colectivo (DSC). Los hallazgos revelaron una preferencia a especializar a los porteros hasta la categoría de cadetes y otros jugadores hasta la categoría juvenil. Los resultados permiten comprender el proceso de entrenamiento deportivo y el enfoque de especialización en balonmano.

**Palabras clave:** Pedagogía deportiva; Especialización deportiva; Balonmano; Entrenadores deportivos.

## Resumo

O objetivo deste trabalho foi identificar e discutir o processo e as faixas etárias mais recomendadas para o processo de especialização de jogadores de handebol, por meio das opiniões de treinadores que atuam nas categorias sub-14 e sub-17 de equipes escolares. Foram entrevistados dez treinadores de um município do Estado de São Paulo, onde os discursos foram analisados com base no Discurso do Sujeito Coletivo (DSC). A partir dos achados foi possível identificar uma preferência de especializar os goleiros até a categoria sub-16 e os jogadores de quadra até a categoria sub-18. Os resultados possibilitam compreender o processo de formação esportiva e a aproximação para a especialização no handebol.

**Palavras-chave:** Pedagogia do esporte; Especialização esportiva; Handebol; Treinadores esportivos.


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## Introduction

The context of the handball game is permeated by the simultaneous relationships between different protagonists (teammates and opponents) in a complex environment (Menezes, 2012), which requires the development of tactical, technical and socio-affective skills of the players (Garganta, 1998) in a long-term overview. In this scenario, different studies (Barreiros, Côté, & Fonseca, 2013; Morelló Tomás, Vert Boyer, & Navarro Barquero, 2018) point out that the sports coach must have knowledge to systematize training in different sports contexts.

Côté, Baker and Abernethy (2007) proposed the Development Model of Sport Participation (DMSP), which describes three sports careers: a) recreational sports participation through diversification; b) participation in elite sport through diversification; c) early sports specialization. The concepts of diversification, deliberate play, deliberate practice and play practice are foundations of the DMSP. Côté (1999) and Côté *et al.* (2007) characterize deliberate play as fun sporting activities that do not necessarily involve an adult, based on intrinsic motivation, enjoyment of the practice and that are resignified (adaptations in rules, playing spaces and number of players, for example).

On the other hand, deliberate practice occurs in the opposite direction to deliberate play, with strenuous, fun-free activities that seek long-term rewards and require a coach (Côté *et al.*, 2007). Usually in a deliberate practice, the practitioner is required to use the “ideal” technique that focuses on sports performance (Côté, Lidor, & Hackfort, 2009). Another concept, play practice, defines activities prescribed by adults for performance improvement through game-centered approaches - such as Teaching Games for Understanding (Côté, Erickson, & Abernethy, 2013). Côté (1999), Côté *et al.* (2007) and Côté *et al.* (2013) point out that activities of different natures (deliberate play, deliberate practice and game practice) must be varied throughout the player's training process.

The above statement is confirmed by Côté *et al.* (2007), who describe that the trajectory of “participation in elite sport through diversification” consists of three stages: a) diversification (up to 12 years old), which advocates involvement in different modalities and prioritizes deliberate play over rather than deliberate practice; b) specialization (approximately 13 to 15 years old), in which involvement in different modalities decreases and the proportions between practice and deliberate play are balanced; c) investment (from 15-16 years old), with the choice for a specific sport and the predominance of deliberate practice.

Identifying aspects related to the specialization of handball players can contribute to the understanding and planning of the long-term training process. For this, the opinions of protagonists as coaches (Santos & Menezes, 2019) and athletes (Silva, Barreiros, & Fonseca, 2019) have valuable importance for the construction of this scenario, as the moment considered ideal to dedicate to just one mode.

In this sense, coaches should consider aspects for the training process of their teams that go beyond anthropometric variables (Carraça, Serpa, Palmi, & Rosado, 2018). Thus, for these authors, different experiences are essential for the players to develop, also favoring the emphasis of the game over the deliberate practice. For Barreiros, Côté and Fonseca (2013), a long-term development perspective is essential to avoid an early players' selection for certain positions and specific sports, a factor that is frequent in the sports context, considering that the professionals involved seek expressive results of youth players.

Considering the presented context, the aim of this study was to identify the moment of specialization of handball players from the opinion of coaches of school teams.

## Methods

Qualitative research was adopted to identify coaches' opinions, analyze the categories and reasons they believe are important for the specialization of handball players. The essence of qualitative research reveals itself when seeking access to externalized human thought through discourse (Lefèvre & Lefèvre, 2005).

## Participants

Handball coaches who work in schools in an important city in the state of São Paulo were invited to participate in the study. In this sense, ten coaches (of 11 possible) participated in this study. The participating coaches competed in the city's most relevant school sports competition at the U-14 and U-17 teams. All of them signed an Informed Consent Form (ICF), approved by the Research Ethics Committee of the School of Philosophy, Sciences and Letters at Ribeirao Preto (CAAE: 32063614.3.0000.5407), from which they received a copy. The description of the participants is shown in Table 1.

**Table 1** - Characteristics of the coaches participating in this study.

Coach	Age	Undergraduation (years)	Experience as handball coach	Continuing education?
S1	38	01	07	Y
S2	27	06	08	Y
S3	27	06	06	N
S4	48	28	09	Y
S5	59	38	20	Y
S6	52	28	05	Y
S7	32	09	04	P
S8	51	29	14	Y
S9	44	21	22	Y
S10	43	21	15	Y

The average age of the coaches was 42.1 ( $\pm$  10.9) years, graduated in Physical Education for an average of 18.7 ( $\pm$  12.4) years and an average of 11 ( $\pm$  6.4) years of experience as school handball coaches. Eight coaches had a continuing education course (postgraduate lato sensu) in the area, one did not and one was in progress.

## Interviews

The choice of semi-structured interview is due to the fact that it is a qualitative research, whose production of information is based on the opinions of the coaches on a theme (Marconi & Lakatos, 2017; Thomas, Nelson, & Silverman, 2009). The opinion of school handball coaches is shown as a source for understanding the process of specialization of players, revealing the representation of a given social context (Lefèvre & Lefèvre, 2012).

Semi-structured interviews are based on questions inherent to the objective of the study, enabling the interviewer to address new questions (Shenton, 2004). In this study the interview instrument was divided into two blocks: 1) personal data, academic background and professional performance; 2) aspects inherent to the specialization of school handball goalkeepers, whose central question was: "What age do you consider ideal to specialize the handball player?"; "Why?"

The interview procedures proposed by Triviños (1987) and applied by Santos and Menezes (2019) were adopted in this study, and were: 1) definition of inclusion criteria for participants; 2) contact with coaches; 3) scheduling the interview; 4) interview recorded in full; 5) transcript *verbatim* of coaches' speeches (started at the same day of interview). The four criteria proposed by Shenton (2004) (credibility, transferability, reliability and confirmability) were adopted to ensure robustness to the methodological decisions of this study.

Each interview was recorded with a digital recorder and transcribed verbatim the same day by the latency of the speech (Oliver, Serovich, & Mason, 2005) and the researchers' notes. The transcripts were submitted to the coaches as a way to validate their content. The experience of the interviewees in qualitative research is also noteworthy, since both have an academic background in sports sciences.

## Speeches Analysis

After the transcription of the speeches, they were tabulated and analyzed based on the Collective Subject Discourse (CSD) method (Lefèvre & Lefèvre, 2012). It was possible to represent the thinking of a collectivity from their individual statements on a particular theme, by grouping discursive content of similar meaning (Lefèvre & Lefèvre, 2005).

The CSD is composed of three methodological figures: a) key expressions (KE, literal transcripts of continuous or discontinuous passages of speech, thus revealing the essence of the statement); b) central ideas (CI, reveal the meaning of a statement or a set of statements in a summarized way); c) and CSD (written in the first person singular from the KE with the same CI) (Lefèvre & Lefèvre, 2005, 2012). The CSD were elaborated by two experienced researchers familiar with handball, qualitative research, interview and the CSD. To ensure reliability in the preparation of CSD, the consensus criterion among researchers was adopted.

## Results

Seven CSD (Table 2) were elaborated: from CSD1 to CSD3 the speeches on goalkeeper specialization are presented, and from CSD4 to CSD7 on the specialization of court players.

**Table 2** - CSD for ages identified as recommended for the specialization of handball players.

### **CSD1: Specialize goalkeepers in the U-14 team (S1, S2, S4, S8, S9)**

The goalkeeper is from the moment he says "I want to be a goalkeeper!"<sup>S2,S8</sup>. The function is very specific<sup>S9</sup>, as I work only with school level and it is not a very high level of competition, I think that specialization in handball itself I would not do so soon<sup>S1</sup>, if it was to specialize, it would be in the U-14 team<sup>S1,S2,S4,S8,S9</sup>. I think it is very different to play in goal and on court<sup>S4</sup>, the function is specific<sup>S1,S9</sup>, is different from the rest<sup>S1</sup>. Even if the boy will start playing in a position that at least does general exercises, varied<sup>S2</sup>.

### **CSD2: Specialize goalkeepers in the U-16 team (S3, S6, S7, S10)**

It is the most specific position and wins the games<sup>S10</sup>, and should be specialized in the U-16 team<sup>S3,S6,S7,S10</sup>. After 14 years the boy already shows that he wants to play only in goal and it is very difficult to find goalkeepers<sup>S3,S6</sup>. They have boys who explore various positions, get along in several, then eventually choose one of those<sup>S6,S10</sup>. In the U-16 team you already know where you move best and where it works best, are already mature and understand handball better<sup>S7</sup>.

### **CSD3: Goalkeeper is innate (S5)**

Goalkeeper is automatic, goalkeeper is goalkeeper since he was born; or he was born goalkeeper or not born goalkeeper. At 10, 11 years old the child already knows that he will be goalkeeper<sup>S5</sup>.

### **CSD4: Specialize the court player in the U-18 team (S1, S2, S4, S6, S7)**

I think at 16, 17 years old<sup>S1,S2,S4,S6,S7</sup>, we will see their development throughout the process, what you think will be a soccer player ends up being a volleyball player. In the U-18 team should be specialized and playing with a more specific position<sup>S2</sup>, but still playing in other positions<sup>S1,S6,S7</sup>.

### **CSD5: Specialize the court player in the U-16 team (S3, S5, S9)**

If you think at school level is the U-16 team<sup>S3,S5,S9</sup>, so far has a straight, has to play in all positions and even some championships force children to play in more than one [position]<sup>S5,S9</sup>, have to play at all, have court experience<sup>S9</sup>. I must specialize him for being his last two years at school<sup>S3,S9</sup>.

### **CSD6: Specialize the court player in the U-14 team (S8)**

I work with all positions, but if it were to point out an age would be from 12 years; He begins to identify and feel more comfortable in one position. Before that, he participated in everything; I work like this, setting only for some championships<sup>S8</sup>.

### **CSD7: Do not specialize the court player (S10)**

I will never specialize someone in a specific position, I think the player should do more than one role. If he has this universal initiation, playing in various positions, he will tactically understand how the game works and his teammate's displacement. Even in adults I don't like to work one position, at least he needs to know two positions<sup>S10</sup>.

## Discussion

The aim of this study was to identify the ages considered ideal for the specialization in handball, based on the opinion of coaches of school teams, who revealed differences between the specialization of court players and goalkeepers. Firstly, there is a preference for the goalkeeper specialization in the U-14 (CSD1) and U-16 (CSD2) teams, while for under court players the U-18 (CSD4) and U-16 teams are suggested (CSD5). Such differences between specific positions result from the specific characteristics attributed to goalkeepers, which are not always transferable to court players.

Santos and Menezes (2019) interviewed six coaches of adult handball teams who suggested that goalkeeper specialization should occur in the U-16 team (as discussed in CSD2), but at a later time than reported by coaches in CSD1. It is important to highlight that the specialization of goalkeepers and court players must be a process, based on diversified experiences throughout their formation.

Côté et al. (2013) discuss the need to participate in activities of different natures, such as deliberate play, deliberate practice and play practice, whose proportions tend to change during sports training. Participation in a greater proportion of deliberate practice in the teams mentioned for the specialization of goalkeepers (U-14 and U-16) and court players (U-18 and U-16) follow a similar logic except for the U-14 team, when the ratio between deliberate practice and deliberate play still proves to be equivalent (Côté et al., 2007).

In the U-16 and U-18 teams players engage in the investment years, whose characteristics change significantly. At this stage, the proportion of deliberate practice surpasses deliberate play, justified by the need for specialization in one particular sport (which decreases participation in others) and the concern is centered in sports performance (Côté et al., 2007).

For Antón Garcia (2000) and Greco, Silva and Greco (2012), up to U-16, general characteristics of the players must be developed without sports specialization, as well as the decision-making capacity for improvement in subsequent teams. In the U-18 and subsequent teams, the tactical and technical demand are higher than youth teams, and the approach with the higher level requires an increase in players' efficiency (Antón Garcia, 2000; Greco et al., 2012; Menezes, Ramos, Marques, & Nunomura, 2018).

Studies with handball have revealed a similar panorama to the one previously described. Ehret, Spate, Schubert and Roth (2002) point out that throughout the process of training the handball player should increase the specificity of teaching offensive and defensive aspects and, consequently, increase the degree of specialization in the sport. Santos and Menezes (2019) highlighted the importance of broad and generalist experience at the beginning of the formation of handball players as a preponderant aspect of their specialization.

Modolo and Menezes (2019) pointed out that goalkeepers should be prepared to defend using different body segments, a fact closely related to the trajectory of the ball, the circumstances in which the goal throw occurs and the court regions. This position confirms the need for a generalist formation, which makes it possible to understand the context of the game, make decisions and refine specific long-term technical-tactical aspects, regardless of the specific position (Antón García, 2000; Gómez, 2007; Greco et al., 2012).

Ehret et al. (2002) point out that in U-12 teams the coach should look for proactive players who are responsible for being goalkeepers; U-14 teams increase the specificity of basic technical skills training, while at U-16 teams it is suggested to increase specificity (however, without specializing in one position). The positioning expressed in the CSD2 agrees with the literature on goalkeeper teaching and learning (Antón García, 2000; Ehret et al., 2002; Greco et al., 2012; Modolo & Menezes, 2019; Santos & Menezes, 2019)

Bompa and Buzzichelli (2018) consider the age between 10 and 12 years as adequate for the beginning of handball training. However, specialization should start at around 14 years and culminate in the best competitive phase between 22 and 26 years of age. However, while CSD1 and CSD6 point out that specialization should occur in U-14 teams, the literature has shown the relevance of U-14 teams in developing versatility in more than one specific post, including

goalkeeper (Ehret et al., 2002; Greco et al., 2012; Santos & Menezes, 2019). Antón García (2000) and Ehret et al. (2002) addressed the importance of developing basic displacement and positioning experiences in the U-14 teams, for further specialization in the U-16 teams, especially for court players.

Specialization should not be seen as the focus in a school environment, due to the educational character that is attributed to the sport performed in this context (Marques, Gutierrez, & Almeida, 2008), which provides the player with diversified practice in a long term perspective. Such perspective, in agreement with the precepts pointed out by Côté et al. (2007), allows the establishment of criticism regarding the CSD6, which advocates specialization in the U-14 teams for court players, especially regarding the latent need to maintain a diversified teaching proposal.

In this sense, the complexity of the gaming environment is respected (Menezes, 2012) and the possible occupations of specific positions varied according to the situation presented in that environment (Ehret et al., 2002). This prerogative agrees with CSD7.

In an antagonistic way to those who believe that the process should occur in U-14 (CSD1) and U-16 (CSD2) teams, the S5 believes that the goalkeeper is innate, as a gift, contrary to the possibility of formation and training of players. Giglio, Morato, Stucchi and Almeida (2008) investigated the concept of gift in study with 17 soccer players (two former professionals, nine professional players and six blind soccer players). The authors point out that the term is applied by common sense to players who have great technical mastery. For the authors there is a conceptual confusion between training and genetics, between innate and acquired (Giglio et al., 2008), which is totally incongruous with the academic background of the interviewees in this study.

Considering goalkeepers as "innate" can stimulate a process of early sports specialization, as coaches would seek to meet adult sports performance criteria, as well as increase the proportion of deliberate practice (Côté et al., 2013) and the use of teaching approaches with this prerogative (Menezes, Marques & Nunomura, 2014).

With these considerations, it is identified that in the context analyzed the under-16 team is characterized by the transition between the stage of specialization and investment, in which there is a search for higher competitive yield, which agrees with different studies (Côté, 1999; Côté et al., 2007; Modolo & Menezes, 2019; Santos & Menezes, 2019). For the participants of this study, the U-14 (CSD1) and U-16 (CSD2) teams would be considered the most appropriate to start the goalkeeper specialization process, and the U-18 (CSD4) team for indoor players.

## Conclusion

This study identified and discussed the moment considered ideal for the specialization of school handball players in specific positions of the sport, through the opinions of coaches of the U-14 and U-17 teams of an important city of the state of São Paulo. It is concluded in this study that the U-16 team seems to be more suitable for the goalkeeper specialization, while the court players seem to be the U-18 team.

When comparing the opinions of the coaches of this study with the results of Santos and Menezes (2019), there is a mismatch between the perspectives of specialization. The differences observed may be due to the lack of guidelines (by the handball regulatory institutions) for the teaching-learning process in the State of São Paulo and the academic formation of these coaches (Modolo, Madeira, Santos, D'Almeida, & Menezes, 2017). Thus, we highlight the need for investment in the continuing education of coaches to provide professional experiences that are close to their realities and that can support the planning of the teaching-learning process of their teams in the long term.

The findings of this study may provoke reflections about the formative process of players in the school environment, discussing and presenting the difficulties found in this context. Future perspectives highlight the need to broaden the debate on handball specialization to foster solutions for the long-term handball teaching-learning process.

Although it was possible to identify in the present study the moment considered ideal for the specialization of school handball players, based on the coaches' speeches, these results cannot be generalized to other contexts, as they have



specific conditions in the players' development. Other factors are also associated with the longevity of sports, such as unfavorable economic situations, early work and specificities of player's context.

Finally, the influence of social and cultural aspects throughout the teaching-learning process can impact on a sports specialization process. However, such variables were not analyzed in the present study.

## Practical Applications

This study presents as practical applications a possible definition of when specific training of court players and handball goalkeepers should be emphasized, such as the most appropriate age for a specialization process. For goalkeepers, it begins with the development of the base position and specific technical gestures in the U-14 team to specialize in the U-16 team. For court players it starts with the diversity and plurality of specific positions until the specialization process in the U-18 team.

## References

- Antón García, J.L. (2000). *Balonmano: nuevas aportaciones para el perfeccionamiento y la investigación*. (1ª ed.). Barcelona: INDE Publicaciones.
- Barreiros, A., Côté, J., & Fonseca, A.M. (2013). Sobre o desenvolvimento do talento no desporto: um contributo dos modelos teóricos do desenvolvimento desportivo. *Revista de Psicologia del Deporte*, 22(2), 489-494.
- Bompa, T.O., & Buzzichelli, C. (2018). *Periodization: theory and methodology of training*. (6ª ed.). Champaign: Human Kinetics.
- Carraça, B., Serpa, S., Palmi, J., & Rosado, A. (2018). Enhance Sport Performance of Elite Athletes: The Mindfulness-Based Interventions. *Cuadernos de Psicología del Deporte*, 18(2), 79-109.
- Côté, J. (1999). The influence of the family in the development of talent in sport. *Sport Psychologist*, 13(4), 395-417.
- Côté, J., Baker, J., & Abernethy, B. (2007). Practice and play in the development of sport expertise. In G. Tenenbaum & R.C. Eklund, *Handbook of sport psychology*. Hoboken: Wiley. 3(8), 184-202.
- Côté, J., Erickson, K., & Abernethy, B. (2013). Play and practice during childhood. In J. Côté & R. Lidor, *Conditions of children's talent development in sport*. Morgantown: Fitness Information Technology. 9-20.
- Côté, J., Lidor, R., & Hackfort, D. (2009). ISSP position stand: To sample or to specialize? Seven postulates about youth sport activities that lead to continued participation and elite performance. *International Journal of Sport and Exercise Psychology*, 7(1), 7-17. doi: 10.1080/1612197X.2009.9671889.
- Ehret, A., Spate, D., Schubert, R., & Roth, K. (2002). *Manual de handebol: treinamento de base para crianças e adolescentes*. (1ª ed.). São Paulo: Phorte.
- Garganta, J. (1998). Para uma teoria dos jogos desportivos colectivos. In A. Graça & J. Oliveira, *O ensino dos jogos desportivos*. (3ª ed.). Porto: Universidade do Porto, 11-25.
- Giglio, S.S., Morato, M.P., Stucchi, S., & Almeida, J.J.G. (2008). O dom de jogar bola. *Horizontes Antropológicos*, 14(30), 67-84. doi: 10.1590/S0104-71832008000200003.
- Gómez, R.A. (2007). El entrenamiento del portero de balonmano en las etapas de iniciación. *E-Balonmano.com: Revista de Ciencias Del Deporte*, 3(2), 21-32.
- Greco, P.J., Silva, S.A., & Greco, F.L. (2012). O sistema de formação e treinamento esportivo no handebol brasileiro (SFTE-HB). In P.J. Greco & J.J.F. Romero, *Manual de handebol: da iniciação ao alto nível*. (2ª ed.). São Paulo: Phorte, 230-250.
- Lefèvre, F., & Lefèvre, A.M.C. (2005). *Depoimentos e discursos: uma proposta de análise em pesquisa social*. (1ª ed.). Brasília: Liber Livro Editora, 2005.
- Lefèvre, F., & Lefèvre, A.M.C. (2012). *Pesquisa de representação social: um enfoque quali-quantitativo*. (2ª ed.). Brasília: Liber Livro Editora, 2012.

- Marconi, M.A., & Lakatos, E.M. (2017). *Metodologia do trabalho científico: procedimentos básicos, pesquisa bibliográfica, projeto e relatório, publicações e trabalhos científicos*. (8ª ed.), São Paulo: Atlas, 2017.
- Marques, R.F.R., Gutierrez, G.L., & Almeida, M.A B. (2008). O esporte contemporâneo e o modelo de concepção das formas de manifestação do esporte. *Conexões*, 6(2), 42–61. doi: 10.20396/conex.v6i2.8637803.
- Menezes, R. P. (2012). Contribuições da concepção dos fenômenos complexos para o ensino dos esportes coletivos. *Motriz*, 18(1), 34–41. doi: 10.1590/S1980-65742012000100004.
- Menezes, R.P., Marques, R.F.R., & Nunomura, M. (2014). Especialização esportiva precoce e o ensino dos jogos coletivos de invasão. *Movimento*, 20(1), 351.
- Menezes, R. P., Ramos, N. C., Marques, R. F. R., & Nunomura, M. (2018). Teaching handball to U-16 and U-18 women's teams: coaches' perspective on the long-term. *Motriz*, 24( 4), 1-9. doi:10.1590/s1980-6574201800040001.
- Modolo, F., & Menezes, R.P. (2019). Características técnico-táticas dos goleiros de handebol da categoria sub-16: Opinião de treinadores brasileiros. *Cuadernos de Psicología Del Deporte*, 19(1), 206–221. doi: 10.6018/cpd.346291.
- Modolo, F., Madeira, M.G., Santos, W.R., D'Almeida, M.P., & Menezes, R.P. (2017). Contextos e situações de aprendizagem de treinadores de handebol em âmbito escolar. *Movimento*, 23(4), 1203-1216. doi: 10.22456/1982-8918.71699.
- Morelló Tomás, E.; Vert Boyer, B.; Navarro Barquero, S. (2018). Establecimiento de objetivos en el currículum formativo de los futbolistas. *Revista de Psicología Aplicada al Deporte y al Ejercicio Físico*, 3(e3), 1-9. doi: 10.5093/rpadef2018a7
- Oliver, D.G., Serovich, J.M., & Mason, T.L. (2005). Constraints and opportunities with interview transcription: towards reflection in qualitative research. *Social Forces: a Scientific Medium of Social Study and Interpretation*, 84(2), 1273–1289. doi: 10.1353/sof.2006.0023.
- Santos, W.R., & Menezes, R.P. (2019). Especialização de jogadoras de handebol a partir dos discursos de treinadores. *Cuadernos de Psicología Del Deporte*, 19(3), 47–61. doi:10.6018/cpd.360471.
- Shenton, A.K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), 63–75. doi: 10.3233/EFI-2004-22201
- Silva, A.S., Barreiros, A., & Fonseca, A.M. (2019). Exploring the importance of coaches in the development of the sports career in Handball. The perception of athletes from higher and lower levels of success. *Cuadernos de Psicología Del Deporte*, 19(1), 106–120. doi: 10.6018/cpd.314221.
- Thomas, J. R., Nelson, J.K., & Silverman, S.J. (2009). *Métodos de pesquisa em atividade física*. (6ª ed.). São Paulo: Artmed Editora, 2009.
- Triviños, A.N.S. (1987). *Introdução à pesquisa em ciências sociais: a pesquisa qualitativa em educação*. São Paulo: Atlas.