

## Coach education in volleyball: a study in five countries

RESENDE RUI<sup>1</sup>; SARMENTO HUGO<sup>1,2</sup>; FALCÃO WILLIAM<sup>3</sup>; MESQUITA ISABEL<sup>4</sup>; FERNÁNDEZ JUAN<sup>5</sup>

<sup>1</sup>Instituto Universitário da Maia, PORTUGAL

<sup>2</sup>Polytechnic Institute of Viseu, Centre for the Study of Education, Technologies and Health, PORTUGAL

<sup>3</sup>McGill University, CANADA

<sup>4</sup>Faculty of Sports, University of Porto, PORTUGAL

<sup>5</sup>Faculty of Sport and Physical Education, University of Coruna, SPAIN

*Published online: December 30, 2014*

*(Accepted for publication November 25, 2014)*

DOI:10.7752/jpes.2014.04072;

### Abstract:

Coach education is a theme of great interest for research because its practice is often not theory driven. The increasing movements for coach professionalization and the need to deepen education and qualifications justify the need for greater theoretical support of the coaching processes. The purpose of this study was to examine the structure of volleyball coach education courses in countries with different levels of development in sport (i.e., Portugal, Spain, Brazil, Italy and France). The sample comprised the documents that regulate volleyball coach education in the five countries under study. Content analysis of the documents revealed some uniformity between the countries, with the exception of France. The analyzed courses focused on performance, revealing a education continuum which evolved from the first until the last level. French courses differ from the other by having more elaborate education proposals, which answered to coaches' needs and distinguishing between participation-oriented and performance-oriented participation.

**Key words:** curriculum, content analysis, volleyball.

### Introduction

The coach has a decisive responsibility in developing athletes through sport and developing the sport system. Due to this key role it is important to inquire about coaches' education. Coach education is a current theme of interest in research because most practical applications lack theoretical support (Abraham, 1998; Côté, 2006; Gilbert, 2006; Jones, 2005). The speed in which knowledge and technology evolves highlights the importance of good and up-to-date education programmes in all professional fields, including sport coaching. This is especially important when coaching is directed towards high performance and competition. In addition, the increasing efforts towards its professionalization and the urgency to improve coaching qualification support the need for greater theoretical foundation in coach education (Cushion, 2010; Duffy, 2005). Demers (2002) argued that coaches professionalization and corresponding improvement of the coaching processes are essential for achieving sport excellence. Furthermore, coach education lacks robust systems for monitoring, regulating, and evaluating its processes, which are essential to optimize professional coach interventions (Campbell, 1993). As stated by Langan (2013), it "seems obvious that an extensive base of knowledge is a prerequisite to coach effectiveness" (p. 47).

The strategies used to deliver coach education programmes are an important issue to consider given that coaches' knowledge and its applications directly impact the coaching process (Lyle, 2000) and are widely accepted as essential to sport development (Duffy, 2010). However several researches emphasize that coaches learn to be coaches through experience (playing and coaching), mentorships, and coaching clinics (Irwin, 2004). In most countries, individuals require a coach qualification or certification to be a sport coach (Campbell, 1993; Wright, 2007). Certifications are obtained by attending educational sessions held by national sport agencies or specific sports federations. Coach education programmes appeared recently and its effectiveness must still be empirically evaluated (Nash, 2012).

The description of current coach education programmes enables us to observe the depth and extension of the curricula as well as the means, methods, and evaluations used in different countries. The comparison between coach education programmes in countries with different levels of sport development, according to recent results in competition, allows us to understand if the coach education programmes reflect the stage of sport development in each country. In particular, this study will be examining the Volleyball coach education programmes in five countries: Portugal, Spain, Brazil, Italy, and France. As such, the research questions guiding

this study are: Which organization provides volleyball coach certification in each country? What levels of coach certification are offered and to which competition level are they intended? What are the requisites to attending the coach education programmes and the requisite of each level? How long does the programmes take, and what is the timetable for each country?

## **Method**

The sample comprises the documents that regulate volleyball coach education in the five countries: Brazil, France, Italy, Portugal and, Spain.. The selected documents were obtained from the volleyball federations of each country. The documents from Brazil, Italy and France were retrieved from the websites, where there is a link to download the documents that guide and regulate coach education in these countries. Similar documents were not available in the websites of the Portugal and Spain federations, and thus a request was made to the National Directors of coach education programmes who shared the materials they dispose. All five volleyball federations possessed an Internet website dedicated to coach education. They distinguished themselves between the ones that advertised their coaching activities (i.e., Portugal, Spain) and those that other than providing information on coaching also provided additional content and support materials for coaches (i.e., Brazil, Italy and France). There was ambiguity in the terminology found in the data analysis due the different terms used in different countries. Once the data collection was completed, a content analysis was performed using the software Nvivo 10.0. During the analysis, the researchers performed a comparison of the diverse designation of coach education levels as well the curricular content in each certification level. In order to synthesize and organize the information, the data was compared to the literature. Three researchers performed this comparison: two had extensive experience in Volleyball research and are well informed about coaches' education courses; the other, was an experienced sport scientist with expertise in qualitative research.

## **Results**

### *Configuration of coach education grades*

Coach education does not follow the same structure in all countries. Most countries consider four or five levels of formation (Campbell, 1993). A guiding structure was sought in order to enable the comparison between the different types of coach education given that there were no identical education proposals within the selected countries.

The alignment of labour laws in European countries provided a movement towards the recognition of education qualifications in sport sciences named AEHESIS (Aligning a European Higher Education Structure in Sport Science). This movement aimed at developing coaches with strong ethical principles, focused on the acquisition of coaching skills, and used a diverse range of education strategies which included basic skills education, formal education sessions, individual learning, distance learning, supervised practice, and recognition of prior learning (AEHESIS, 2006). These principles are based on the awareness that coaching expertise is built by combining practical experience, formal education programmes, and self-reflection (Côté, 2009; Cropley, 2012; Nash, 2012). Coach education must be designed for the coach to acquire competence in order to help athletes achieve their goals, following the appropriate stages of their development, and within the context coaching is happening. Four areas are distinguished within the professional sphere of the coach (Duffy, 2010): coaching practitioners that are entering the sport (children, young people, and adults), coaching practitioners seeking non-competitive long-term sport participation (children, young people and adults), coaching sports talents and competitive athletes (children, young people and adults), and full-time coaching of high performance athletes. The description of education levels proposed by the European Network of Sport Science, Education & Employment (European organization that involve all EU countries with the aim of harmonize labour legislation, qualification framework and coach education) were used to compare the coach education programmes being studied. Thus, in this study we name the levels of certifications as Assistant Coach, Coach, Senior Coach and Master Coach (ENSSEE, 2007).

### *Certification*

In this study the national volleyball federations regulates the coach education in the sport and its certifications. Despite the autonomy of the federations, it is noticeable that the coaching education processes are overseen and audited by the governmental agencies that finance coaching activities. Furthermore, the AEHESIS proposal (2006) indicated that universities (with degrees in sport and physical education) and other entities (that meet the necessary requirements) might carry out sports coach education and certification. This inclusion by the AEHESIS proposal reflects the criticism that coaching education has received for not being linked to higher education. Such criticism has echoed in several research papers, which support that the coaching practice is too complex to be taught under such scarce education. For example, Gilbert (1999) compared coaches to physical education teachers and argued that while teachers require a university degree, coaches required a small number of education hours. In addition, Knowles (2001) criticize the long time between the end of a coaching course and the beginning of the next. Thus, it is not surprising that coach's knowledge does relies more on personal interpretation of previous experiences than on formal coach education courses (Cushion, 2003; Gould, 1990).

Education plans in all analysed countries reflected a linear and hierarchal organization of coaching levels assuming a sequence from entry levels of volleyball to high performance. The organization of coaching levels as a continuum from inexperienced to expert coach matching athletes' competition level has been progressively abandoned in favour of an approach which recognizes the specificities of the different coaching contexts (e.g., recreation, developmental, or elite sports) (Trudel, 2006). The association between coach educations and athletes competition level puts inexperienced coaches in the early stages of athletes coaching. This strategy is counterintuitive given the necessity of having experienced coaches with advanced pedagogical skills in the early stages of athletic coaching. In accordance with this idea, France presents a clear distinction between the types of coach education for different sport contexts, which include coaching guided towards leisure (participation sport) or coaching towards sport performance. The diversity in coach education reveals a concern with providing coaches the knowledge and skills specific to the different levels of sport participation. The French federation shows clear concern with providing knowledge and strategies to coaches, which reflects a holistic and contextualized vision of coach education. These principles are supported by findings by Sullivan (2012) that "highlight the importance of coach education for improving coaching efficacy in youth sport" (p. 122).

The federation's education proposals do not mention the recognition of prior learning (Jones, 2003; Cushion, 2003) and the reflection about their own experience (Demers, 2006) as proposed by the AEHESIS (2006).

#### *Assistant Coach*

In spite of being an introductory level of education for those interested in sports coaching, the education proposals for assistant coaching are different in each country. France is the only country that differentiates its education according to two target audiences: the leisure-oriented coaching and the young athletes Volleyball coaching. It distinguishes itself from the other countries by aspiring the acquisition of skills while also focusing on the structural development of the club and the loyalty of participating coaches. The proposed objectives are to provide knowledge to the coach apprentice to initiate young people in the sport, while also seeking to endow coaches with basic technical and pedagogical skills to contribute in the qualification of the athlete's development in a long-term perspective. The age of access to coaching is between 16 and 18 years old. It is noted that despite no consensual minimum age to begin a coaching career or to access education, the age access does not differ much between the countries in this study.

With regard to the evaluation, the coach applicants are subjected to diverse situations. Spain indicates that the coaches must be approved at all disciplines, but they don't specify the evaluation methods. Brazil and Italy state that the applicants are assessed in practical terms of technical fundamentals, execution, and through a written evaluation. In the case of Brazil, there is a multiple-choice test and an open-ended response questionnaire. In Italy, it is requested an oral test to be held in the form of a conference. In Brazil, this oral test is only required for the applicants who failed to obtain approval on the written evaluation.

In France, the certifications are obtained after the applicants coach Volleyball athletes during a sports season. The applicants' practices must be validated by instructor supervision to be accepted. This coaching course is divided into two distinctive parts that are called *first step in Volleyball school* and *towards a confirmed educator*. The first provides the basic skills for applicants who wish to invest in a coaching career, and starts in a Volleyball school under the responsibility of an experienced coach a level above in the coach education programme. The second proposes an enhancement of coaching skills for those who wish to manage and develop a Volleyball school.

Table 1 – Assistant Coach

	Name	Goals	Prerequisites	Evaluation	Duration
<b>Brazil</b>	Level I	Coaching young athletes.	18 Years; Experience as an athlete; Coach not Federated; Frequency of PE.	Theoretical Review; Practical test;	40 Hours
<b>Italy</b>	Student Trainer course	Develop skills in technical coaching; Structured exercises and teaching progressions.	Informative test.	Evaluation practice; Theoretical Evaluation.	34 Hours
<b>France</b>	Leisure	Acquire skills to animate a leisure section. Propose sessions and game forms adapted to the target audience. Create social dynamic within the Club. Consolidate the associative link.	Be of legal age	File time; Organization of a plan and its evaluation.	20 Hours
	A school volleyball educator	Acquire skills to welcome and retain children to sports in a safe environment. Promote social development and physical. Give the child a pleasantly sporty ambience. Promote and develop the organizational structure and functioning of the Club.	16 Years	Practice in a coaching school Validation by trainer.	30+30 60 Hours
<b>Spain</b>	Mini-Volleyball	Collection and dissemination of volleyball.	16 Years	Suitable for all disciplines.	20 Hours

*Coach*

The education proposals for the first level of coach certification are identical in all the countries. They seek to provide coaches with knowledge and skills to initiate young people in sport through Volleyball. Standing out in this context is France, which presents two distinctive education proposals, one orientated towards leisure and another oriented towards skill acquisition. The education proposal to guide groups wishing to enjoy the pleasure of practicing sport emerges as an innovation in the panorama of general education guidelines that are usually orientated towards a path that has performance as an objective (Werthner, 2006). With this education, France seeks to answer the needs of people who enjoy the sport and do not seek to increase performance because of their age or specific interests. We highlight this education importance as it is inferred from their goals and that is patent in Penney's (2006) speech: "Enlarge the basis of entrance in the sport for a target audience that usually is not the object of sport attention" (p. 27).

France also distinguishes itself by placing a strong emphasis on skills acquisition by coaches in education. Thus, it follows the recommendations of AEHESIS (2006) by distinguishing coach education differentiating those who coach beginners in the sport or people who only seek participation in the sport, from coaches that are orientated towards their athlete's high performance. In this domain, Brazil and Spain do not mention the professional skills to achieve. Brazil indicates they only work in coaching young athletes and Spain only mention attracting athletes and promoting the sport. Italy approaches skills acquisition yet in a narrower sense than France.

All countries, with the exception of Portugal, identify this level of education as the starting point in the coach career and target young people. It seems a commonplace to the several countries the attempt to attract young athletes to a coaching career, as long as they fulfill the prerequisites to access the coaching career. Spain directs its education towards an introduction of the coaches in, what one can name, an awareness of the coaching process.

Ibáñez (1997) investigated coaches' thoughts about their own education process. Their finding suggested that aspiring coaches should be at least 16 years old. They claim this age implies a certain maturity to work with children, not considering it necessary to have prior practice experience.

With regard to evaluation, it is perceptible that countries assume the traditional way of evaluation through theoretical tests and exams. On this issue Gilbert and Trudel (1999) state that even well-designed knowledge tests focus on stereotypes and are simplistic on its educational interpretation, thus reinforcing that traditional pen and paper evaluation is not appropriate to assess the skills and coaches knowledge. In this issue, France is an exception, its evaluation and certification plan are more contextualized and seek to provide applicants with tools that may be useful in their activity, such as creating a dossier, organizing a plan, and its evaluation. These demands enable the coach to learn how to organize documents and formulate plans under a superior guidance. The fact that an instructor in the context of his activity ratifies the evaluation implies a more appropriate knowledge of the reality where the coach carries out his activity and, consequently, transforms the evaluation in an educational process close to reality (Cushion, 2001). It enables the coach to have contact with tutors, what may be an important and useful reference in the development process of a coach (Fleurence, 1999; Jones, 2003).

With regard to the expected length of time there are substantial discrepancies between the countries under review. The education length of times in all countries are between 20 hours, in the Leisure Courses in Spain and France, and 34 hours for Italy and 60 hours for France in the Educator course of a Volleyball School. Thus, France has the longest courses, which are three times longer than identical level courses in other countries. There are a 20h proposal in both the course carried out in Spain and in the Leisure oriented course in France. Brazil and Italy courses have approximate time lengths, although have different operating structures. While Brazil uses a concentration procedure, Italy spreads its course for an extended period of time. The education in a concentrated period of time offers few opportunities to enable the integration of new knowledge into coaching practice (Nelson, 2006). This education configuration is contested widely in literature, since it has a relatively low impact on coach education compared to the hours spent as a player, assistant coach and coach (Cushion, 2003). However, it allows coaches the possibility of concentrating exclusively on the course and taking advantage of the interaction with peers in addition to the logistic aspects being facilitated.

Italy is the only country that has the course in an extended time format. It indicates specifically that it should be carried out over at least two months. This configuration offers the opportunity of enabling the integration of the new knowledge into coaching practice (Knowles, 2001).

The majority of countries are concerned with compelling coaches to attend education sessions connected to the activity in order to revalidate the certificate obtained. In this aspect, Italy is the most demanding country, because it requires coaches to attend at least two formal education sessions per year. This concern suggests that coach certification structures identify as necessary continuous learning propaedeutic of consistent and lasting knowledge acquisition. Nevertheless, the minimum of four hours for continuous formal coach education seems substantially scarce considering the demands of knowledge and skills that the coach role requires.

Table 2 - Coach

	Nome	Goals	Prerequisites	Evaluation	Duration
<b>Portugal</b>	Level I	Define and enhance the technical execution characteristics and game systems; Develop knowledge about the theory and coaching methodology; Set exercises and progressions to didactic learning techniques; Master the work methodology for improving technical skills in game situations; Structure and organize tactics drills; Prepare managers to guide coaching teams; Technical rules of referee.	Theoretical test (35% minimum)	Theoretical Review; Continuous Evaluation; Practical evaluation	55 Hours
<b>Brazil</b>	Level I	Coaching young athletes	National or international FIVB level I; PE (8th period) with Volleyball	Theoretical Review; Practical test	64 Hours
<b>Italy</b>	1° Grade	Master the coaching theory and methodology; Develop working methods for the technical improvement in game situation; Meet, structure and organize tactical exercises; Technical referee and rules.	Unspecified	Tesina Theoretical and practical examination Final Colloquium	60 Hours
<b>France</b>	Regional Coach ER1	Familiarize yourself with the basics of coaching, get inside the logic that underlies the organization coaching; Put the team and the player in a dynamic of progress.	Be of legal age	Theoretical Review; Pedagogical	35 Hours
	Regional Coach ER2	Develop skills to welcome and retain children (under 13 years) in a secure environment. Encourage the social development. Adapt the pedagogy to the target audience. Give the child a sporting and nice collective environment. Promote and develop the structure.	License ER1 to do ER2	Theoretical Review; Pedagogical Final validation at a club	35 Hours
<b>Spain</b>	Level I	Unspecified	17 Years	Suitable for all disciplines; Certification after one season in Federated team	45 Hours

### Senior Coach

The Senior Coach level is designed for coaches interested in working in higher competitive levels. In the countries under consideration, coaches with this level of education obtain permission to lead teams up to senior level, although not reaching the highest competitive level. The AEHESIS (2006) proposal mentioned that this coach must acquire the skills to plan, implement, analyse, and revise coaching programmes. It assumes that a coach at this level has considerable experience and should have important responsibilities in the coaching process. Education at this level allows coaches to reach a degree of high involvement and responsibility in the coaching process. In addition, there is an agreement between all the countries about the opportunities this certification grants coaches in their professional careers.

It is noticeable that, generally, the countries focus their education objectives in the acquisition of knowledge about sport sciences and about specific knowledge connected to Volleyball. Spain and Brazil do not specify objectives. France objectives include the acquisition of skills by the coach, emphasizing the direction of education towards know-how. Oliver (1990) defines this skill as a level of performance connected to the individual ability to achieve a particular objective. It is perceptible that France emphasizes the practical knowledge seeking the applicability of acquired knowledge in the context where the practice of the coach will be carried out.

With regard to the prerequisites, only three countries refer to the possibility to access this level of education by PE teachers (Portugal and Spain) or students that are attending the PE course (Brazil), provided that they have some expertise in Volleyball. Interestingly, only Spain values the possibility of entering this level of coach education by international athletes or someone who has performed five years as senior athlete. This highlights the fact that other federations and their coach education structures do not value the lived experiences of coaches as athletes. However, several researches based on expert coaches' reports emphasize that coaches' use their experience as athletes as a sources of knowledge (Côté, 2006; Cushion, 2003; Erickson, 2007; Gilbert, 2006; Salmela, 1993; Wright, 2007). In a study with expert coaches, Gilbert (2006) suggested that successful coaches accumulated thousands of hours of experience as "pre-coaches" while competing as athletes. Nonetheless, they noticed a wide variation in the total number of hours of experience as athletes, which according to the authors, may decrease the importance of considering a minimum of athletic experience to become a successful coach. Werthner (2006) commented that the way coaches learn illustrates their development and is often idiosyncratic. In this sense, it is suggested that their experience as athletes may be considered as added value, not being an exclusive criteria.

Table 3 – Senior Coach

	Name	Goals	Prerequisites	Evaluation	Duration
Portugal	Level II	Deepen coaching theory methodology knowledge; Organize coaching according to the technic-tactics needs of medium and high level game; Choose and organize tactical situations; Organize and structure the team's tactics and choose the game systems.	Level I; One year of experience as a coach; PE Teacher.	Written test, Continuous Evaluation, Evaluation practice.	108 Hours
Brazil	Level III	Unspecified	National or international FIVB level II; PE (Period 8) with volleyball discipline;	Theoretical Review; Practical test.	80 Hours
Italia	2° Grade	Deepen coaching theory methodology knowledge; Organize coaching according to the technic-tactics needs of medium and high level game; Choose and organize tactical situations; Organize and structure the team's tactics and choose the game systems.	Unspecified	Exams: "Obstacle" end periodic phase. Of "good repute" end residential phase.	72 Hours 44h+24h
France	Federal Coach EF 1 EF 2	Competencies to coach a senior team in competitive setting.	On going at the time Federated ER2 License.	1° Assessment at the end of the education 2° terminal evaluation.	70 Hours 2x35h
Spain	Level II	Unspecified	Level I; PE with Volleyball; Athletes with 10 international games; 5 years as a senior player.	Suitable for all disciplines; Certification after an active season with a federated team.	84 Hours

Evaluation at this level of education seems to be stricter in the several countries because many evaluations are required throughout the education process. In this respect, Italy proposes two evaluations, one of which is referred to as "obstacle", because it prevents the coaches from continuing with education in case they doesn't succeed. It is inferred that, since the evaluation is stricter, this education implies greater dedication and preparation from the coaches. In terms of length of time, all countries, with the exception of France, increase the amount of time of courses at this level of education. Once more, the amplitude of time is noteworthy, with France demonstrating 70 hours and Portugal 108 hours. We can see an average increase of 20.8 hours in comparison to the previous coaching level in the several courses. Portugal is the country that stands out in the establishment of the hours assigned to education for this level. France does not show an increase in the length of its courses for this level, which may be due to the organisational structure of the education that takes place in two distinctive times and for five consecutive days. The AEHESIS (2006), in its final education proposal, organized in four levels indicates 16 credits that imply a total of 400 hours of course. It is noticeable, in this context that the discrepancy is even larger than in the previous level. With regard to its structure, Italy divides its education in two parts, being one of them in permanent concentration. It is suggested that, with this form of functioning, Italy wishes higher concentration by applicants in education, favouring the informal contact between coaches beyond the sessions.

#### *Master Coach*

The AEHESIS (2006) indicates master coaches have the role of planning and implementing multiannual practice programmes and should possess extensive experience in the high performance setting. In the the countries being studied, this level of certification allows coaches to lead processes at the highest level of performance. There are no major discrepancies in the possibilities offered in this level between the countries. However, France stands out as the only that differentiates its coaching types according to performance levels for young people and adults, being that both coaching's are targeted at high performance. In Brazil, Spain, and Portugal there is a continuum of the objectives taught in previous courses pointing towards the acquisition of knowledge connected to sport performance. In Italy, there is an inversion of objectives, because in the previous level it features objectives aimed at the high level. There are no visible reasons that substantiate this measure, which in some ways would contradict the guidelines suggested in other countries' educations. It is also noticeable that Italy is the only country that decreases the length of this course compared to the previous level. A reason that justifies this is the specialization courses offered for coaches working with young people and to be a fitness physical coach who can complete the certification level. Once again, France appears to be more in line with the guidelines of current literature and with the specific needs of coaches, namely guiding the courses to certain target audiences such as young people and women (cf. Haselwood, 2005; Kilty, 2006; Marback, 2005; & Tomlinson, 1997). They also incorporate the novelty of including an internship with experts coaches in the final part of the course. This strategy comes up as one of the most valued ways of acquiring knowledge by coaches, whereby it suggests a greatly enriched education especially if it occurs in a practical setting.

With regard to prerequisites, we observed that Spain is the only country that differentiates the athletes with great experience as applicants to attend this level of education. Indeed, it allows athletes with extensive competitive experience to enter directly in the most advanced level course. However, this contradicts the education theory continuum. Only Portugal addresses coaching experience as a prerequisite for the education programme. Its objective is to give applicants the possibility of using their experience to lead teams of a higher level and create opportunities to grow connecting coaching knowledge with their field experience. For other countries, the only criteria is to possess the previous level license (Senior Coach). The countries have diverse evaluation resources in this education level. However, there is a widespread concern of making the evaluation process more educational rather than an exclusion criterion. This is reflected on the types of instruments used in the evaluations, such as the construction of a dossier (France), the preparation and presentation of a tesina (Italy), and other similar types used in Brazil (clínica). They are designed for coaches who need an evaluation in order to give credibility to the coach education process given they have already started their coaching career. Providing an evaluation constitutes an added value in terms of learning.

This education level exposes a larger disparity with regard to the amounts of hours proposed among the studied countries. Moreover, in view of the established objectives for the intended coach level, it seems that this difference is a bit excessive. In this regard, we point out Italy for being the only country where the amount of hours decreases from the previous level (72 hours) to this level (50 hours). On the other hand, Spain showed an increase in the amount of hours from the senior level (84 hours) to this level (200 hours). With this in mind, we noticed considerable differences in the total amount of hours proposed by each country. Italy is the country with less time devoted to education, 216 hours, followed by Brazil and Portugal, both with 267 hours. France (340 hours) and Spain (349 hours) are the countries with most time devoted to coach education. Particularly, Spain values courses at the last level increasing in 68% the hours required to complete the level compared to the previous level. This is the biggest increase between all countries. This may be due to the fact that previous courses (Minivolley, Level I and Level II) are the responsibility of the autonomous regional federations and the Level III course is the responsibility of the National Federation.

With regards to structure, Portugal, Spain and Brazil have intensive courses. We can speculate that intensive courses added to high number of hours requires a large effort from both the applicants and the teachers. The reasons that lead to this format may be due to organisational aspect, namely in these countries coaches often have part-time jobs beside being Volleyball coaches. This kind of organization is criticized in the literature by Fuentes (2003), who observed that tennis coaches “ask for new types of education that are compatible with their professional obligations” (p. 33). Also, Knowles (2001) criticized this format because of its short time to incorporate newly acquired knowledge.

Table 4 – Master coach

	Name	Goals	Prerequisites	Evaluation	Duration
<b>Portugal</b>	Level III	Theoretical and practical knowledge for managing high-level teams-clubs and national teams; Fundamental concepts of volleyball, planning and principles of coaching sessions; Technical skills – basic tactical game; Season planning; Leading the team in high competition; Evaluate the athlete and the team. Strength training	Level II; PE Teacher specializes in Volleyball; Have between 4-6 years of experience	Written test; Continuous assessment and technical competence; Evaluation practice	118 Hours
<b>Brazil</b>	Level IV	Unspecified	Level III National or FIVB; PE Teacher post-graduated in Volleyball	Seminar (AP. oral); Clinic (AP. practice); Oral (Review Board)	80 Hours
<b>Italia</b>	3° Grade	Provide the theoretical and practical knowledge for managing high-level teams	Unspecified	Tesina; Theoretical and practical examination; Final Colloquium	50 Hours
<b>France</b>	Federal Coach Young's	Acquire the necessary skills for sports development coordination in clubs; Lead a young team for the income	ER2 qualification holder	1° Assessment 2nd terminal Evaluation	70 Hours 2x35h
	Federal Coach 2° Grade	Ensure the training quality in a system with trend towards professionalization; Organize and direct a technical team.	ER2 qualification holder	1° Assessment 2nd terminal Evaluation	105 Hours 3x35h Stage
<b>Spain</b>	Level III	Meet the adaptation scientific basis of physical stimuli organic practice; Draw specific tests to players biological evaluation in its different stages; Meet the media, practical methods and procedures for the development of volleyball specific physical qualities; Get a load of shares vision physical, technical, tactical and psychological make up the high Volleyball competition; Plan and direct the General and specific physical conditioning of Volleyball players. Collaborate in talents detection.	Level II; 40 or more international games; PE teachers with Volleyball.	Suitable for all disciplines; Certification after an active season with a federated team.	200 Hours

## Conclusion

The content analysis of the documents that described coach education in the five countries (Portugal, Spain, Brazil, Italy, and France) revealed some uniformity, with the exception of France. As such, there were no accentuated discrepancies in the coach education processes despite the countries having distinctive developmental levels in Volleyball.

The governing bodies responsible for the certification and organization of coach education in the five countries are national federations presided by governmental departments. In countries like Brazil, Spain, and Portugal other governing bodies, such as regional associations or federations, can also organize coach education courses. Nevertheless, the national federations are the ones who certify and allow coaches to obtain their coach title. There are also some countries that recognize university degrees, namely through PE programs with concentration in Volleyball or sports coaching experience such as the “Brevet d’etat” in France. The federations show an education structure based on three (Portugal) or four education levels (Brazil, France, Italy and Spain).

The proposed courses for coach education have a vertical layout in line with the prerogatives of increasing performance of sports athletes, revealing an education continuum which evolves from the first level until the last one in all the analyzed countries. This development is noticeable in the form of an increased level of the coaching contents as well as in the amount of hours of each course. Also, the initial level courses are designed to prepare coaches to lead practice processes of young athletes who are starting in the sport, or are in the stage of development, or are being assistants at higher performance echelons. As they rise from one level to another, coaches are licensed to act autonomously in adult teams and with the highest certification they can be coaches at all competitive levels.

Of the analyzed education contexts, France clearly stands out with a more elaborate education proposals. The French model responds to specific contextual demands of coaches, distinguishing participation sports from performance sports. In addition to favoring specific audiences in its coaching, France establishes a range of specializations that aims at contemplating all forms of occupation through Volleyball. In spite of having a common structure to other countries, Italy stands out for offering specialization courses specific to physical preparation.

In each country, coaches must have the minimum mandatory schooling in order to access education and need to obtain the previous level license to be able to proceed to the next levels. It is worthy of notice the little or no appreciation for applicants’ athletic experience to enter the education processes and the case of Portugal, which requires a minimum level of activity as a coach at the previous level.

The time length of courses is diverse among the several countries and among the various levels. Considering all courses, Italy is the country with less time dedicated to coach education with 216 hours in four levels, followed by Brazil and Portugal with 267 hours, and four and three levels respectively. France and Spain are the countries that dedicate more time to coach education. France required 340 hours in three plans with three levels each, and Spain required 349 hours in four levels. The courses increase the length of time as applicants moved forward in each level in all the countries. The exception is Italy, which substantially reduced the time dedicated at the highest level. There is an extremely marked difference between the lengths of time of the coach education courses in the countries being analyzed and the times proposed by AEHESIS (2006).

The most used functioning system is the intensive one and it does not differ between countries. The exception is Italy, which requires courses to be spread out in a minimum of a two-month period.

Several methods are used to evaluate coaches. Namely written tests, dossiers, and effective practice during a season. In France and Italy, the coaches’ certifications need to be validated through the attendance of continuous coaching sessions of related to sport or particular to Volleyball. Generally, courses are structured to favor the acquisition of knowledge. France stands out by having substantive evidence on the skills acquisition in its education proposals.

Traditionally the coaching activity is confined to performance-oriented sport domain. However, the AEHESIS (2006) proposed a differentiation between Sport Performance and Sport Participation having as a reference the different contexts of professional intervention. By accepting the differentiated education, the AEHESIS proposal allows coaches to choose the path that best suits their interests addressing the problems that coaches face in their daily practices in an assertive and contextualized matter. It is noticeable in this research that the existing documentation in the different countries does not differentiate these two facets, with the exception of France.

## References

- Abraham, A., & Collins, D. (1998). Examining and extending research in coach development. *Quest, 50*, 59-79.
- AEHESIS. (2006). Final report of the coaching group: Aligning a European Higher Education Structure in Sport Science Cologne: Institute of Sport Development & Leisures Studies, Germain Sport University Cologne.



- Campbell, S. (1993). Coaching education around the world. *Sport Science Review*, 2, 62-74.
- Cassidy, T., & Kidman, L. (2010). Initiating a national coaching curriculum: a paradigmatic shift? *Physical Education & Sport Pedagogy*, 15, 307-322. doi: 10.1080/17408980903409907
- Côté, J. (2006). The development of coaching knowledge International. *Journal of Sport Science & Coaching*, 1, 217-222.
- Côté, J., & Gilbert, W. (2009). An integrative definition of coaching effectiveness and expertise. *International Journal of Sports Science & Coaching*, 4, 307-323.
- Cropley, B., Miles, A., & Peel, J. (2012). Reflective practice: Value of, issues, and developments within sports coaching *Sports Coach UK Research Project* Cardiff School of Sport; Cardiff Metropolitan University.
- Cushion, C., Armour, K., & Jones, R. (2003). Coach education and continuing professional development: Experience and learning to coach. *Quest*, 55, 215-230.
- Cushion, C., & Jones, R. (2001). A systematic observation of professional top-level youth soccer coaches. *Journal of Sport Behaviour*, 24, 354-376.
- Cushion, C., & Lyle, J. (2010). Conceptual development in sports coaching. In J. Lyle & C. Cushion (Eds.), *Sports Coaching: Professionalization and practice* (pp. 1-13). Edimburg: Elsevier.
- Demers, G. (2002). Analyse de besoins en sport des athlètes et des entraîneurs de haut niveau. Paper presented at the Cultures Sportives et Artistiques: Formalisation des savoirs professionnelles, pratiques, formations, recherches, Deuxième colloque International à Rennes - Haute Bretagne.
- Demers, G., Woodburn, A., & Savard, C. (2006). The development of an undergraduate competency-based coach education program. *The Sport Psychologist*, 20, 162-173.
- Duffy, P. (2005). Coaches training in Europe: Implications for Asians Countries. Paper presented at the Asian Regional Coaching Conference of the International Council for Coach Education, Hong Kong.
- Duffy, P., Crespo, M., & Petrovic, L. (2010). The European framework for the recognition of coaching competence and qualifications - implications for the sport of athletics. *New Studies in Athletics*, 25, 27-41.
- ENSSEE. (2007). Review of the EU 5-level structure for the recognition of coaching qualifications. Collogne, Germany: Complied by the European Coaching Council, a subcommittee of the European Network of Sports Science, Education and Employment.
- Erickson, K., Côté, J., & Frasser-Thomas, J. (2007). Sport experiences, milestones, and educational activities associated with high-performance coaches' development. *The Sport Psychologist*, 21, 302-316.
- Fleurence, P., & Cotteaux, V. (1999). Construction de l'expertise chez les entraîneurs sportifs d'athlètes de haut niveau français. *Avante*, 5(2) 54-68.
- Fuentes, J., Sanz, D., Ramos, L., Perla, M., & Del Villar, F. (2003). Análisis del pensamiento de los entrenadores españoles de tenis de alta competición con relación al diseño de las nuevas titulaciones. *Kronos*, 3, 29-34.
- Gilbert, W. (2006). Introduction to special issue: Coach education. *The Sport Psychologist*, 20, 123-125.
- Gilbert, W., Côté, J., & Mallett, C. (2006). Development paths and activities of successful sport coaches. *International Journal of Sports Science & Coaching*, 1, 69-76.
- Gilbert, W., & Trudel, P. (1999). An evaluation strategy for coach education programs. *Journal of Sport Behavior*, 22, 234-250.
- Gould, D., Giannini, J., Krane, V., & Hodge, K. (1990). Educational needs of elite U.S. national teams, Pan American, and Olympic coaches. *Journal of Teaching in Physical Education*, 9, 332-344.
- Haselwood, D., Joyner, A., Burke, K., Geyerman, C., Czech, D., Munkasy, B., & Zwald, A. (2005). Female athletes' perceptions of head coaches' communication competence. *Journal of Sport Behavior*, 28.
- Ibáñez, S., Delgado, M., Lorenzo, M., Del Villar, F., & Rivadeneira, M. (1997). Análisis de la formación del entrenador deportivo. El entrenador de baloncesto Experiencias de formación de docentes y entrenadores en el ámbito de la actividad física y el deporte (pp. 83-129). Madrid: Ministerio de Educación y Cultura; Consejo Superior de Deportes.
- Irwin, G., Hanton, S., & Kerwin, D. (2004). Reflective practice and the origins of elite coaching knowledge. *Reflective Practice*, 5, 425-442.
- Jones, R. (2005). The sport coach as educator: Reconceptualising sports coaching London: Routledg.
- Jones, R., Armour, K., & Potrac, P. (2003). Constructing expert knowledge: A case study of a top-level professional soccer coach. *Sport Education and Society*, 8, 213-229.
- Kilty, K. (2006). Women in coaching. *The Sport Psychologist*, 20, 222-234.
- Knowles, Z., Gilbourne, D., Borrie, A., & Nevill, A. (2001). Developing the reflective sports coach: A study exploring the processes of reflective practice within a higher education coaching programme. *Reflective Practice*, 2, 185-207.
- Langan, E., Blake, C., & Lonsdale, C. (2013). Systematic review of the effectiveness of interpersonal coach education interventions on athlete outcomes. *Psychology of Sport and Exercise*, 14, 37-49. doi: 10.1016/j.psychsport.2012.06.007

- Marback, T., Short, S., Short, M., & Sullivan, P. (2005). Coaching confidence: An exploratory investigation of sources and gender differences. *Journal of Sport Behavior*, 28, 18-34.
- Nash, C., & Sproule, J. (2012). Coaches perceptions of their coach education experiences. *International Journal of Sport Psychology*, 43, 33-52.
- Nelson, L., Cushion, C., & Potrac, P. (2006). Formal, nonformal and informal coach learning: A holistic conceptualization. *International Journal of Sports Science & Coaching*, 1, 247-259.
- Oliver, B. (1990). Defining competence: the case of teaching. *Journal of Teaching in Physical Education*, 9, 184-188.
- Penney, D. (2006). Coaching as teaching: new acknowledgements in practice. In R. Jones (Ed.), *The Sports Coach as Educator: Re-conceptualising sports coaching* (pp. 25-36). Oxon: Routledge.
- Salmela, J., Draper, S., & Laplante, D. (1993). Development of expert coaches of team sports. Paper presented at the VIII World Congress of Sport Psychology, Lisbon.
- Sullivan, P., Paquette, K. J., Holt, N. L., & Bloom, G. A. (2012). The relation of coaching context and coach education to coaching efficacy and perceived leadership behaviors in youth sport. *The Sport Psychologist*, 26, 122-134.
- Tomlinson, A. (1997). Male coach/female athlete relations: gender and power relations in competitive sport. *Journal of Sport & Social Issues*, 21, 134-155.
- Trudel, P., & Gilbert, W. (2006). Coaching and coach education. In D. Kirk, M. O'Sullivan & M. McDonald (Eds.), *Handbook of research in physical education* (pp. 516-539). London: Sage.
- Werthner, P., & Trudel, P. (2006). A new theoretical perspective for understanding how coaches learn to coach. *The Sport Psychologist*, 20, 198-212.
- Wright, T., Trudel, P., & Culver, D. (2007). Learning how to coach: the different learning situations reported by youth ice hockey coaches. *Physical Education & Sport Pedagogy*, 12, 127-144.