

THE PROCESS OF SELECTION AND TRAINING OF FIFTEEN TO SEVENTEEN-YEAR-OLD MALE SETTERS ON THE CATARINENSE'S VOLLEYBALL TEAM

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Abstract

The objective was to identify the procedures adopted by catarinenses' volleyball coaches in the selection and training of youngest male setter's team. The volleyball club's coaches, with tradition in the formation of volleyball athletes, participated within the study (n=6). Structuralized interview were used in the data collection. The evidences confirm the importance attributed to the coordinative, technical, cognitive, tactical and psychological factors in the setter's selection. Beyond individual sessions, the volleyball coaches used complementary sessions in the training for the youngest male setter's team, in the development of exercises for individual technique, ball time, direction and force.

Keywords: Volleyball - Training - Setters

Introduction

The volleyball is a collective sporting modality in constant evolution, becoming more and more popular and competitive (FERREIRA; DE PAULA; COTTA, 2007). Actually, is one of the more complex sporting modalities, where the perfect ability in the execution of its fundamentals and the physical characteristics of its athletes are fundamental for a great performance of the team (SILVA, 2003). Some researchers (ARAÚJO, 1999; MOUTINHO, 2000; NASCIMENTO et al., 2001) evidenced the factors that determine the sporting performance, highlighting the anthropometric, conditional, technical-coordinative, tactical-cognitive and psychological factors.

The physical, technical, tactical, and psychological evolution of this modality has accompanied the rhythm and the volleyball needs (DUWE; NOVAES, 2008), as well as the rules evolution, the spectacular sport process and the marketing (MARCHI JUNIOR, 2003).

About this matter, Ramos et al. (2004) detach that the tactical evolution in the better results search permitted the specialists players appearing in determined functions inside a match, as setters, attackers and liberos.

The volleyball athletes' formation process is being carried out in order to maintain or improve the results, both with the teams' renewal, as also with athletes appearing of great quality (BARBANTI, 2005; BOJIKIAN, 2007; GRECO; BENDA; CHAGAS, 1997; SILVA, 2006).

An aspect detached by Bojikian and Böhme (2008) is that the formation of a talented athlete in the volleyball, as in others sports, is a long process, which depends on many aspects that are inter-related. Like this, it identifies, select and promote the young sporting talent is a very complex task, due to the big range of involved aspects: psychological, social, cognitive, constitutional and environmental (BOJIKIAN; BÖHME, 2008). In study carried out with catarinenses coaches of the youngest category, Nascimento et Al. (2001) established the technical-coordinative, tactical-cognitive, and psychological factors are prioritized by the same instead of the conditional and anthropometric factors in the first thin specific selection of setters.

During a match, that player that participates intensely of the game, in almost all the shots preparing the ball for the attack is named setter. The setter' function is provide to the attacker the ball in ideal conditions of attack, in other words, to find always a better way for the attacker can defined the shot.

Setter has been one of the most important players in a team, responsible by the creation of the main offensive actions (RAMOS et al., 2004; DÜRRWÄCHTER, 1984; MOUTINHO, 2000; RODRIGUES, 1997; ZHELEZNIAC, 1993). Beyond have a great ability and technique, setter should be an excellent tactical strategist to decide suitably the best attack combinations according to its characteristics (technical, tactical, physical and psychological) and of its attackers.

In the literature used, it was found the importance of the multivariate training in the childhood, to provide to athlete the opportunity of develop all its potentiality and acquire a large and varied motor experience (BARBANTI, 2005; BOJIKIAN, 2007; BOMPA, 2000; GRECO; BENDA; CHAGAS, 1997; SILVA, 2006). During the initial phases, the recommendations are contrary to the athletes' specialization, i.e., all players should find to attend the needs of any position.



However, the first specialization should happen about fifteen or sixteen years old (BOMPA, 2000), namely in the youngest category of the volleyball.

In this perspective, the present study was carried out with the intent of identify the procedures adopted by catarinenses coaches in the selection of youngest male setter's team (15 to 17 years of age), as well as characterize the specific training process of setters in different periods of training of a sporting era. Thus, it was necessary: (I) it Identify the defensive and offensive systems of game more utilized by the youngest male teams; (II) Observe the criteria utilized by the catarinenses coaches in the selection of youngest male setter's team; (III) Verify the procedures adopted by the catarinenses coaches in the training carried out with youngest male setters.

Methodology

This study characterized as a descriptive inquiry, because sought to gather information for the description of a situation or condition (THOMAS; NELSON, 2002), namely of identify the procedures adopted by catarinense' volleyball coaches in the selection and training of youngest male setter's teams.

The study population was formed by volleyball coaches (n=6), all male, with medium of age at 39 + 11.2 years, that acted in male teams of youngest category (15 to 17 years of age), affiliated in the Volleyball Federation of Santa Catarina - FCV, state of Santa Catarina/SC. The sample selection process was not probabilistic, intentional, being invited to participate of study only the teams coaches with tradition in the sporting formation in this modality. The coaches of this study are of Joinville, São José, Brusque, Blumenau, Criciúma and Jaraguá do Sul teams, which participated in the Volleyball State Championship of Santa Catarina youngest male.

To data obtainment was elaborate a structured interview, based on study objectives and in the instrument adopted by Araújo (1999), which was composed by the following fields: (I) Socio-demographic characteristics of the coaches: information about the age, sex, academic formation, federalist formation, experience as athlete in the modality, experience as coach in the modality, experience as coach of state selection, experience as coach of the team that trains currently and if he has another profession beyond coach; (II) Systems of game utilized:

information about the defensive, offensive systems and reception utilized by the team; (III) Selection criteria of youngest setters: information about the importance attributed to the performance factors and to setters' selection indicator, as well as about the procedures adopted in the players selection; (IV) Training characteristics of youngest setters: information about the weekly frequency of the sessions of technical-tactical training, the weekly frequency of the sessions of physical preparation, setters' individualized training existence, setters' complementary training existence and the types of exercises utilized in the training sessions. For the instrument testing it was utilized the clarity exam and language objectivity, applied with 4 Volleyball coaches of the youngest female category that acted in city of Florianópolis. The content validity of the structured interview was obtained from the specialists' appreciation (masters and/or doctors) of the area pertaining to the Federal University of Santa Catarina. Both, the clarity testing as the validity had maximum concepts.

The interviews were carried out individually with the coaches in the intervals between the teams' games and/or in the free periods, especially in the team concentration locals (lodgings), during the second phase of the Volleyball State Championship of Santa Catarina youngest male.

In the data analysis were utilized the resources of frequency descriptive statistics and percent frequency, as well as medium and standard deviation.

The research was submitted to the Committee of Ethics for Research approval with Human Being of the UFSC - CEPESH, of consubstantiated referral no 051/03, as well as were obtained the respective signatures of Free and Clarified Consent Term by the participants.

Results and discussions

Socio-demographic characteristics of volleyball coaches

Regarding the academic formation, $n = 4$ of volleyball coaches were merely graduate and $n = 2$ carried out a specialization course (post-graduation). As regards the experience as volleyball athlete, $n = 5$ were modality athletes, with average at $10.5 + 6.5$ years of athletic experience. Among the interviewees, only $n = 1$ was never a volleyball athlete.

The interviewees related long professional experience as volleyball coach (18.3 + 10.1 years). As regards the acting in state selections, n = 4 of the interviewed coaches, already occupied the state selection coach function in the volleyball formation levels. The average time of intervention was at 5.3 years, being that only n = 2 never worked as state selection coach. Beyond that, the volleyball coaches acted in the researched teams for less than 5 years.

Game systems used by the volleyball teams

All volleyball coaches interviewed (n=6) related that utilized the 5:1 system (system that has a setter and five attackers) as offensive system of its teams. Araújo (1999) found that, in the youngest male formation level, 100% of coaches utilize the 5:1 game system, showing setter' function importance in the teams. As regards the reception system, while n = 4 (67%) utilized the system with 2 or 3 receivers depending on the service opponent, n = 2 (33%) utilized the system with 3 priority receivers. Similar results were found in the study carried out with cariocas volleyball coaches, where 75% of youngest male teams utilize the system with 2 or 3 receivers depending on the service opponent (ARAÚJO, 1999). In Kolbe study (2006), made with volleyball teams of São Paulo become clear that 80% of the female teams and 66% of the male teams utilized as tactical system the 5:1. According to Baiano (2005), the 5x1 system is the most efficient one; because, beyond prioritize the attack, also worry with the ball recuperation in the defense and the improvement in the service reception. The 3:2:1 system, also named of 6 set back or still of correspondent cover, because the player of the position "6" is the responsible one by all the baseline, was the defensive system that all of the coaches, n = 6 (100%) utilized in its teams.

Selection criteria of youngest male setters in the volleyball

The athletes' selection process should consider different indicator of performance as anthropometrics (weight, stature, scope, members length), conditioning (flexibility, force and resistance, speed of displacement and of reaction), technical-coordinating (technique and regularity of execution of the fundamentals), tactics-cognitive (capacity of perception and analysis of the situations of game, capacity of anticipa-

tion and decision) and psychological (self-confidence, leadership, motivation, team spirit, capacity of concentration) (KONRAD; NASCIMENTO; BARROS, 2002).

Dias (2004) mentioned in his study "a good setter characterizes by a good domain of the technical-tactical procedure of pass, the adaptation to the adverse situations of the game; and still elevated agility, unpredictability and precision". Queiroga (2005) did an association to the psychological aspects, considering the confidence characteristics, leadership, management, strategy, communication, beyond a good vision of game and elevated tactical capacity.

Fernandes (2004) declared in his study, which found no documents that specifically treat about when should occurs the specialization process or the players' positions choice in the volleyball teams, leaving, like this, the decision in the coaches hands based on experience and intuition. Maia, Mesquita (2006) and Fernandes (2004) cited that the specialization is not temporally defined, however tendentially occurs first with the setter, by the technical particularities that the even presents aggregated to the specific demands of the game.

The volleyball coaches investigated in this study were questioned about the importance attributed to the performance factors in setter' selection. According to the data contained in the Table 1, in the youngest male setter' selection, the volleyball coaches prioritized the technical-coordinating factors, followed by the tactical-cognitive factors and psychological factors. Finally, it considered the conditional and anthropometric factors. Those data coincided with the results obtained by Araújo (1999) and Nascimento et Al. (2001), that have the same importance order to the performance factors in the inquiries with catarinenses and cariocas coaches, respectively, in male teams of this age level and opposed the of Milistetd et Al. (2009) of analyzes the experts coaches conception about the functional specialization process in the sporting formation of volleyball players in long term that 41.6% of interviewees valued the physical indicator, followed by 36.9% of the technical indicator and 21.5% of the psychological indicator.

Table 1: Importance attributed to performance factors in the selection of setter

Factors	Importance				
	1	2	3	4	5
Technical-coordinating	67%	16.5%	16.5%	-	-
Tactical-cognitive	-	67%	-	33%	-
Psychological	33%	-	33%	-	33%
Conditional	-	-	50%	16.5%	33%
Anthropometric	-	16.5%	-	50%	33%
Total	100%	100%	100%	100%	100%

Legend: 1 – Fundamental; 2 – Very Important; 3 – Important; 4 – Little Important; 5 – Nothing important

Regarding the anthropometric factors (Table 2), the volleyball coaches detached as main indicators the body mass and the upper members' length. The data obtained did not coincide with those found by Araújo (1999), whose coaches investigated aimed the most important height in the youngest male setters' selection.

Table 2: Importance attributed to performance factors in the selection of setter

Indicators	Average	Standard Deviation
<i>Anthropometric Factors</i>		
Stature	3.3	+ 0.8
Body Mass	4	+ 1.1
Scope	3.5	+ 1
Upper Members Length	3.5	+ 1.2
Lower Extremity Length	2.8	+ 0.7
<i>Conditional factors</i>		
Flexibility	3.5	+ 0.5
Resistance	3.6	+ 1.2
Strength	3.8	+ 0.7
Displacement Speed	4.6	+ 0.8
Reaction Speed	4.8	+ 0.4
<i>Technical-Coordinating Factors</i>		
Technique of Execution of the Touch	4.8	+ 0.4
Technique of Execution of Forearm Pass	3.3	+s 0.8
Technique of Execution of Dump	2.5	+ 0.5
Technique of Execution of Block	4	+ 0.6
Regularity in the Execution of Fundamentals	4.3	+ 0.8
<i>Tactical-Cognitive Factors</i>		
Perception Capacity of the game situations	4.5	+ 0.8
Analysis Capacity of the Game Situations	4.6	+ 0.5
Anticipation Capacity	5	0
Decision Capacity	5	0
<i>Psychological Factors</i>		
Self-confidence	4.3	+ 0.5
Leadership	5	0
Motivation	4.5	+ 0.8
Team Spirit	4.5	+ 0.5
Concentration Capacity	4.8	+ 0.4

As regards the conditional factors (Table 2), the reaction speed and the displacement speed appeared with bigger highlight and were considered by volleyball coaches as fundamental in the setters' selection process. The reaction speed, execution speed and displacement speed also appeared as being the more important selection criteria in Araújo inquiry (1999), showing relative resemblance in the opinion of catarinenses and cariocas volleyball coaches as regards the indicators of the conditional factors of the youngest male setters' selection.

Concerning to the technical-coordinating factors (Table 2), we can perceive that the technique of ball touch execution, as well as the regularity in the fundamentals execution, it was considered very important by the volleyball coaches investigated. These results corroborate the evidences obtained by Nascimento et Al. (2001) and Araújo (1999).

Concerning to the tactical-cognitive factors, the catarinenses volleyball coaches considered all of the selection indicators as fundamental, detaching mainly the anticipation capacity and the decision capacity. Araújo (1999) and Nascimento et Al. (2001) presented similar results in their inquiries, with the decision capacity being the most important tactical-cognitive indicator in the youngest male setter' selection process, followed by the analysis and perception capacities of the game situations and the anticipation capacity.

As regards to the psychological factors (Table 2), data revealed that all indicators, with exception of self-confidence, were considered fundamental by catarinense volleyball coaches. The leadership and the concentration capacity had bigger highlight as psychological criterion of setters' selection in the youngest male level. Comparing with the results of Araújo study (1999), we note that there are not resemblances in the results, although the author has found in her research the concentration capacity in maximum levels and the motivation as one of the most important indicators.

In spite of attribute determined importance to the factors and selection indicators, the subjectivity in the selection procedures was aimed by all volleyball coaches investigated. The volleyball coaches prioritize the observation not systematical of athlete in the training sessions, i.e., the majority of the coaches observes the ball touch execution technique and the psychological aspects (leadership that athlete exercises about the group) as selection process. Those data coincide with the Araújo data (1999), which 100% of the coaches participants of the in-

quiry utilize subjective methods in setter' selection process (youngest male), and only 25% make additional use of objective methods.

Training characteristics of youngest male setters

Regarding the sessions weekly frequency of teams' technical-tactical preparation (Table 3), it was established that there is not a homogeneity between the volleyball coaches investigated as regards the technical-tactical training sessions number in the basic, specific, competitive periods and transition.

Table 3: Weekly frequency of technical-tactical preparation sessions of teams

Frequency \ Periods	6 times	5 times	4 times	3 times	2 times	No trains	Total
	%	%	%	%	%	%	%
Basic	16.5	33	16.5	-	16.5	16.5	100
Specific	16.5	33	16.5	16.5	16.5	-	100
Competitive	33	33	16.5	16.5	-	-	100
Transition	-	-	50	33	-	16.5	100

In the basic period (66%) predominated the frequency of 4 to 6 of weekly sessions of technical-tactical training. However in the specific period, the number of weekly sessions varied of 2 to 6, being that n = 2 (33%) of volleyball coaches utilize 5 weekly sessions in the preparation of its teams. In the competitive period, n = 4 (66%) of coaches utilized of 5 to 6 weekly sessions of training. On the other hand, in the transition period, n = 5 (83%) of the volleyball coaches concentrate the technical-tactical training of its teams in 3 to 4 times a week.

In Silva; Tumelero study (2007) with youngest male volleyball athletes we established a weekly frequency of training sessions of 5 times a week, with emphasis in the physical, technical and tactical part.

The results revealed the care of the catarinense volleyball coaches with training rationalization, associated to the methodological substantiation and work organization pointed by Lima (2000). Beyond stimulate pleasure by the game and the modality, the training rationalization needs to respect the deep interests of the players that are going to do a sporting career, developing the pleasure of train and compete.

As regards the sessions weekly frequency of teams physical preparation (Table 4), it is establishes once again that there is not homogeneity concerning to weekly frequency of physical preparation sessions between the volleyball interviewed coaches. Whereas in the basic pe-



riod (50%) predominated the frequency of 5 times a week, in the specific and competitive periods, the volleyball coaches concentrate the physical preparation sessions in 3 times a week (67%).

Table 4: Weekly frequency of physical preparation sessions of teams

Frequency \ Periods	6 times	5 times	4 times	3 times	2 times	No trains	Total
	%	%	%	%	%	%	%
Basic	16.5	50	17	-	16.5	-	100
Specific	-	16.5	16.5	67	-	-	100
Competitive	-	16.5	-	67	-	16.5	100
Transition	17	33	-	17	33	-	100

In the transition period, 50% of interviewees concentrated the physical preparation sessions in 5 to 6 times a week and the others 50% in 2 to 3 times a week. Considering the calendar and the periodization of the sporting season, we note a high physical training volume in the basic and transition periods

Concerning the utilization of setter' individualized training, all coaches (n=6; 100%) answered that did use of this type of training in the technical-tactical preparation of its setters. The fact of setter is the player that more participates in the game actions it seems to justify the worry of the volleyball coaches in train its setters in a special way and separately of the group.

As regards the training periods in that is carried out the individualized training of setter, n = 5 (83%) of the volleyball interviewed coaches concentrated that type of training in the specific and basic periods. In the study of Araújo (1999), only 50% of the coaches of youngest male category utilized specific training in all sessions of teams training.

The high incidence of the individualized training of setter in the basic period is because, in that period, the worry is the formation/preparation of athlete for that function, which requires a lot technical ability. Moreover, n = 4 (67%) of the volleyball interviewed coaches utilized, at least, 3 weekly sessions for the individualized training.

An aspect to highlight is that all volleyball investigated coaches, n = 6 (100%), affirmed that utilize the complementary training in the preparation of setter by, at least, 2 to 3 times a week. Besides it show that the individualized training is not sufficient in the technical preparation of the setter, the high level achieved by youngest teams in the catarinenses championships has justified the achievement of complementary training, especially in the competitive, specific, and basic pe-

riods, for correct eventual faults of that player in the course of the trainings, friendly and in the competition.

The worry of the volleyball coaches in provides to all players, in special to setters, a positive sporting experience and gratifying stayed evidenced in the interviews. Indeed, the investigated coaches it seem to attend the recommendations of Graça (2000) as regards the need of create the conditions and supply the resources that players more need for deal with tasks of their development as athlete and as person, mainly for build a positive image of itself.

The results of Table 5 revealed that also there is little homogeneity between the interviewed coaches regarding the exercises utilized and respective weekly frequency in the training of setter.

Table 5: Weekly frequency of the exercises utilized in the training sessions of setter

Periods	Frequency	6 times	5 times	4 times	3 times	2 times	No trains	Total
		%	%	%	%	%	%	%
Exercises of direction		16.5	33	-	16.5	33	-	100
Exercises of strength		-	16.5	33	50	-	-	100
Exercises of ball time		-	50	16.5	33	-	-	100
Exercises of individual technique		16.5	50	16.5	16.5	-	-	100
Exercises of tactics (collective)		-	-	33	33	33	-	100
Exercises in situations of game (collective)		-	33	16.5	16.5	33	-	100

In general, the direction exercises and in game situations are carried out by 67% of the coaches, between 2 and 5 times a week. All coaches (100%) affirmed to carry out of 3 to 5 times a week ball time exercises and force exercises with their setters. Whereas 67% of coaches utilize exercises of individual technique 5 to 6 times a week, all coaches (100%) carry out exercises of collective tactics of 2 to 4 times a week.

Regarding the weekly frequency of the different types of exercises utilized in the complementary training of setter (Table 6), the interviewed coaches related that utilize 4 to 5 times a week, direction exercises and exercises of individual technique.

Table 6: Weekly frequency of exercises utilized in the sessions of complementary training of setter

Periods	Frequency	6 times	5 times	4 times	3 times	2 times	No trains	Total
		%	%	%	%	%	%	%
Exercises of direction	-	50	16.5	16.5	16.5	-	-	100
Exercises of strength	-	33	16.5	16.5	33	-	-	100
Exercises of ball time	-	16.5	-	33	50	-	-	100
Exercises of individual technique	-	67	-	16.5	16.5	-	-	100
Exercises of tactics (individual)	-	16.5	16.5	33	33	-	-	100

The evidences found it seem to indicate a greater worry of the coaches in adjust the relation between the set and the attack, confirmed by higher weekly frequency of exercises of individual technique and of time of ball in the sessions of individualized training. Moreover, the major individual technique exercises incidence, of direction and strength exercises in the sessions of complementary training detaches how the technique and the direction are indispensable to a good setter, as well as the strength is necessary to put the ball in the extremities.

The exercises diversity implemented by the coaches it seem to attend the recommendations of Mesquita and Graça (2002), as regards need not only put setters in closed situations, but also in game situations to develop a consistent standard of decision-making related to the strategic options facing situational opposition of the game.

Conclusions

As regards the defensive and offensive systems used in youngest male teams, it was found that the catarinense volleyball coaches utilized the offensive system 5:1 and the defense system 3:2:1. Most volleyball coaches utilize the reception system with 2 or 3 priority receivers, depending on the serve opponent.

Concerning the yield factors considered by catarinenses volleyball coaches in youngest male setters' selection, it was found the greater importance attributed to psychological, tactical-cognitive, and technical-coordinating factors, the results are similar to those related in other inquiries with this age level.

Regarding the selection indicators prioritized by the catarinense volleyball coaches, it was detected the bigger worry with the body mass, the reaction speed and the displacement speed, the execution technique of ball touch, the anticipation capacity and the decision capacity, the leadership and the concentration capacity. However, all

coaches utilize the subjective method in the selection of setters from the non-systematic observation of athlete in training situations.

However, in the setters' individualized training, all volleyball coaches utilized this procedure, mainly in the specific and basic periods, with weekly frequency of 3 sessions. The sessions of complementary training with setters happened at competitive, specific, and basic periods, with weekly frequency of 2 to 3 times.

In general, the results found in this inquiry supply important information about the procedures adopted in the first thin specific selection of the setter, and the procedures used in the youngest male setters' training. Moreover, the homogeneity in the importance attributed by the volleyball-interviewed coaches as regards the factors and selection indicator of setters it seems to reveal the existence of a catarinense school of setters' formation.

The frequent use of individualized training and complementary sessions for setters reveals a big worry of catarinenses coaches with the set quality. Further, considering the elevated level of the games of that category, have a setter well selected and trained became indispensable for the result of the matches and state championships.

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Recebido em: 23/09/2009

Revisado em: 13/11/2009

Aprovado em: 10/05/2010

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