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ORIGINAL ARTICLE

THE ORGANIZATION OF THE SPORT PROCESS: THE PERSPECTIVE OF ELITE VOLLEYBALL BRAZILIAN COACHES

Abstract

The purpose of this study was to analyze the coaching knowledge of 24 expert high-performance Brazilian volleyball coaches in the organization of training and competition. A semi-structured interview was used, and the resulting data analyzed following the procedures outlined by Côté and colleagues (Côté and Salmela, 1994, 1996; Côté, Salmela, and Russell, 1995a, 1995b). Overall, the data highlighted that the coaches of male and female teams organized competition and training similarly. Additionally, the organization component comprised not only the planning of training and competition, but also a constant social interaction with the athletes, the athletes' significant others, the assistant coaches and other technical staff, as well as other sport agents (e.g., administrators). The overall trends are primarily discussed in relation to existing research.

Keywords: Leadership, coaching model, organization, expert coaches, volleyball

INTRODUCTION

Over the years, sport specific research on leadership has examined the behaviors of successful coaches, both in training (e.g., Ford et al., 2010; Jones and Wallace, 2005) and in competition (e.g., Bloom et al., 1997, 1999; Debanne and Fontayne, 2009). In general, these studies have shown a consistent direct relationship between coaching behaviors and athletes' evaluative reactions. However, to think of a coach as a professional who interacts and works with athletes and teams only in training and competition situations is, currently, a simplistic and outdated vision of reality. To help athletes realize their potential, coaches have, among other things, to guide the practice of skills, give instructions and feedback, and monitor learning and performance. They act as teachers, motivators, character builders and/ or strategists (Gould, 1987). Additionally, to promote the relationship they must necessarily establish with their co-workers (i.e., assistant coaches, managers, sponsors), coaches have to, every so often, act as a manager, educator, or physical trainer. Accordingly, it will only be beneficial if they possess knowledge on several sport related domains, such as psychology, sociology, physiotherapy, nutrition, medicine, and even economy (Bompa, 2009; Buceta, 2010; Erickson et al., 2007; Mesquita, 2005).

Furthermore, above and beyond putting together winning athletes and/ or teams, coaches have other responsibilities that force them to devote much of their personal time and energy to their profession. Thus, leisure and family time is often postponed and sometimes even cancelled (Dixon and Bruening, 2007). Coaching is a year-round job, requiring long, nontraditional hours, including evenings and weekends, and often extensive travel. These hours exist not only during the competitive season, but also, especially at the elite level, during off-season, with workout activities, sport meetings and events (e.g., Olympic championships, World championships) or the pre-season training (Dixon and Warner, 2010). At the end of the day, to effectively act as the leader of a team and successfully manage athletes and his peers, coaches must possess a wide range of organizational skills, which are essential to plan and coordinate athletes' preparation, to establish optimal conditions for training and competition, and help athletes reach their performance and personal goals (Baker et al., 2003; Bloom, 2011; Côté et al., 1995a). This planning and organization of material and human resources will increase the athletes' confidence in their coach. As a result, coaches will likely approach their work with more confidence and determination (Fox, 2006), and put more effort and compromise towards the organization (Turner and Chelladurai, 2005).

In summary, the coach's field of actuation is multifaceted and their responsibilities are becoming increasingly complex. Training and competition processes must be preceded by the organization and coordination of numerous tasks involved in the process of athletes' development, which are not limited to the traditional periodization of training according to the competition requirements. Bloom (1996a, 1996b, 2002) underlined coaches' organizational work as an extremely important area in the study of coaching. This author considers that the coaches' capacity to organize the season and deal with organizational issues represent the foundation of the coach's knowledge base, and is present before, during and after the competitive season. Along these lines, Bloom (2011) stressed the importance of investigating the physical, organizational and human circumstances that surround the coach, as well as this professional's characteristics and behaviors in different moments.

Along these lines, in order to identify expert coaches coaching knowledge, Côté et al. (Côté et al., 1995a, 1995b, 1995c; Côté and Salmela, 1996; Côté and Sedgwick, 2003) developed the coaching model (CM), a theoretical framework that allows establishing connections between the accumulated knowledge of the coaches. This model infers that coaches' construct a mental model of their athletes' potential (Côté et al, 1995b). These cognitive representations underlie their behaviors, dictating how the coaches apply the primary components of organization, training, and competition to their athletes. Additionally, the mental model is influenced by three peripheral components: coach's personal characteristics, athlete's personal characteristics, and contextual factors. An optimal environment for athletes' full development requires that the primary and peripheral components are compatible (Côté et al., 1995b).

The authors sustain that, in comparison with older and more traditional conceptual models, such as the multidimensional model of leadership in sport (Chelladurai, 2007; Chelladurai and Saleh, 1980), or the mediational model of leadership (Smoll and Smith, 1989), the CM is broader in its analysis of the coaching process. In effect, Côté et al. (1995a) criticized Chelladurai's and Smith and Smoll's models for providing conceptual frameworks that, despite facilitating the study of coach's leadership behaviors and coach-athlete interactions, do not stimulate the understanding of the several variables surrounding the coaching process. For instance, those models don't examine the organizational knowledge and strategies that coaches rely upon to optimize the training and competition settings by structuring and coordinating various coaching tasks before, during or after training or competition (Côté et al., 1995b; Côté and Salmela, 1996).

Originally, research for the CM was conducted with 17 expert high-performance gymnastic coaches (Côté and Salmela, 1996; Côté et al, 1995a, 1995b, 1995c). The authors examined the coaches' knowledge and strategies used in training and competition, as well as in the organization of training and competition. Regarding this last component, qualitative analyses showed that, besides planning the training, expert gymnastic coaches had to deal with dynamic social interactions with gymnasts, parents, and assistant coaches. The authors claimed that, although crucial for developing elite gymnasts, several areas of coaches' organizational work that were generally not taken into consideration in formal coaches' training programs (e.g., dealing with athletes' personal concerns, working with parents). In a more recent study conducted with 10 expert rowing coaches, Côté and Sedgwick (2003) concluded that coaches' effective behaviors comprised some aspects which emphasized their organizational skills and were, at the same time, central to coaching effectiveness (e.g., proactive planning [making initiative plans]), the creation of a training environment that promoted the athletes desire to learn and train, the recognisance of individual differences, or the establishment of a positive relation with each athlete.

However, although the importance of coaches' organizational tasks has been gradually more recognized, this area still merits further research (Côté and Sedgwick, 2003). On the whole, studying coaches' perceptions of their thoughts and behaviors may contribute to a better understanding of the principles and mechanisms that guide the development of the coach (Côté et al., 1995a). Additionally, the examination of coaches' organizational tasks may help developing training programs for coaches, namely regarding the knowledge and strategies that can be used to optimize training and competition. Accordingly, the purpose of this study was to identify and categorize the organizational tasks of Brazilian expert high-performance volleyball coaches.

All the coaches participated in SUPERLIGA, the main competition of volleyball in Brazil and one of the best in the world. In fact, in the eighties of last century, Brazil became one of the world's references in high performance volleyball. Since then, Brazil has consistently occupied the first places in the in the *Fédération Internationale de Volleyball* (FIVB) Senior, Junior and Youth, and Beach Volleyball world rankings (men and women) (Bojikian, 2008; FIVB, 2013a, 2013b). In our opinion, the merit of reaching and sustaining such high ranking positions is explained not only by the talent of athletes and the competence of sport administrators, but also by the work of the coaches, namely concerning the way they 'lead' their teams. Thus, it is understandable that Brazil has established its own school of

volleyball, and even ‘exports’ coaches and athletes to other countries. Thus, since the present study comprised some of the world best volleyball coaches, the results may constitute a reference to their peers and professionals in related areas.

METHOD

In this section we present information on participants and data analysis procedures, including the interview guide, pilot interviews, data collection, ethical considerations and data analysis.

Subjects

The most successful Brazilian volleyball coaches participated in the present investigation. To that extent, all the coaches that worked with the teams participating in SUPERLIGA, the most important competition of volleyball in Brazil, were selected. They were clearly identified as the most knowledgeable and respected coaches in their sport, having obtained notable results at the regional, national, world and Olympic level. Overall, 18 world championship titles and six Olympic titles could be counted amongst all the coaches. In addition to their sports curriculum, the fact that the participants worked with high performance athletes in an environment characterized by the relentless pursuit of better performances was in agreement with Erickson et al.’s (2007) definition of an expert coach.

Specifically, the participants in this investigation were 24 expert high-performance Brazilian volleyball coaches, aged between 34 and 52 years old. Twelve coaches worked with female teams ($M = 39.2 \pm 4.9$) and 12 with male teams ($M = 42.3 \pm 4.5$). At the time of the interviews, the participants professional experience as coaches varied between 2 and 26 years ($M_{\text{female}} = 13.9 \pm 5.7$; $M_{\text{male}} = 14.3 \pm 9.5$). Their technical degree varied between national level 3 (Brazilian Volleyball Confederation) and the highest, international level 5 (FIVB).

Interview Guide

The CM (Côté et al., 1995a) was employed to frame the examination of the Brazilian expert volleyball coaches’ knowledge in the contexts of training, competition and organization, but the present study presents only a portion of the findings resulting from that in-depth investigation. Semi-structured, open-ended interviews were carried out using a three-section interview guide that was specifically created for this study. The interview began with

a brief introduction, in which the interviewer provided information about the general purpose of the project and clarified any doubts. Next, the interviewer extracted information concerning the coaches' background and athletic experience (e.g., years of experience, main titles at the national and international levels). The rest of the interview guide consisted of key questions based on Côté et al.'s (1995a, 1995b, 1995c) CM, namely the participants' knowledge and how they applied the three primary components - training, competition and organization - of the CM (i.e., the strategies) to their athletes.

As regards the organization component, the interviewer questioned the coaches about four specific issues: (a) planning training and competition (definition of work programs, in order to prepare the athletes and the team; e.g., "Could you tell me how you plan a training session?"); (b) working with assistant coaches and other sport agents (availability and openness to work in group; e.g., "Could you describe your relationship with your assistants?"); (c) working and cooperating with the athletes' significant others (availability and openness to work with the athletes' relatives; e.g., "What kind of relationship do you have with your athletes' relatives?" Do you talk with them about the athletes' performance?); and (d) relationships outside sport and support to the athletes' personal problems (willingness to support athletes regarding their life outside sport and personal difficulties; e.g., "Do you keep up with your athletes' social life?"; "Do you talk with your athletes about what is going on in their lives outside sport?"). A final section of the interview guide intended to recapitulate the topic of the study and gave the participants an opportunity to add any comments they felt were relevant.

Pilot interviews

Two pilot interviews were conducted (and audio taped) individually with two Brazilian male volleyball coaches. Both coaches had a degree in Physical Education, specialized in high level training. One of them had seven years' experience as a coach in regional and national competitions, while the other had 10 years' experience at those same levels.

The pilot interviews tested for appropriateness and comprehension of questions and terms, lasted from 53 minutes to one hour and 22 minutes, and were conducted individually by the primary researcher. Based on the coaches' feedback, and also on the primary researcher evaluation, modifications were made to adjust the wording of the questions to the specificities of high performance volleyball. The new version of the instrument was submitted

to the appreciation of two specialists in sport psychology with experience in qualitative research and interviewing techniques. The final guide was used to interview the coaches who participated in the current study.

Data collection

As mentioned before, a semi-structured, open-ended interview was specifically developed for this study. This guide included a flexible set of questions and was used to encourage maximum freedom of expression (cf. Corbin and Strauss, 2008; Lincoln and Guba, 1985; Patton, 2002). Since the responses frequently led the interviewer to react to and explore pertinent related issues, the order of the questions varied depending on the flow of the conversation (Patton, 2002). This flexibility improved the fluency of the interview and richness of the information collected, but, at the same time, allowed to retain the systematic nature of the data (Fletcher and Hanton, 2003). Additionally, to enhance the authenticity of the data, the interviewer asked the coaches to describe their knowledge and beliefs using their own words and not the interviewer's constructs (Corbin and Strauss, 2008). This way, the authors tried to create "a real exchange, during which the interlocutor of the investigator expresses his perceptions of an event or a situation, his interpretations or his experiences" (Quivy and Campenhoudt, 2005, p. 192).

Throughout the interview and as necessary, probe questions were asked to clarify (e.g., in relation with the request to 'describe their relationship with their athletes, some coaches were asked to: "Do you believe this relationship is close or distant?") and elaborate (i.e., to gain more information or to explore the comments provided by the participant; e.g., "Could you tell me more about the way you develop your daily training plans?") (cf. Patton, 2002). These probes amplified the richness and depth of responses, and allowed to expand areas considered relevant (Rubin and Rubin, 1995). In case the participants strayed from the main question and, thus, the interview purposes, the interviewer, assuming a non-critical attitude, was alert to redirect and guide the conversation (Quivy and Campenhoudt, 2005), clarifying any doubts and setting the coaches in the right direction as naturally as possible. At the end of the interview, the participants were asked whether there was anything else they could add concerning what had been discussed.

All 24 coaches were interviewed individually by the first author. This helped ensure that the participants' were given the opportunity to speak freely and that the answers of some participants wouldn't influence others (Ericsson and Simon, 1993). The interviews were

audiotaped and ranged in duration from 42 to 154 minutes (see Table 1).

Ethical considerations

After obtaining consent from the Scientific Council of a Portuguese Faculty, the participants were contacted through phone calls, letters and emails. The coaches were informed about the requirements, aims, and procedures of the study and assured their participation was voluntary and completely anonymous. All of the coaches who were contacted agreed to participate in the investigation and to being audiotaped. To ensure confidentiality a coding system was used, throughout this article, for each coach. This coding system replaced each name with a number (i.e., #1-24); as well, any potentially identifying information (e.g., name of athletes, home town) was also replaced or disguised.

Table 1: Duration of the interviews

Coach	Duration	Coach	Duration
C1	91'	C13	68'
C2	154'	C14	85'
C3	70'	C15	96'
C4	89'	C16	76'
C5	90'	C17	49'
C6	49'	C18	112'
C7	69'	C19	149'
C8	42'	C20	94'
C9	100'	C21	93'
C10	83'	C22	133'
C11	54'	C23	128'
C12	120'	C24	60'

Data analysis

Following guidelines provided by Côté et al. (1995a), the aim of the data analysis was to build a system of categories which represented the knowledge used by coaches to establish optimal training and competition conditions. In general, data analysis used a combination of inductive analysis, whereby the properties and categories emerged from the data, and deductive analysis, when the structure of the interview guide was used as framework guide to deductively categorize the data under the three main components (i.e., training, competition, organization).

Data analysis followed several steps. First, each interview was transcribed *verbatim*. The interview transcript was first read in its entirety in order to get a global sense of the whole. Then, the text was read a second time, more slowly – and divided into meaningful

basic units of analysis, labeled meaning units (MU). These were quotes (i.e., segments of comprised of words, phrases, or entire paragraphs) conveying the same idea or piece of information and related to the same topic (Tesch, 1990). MUs were compared and regrouped into a hierarchy of knowledge labeled as properties, categories, and components. The number of MUs elicited in the organization component was 504. These were compared and regrouped into 23 properties. Each property was named after the common characteristics shared by its entire MUs. For example, the property labeled 'season planning' comprised the following MU: "Actually, we organize the annual season from the guidelines of a big sponsor; you just end up prioritizing all competitions according to the SUPERLIGA." Another MU was included in the property 'training rules': "At the beginning of the season we tell them the behavior rules we believe are the best, like wearing uniforms, training equipment, trips, games, schedules..." Subsequently, a similar process was used to group the properties into larger and more inclusive sets named categories. The above referred properties 'season planning' and 'training rules' were included, along with another eight properties, in the 'planning training category'. Five categories emerged from this process.

Finally, after the data was categorized into properties and categories, each MU was reanalyzed to search for similarities and uniquenesses in its content (Côté and Salmela, 1994). Based in this procedure, 'dimensions' were provided for each property. These dimensions refer to the variations in coaches' statements and aim to clarify the content of the MU (Côté et al., 1995a). For example, the property 'helping athletes with their personal concerns', included in the category 'relationship with athletes', comprised three distinct dimensions: athletes' personal life (familiar and social), athletes' education, and athletes' finances. These dimensions illustrate that the coaches could be concerned with different aspects of their athletes' life outside sport. As Côté and Salmela (1994) stated, "providing dimensions for the properties helped to uncover as much variation as possible between coaches" (p. 250).

To assure the trustworthiness and credibility of the data analysis and to reduce interpretive bias, a collaborative approach was taken in the process of data analysis. Initially, two researchers coded the data and conducted code checks to assure coding reliability and to minimize interpretive bias (Patton, 2002). One of these researchers had a doctoral degree in sport psychology and the other, besides a master's degree in sport sciences and technical formation in volleyball, possessed a vast experience, as an athlete and as a coach, in Brazilian volleyball. This experience made her aware of the culture and dynamics of the Brazilian volleyball, which, according to Lincoln and Guba (1985) are essential to build the trust of

participants. Following several discussions between these two researchers and after reaching a mutual consensus, the final codification was submitted to another researcher (i.e., peer reviewer). Following the same procedures adopted by Carter and Bloom (2009), a random sample of 125 MUs (25%) were presented to the peer reviewer who placed them under the appropriate tags that best identified each MU using the complete list of 23 properties. Additionally, the same peer reviewer was asked to place the 23 properties into the defined categories. Whenever divergences aroused, the original statements of the coaches were reexamined. This process ended when mutual consensus was reached (Lincoln and Guba, 1985; Patton, 2002). The data were examined until saturation was reached and no new level of information emerged at any classification level (Côté et al., 1995a).

RESULTS

Table 2 reports the categories that emerged within the organization component, the number of coaches who identified each category, and the number of MUs in each category. The organization component comprised five categories, namely ‘planning training’, ‘monitoring athletes’ physical conditions’, ‘relationship with athletes’, ‘relationship with significant others’, and ‘relationship with assistants and other sport agents’. In general, there were no substantial differences between the categories of knowledge identified by coaches of male and female teams. Thus, the presentation and discussion of the results will emphasize eventual differences between the perspectives of coaches of female and male teams as regards the properties and dimensions of each category.

Table 2: Categories and meaning units of the organization component

Categories	Total Coaches	Total MUs	Coaches of females (n = 12)		Coaches of males (n = 12)	
			Coaches (n)	MUs (n)	Coaches (n)	MUs (n)
			Planning training	24	358	12
Monitoring athletes’ physical conditions	05	06	04	05	01	01
Relationship with athletes	24	41	12	21	12	20
Relationship with athletes’ significant others	18	22	10	10	08	12
Relationship with assistants/ sport agents	24	77	12	36	12	41

Table 3 illustrates the categories, properties, and dimensions of the organization component, as well as the number of coaches of males and female teams who identified each dimension. ‘Planning training’, which included aspects important to prepare athletes’ for training and competition, was clearly the most pervasive category, comprising 10 properties. The categories regarding the relationship with athletes’ significant others and the relationship

with assistants/ sport agents were not directly related to training or competition, but rather to the social and sport structure in which the coach moved. Lastly, the ‘monitorization of athletes’ physical conditions was the least discussed category.

Table 3: Categories, properties and dimensions of the organization component

Category and property	MU	Dimension	CF	CM	Coaches
Planning training					
Season planning	19	methodological aspects	9	10	C2,C3,C4,C5,C7,C9,C10,C11,C12,C13,C14,C15,C16,C18,C19,C21,C22,C24
	8	balanced team	3	5	C4,C7,C10,C17,C18,C20,C22,C24
	12	experience and curriculum	7	5	C1,C2,C3,C6,C9,C10,C12,C14,C18,C19,C21,C21
	13	technical and tactical characteristics	5	8	C1,C2,C4,C9,C10,C13,C15,C16,C17,C18,C19,C21,C24
Constructing the team	4	physical characteristics	1	3	C1,C13,C21,C24
	21	psychological characteristics	10	11	C2,C3,C4,C6,C7,C8,C9,C10,C11,C12,C13,C15,C16,C17,C18,C19,C21,C21,C22,C23,C24
	8	group integration	4	4	C2,C3,C6,C9,C13,C14,C15,C24
	8	behavior outside sport	4	4	C1,C6,C8,C10,C15,C18,C21,C21
	3	outcome	1	2	C7,C13,C18
	10	performance	8	10	C2,C3,C4,C5,C7,C10,C11,C12,C13,C14,C15,C16,C19,C21,C21,C22,C23,C24
	5	psychological domain	2	3	C7,C10,C13,C19,C23
	15	technical, tactical and physical domain	7	8	C2,C3,C4,C5,C7,C10,C12,C13,C14,C18,C19,C21,C21,C22,C23
Setting goals	3	definition of priorities	1	2	C11,C19,C21
	8	reassessment/ flexibility	4	4	C1,C2,C5,C11,C15,C18,C22,C23
	3	difficult/ challenging	1	2	C6,C19,C22
	1	written	1	-	C4
	15	plan of action	7	8	C2,C4,C5,C6,C10,C11,C12,C13,C14,C15,C19,C21,C21,C22,C24
	13	specific/ measurable	4	9	C2,C3,C4,C12,C13,C14,C18,C19,C21,C21,C22,C23,C24
	9	team	5	4	C2,C3,C4,C7,C11,C15,C18,C21,C21
	16	individual	8	8	C2,C3,C4,C5,C6,C7,C11,C12,C13,C14,C16,C19,C21,C21,C22,C24
Group dynamics	16	encouragement of team work	9	7	C1,C2,C3,C4,C6,C9,C10,C11,C12,C13,C14,C19,C21,C21,C22,C24
Athletes’ fatigue or lesions	20	modify training	9	11	C1,C2,C3,C4,C5,C7,C9,C11,C12,C13,C14,C15,C16,C18,C19,C21,C21,C22,C23,C24
	9	prevention	6	3	C3,C4,C5,C6,C7,C10,C14,C21,C21
Club goals	2	high performance	2	0	C2,C7
	2	city projection	2	0	C2,C9
Daily training plan	14	flexible	8	6	C1,C2,C3,C4,C5,C10,C11,C12,C13,C14,C19,C21,C22,C24
	12	structured	6	6	C1,C2,C3,C9,C10,C12,C14,C19,C21,C21,C22,C24
	10	specific training	4	6	C1,C2,C9,C11,C14,C15,C21,C21,C22,C23
	6	psychological aspects	2	4	C9,C10,C13,C21,C22,C23
	4	physical conditioning	2	2	C5,C9,C12,C13
	8	technical- tactical	4	4	C5,C7,C9,C10,C13,C14,C21,C23
Game plan definition	17	analysis of the opponent team	7	10	C2,C5,C7,C9,C10,C11,C12,C13,C14,C15,C16,C18,C21,C21,C22,C23,C24
	2	diminish training intensity	2	0	C3,C4
	3	motivate athletes	2	1	C2,C4,C5,C7,C9,C13,C16,C17,C19,C21,C21,C23,C24
Training rules	13	present	6	7	C4,C5,C7,C9,C10,C12,C13,C15,C16,C21,C21,C22,C24
Social rules	5	autonomy and responsibility	1	4	C1,C13,C16,C19,C22
	13	present	9	4	C1,C2,C3,C4,C5,C7,C9,C10,C12,C13,C16,C21,C22
Monitoring athletes’ physical condition					
Athletes’ physical conditions	01	autonomy and responsibility	1	-	C6
	05	follow up/ monitorization	4	1	C2, C6, C9, C12, C14

A coding system was used to ensure confidentiality and anonymity of the participants, whereby the letter ‘C’ was designed, alongside with a number, to identify each coach (CF = Coaches of females; CM = Coaches of males)

Table 3: Categories, properties and dimensions of the organization component (cont.)

Category and property	MU	Dimension	CF	CM	Coaches
<i>Relationship with athletes</i>					
Helping athletes with personal concerns	24	personal and familiar life	12	12	C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24
	04	education	3	1	C8, C9, C10, C22
	03	finances	2	1	C8, C9, C14
Relationship outside sport	02	non existent	-	2	C16, C18
	04	present	2	2	C1, C11, C14, C20
Interpersonal relationship in training	04	difficulties	2	2	C2, C4, C16, C23
<i>Relationship with significant others</i>					
Relationship outside sport	02	non existent	2	0	C1, C4
	11	occasional (sporadic)	6	5	C3, C5, C7, C9, C10, C11, C16, C18, C19, C20, C23
	04	close	1	3	C7, C14, C21, C24
Work with significant others	01	sharing athletes' goals	0	1	C20
	04	sharing athletes' performance	1	3	C2, C12, C19, C21
<i>Relationship with assistants and sport agents</i>					
Technical staff	24	sharing responsibilities	12	12	C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24
	01	forward	1	0	C10
Psychologist	10	forward	3	7	C2, C3, C7, C15, C16, C17, C20, C21, C23
Medical Doctor	12	forward	5	7	C2, C3, C4, C5, C10, C15, C16, C17, C18, C20, C23, C24
Managers	05	sharing responsibilities	2	3	C6, C7, C15, C16, C18
Physiotherapist	03	sharing responsibilities	1	2	C9, C16, C18
	10	forward	5	5	C2, C4, C5, C7, C15, C18, C20, C21, C22
Nutritionist	05	forward	2	3	C3, C7, C17, C18, C20
Helpers/ support staff	07	forward	5	2	C1, C3, C4, C5, C11, C15, C18
<i>A coding system was used to ensure confidentiality and anonymity of the participants, whereby the letter 'C' was designed, alongside with a number, to identify each coach (CF = Coaches of females; CM = Coaches of males)</i>					

Planning training

As mentioned earlier, planning training was the most embracing category. Coaches reported that, when planning the competitive season, they took into consideration the methodological aspects regarding the initial period of training. While in the more traditional teams this preparation began just after the end of the previous competitive season (i.e., six months before the current season), in some of the less structured teams, the coaches only initiated training two months before the beginning of the SUPERLIGA. In any case, when planning the competitive season, all of the coaches were at the mercy of private and public sponsors (e.g., companies, partners) for funding. The coaches also mentioned the basic planning, referring to the emphasis they placed in physical conditioning, including physical tests and laboratory and medical exams, just before the beginning of the season.

Several coaches brought up the pre-season period, highlighting the participation of their teams in local and regional preparatory competitions for the SUPERLIGA. A small number of coaches mentioned the participation in international competitions (e.g., South American Volleyball Championship and Clubs World Championship) to that end. Moreover, the coaches stressed the difficulty in planning the training, given that the calendar of the SUPERLIGA, including its starting date, was released almost on the eve of its beginning. There were even some who complained about the excessive paperwork and organizational tasks, as well as the financial constraints, which limited the enrolment of athletes and assistants, and the eventual expansion of the structural and material resources.

A second property that emerged in the planning category comprised the aspects coaches took into consideration when putting the team together. The most mentioned dimension was the psychological characteristics (e.g., *“The aggressiveness, the fierceness, the determination, that’s what we look for.”* [C9]; *“In my team, I prefer belligerent athletes, vibrant athletes... Who speak during the game, who vibrate (...), who are more extraverted... more sanguine”* [C3]). Additionally, the technical and tactical characteristics were also referred by several coaches. Usually, the setter was the first element to be chosen. Then, they tried to establish a close relationship between the setter and the technical and tactical characteristics of the other players who would be part of the group. Athletes’ experience and curriculum were also cited by an elevated number of coaches. It should be noted that the experience had to do not only with the coaches’ observations and the history of athletes’ participation in previous editions of the SUPERLIGA and other competitions, but also with the statistical data collected by the coaches’ technical assistants and the BCV ranking of the athletes.

In fact, in addition to the athletes’ ratings, their skills, experiences and curricula, coaches had to consider a maximum number of points, set for each team (see files and texts of the official rankings of the female and male athletes - in BCV [2012]). While ‘high-budget’ teams were more at ease with the money they spent signing athletes, they were limited by the number of points set for their team by the BVC. Instead, because ‘low budget’ teams lacked the necessary budget to acquire the more scored players, their coaches assumed they didn’t even worry about the ranking established by the BVC.

In any case, the coaches tried to put together ‘balanced’ teams vis a vis features such as age, athletes’ experience, positive relationship with others and integration in the group, and

even their behaviors inside and outside the playing field. In some cases, the coaches characterized the athlete they tried to avoid: *“A lazy player, who doesn’t like training... A player who likes to go out at night too much... A player who complains too much...”* (C8). Very few coaches discussed the physical characteristics as a determining factor when building their teams. However, it should be noted that, on the whole, the coaches considered that these elements were complementary and not mutually exclusive.

Another important aspect of planning training was setting goals. Performance goals, reached through partial improvements (e.g., *“We intended to progress by diminishing the number of errors...”* [C23]), were mentioned by more coaches than outcome goals, focused exclusively on the end results, on winning games and titles (e.g., *“Our purpose is quite clear, our team was created win the championship, period!”* [C18]), and technical, tactical and physical goals were more mentioned than psychological goals. While they tried to establish an interdependence between the former (i.e., technical, tactical and physical goals), psychological goals were aimed at motivating and stimulating closeness among all the teams members. Individual goals were more brought up than collective goals and various coaches, especially in male teams, stressed the importance of setting specific and measurable goals (using statistical programs, filming and observations). Almost the same number of subjects discussed the development of a strategic action plan, with a breakdown of tasks to achieve the goals. Some reported that goals were reevaluated and could be changed in function of game results, trips, or even the availability of a place to train; in other words, the goals were flexible. Setting difficult and challenging goals, establishing priorities, or writing the goals down, were less mentioned aspects. In fact, only one coach mentioned that the goals were set in writing with the players: *“The goals were set with the athletes. We sat at the table at the beginning of the season and we asked the opinion of each athlete.”* (C4).

Planning training also took into consideration the improvement of team work and group dynamics (e.g., *“...through meetings, videos, trainings designed to make the athletes overcome themselves as a team.”* [C7]), and situations of fatigue or injury. In this last case, most coaches modified the training session (e.g., *“When I perceive athletes are fatigued, I have to diminish the training intensity, its volume, or even end the training session.”* [C3]). Some of them also discussed how they organized training in order to prevent injuries: *“...we prevent injuries by strengthening the muscles (...) strength training, power, so that the athlete doesn’t feel during the competition.”* (C14).

The club goals were reported as an important property of planning only by coaches of females. Two coaches discussed the fact that their clubs had high-performance goals, as illustrated by this coach: *“Because this administration is, simultaneously, a sponsor which is the brand leader in its segment... it ends up transferring that expectation to the sport.”* (C7). Additionally, one of those coaches (C2) and another one stated that they thought in the national projection of the city: *“...my goal is to project the city at a national level, within this competition [SUPERLIGA]. Period!”* (C9).

Making daily training plans and making game plans were two properties of planning training addressed by most respondents. As to daily plans, the coaches mentioned different periodizations, depending mainly on aspects such as the characteristics of the athletes, available time and goals. For example, while for some coaches the reference macro cycle included the competitive period, for others it did not. In any case, and in spite of its structure (i.e., macro and micro cycles), daily training plans were also flexible, since there could be changes in every training unit or revaluations in each micro cycle (i.e., a weekly review). For example, one coach stated: *“We make a graphic of the physical, technical, and tactical elements, and we present it, day after day, to the technical commission and to all the athletes. Planning is reviewed daily. And depending on the necessities, depending on the week... we make changes...”* [C5]). Furthermore, participants referred that daily training plans comprised technical, tactical and psychological aspects of training; the conditioning aspects were slightly less discussed. Finally, coaches mentioned they made specific and sometimes individualized daily training plans, namely considering the characteristics and position of each athlete (e.g., setters, liberos, and hitters; middle, left side, and opposites). Regarding the game plan, the analysis of the opponent was consensual to almost all of the coaches: *“A day before we leave (the training) is always tactical, in function of the opponent.”* (C9). The importance of motivating the players was also mentioned, even though by fewer coaches. Lastly, two coaches of female teams mentioned diminishing training intensity just before the games.

Finally, part of the coaches' planning tasks was to set rules for players in training (i.e., establishing norms, rights and duties of athletes, such as meeting the training schedule or using the uniform). The coaches also set rules for outside the training environment (i.e., social rules). For example, a coach mentioned: *“The attitude of the athlete on the plane, you know? The conversations, the education... that's what (...) has to be preserved within the group”* (C1). Some coaches mentioned that, together with the club's administrators and sponsors, he had prepared a document to use in travel circumstances (regarding the trip, sport events,

meals, hotels, etc.). This document was even part of the athletes' employment contract, and they were liable for financial penalties if they failed to comply. Most coaches, especially among those who worked with female teams, made sure that these rules were obeyed, but some, namely among those who worked with male teams, stressed the importance of promoting athletes' autonomy and accountability regarding this matter.

Monitoring athletes' physical condition

One important aspect of organizing was the monitorization of athletes' physical condition. Specifically, this category comprised the knowledge used by the coaches to establish a program to physically prepare their athletes, together with the physical trainers. This category was not reported by many coaches. In fact, only four coaches of females and one of males referred to their role of controlling and/ or monitoring their athletes: *"I always work directly with the physical trainer, I always follow-up...I always swap ideas with him..."* (C9). One coach of the female teams said that although he tried to follow closely his athletes' physical conditions, it was important to promote their autonomy and responsibility, and thus their maturation as regards this issue: *"When they become aware of the work that has been done, (...), of the information that we give them, of that follow through (...) they transform themselves as persons (...) and they begin to understand that 'that' will be important throughout their career."* (C6).

Relationship with athletes

Coaches' organizational tasks also comprised aspects related to their relationships with the athletes. Three properties emerged in this category. The property discussed by a higher number of coaches was related to conversations and counseling as regards helping athletes with personal concerns, especially their personal and familiar life. Helping athletes with their educational and financial issues was also mentioned, though by fewer coaches: *"I like to talk with the athletes about their extra sporting life... (...) educational concerns, even this question of saving money."* (C9). It should be noted that some coaches showed concern about some factors that could contribute to athletes' academic problems, including the need to have athletes training full-time and the many travels to games in different cities. In addition, most said they carried out this type of action (i.e., conversing and counseling) in a timely and unsystematic manner, arguing that athletes were adults and independent. Only one of the coaches alleged that his concern with athletes' well-being across other domains of their lives was essential to their continuous formation and development, even if they were adults.

However, despite these concerns, few coaches recognized they had a personal relationship with their athletes outside the sport arena (e.g., *“I invite my athletes to my house; to me, they are like my sons, isn’t it?”* [C14]). There were even two coaches that emphasized the nonexistence of such a relationship (e.g., *“Never... I don’t go out with the athletes, kind of ‘let’s have a beer’, ‘let’s eat’...”* [C18]). The participants also discussed the influence of their interpersonal relationship with the athletes as regards the training session. Specifically, some of them stressed the difficulties that, in certain circumstances, they had establishing that relationship with some athletes (e.g., more experienced players: *“When I work with players who have more years of experience as athletes in the national SUPERLIGA than I as a coach, I have some difficulties...”* [C2]), and the distance they felt from some of the athletes due to the dualistic roles (i.e., coach- boss) they played within the team. Coaches of females also mentioned having some relationship issues with their athletes.

Relationship with athletes’ significant others

Only a small number coaches reported having a close relationship with athletes’ significant others. In fact, almost half the respondents stated that their relationship with the athletes’ relatives was sporadic and two coaches of females even said that this kind of relationship simply didn’t exist. Only four coaches mentioned they had a close relationship with their athletes’ relatives (e.g., *“In some situations, we promote a get-together, kind of like a barbecue, with the relatives.”* [C17]). Additionally, only four coaches acknowledged talking with relatives, namely some of the parents, about their sons’ performance (e.g., *“We have young athletes who are closely monitored by their parents. They go there, wanting to know how they are doing... I tell them...”* [C19]). One coach said he informed parents about the sons’ goals (*“I always try to tell them what I want from the athlete...”* [C20]). In general, these coaches said that this sharing of information was unsystematic, only happening when they were sought for by athletes’ relatives.

Relationship with assistants/ sport agents

This category embraced the relationship and the work of the coaches with the members of their multi professional teams. In general, all the coaches stated that they worked closely with their technical teams (e.g., assistant coaches, physical trainers), sharing responsibilities about several aspects of the training session: *“First, I have my opinion, and, from my opinion, I ‘sit’ with my assistants. An assistant who is the physical trainer, an assistant responsible for training blocking, other assistant responsible for training ‘reception*

and defense' ... I have a nutritionist, I have a physiotherapist, I have this entire staff... I talk with them... (...) If they have some suggestion, I am open to that suggestion..." (C18). Only one coach reported that, sometimes, besides sharing responsibilities with the members of his staff, he simply forwarded the athletes to them, stating that he did not "work directly with them..." (C10).

As regards psychologists, medical doctors, nutritionists, assistants / support staff (e.g., masseuse, 'butler'), and physiotherapists, coaches also forwarded the athletes when they deemed it was necessary: "The club has a psychology department, a nutrition department, a medical department. (...) If we need them, we sent the athletes there." (T3). Nevertheless, three coaches found that, sometimes, it was important to share responsibilities with their physiotherapists: "We always try to decide together" (C9). Still, this sharing only occurred when the coaches had exclusive physical therapists for their teams; the others had to refer athletes on to the physiotherapists of their respective clubs. Finally, some respondents stated they had a close and sharing relationship with the club administrators (e.g., supervisors, directors) throughout the competitive season.

In any case, it should be noted that almost all the respondents mentioned the existence of a hierarchy in which they always had the 'final word'. Generally they respected and sometimes even promoted the specialists' autonomy, but before that 'final word', some of them promoted collective debates, consulting all the members of their technical team.

DISCUSSION

The purpose of this investigation was to identify and characterize the organizational tasks of the coaches of the Brazilian volleyball SUPERLIGA, which comprised some of the world's best volleyball coaches.

Planning training

With regard to planning training and in agreement with several authors' statements (e.g., Garganta, 2003; Pires, 2005), coaches stressed the importance of planning the season, establishing different steps and timelines, as a prerequisite to optimize the preparation of their teams and to achieve their goals. These results are understandable, since they were referring to professional athletes, whose training is logically more focused on the tactical, physical and psychological aspects than on the technical aspects. Furthermore, the long duration and

intensity of the competitive period - coaches reported spending more time competing in the SUPERLIGA than training - is justified by all the features that, according to several authors, must be present in high level competitions: a large number of games (Gilbert and Trudel, 2004), which allow access and enhance the fun of the spectators (Dixon and Warner, 2010) in numerous Brazilian cities, as well as television broadcasts conveying the "image" of everyone involved in the competition to large public audiences (Kasznar and Graça Filho, 2002).

Besides the methodological aspects, the coaches also discussed the constraints and the limitations they faced, which, ultimately, distanced them from their main task (i.e., training athletes). This result corroborates the idea that the limitations to the work of the coach go much beyond what occurs in training or competition (Carter and Bloom, 2009; Weinberg and McDermott, 2002). On the other hand, because they knew their reality, they were more apt to devise strategies and activities which would develop their athletes' skills and help them attain maximum performance. In the long run, this would give coaches a clear vision of the future and enable them to achieve the desired results (Garganta, 2003; Mesquita, 2005).

The emergence of a property related with assembling the team is in accordance with statements by several authors (e.g., Turner and Chelladurai, 2005), who state that, while working as human resources for their clubs/ companies, coaches have to recruit other human resources, such as the athletes. In this sense, the notion of organizational commitment (i.e., the identification of a person with a particular organization and its goals, and his or her desire to maintain membership with the organization [Blau and Boal, 1987]) may be essential when constructing the team. The fact that the coaches had a special interest in the players' psychological characteristics, considering them crucial to overcome the other teams and to cope with the demands and pressures common to elite sport, is consistent with results from other investigations (e.g., Bloom et al., 2003; Solomon and Lobinger, 2011). Additionally, the strategic choice of the setter as the first element is consistent with the tactical importance contemporary volleyball gives to this position (see Clemens, 2005; Mesquita and Graça, 2002; Resende, 1995). Likewise, Müller (2009) advocates, in assembling a volleyball team, the importance of establishing a close relationship between the setter and the technical and tactical characteristics of the other players. On the other hand, the apparent little importance given to the physical characteristics may be due to their link to the technical characteristics (Brislin, 1997). When composing their teams, coaches need different specialists for each position, and generally these players possess different physical characteristics (e.g., 'middle hitters' are taller and faster, outside hitters or left side hitters are more agile and have more

strength [explosive power], 'opposites' are taller and stronger) (Bizzocchi, 2008; Müller, 2009).

Finally, the concern with putting together a balanced team regarding the personal characteristics of the players (e.g., age, experience), integration in the group and even taking into account the players' behavior outside sport showed that the coaches were not only concerned with the success and well-being of the team in trainings and competitions, but also considered the long period of coexistence between the athletes, including trainings, games, travels and concentrations. These considerations are in line with the specialized literature (e.g., Beal, 2005; Bizzocchi, 2008; Bloom, 1996a, 1996b).

Hence, while many professionals contribute to the formation of the team, the most important person is the coach. Since he originates the process, he must have the ability to evaluate the athletes, in competition and in training, creating an environment where their quality can translate into successful performances (Bloom et al., 2003; Solomon and Lobinger, 2011). Relatedly, and in line with relevant studies on the topic (e.g., Bloom et al., 2003; Eys et al., 2006), the coaches discussed the importance of organizing training in order to improve players' interactions and helping each other, which are key aspects in a team sport as is volleyball.

Part of the coaches' planning tasks also included setting goals. According to several authors (e.g., Beal, 2005; Bizzocchi, 2008), the setting of performance goals suggests that, to these coaches, partial improvements were directly related to the achievement of short-term goals for training and competition, facilitating the achievement of long-term goals. Additionally, the other criteria that coaches used to set the goals, such as setting flexible, difficult, and specific goals, in different areas (e.g., technical, tactical, physical, psychological), written down, and regulated by an action plan with priorities and strategies, were in accordance with the criteria found in the literature on goal setting (Bompa, 2009; Burton, 1993; Locke and Latham, 1990). Moreover, the use of statistical programs and the filming the actions of the athletes in order to develop the athletes' technical gestures corresponded to suggestions of Bizzocchi (2008). On the other hand, it should be outlined that, while some significant principles of goal setting were not cited by any coach (e.g., the importance of setting positive goals; Burton, 1993), certain of the above referred characteristics were mentioned by a small number of respondents (e.g., prioritizing goals, writing goals down, establishing difficult goals). In fact, only the definition of an action plan

and the setting of specific and measurable goals were mentioned by over half of the sample.

Still with regard to setting goals, the difference found in the coaches of females and coaches of males' statements as regards specific goals may be explained by the fact that, although there are no official records, SUPERLIGA's male teams have not only more financial resources, but also more material resources to film and register statistical data, which might facilitate setting specific goals. Curiously, the coaches that stressed the importance of specific goals also mentioned setting team goals. Individual goals, reported by fewer coaches, revolved around technical and physical questions, but were always directed towards achieving the team's goals. According to Bizzocchi (2008), individual goals highlight each athlete's contribution to the team, being contingent not only on the characteristics of each element, but also on their specialties.

In situations of injuries or fatigue the majority of the coaches also emphasized the importance of modifying the training, designing a specific and individualized training or restructuring the training of the team. In agreement with suggestions made by Brislin (1997), they mentioned acting in coordination with their physical trainers, physiotherapists and doctors, to promote adapted activities which would minimize the exposure of athletes to overtraining and injuries. Moreover, sometimes some of them changed the way of communicating with injured athletes, because they felt those athletes could be in a more vulnerable place. Along these lines, Podlog and Eklund (2007) underlined the importance of providing social and psychological support to injured athletes, especially during the recovery phase. Some coaches said that they even sought to integrate the injured athletes in a single working environment with the uninjured athletes, as suggested by Johnston et al. (2004).

The SUPERLIGA comprises male and female teams, both of which are (co) sponsored by municipalities and universities. In this context, the fact that only three coaches of females stressed the importance of taking into account the objectives of the club when planning training may indicate not only that these coaches have a closer relationship with the 'club/company' than the coaches of males, but also that they are more familiar with the principles of management and marketing.

An interesting result regarded the daily training plan, which was described as both structured and flexible. In fact, consistently with suggestions by Carter and Bloom (2009), the inherent flexibility of the training plan emerged when the coaches emphasized the importance of organizing the training session-by-session, with the purpose of better preparing the athletes

for competition. Additionally, these results were consistent with statements made by Bompa (2009), who states that the annual program, based on concepts and principles of periodization, should be divided into phases which guide daily training. Along the same lines, several authors (Eccles and Tenenbaum, 2007; Kellett, 1999) emphasize the importance of flexibility in planning training. On the whole, they state that, according to the progress or setbacks experienced, the plan should fit the circumstances. This may be indicated by multiple variables (e.g., injuries, athletes' evolution assessment). In addition, it ought to be reviewed not only at the end of the season, but in a systematic manner, even at every session.

Moreover, consistently with authors such as Bizzocchi (2008), coaches individualized the daily training plans considering the position of each athlete (e.g., setters, liberos, and hitters; middle, left side, and opposites). In this regard, a historical analysis of the tactics of volleyball shows an evolution in athletes' specialist positions. This evolution occurs because and when the functions in the game and the positions on the court require a specific training which may improve the performance of each athlete according to their specialty (without neglecting the improvement of whole team). It is possible that the conditioning aspect of training was less referred because, in line with several authors (e.g., Bizzocchi, 2008; Brislin, 1997), some of the professionals preferred to begin with the definition of their teams' technical and tactical goals, and only then design the physical preparation plan, together with the physical trainer.

With regard to the game plan definition (i.e., the strategy planned before a game), the generality of the respondents also seemed to act in accordance with several author's suggestions (e.g., Bizzocchi, 2008; Bompa, 2009), developing a tactical plan based on the analysis of the adversary. On the other hand, it was curious to verify that, although according to training theory, the last training before the game should be characterized by an emphasis on the tactical aspects and diminished intensity, this facet was rarely discussed, and only then just by coaches of females.

Finally, some coaches discussed the presence of rules, both in training and outside the training environment (i.e., social rules). The presence of the latter was more mentioned by coaches of females. At the same time, consistently with recommendations by Beal (2005), some coaches aimed to promote their athletes' autonomy and responsibility, especially amongst male athletes. The greater concern with controlling females' social environment and promoting males' autonomy seems to reflect traditional gender roles in Western societies,

where parents and care givers are more protective of their daughters than they are of their sons (Gilligan, 1992; Moreno, 1999). However, it should be remembered that, when putting the team together, both the coaches of males and males took into consideration the athletes' history (see property: 'team building – behavior outside sport), in order to avoid enrolling players with unwanted behaviors (e.g., drinking alcohol, staying out late), especially if these behaviors occurred or were excessive during the competitive season. These concerns were also highlighted by Lewis (2008).

Monitoring athletes' physical condition

Certain coaches recognized that part of their organizational work concerned the monitorization of their athletes' physical condition. Considering the genetic and hormonal factors most commonly related to women, this monitorization seemed to coincide with the conditioning training associated with weight control (Bizzocchi, 2008). On the other hand, the number of coaches who referred this category was relatively low, which may be related to the few references made to the physical conditioning aspect of training. Ultimately, these results may reflect the fact that all the teams in the SUPERLIGA worked with a physical trainer.

Relationship with athletes

Some volleyball coaches indicated it was important to help their athletes' deal with personal difficulties. These concerns reinforce the idea that the 'work' of a coach is not exhausted in what happens in training and in competition and that even at the elite level, part of the coaches' organizational tasks includes dealing with athletes' personal concerns, creating a support climate (Beal, 2005; Côté and Salmela, 1996; Kellett, 1999). In other words, these data suggest that it is important that the coaches establish a holistic view of the training process and its participants (Côté, 2006, Côté et al., 1995b).

Meanwhile, certain coaches recognized that their relationship with their athletes exceeded the boundaries of the training process when this coexistence led to a better understanding and to a more trusting relationship. In fact, similarly to results found by Dixon and Warner (2010) in a study with college athletes' coaches, one of the coaches in the present investigation appeared in the role of a 'significant other'. Bloom et al. (2003) suggested that coach-athletes relationship could be decisive to strengthen team cohesion. Alongside, Brandão and Krebs (2010) pointed this coexistence as one of the main measures to be taken in order to increase and improve the team's performance. This is especially true if we consider

the long periods the athletes coached by our subjects stay away from their families, either training, competing or traveling, with few days off. On the other hand, the scarcity of respondents who discussed the importance of this extra sport relationship with the athletes may be related to the fact that most of the coaches in this study didn't meet their athletes until they were promoted to the senior division, and namely the SUPERLIGA. In fact, some coaches met new athletes in each edition of the SUPERLIGA, and even then they could be their coaches only during that season. In other words, some relationships were episodic.

Finally, as regards the difficulties expressed by some of the coaches as to their relationship with the athletes, one of the most interesting results was the difficulties faced by some coaches of females. In this regard, Gilbert and Trudel (2004) suggested that, above and beyond the age and level of the athletes, the structure of the coaches' mental model should take into account the gender of the athletes, claiming the need to develop further studies on this theme.

Relationship with athletes' 'significant others'

As for the relationship with athletes' significant others, the fact that several coaches reported its irregularity or inexistence may be due to them working with high performance adult teams. In other words, we have to take into consideration that the athletes were mostly independent autonomous adults. Along these lines most authors only discuss the importance of the coach maintaining a close relationship with young athletes' parents, while other significant persons (e.g., spouses, friends), even in relation to adult athletes, are seldom mentioned (Pavlik, 2005).

Moreover, many of the approximately 400 athletes trained by the coaches who participated in this study lived in cities that were not their native homes and had to travel frequently to other parts of the country to play in SUPERLIGA's games. In this context, it is understandable that, as stated above, most of the coaches established an occasional relationships with athletes' significant others. On the other hand, the coaches who regularly informed athletes' relatives of the progress and goals of athletes only did that when they were sought by the former, because they considered that all the athletes were professionals, and, with rare exceptions, monetarily independent and of age.

Relationship with assistants/ sport agents

Regarding the relationship with the members of their technical committees, the sharing of responsibilities assumed by most coaches is not surprising, since those working teams had been put together by them and were maintained not only over the entire season, but sometimes over the years, generating what some coaches called a 'team' and others a 'family'. These data confirm the importance of receiving help from various experts, assuming that the relationship and communication established between all the members of a multidisciplinary team contribute to the harmony, and, consequently, to the success of all involved (Beal, 2005; Carter and Bloom, 2009). Thus, it is understandable that expert coaches such as the ones in the present study, in addition to setting goals and defining the characteristics of the athletes they wanted to enroll, for example, also delineated the composition of their multi professional technical teams (Bizzocchi, 2008). In such a working environment, it is also natural that coaches share their knowledge and responsibilities, and that the assistants and other members of the staff often come up with new ideas, thus enriching the coach's vision (Bloom et al., 2003; Solomon, 2002). Furthermore, the fact that the coach always had the final word, but, at the same time, respected his coworkers' autonomy and tried to promote collective debates, most certainly resulted in an environment of professional support and camaraderie, which was also highlighted by several experts (e.g., Kellett, 1999).

Along the same lines, by referring athletes to the help staff, such as the 'butlers', masseuses and 'arms', suggested that, as Araújo (2009) advocates, the coaches recognized and emphasized that, both to manage and to lead, it is crucial to establish good working relationships with all the employees. Concerning the other sports sciences specialists, namely the sport psychologists, it was curious to learn that although the coaches only referred athletes to them when such was necessary, there was a general complaint regarding the brief and unsystematic interventions of sport psychology specialists within their teams. Interestingly, and contrariwise, in a study by Johnson, Andersson, and Falby (2011) with Swedish soccer coaches, the participants presented several barriers to these professionals. The authors believed that this was due to the lack of knowledge regarding the sport psychologists' work and the resulting skepticism, which generated a negative vision of this domain.

FINAL CONSIDERATIONS

On the whole, this investigation confirmed that the role, functions and tasks of the coaches go well beyond the training and the competition, confirming the importance of the coaches' organizational work in structuring and coordinating various coaching tasks to establish optimal training and competition conditions (Côté and Salmela, 1996; Kellett, 1999).

Additionally, the results highlighted the importance of the relationship established with all those whom surround the competitive context, including significant others, assistants and other sports agents. This social role may imply that, even in high performance sport, coaches must be able to intervene and build rapport (e.g., listening and paying attention to other people, seeing things from other people's perspectives, getting their message across, negotiating solutions) not only with the athletes, but also with their 'enlarged' technical teams, including the administrators and the athletes' relatives. However, one aspect that should be noted is that although several studies have made progress in this area and reinforce the importance of significant others' support in helping young athletes achieve higher levels of performance through partnerships with coaches, further research is needed on the social influence and psychological impact of family members and the coach-family relationship on adult and professional athletes (Partridge, 2011).

Hence, considering that expert coaches' organizational work involves the manipulation of several related variables, they should not only possess rich and well-organized knowledge in the technical and tactical domains, but also in the organizational and psychosocial domains. Bloom et al. (Bloom et al., 2003; Bloom and Loughhead, 2011) state that coaches should be careful with the way they communicate and manage human relations issues regarding, for instance, the promotion of autonomy (empowerment) of all actors, the criteria for setting goals, or the planning of group dynamics. Ultimately, the knowledge and actions of the coaches will foster a supportive environment for the development of the players as athletes, individuals and citizens (Kellett, 1999).

Curiously, even though most of the coaches took into consideration the psychological characteristics of the athletes when assembling the team, and despite the fact that some coaches worked with sport psychologists occasionally (e.g., implementing some group dynamics), only two of them worked with sport psychologists on a regular basis. In many aspects, they seemed to work intuitively on this regard. For example, they implemented group dynamics to encourage teamwork, but didn't seem to be familiar with any formal programs of

team building, such as those indicated by Bloom and Loughhead (2011). Moreover, in situations of fatigue or injuries, they modified the training and tried to coordinate it with the physical trainer, but there was no mention of the use of sport psychology techniques (e.g., goal setting, imagery, relaxation, positive self-talk) (Bloom et al., 2004). Furthermore, with regard to the daily training of psychological aspect, coaches emphasized the setting of goals and other motivational activities (e.g., motivational videos). However, there was no indication that, in doing, so they resorted to any 'scientific' guidelines or professionals. In this sense, if those who manage sport, specifically high performance volleyball, should engage specialists in sport psychology, they can probably expect improvements in domains related with human relations, and individual and team performance and success.

In sum, we believe that this study can provide valuable ideas, contributing to a closer look at the knowledge of volleyball coaches and how it can be improved. Without disparaging coaches' academic and technical formation, as well as the importance of mentoring processes and the new ideas that arise from being out in the field with other coaches, a careful reassessment and redefinition of the content of coach training programs is warranted. For instance, these programs could teach these professionals how to set goals (e.g., short and long-term goals, positive vs. negative goals), how to plan and implement team building activities throughout the season (including training sessions and social activities), or how to incorporate some psychological techniques in the prevention or treatment of sport injuries. This emphasis may be especially noticeable in high performance professional sport, because since there is a higher turnover and more financial means to enroll athletes, there may also be, comparatively with non-professional teams, more stress (i.e., responsibility) to win (Bloom et al., 2003). Simultaneously, the social nature of the coaches' organizational work should not be set aside. They should be attentive to the issues that preoccupy athletes in their personal lives, and be sensible to the social network surrounding them, including parents and other relatives, the coaches' staff, administrators, or sponsors. Relatedly, coaches' formation should also address organizational responsibilities, such as human resources management, finances, time, structures and materials, communication and marketing (Demers et al., 2006). These will permit to bring closer the coaches theoretical education and their practical realities. After all, the improvement of the coaches' knowledge is crucial to the development of athletes.

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Authors' Note

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