Identification of Volleyball Players in Sports Associations in Tirana, Albania

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Abstract

Anthropometric and physical measurements are necessary to take place every year in age groups differents.The purpose of this study is to identify physical and anthropometric skills between ages in female volleyball players in Tirane,Albania. Methods: Participants in this study were (N=138) volleyball players from three Association Sports; the average age (15-16 yrs.). Measurement for anthropometrics (body weight, body height and waist circumference) and physical abilities T -TEST (Brian mac). Results: Results from ANOVA analysis between three Association Sports show significant differences. Multiple comparisons- LSD post hoc analysis showed results for anthropometrics and also for physical abilities showed different differences between groups of volleyball players.Conclusion: The results show the training process of volleyball players in Association Sports Tirana in Albania is conditioned by the factor available to develop training sessio in with a specific training purpose. There are changes in the agility and speed of the game of volleyball.The results of this study clearly show that the development of female volleyball agility improvement of the se skills scores can be achieved with a specific training model to help players improve their skills.

Keywords: volleyball, association, anthropometric, t-test

1. **Introduction**

Physical ability are of particular importance to every player who plays but specifically, physical skills play a crucial role and affect the intelligence and tactics of the game because during these games a high physical performance is required. Team games require a comprehensive preparation of skills such as technical, tactical, physical etc. Volleyball has become one of the most practiced sports in the world.

Volleyball is characterized by continuous jumps combined with blocks and spikes, numerous short-distance sprints as well as short agility movements that occur repeatedly throughout the match or training session [16]. In volleyball, anthropometric characteristics, individual physical performance and technical and tactical skills are most important factors that contribute to the success of a team in competitions [10]. The performance of these precise and structured movements depends on anthropometric parameters and physical abilities [12]. Also, players in volleyball need to have strength and power in high performance during the game [1]. Especially in the game of volleyball, this type of physical ability is of great importance [13] knowing that volleyball is a sport with short intervals and efficient physical loads combined with rest phases. According to scientists, the role of the coach in enhancing an athlete's performance is very important the increased indices of speed, strength, coordination and balance being able to contribute to achieve sports performance [15]. The coaches who deal with the training are convinced and oriented quite accurately that there is a difference in performance for the anthropometric parameters and physical abilities according to gender and positions in the field with regard to volleyball [2; 3; 4; 5; 6; 14] and in other team sports [7; 11]. The purpose of this study was to identify physical abilities in groups 15-16 years old female volleyball players in the Sports Associations Tirana in Albania. According to author's findings and experience, skill-based training could be a part of training programs in younger volleyball players where the intensity of training is not as high as in professional and elite volleyball players. However, studies investigating the effectiveness of game-based training in female volleyball are limited. Therefore, more research is needed in order to confirm this theory

2. Methods

Anthropometric measurements were carried out in the respective gyms of the sports associations, according to their training schedules. The volleyball players were also tested in the T-test skill test (Brian mac)

Protocols of the test

Body weight and height; Weight- Players were asked to remove their footwear (shoes, slippers, sandals etc.) and socks and step onto a scale stadiometer. It was recorded the weight measurement in kilogram. Height- Players were asked to remove their footwear (shoes, slippers, sandals etc.) and socks and step onto a scale stadiometer. They were asked to stand on the board facing the coach and also were asked to stand with feet together and heels against the backboard. It was recorded the height measurement was in centimetres.

Statistical Analysis

ANOVA is a statistical analysis for testing whether there is no significant difference between two or more group's means. This study used one-way ANOVA to investigate the significant difference by age groups. ANCOVA was used to test the main and interaction effects of the independent variable on the dependent variables, controlling for the effects of covariates. Multiple comparisons- LSD post hoc analysis showed results for variables measures in this study. After collecting field test data, it was used SPSS version 23, at $p \leq 00.5$ level.

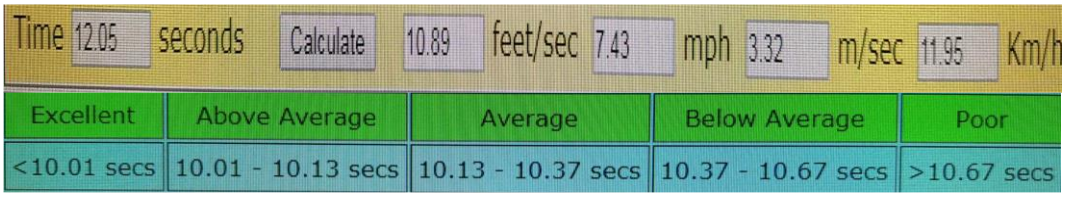
3. Results

Data from table 1 show descriptive statistics (mean, Std. Dev.) for anthropometric variables for the three sports associations with regard to volleyball girls. Participants in this study were (138) volleyball players. Descriptive mean data are shown for body height, body weight and waist circumference.

Table 1 Descriptive statistics for anthropometric variables in girls' volleyball players by age group categories

	Age	N	Mean	Std. Dev.
Body Height cm	(15-16 yrs.)	138	172.3	7.3
Body Weight kg	(15-16 yrs.)	138	63.6	8.7
Waist Circumference cm	(15-16 yrs.)	138	70.6	6.9

Figure 1. Descriptive statistics for T-Test variables in girls' volleyball players



4. Discussion

This study investigated the 3 associtation sports Tirane, Albania for female volleyball players for anthropometric parameters and physical fitness components in T-Test. T -TEST is the tests similar to volleyball players' movements in the front, back and forth The analysis of the T-Test and results is compared showed the lower level of skill volleyball players 15 -16 age old in associtation sports Tirane, Albania. Results from ANOVA analysis show significant differences between girls.The findings of this study are in line with the results of which found significant differences for body height.Comparison data for waist circumference between girls (mean difference= 0.4 cm; Sig= 0.895).Other data results from [9] showed that anthropometric parameters

are age dependent. Finding from [9] showed that physical performance seems to be dependent on the playing positions. Also most studies reveal that physical and physiological characteristics between playing positions in female volleyball players are age dependent [9; 8; 14]. In the best interest of the study, it would be good if other teams were involved from different cities of Albania. Suggestions for other studies we recommend in comparing data by positions in the field.

5. Conclusion

Results showed that anthropometric parameters are age-dependent. There are changes in T-Test between girls. The training process of volleyball players in Albania is conditioned by the factor available to develop training sessions with a specific training purpose. The results of this study clearly show that the development of female volleyball agility improvement of the se skills scores can be achieved with a specific training model to help players improve their skills.

6. Recommendations

This study has limitations with regards to the sampling number of female volleyball players which is justified for not having sufficient funds. In the best interest of the study, it would be good if other teams were involved from different cities of Albania.

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