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Original article

Characterization of the technical-tactical level of beach volleyball in the initiation category, in Cuba

Caracterización del nivel técnico-táctico del voleibol de playa en la categoría de iniciación, en Cuba

Caracterização do nível técnico-tático em jogadores cubanos de vôlei de praia da categoria pioneira

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ABSTRACT

In Cuba, a current challenge for beach volleyball specialists is to advance in the solution of the different problems of the technical-tactical preparation process; however, the aspects that characterize it in the initiation category are unknown, which hinders the work of coaches to develop an adequate training process. Hence, the objective of the study was to characterize the technical-tactical level of the players at this level of competition, in Cuba. The research is of a descriptive type, where methods such as documentary review, observation and statistical-mathematical were used that allowed to obtain and process the results of the technical-tactical test applied to the players as an evaluation of the pedagogical objectives in the 1st National Championship of this category, in 2019. It was evident that more than 50% of male players and 65% of female players had a low or very low level of performance. Players aged 12, in the male category, and 11, in the female category, showed the most adverse results. The information obtained is considered to be of reference value for this sport at the initiation level.

Keywords: training, initiation, technical-tactical performance, beach volleyball

RESUMEN

En Cuba, un reto actual para los especialistas del voleibol de playa es avanzar en la solución de las diferentes problemáticas del proceso de preparación técnico-táctica; sin embargo, se desconocen los aspectos que lo caracterizan en la categoría de iniciación, lo que obstaculiza la labor de los entrenadores para desarrollar un adecuado proceso de formación. De ahí que el objetivo del estudio fue caracterizar el nivel técnico-táctico de los jugadores a este nivel de competición, en Cuba. La investigación es de tipo descriptiva, donde se utilizaron métodos como la revisión documental, la observación y el estadístico-matemático que permitieron obtener y procesar los resultados de la prueba técnico-táctica aplicada a los jugadores como evaluación de los objetivos pedagógicos en la edición del 1^{er} Campeonato Nacional de esta categoría, en 2019. Se evidenció que en más del 50 % de los jugadores del sexo masculino y el 65 %, del sexo femenino predominó un nivel de rendimiento bajo o muy bajo. Fueron los jugadores de 12 años, en el masculino y de 11, en el femenino, los que



mostraron el resultado más adverso. La información obtenida se considera con valor de referencia para este deporte en el nivel de iniciación.

Palabras clave: entrenamiento, iniciación, rendimiento técnico-táctico, voleibol de playa

RESUMO

Um desafio atual dos especialistas do Voleibol de Praia em Cuba é avançar na solução dos diversos problemas do processo de preparação técnico-tático dos nossos jogadores. Porém, são desconhecidos os aspectos que caracterizam o nível técnico-tático na categoria pioneira, o que dificulta o trabalho dos treinadores para desenvolver um processo de treinamento adequado. Assim, o objetivo do estudo foi caracterizar o nível técnico-tático dos jogadores deste nível de competição em Cuba. Métodos como revisão documental, observação e estatístico-matemático foram utilizados para obtenção e processamento dos resultados da prova técnico-tática aplicada aos jogadores, no âmbito da avaliação dos objetivos pedagógicos na edição do primeiro campeonato nacional pioneiro de 2019. Foi evidente que em mais de 50% dos jogadores masculinos e 65% das jogadoras femininas predomina um nível de desempenho Baixo ou Muito Baixo. As jogadoras de 12 anos no futebol masculino e as jogadoras de 11 anos no futebol feminino foram as que apresentaram resultados mais adversos. As informações obtidas constituem valores de referência para esta modalidade no nível iniciante.

Palavras-chave: treinamento, iniciação, desempenho técnico-tático, voleibol de praia

INTRODUCTION

Beach volleyball is a team sport characterized by the presence of a net and its hallmark is the game played on sand, a very unstable surface that makes the technical-tactical actions of the players more difficult; it is not only played on beaches, but has invaded large cities and metropolises on all continents, and unlike other sports games, it is made up of technical-



tactical actions that are developed sequentially and make up the typical phases (Griego , et al., 2021).

In Cuba, the official practice of this sport dates back to 1987 and began with the inverted pyramid, as the competitions started from the senior category until finally reaching the base category (11-12 years old). The first competition at this level was recent, held in April 2019, and the second championship on the same date in 2022 and these are the only two editions held so far. These circumstances mean that there are still gaps that underlie the initial training in this sport, mainly in relation to the technical-tactical component.

According to Griego (2019), Cuban coaches have based the preparation of their players on the training concepts of their volleyball counterpart and have made adaptations without taking into consideration the differences between both modalities, a national reality far removed from the most current concepts and trends in sports training. This is the fundamental reason for recognizing that the preparation of players requires carrying out actions aimed at studying competitive activity and considering the characteristics of the players and the competition, in order to establish the reference values that guide the training process (Giatsis , et. al., 2023).

Performance monitoring allows to analyze the development of the technical-tactical actions executed by the players and the team. The mastery of these skills can vary according to the competitive level of the players and the training process; therefore, it is essential to establish an adequate follow-up to their development (Alzate, Ayala and Melo, 2017; Palao and López, 2012). It is for this reason that performance indicators are crucial for the management of preparation and competition (Drikos , et al., 2021; Giatsi , et. al., 2023).

High-level competition in this sport is becoming more and more demanding and leveled, hence the importance of laying the foundations for a solid development of technical-tactical skills from the initiation stage of the sport (Da Silva, et. al., 2023; López, et. al., 2022; Mon et al., 2019; Navelo, et. al., 2023). These circumstances have made the study of performance in competitions so relevant (Griego, et. al., 2022). It is currently impossible to speak of a successful preparation process for players in the initiation stage that is not adjusted to the



characteristics of the competitive activity; for this reason, it is considered a fundamental aspect to obtain the values and parameters that characterize the trends in each category (Palao and López, 2012).

All the information obtained from the performance of technical-tactical skills is useful information for the work of coaches in the process (Alzate, Ayala and Melo, 2017; Jiménez, Wambrug and García, 2020). In this context, it is necessary to point out that the current Comprehensive Athlete Preparation Program for Cuban beach volleyball (Cuban Volleyball Federation, 2021), does not yet offer elements characterizing beginner players and in this document, scientists and researchers are urged to work towards achieving these objectives. In this sense, it should be noted that scientific research on beach volleyball at the national level, despite having increased, is still very scarce (Griego, O., La Rosa and Griego, 2018; Griego, et al., 2021).

In the international context, research on beach volleyball has been mainly directed at the highest level of competition, and the characteristics of this sport at the initiation stage are little explored (López, 2012; Palao and López, 2012). In order to know the technical-tactical parameters of the game that characterize this initiation stage, it is necessary to carry out a detailed assessment of performance (Griego, O., Ojeda and Griego, 2020). In this way, reference values are obtained, which coaches can use to develop an adequate sports preparation process (Da Silva, et al., 2023), supported by the study of competitive activity.

This situation implies looking for the source of information, in the study of the competitive activity of this sport and the game actions, very specifically in the initiation category; however, very few studies have been carried out on the characteristics of Cuban beach volleyball at the base, so little is known about its characteristics and trends. Consequently, it is necessary to go in search of the reference values in the sports initiation stage and to carry out a more objective assessment of the evolution of the players, in order to conceive more appropriate sports preparation strategies (Arronte and Ferro, 2020; Palao, et. al., 2018).

In the specific literature, numerous research echo that technical-tactical performance is the fundamental field of scientific intervention, as a trend in the specialized analysis of sport



(Calero, et. al., 2023). As this category has just started its competitions at a national level, it does not have information regarding the particularities of the players who participate in it. Hence, the objective of this study was to provide a characterization of the technical-tactical level of Cuban beach volleyball players in the initiation category, which is understood as ages 11 and 12, respectively.

MATERIALS AND METHODS

The methodology used for the research was descriptive, with a non-experimental, cross-sectional and field design; it was non-experimental, since at no time it was intended to manipulate the variables under study, only the facts were described as they happened, to later proceed to their analysis (Hernández, Fernández and Baptista, 2010); it was cross-sectional, because the information was collected at a single time and through a field design that allowed the data to be handled safely and accurately (Bavaresco , 1997).

Context and participants. The population consisted of the 62 players who participated in the 1st Cuban National Championship, in the initiation category, in 2019; there were 32 (16 pairs) of males and 30 (15 pairs) of females who represented all the provinces of the country. It was highlighted, as a special rule, that these pairs were made up of an obligatory player of 11 years and another of 12 years.

Methodology. During the development of the research, an analysis was carried out of official documents such as the Comprehensive Program for the Preparation of Athletes and the Annual Call for this sport for competition in the category, a bibliographic review in search of the elements that allowed establishing an identification of the technical-tactical level of Cuban beach volleyball players in the initiation category, which included articles published in Cuban journals specialized in sports such as Arrancada, Ciencia y Actividades Física, Pódium, Olimpia, Acción and Deporvida. Theoretical and empirical methods were applied, such as analysis-synthesis, inductive-deductive, structured observation and mathematical statistics, which allowed the research to move through two stages.



In the first, after the documentary analysis, it was decided to use the technical-tactical test established and validated by Griego (2019), approved by the Cuban Volleyball Federation (FCV) to evaluate the players' results in meeting the pedagogical objectives in the championships of the sports initiation categories in beach volleyball in Cuba. Later, in the development of the competition, observation was used to evaluate the performance of each player and pair in carrying out said test.

The observation and data collection protocol was carried out following all the parameters as established in the execution of the technical-tactical test (Griego, 2019), there were seven observers and decisions were made by majority consensus. It is important to highlight that the main author of this article directed the preparation process of the observers and the performance of the evaluation during its implementation in the competition.

In this way, access was gained to all the models that summarize the evaluation corresponding to each pair participating in the competition. After having all the information, in a second stage of the research, a table work was developed for the analysis and evaluation of the protocols of results obtained by the players individually and by each pair participating in the event. The data was quantified and processed with the statistical program Excel.

RESULTS AND DISCUSSION

As a result of the first stage of research, it was considered more accepted for the purposes of the study to use the technical-tactical test (Griego, 2019), which evaluates the performance of players in the competition. Table 1 shows the content of the elements that were determined to be observed and assessed in their practical execution.



Table 1. Observation and information collection protocol in the technical-tactical beach volleyball test (Griego, 2019)

Province	(Female) Players (Male)										
	(1)		(2)		(1)		(2)				
Serve (2)	(ETE)										(ETA)
	SUC		GBR		SZE		CGB		RL		
	F	M	F	M	F	M	F	M	F	M	
Receipt (2)	LCB		LMC		PCR		CM		BCP		
	F	M	F	M	F	M	F	M	F	M	
Pass over (4)	DDS		CBD		AMB		PAA		IZR		
	F	M	F	M	F	M	F	M	F	M	
Shots (5)	AUP		FR90°		ORR		GBR		RDP		
	F	M	F	M	F	M	F	M	F	M	
Blocking (3)	CFB		SMA		CZB		CAM		DC		
	F	M	F	M	F	M	F	M	F	M	
Defense (2)	AAR		LCB		BCP		FM		DIR		
	F	M	F	M	F	M	F	M	F	M	
Backward Shift (2)	SLC		MVR		HDA		FAM		CDE		
	F	M	F	M	F	M	F	M	F	M	



All this, from the perspective of evaluating technical and tactical execution in the following aspects:

- Serve (2 points): positioned correctly (SUC); hits with a straight arm (GBR); serves to the chosen area (SZE); hits the ball correctly (CGB); logical response (RL).
- Reception (2 points): reaches the ball comfortably (LCB); receives the ball in the middle of the body (LMC); remains in a comfortable position to shoot (PCR); coordination of movements (CM); comfortable ball for passing (BCP).
- Overhand pass (4 points): movements when defining the throw-in (DDS); positions himself well under the ball (CDB); adequate ball handling (AMB); pass with adequate height (PAA); indicates the shooting area (IZR).
- Shots (5 points): adequate last step (AUP); knee flexion $H^{\circ}90^{\circ}$ (FR90°); observe the opponent to finish (ORR); hit with the straight arm (GBR); finish in the intended direction (RDP).
- Blocking (3 points): positioning in front of the ball (CFB); jumping appropriately (SMA); closing the blocking zone (CZB); correct hand action (CAM); communication with the partner (CC).
- Defense (2 points): anticipates the shooting action (AAR); reaches the ball comfortably (LCB); ball is comfortable for passing (BCP); fluidity of movement (FM); detects the intention of the shooter (DIR).
- Movements (2 points): correct lateral exit (SLC); maintains sight of the net (MVR); has the ability to move around the sand (HDA); anticipation for the motor action (AAM); quality of movement and delivery (CDE).

The data were collected from the results of the evaluations carried out on the 62 players participating in the competition, who were evaluated according to the regulations of this sport, established in the annual call for the initiation category and the applied test. In this way, a maximum of 20 points were awarded (distributed in the manner described above) to be achieved by each player in the technical-tactical evaluation, and the result was evaluated in the same way for each of the pairs participating in the competition. These points were



distributed according to the motor action carried out (Table 1). The results obtained were evaluated according to the score achieved as shown in Table 2.

Table 2. Evaluation scale according to points obtained by the players in the technical-tactical test.

Points (based on 20)	Assessment
From 15.5 to 20 points	Good (B)
From 10.5 to 15 points	Fair (R)
From 5.5 to 10 points	Poor (M)
Up to 5 points	Very poor (MM)

As a result of the second stage, the data was processed. The assessment carried out allowed to obtain the characteristics of the technical-tactical level of the beach volleyball players, beginner category, participating in the Cuban National Championship, in 2019, where the main exponents of this sport at the national level were represented. Table 3 shows the results of the male sex individually and of the pair that represented each province.

Table 3. Scores obtained by players and by provinces

Provinces	Points per player		Points achieved by each pair	Assessment	% of points obtained
	11 years	12 years			
Pinar del Río	9	11	10	M	50%
Isla de la juventud	4	4	4	MM	20%
Artemisa	5	8	6.5	M	32.5%
Mayabeque	8	9	8.5	M	42.5%
La habana	9	13	11	R	57.5%
Matanzas	6	9	7.5	M	37.5%
Villa Clara	12	7	9	M	45%
Cienfuegos	9	7	8	M	40%
Santi Spiritus	3	4	3.5	MM	17.5%



Ciego de Avila	19	20	19.5	B	97.5%
Camagüey	5	3	4	MM	20%
The Tunas	10	8	9	M	45%
Holguin	4	3	3.5	MM	17.5%
Santiago de Cuba	12	6	9	M	45%
Granma	9	7	8	M	40%
Guantanamo	6	7	6.5	M	32.5%
Average	8	8.2	8.5	M	42.5%

As it can be seen, the male gender was characterized by having a technical-tactical level considered to be poor, if it is taken into account the results that are seen in the evaluations carried out. It was evident that the largest number of pairs (10), which represented 62.5%, obtained a poor evaluation and only two, 12.5%, were between the parameters of good and fair. The average score obtained from the results per pair was evaluated as poor, since it barely exceeded 40%.

In an analysis of the data, from the point of view of age, it was found that, in a general sense, both ages had evaluations considered in the poor range, which meant deficiency in initial training.

In another order of analysis, table 3 indicated that more than 80% of the evaluations of the players individually showed values corresponding to evaluations between very poor and poor, a worrying aspect if it is aspired to a solid formation from the beginning, and it showed the low level of these players of the initiation category in Cuba. However, a curious fact found was that % of poor assessments, was higher at the age of 12 years and not at the age of 11 years; this was contradictory because older children are supposed to show better results.



Table 4. Summary of assessments by age in males

Indicators	Evaluations			
	Good (B)	fair (R)	Poor (M)	Very bad (MM)
Players aged 11 (16)	1 (6.25%)	2 (12.5%)	8 (50%)	5 (31.25%)
Players aged 12 (16)	1 (6.25%)	2 (12.5%)	9 (56.25%)	4 (25%)
Total number of players evaluated (32)	2 (6.25%)	4 (12.5%)	17 (53.125%)	9 (28.125%)

In the analysis corresponding to the female sex (Table 5), the results of the evaluations carried out on the 30 players present at the event were taken into account, since only the province of Las Tunas was not represented.

Table 5. Scores obtained by the players and by provinces

Provinces	Points per player		Points achieved by each pair	Assessment	% of points obtained
	11 years	12 years			
	Pinar del Río	7	10	8.5	M
Isla de la Juventud	6	7	6.5	M	32.5%
Artemisa	4	6	5	MM	25%
Mayabeque	3	8	5.5	M	27.5%
La habana	7	18	12.5	R	62.5%
Matanzas	6	6	6	M	30%
Villa Clara	7	9	8	M	40%
Cienfuegos	4	6	5	MM	25%
Santi Spiritus	6	5	5.5	M	27.5%
Ciego de Avila	4	4	4	MM	20%
Camagüey	6	7	6.5	M	32.5%
The Tunas	-	-	-	-	-



Holguin	5	3	4	MM	20%
Santiago de Cuba	6	6	6	M	30%
Granma	7	10	8.5	MM	42.5%
Guantanamo	7	6	6.5	M	32.5%
Average	6	7	6.5	M	32.5%

Table 6 shows that in this sex, the level is also characterized by being very low, which was observed in the results achieved by each player individually and by participating pairs. It was found that the largest number of pairs (9) obtained a poor evaluation, 60% of those present in the competition. Five pairs were evaluated as very poor, 33%. One pair obtained a fair evaluation, which is equivalent to 6% and none of them achieve results good in their evaluation, which revealed the training deficiencies. The average score obtained from the results for pairs in this sex had poor evaluation criteria and was another element that showed weaknesses, since it barely exceeded 30% of the possible points to be achieved.

When evaluating the results, from the point of view of age (Table 5), both ages reached evaluations considered in the poor range. It was observed that more than 65% of the players obtained values corresponding to evaluations between very poor and poor. The information corroborated the low level shown by these players at the initiation level in Cuba.

Table 6. Summary of assessments by age in the female sex

Indicators	Evaluations			
	Good (B)	fair (R)	Poor (M)	Very poor (MM)
11 year old players (15)	0 (0%)	0 (0%)	10 (66.6%)	5 (33.4%)
Players aged 12 (15)	1 (6.7%)	0 (0%)	11 (73.3%)	3 (20%)
Total number of players evaluated (30)	1 (3.4%)	0 (0%)	21 (70%)	9 (26.6%)



As a result of the comparison of the evaluations of both sexes, the female sex presented an even lower level. In another order of analysis, a detailed assessment was made of the results achieved by the teams that represented each region of the country. Table 6 shows the results corresponding to the western region of Cuba.

Table 7. Scores obtained by players and by provinces in the western region of Cuba

Provinces	Sex	Points per player		Points achieved by each pair	Assessment	% of points obtained
		11 years	12 years			
		Pinar del Río	M			
Isla de la Juventud	M	4	4	4	MM	20%
Artemisa	M	5	8	6.5	M	32.5%
Mayabeque	M	8	9	8.5	M	42.5%
La habana	M	9	13	11	R	57.5%
Matanzas	M	6	9	7.5	M	37.5%
Average		6.8	9	7.9	7.9 (M)	40%
Pinar del Río	F	7	10	8.5	M	42.5%
Isla de la juventud	F	6	7	6.5	M	32.5%
Artemisa	F	4	6	5	MM	25%
Mayabeque	F	3	8	5.5	M	27.5%
La Habana	F	7	18	12.5	R	62.5%
Matanzas	F	6	6	6	M	30%
Average		5.5	9	7.3	7.2 (M)	32%

It can be seen that in this region the general average of points in both sexes was below eight points (evaluation considered poor), a general average of possible points to be achieved in the evaluations was observed that was below 45%. It can also be seen that the difference in points between ages was greater in the case of the female sex, and in both cases, the older players achieved better results. Table 8 shows the results corresponding to the central region of Cuba.



Table 8. Score obtained by players and by provinces in the central region of Cuba

Provinces	Sex	Points per player		Points achieved by each pair	Assessment	% of points obtained
		11 years	12 years			
		Villa Clara	M			
Cienfuegos	M	9	7	8	M	40%
Santi Spiritus	M	3	4	3.5	MM	17.5%
Ciego de Avila	M	19	20	19.5	B	97.5%
Camagüey	M	5	3	4	MM	20%
Average		9.6	8.2	8.8	8.8 (M)	44%
Villa Clara	F	7	9	8	M	40%
Cienfuegos	F	4	6	5	MM	25%
Santi Spiritus	F	6	5	5.5	M	27.5%
Ciego de Avila	F	4	4	4	MM	20%
Camagüey	F	6	7	6.5	M	32.5%
Average		5.4	6.2	5.8	5.8 (M)	29%

In this region, in contrast to the previous one, the general average of points per pair was above eight points, but only in the male sex, although it is still a poor evaluation. The general average of points achieved by the region was below 45%, here a greater disparity was observed in the technical-tactical performance presented by both sexes. In relation to the result according to age, in this region the 11-year-old players achieved a better score than the 12-year-old players. This region was the only one with a good evaluation in the competition, but contradictorily it is where the greatest number of very poor evaluations were found. It could also be observed that the difference in points between ages was greater in the case of the female sex. Table 9 shows the results corresponding to the eastern region of Cuba.



Table 9. Scores obtained by players and by provinces in the eastern region of Cuba

Provinces	Sex	Points per player		Points achieved by each pair	Assessment	% of points obtained
		11 years	12 years			
		The Tunas	M			
Holguin	M	4	3	3.5	MM	17.5%
Santiago de Cuba	M	12	6	9	M	45%
Granma	M	9	7	8	M	40%
Guantanamo	M	6	7	6.5	M	32.5%
Average		8.2	6.2	7.2	7.2 (M)	34%
The Tunas	F	-	-	-	-	-
Holguin	F	5	3	4	MM	20%
Santiago de Cuba	F	6	6	6	M	30%
Granma	F	7	10	8.5	MM	42.5%
Guantanamo	F	7	6	6.5	M	32.5%
Average		6	6	6	6 (M)	31%

This region had the lowest average of points per pair in both sexes, around 6 points, and with an overall average of points possible to achieve in the region, it was below 35%, with all evaluations in the range of poor or very poor. In this region, as in the central region, the 11-year-old players achieved a better score than the 12-year-olds, but it was also the only one that did not have any evaluations of good or average.

The objective of this study was to characterize the technical-tactical level of Cuban players in the initiation category. This assessment was possible because the best exponents of the category in each province attended this championship. This type of research reveals the need to strengthen the basic training work with new perspectives and requires the beach volleyball family throughout the country to be aware of the need to study this phenomenon in depth as an element of improvement for the initial training work.



The need to ensure adequate transit of players of this sport through the performance pyramid in the country is considered, which can certify Cuban participation in the different levels of international competition, and in the same way, provide the national teams with players with a higher level of technical-tactical development, especially in the female sector, which is depressed at this time.

The fact that the percentage of poor evaluations was higher in male players aged 12 years, may be a consequence of the fact that the players with the best parameters of height and somatotype present in the competition were aged 11 years, this advantageous physical condition is always a differentiating element. This shows that there are talents to work with in the basic training quarry, but more efficient and accurate work is needed to consolidate such purposes.

Since there is no evidence from other similar studies in beach volleyball at a national level, the analyses carried out show that the low number of players evaluated as good in the competition are the result of the methodological deficiencies of the coaches in the initial training of the base.

As for the results by geographical regions, the male sex reaches a higher technical-tactical level than the female sex; this is an element of judgment, which although it may be given by the characteristics that physically differentiate boys and girls at these ages, the causes must be scientifically investigated. However, in the central region the difference between the sexes is more accentuated, there was only one good evaluation in the championship and it corresponded to the province of Ciego de Ávila (national champion of the male sex). In the female sex the evaluation was extremely opposite, which shows that the result of the training is not homogeneous throughout the national territory. By province, the most stable was La Habana, which demonstrates the weight of the capital of the country in the results of this sport in Cuba.



Scientific research in this context of the analysis of technical-tactical performance of beach volleyball in the initiation category in Cuba is not recurrent. A group of prospective actions is required that can be implemented in the future, based on the perception of coaches on the importance of consolidating the technical-tactical performance of their players, and raising the competitive level in initiation, as a need to contribute with scientific input to the updating of the Comprehensive Program for the Preparation of Athletes.

Numerous empirical studies, such as those developed by Griego (2019), Palao and López (2012), demonstrate the need for scientific contribution to the initial training level of beach volleyball. The results achieved in the present research facilitate the theoretical and methodological foundation to other research directly related to the subject, and at the same time, allow to improve the preparation of our coaches in the initial training, with the aim of establishing professional development strategies for the country's coaches, in addition to deepening the analysis of the technical-tactical performance of the players in the different competitions.

CONCLUSIONS

The results obtained in this research demonstrated the existence of a low level of technical-tactical development in beach volleyball in the initiation category of Cuba and showed the weaknesses existing in the basic training; based on this, a rethinking of the methodological work in the future is proposed.

It was evident that, despite the low level shown by the players in general, the greatest weaknesses were focused on the female gender. If compared with the reality of our national teams, it is a reflection of the current scenario.

The data obtained in this research can be used to establish relevant comparisons with other championships for the initial formation of the base and to continuously monitor the level of technical-tactical development achieved by the players at this level. Likewise, it allows coaches, managers and scholars of this sport to work to establish the relevant development strategies that allow reaching the highest level of competition.



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The author is responsible for writing the work and analyzing the documents.



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