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Constructing Norms for selected Skills of Volleyball Players

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Abstract

The purpose of this study was to construct norms for selected skills of volleyball players. For the purpose of the present study, sixty (N=60), male volleyball players of Guru Nanak Dev University, Amritsar between the age group of 18-25 years volunteered to participate in the study. All the subjects were informed about the objective and protocol of the study. Serve Test was conducted to test the skill in the volleyball serve consistency and accuracy. Fore-Arm Pass Test was conducted to measure the accuracy, height and consistency in the fore-arm pass. Set-Up Test was conducted to measure the set-up ability in volleyballers. In order to construct the norms, Percentile Scale was used. Further, the scores were classified into five grades i.e. very good, good, average, poor and very poor.

Keywords: Norms, serve, fore-arm pass, set-up, volleyball player.

Introduction

Skill is an athlete's ability to choose and perform the right techniques at the right time, successfully, regularly and with a minimum of effort. One of the most appealing reasons for talent research in sport is the hope that future talent can be predicted in "key transferable skills¹. An individual's ability to perform compound motor tasks has been considered to be a possible determinant of physical fitness^{2,3,4}. The construction of norms of athletic excellence evidenced in sports activities cemented communities of participation who valorized rigorous sorts of physical discipline in preparation for athletic competition and in expressing the highest degree of athletic skill. For this, research

is systematically conducted to identify the factors that help in achieving mastery of skill, which a player can attain through proper coaching and evaluation⁵.

Material and Methods

Subjects: For the purpose of the present study, sixty (N=60), male Volleyball Players of Guru Nanak Dev University, Amritsar between the age group of 18-25 years volunteered to participate in the study. All the subjects were informed about the objective and protocol of the study. The details of subjects are exhibited in figure-1.



Figure-1 Subject's Demographics

Methodology: Serve Test was conducted to test the skill in the volleyball serve consistency and accuracy. Fore-Arm Pass Test was conducted to measure the accuracy, height and consistency in the fore-arm pass. Set-Up Test was conducted to measure the set-up ability in volleyballers.

Statistical Technique Employed: The data, which was collected by administering tests, was statistically treated to develop for all the test items. In order to construct the norms, Percentile Scale was used. Further, the scores were classified into five grades i.e. very good, good, average, poor and very poor.

Results and Discussion

Table 1 shows that in Serve, the mean score was 25.450and standard deviation score was 5.40. In Fore-Arm Pass, the mean score was 33.150 and standard deviation score was 3.9. In Set-Up, the mean score was 5.6000 and standard deviation score was 1.26. The descriptive statistics (mean and standard

deviation) of selected Skills of volleyball players (N=60) has been presented graphically in figure 2 and the Percentile Plot (Hi and Low) of selected skills of volleyball Players (N=60) has been presented graphically in figure-3.

 Table-1

 Descriptive Statistics (Mean and Standard Deviation) and

 Percentile Plot (Hi and Low) of selected Skills of Volleyball

 Players (N=60)

Sr. No.	Test Items	Mean ± Dev	Standard iation	Hi	Low
1.	Serve	Mean	25.450	34.00	18.00
		SD	5.40		
2	Fore-Arm Pass	Mean	33.150	40.00	26.00
		SD	3.91		
3	Set-Up	Mean	5.6000	8.000	3.000
		SD	1.26		



Figure-2

Descriptive Statistics (Mean and Standard Deviation) of selected Skills of Volleyball Players (N=60)



Percentile Plot (Hi and Low) of selected Skills (i.e., Serve, Fore-Arm Pass and Set-Up) of Volleyball Players (N=60)

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Percentile Norms for the selected Physical: Fitness test items: The Percentile score received by Volleyball Players (N=60) for the selected Skills of Volleyball (i.e., Serve, Fore-Arm Pass andSet-Up)has been presented in the table 2.

Table-2 The Percentile score received by Volleyball Players (N=60) for the selected Skills of Volleyball (i.e., Serve, Fore-Arm Pass and Set-Un)

Percentile	Volleyball Players (N=60)					
	Serve	Fore-Arm Pass	Set-Up			
0	•		•			
10	20.0000	28.0000	4.0000			
20	20.0000	30.0000	4.0000			
30	21.0000	30.0000	5.0000			
40	22.0000	32.0000	5.0000			
50	24.0000	32.0000	5.5000			
60	27.0000	33.2000	6.0000			
70	31.0000	34.0000	6.0000			
80	32.0000	38.0000	7.0000			
90	32.0000	38.0000	7.0000			
100	34.0000	40.0000	8.0000			

Table 2 shows that in serve, the highest score was 34.0000 and lowest score was 20.0000. In fore-arm Pass, the highest score was 40.0000 and lowest score was 28.0000. In Set-Up, the highest score was 8.0000 and lowest score was 4.0000 of volleyball players (N=60).

Distribution of Grades Under Normal Distribution: For each of selected skills of volleyball players (N=60) five types of classification/grades i.e., very poor, poor, average, good and very good have also been prepared under Normal Distribution. Grades have been presented in table 3.

The values listed in table 3 gives a guide to expected scores for Volleyball Players (N=60) for the selected Skills of Volleyball (i.e., Serve, Fore-Arm Pass and Set-Up). In Serve, the scores below 14.65 are considered very poor, from about 14.65-20.05 is considered poor, 20.05-30.85 is considered average, 30.85-36.25 is considered good and the scores above 36.25 are considered very good. In Fore-Arm Pass, the scores below 25.33 are considered very poor, from about 25.33-29.24 is considered poor, 29.24-37.06 is considered average, 37.06-40.97 is considered good and the scores above 40.97 are considered very good. In Set-Up, the scores below 3.08 are considered very poor, from about 3.08-4.34 considered poor, 4.34-6.86 is considered average, 6.86-8.12 is considered good and the scores above 8.12 are considered very good.

Table-3					
Grading for selected Skills of Volleyball Players (N=60)					

Volleyball Skills	Very Poor	Poor	Average	Good	Very Good
Serve	Less than (<)14.65	14.65-20.05	20.05-30.85	30.85-36.25	Greater than (>)36.25
Fore-Arm Pass	Less than (<) 25.33	25.33-29.24	29.24-37.06	37.06-40.97	<i>Greater than</i> (>) 40.97
Set-Up	Less than (<) 3.08	3.08-4.34	4.34-6.86	6.86-8.12	<i>Greater than</i> (>)8.12



Normal distribution of selected volleyball skill selected Skills (i.e., Serve, Fore-Arm Pass andSet-Up) of Volleyball Players (N=60)

Conclusion

Based on the findings of this study, the following conclusions were drawn: i. In Serve, the scores below 14.65 are considered very poor, from about 14.65-20.05 is considered poor, 20.05-30.85 is considered average, 30.85-36.25 is considered good and the scores above 36.25 are considered very good. ii. In Fore-Arm Pass, the scores below 25.33 are considered very poor, from about 25.33-29.24 is considered poor, 29.24-37.06 is considered average, 37.06-40.97 is considered good and the scores above 40.97 are considered very good. iii. In Set-Up, the scores below 3.08 are considered very poor, from about 3.08-4.34 considered poor, 4.34-6.86 is considered average, 6.86-8.12 is considered good and the scores above 8.12 are considered very good.

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