

Development and Standardization of a Test Battery for Selection of Kabaddi Players

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Abstract

The Kabaddi players of the Vidarbha playing at senior level Kabaddi tournaments were considered as the total population of the study. The total population convenience sampling method was used to select the sample for the current study. The data was collected from total of 500 samples who participated at various college, club and association during 2011 to 2012. After step wise data collection, they were processed through a series of statistical analysis. The descriptive statistics of the collected score was done. The mean, median, and standard deviation was calculated. To find out the normality of the scores the skewness and the kurtosis were found out. Some of the scores from the data were removed as they were outliers. The outliers were found with the help of box plots through SPSS. The percentile method was used to create norms. The present norms of 9 physical fitness performance finally selected test items indicate that the distribution of scores of almost all the test items resides in the normal range of probability curve. The raw data was further converted into standard scores for the combining or comparing scores.

KEYWORDS :- Development, Standardization, Test Battery, Kabaddi.

Introduction

In India many states participated in national competitions and professional teams dominated die others. The main reasons of domination are lack of scientific training, coaching programme and quota system. In, Vidarbha region many teams participate at senior Kabaddi championship and all the matches are challenging, but after long experience as player the researcher noticed selection affect the team performance of Kabaddi players. The performance status of Kabaddi players of Vidarbha region in this game seems to be questionable at the national level. Presently after the study of previous research the investigators opined that selection of proper player as per the ability is the key of success. After the study of various research reviews in the field of physical education and sports many sports scientist the researcher understands the importance of standard criteria for evaluation the players. In Vidarbha region no such selection criteria is available for evaluate the senior player. In Vidarbha region no study has been done to know the physical fitness and skill status for senior Kabaddi players. Modern Kabaddi is a synthesis of the game played in various forms under different names. Kabaddi received international exposure during the 1936 Berlin Olympics, demonstrated by Hanuman Vyayam Prasarak Mandal, Amravati, and Maharashtra. Although various specific training methods are imparted on the Kabaddi players by efficient coaches with the support from the Union Government, the status of performance in national level is still very depressing. It has become our common experience that even though an athlete receives scientific training and coaching the team is showing no great progress. The basic reason, perhaps, lies with the unavailability of norms for selection of Kabaddi players. Surprisingly, no standardized Test Battery is available, at present, in order to select suitable players for exhibiting team performance in Kabaddi. Further, if progress is to be achieved in any sports, evaluation of sportsperson is a must. In India, till today, as

there is no standardized Test Battery for assessing and evaluating Kabaddi players, the investigation in this direction has significant relevance. The significance of present study, would be helpful and eventually contributed to the literature of Indian sports and Indian Kabaddi field in totality. This study would be a great contribution to the field of talent search of players, coaches, physical education teacher in the game of Kabaddi. In fact was help for necessary modifications in their coaching and teaching strategies in prepared Kabaddi players. The present study would be proving beneficial for the selection committee members for objective assessment and evaluation of performance ability of Kabaddi players. This study had providing an opportunity and encouragement the sports talents in Kabaddi with a hope that their efficiency would be accurately judged by developed test and norms. The Political involvement in sports influences selecting a player, overlooking the basic motor qualities, skill and other associated variables that may affect overall efficiency of a Kabaddi team. No specific performance factors (i.e. morphological, Physical fitness and skill) are assessed or evaluated prior to select a Kabaddi player. Moreover, selecting a player on the basis of a single a game situation is inaccurate. In Maharashtra, mere is no criteria available by which one can get at least a few guidelines of selecting talented players for Kabaddi. Researcher, on the basis his experience, scientific discussion with experts, physical education, doctors and reviews of literature is found that there is and immanent need of research in this area. It will be thought desirable to undertake the research project entitled **“Development and Standardization of a Test Battery for Selection of Kabaddi Players”**.

Objectives

To identify the performance variables of Kabaddi players.

To measure selected variables (physical fitness, morphological) of the talented Kabaddi players.

To develop and standardize norms and grading a suitable "Test Battery" to select talented Kabaddi players so as to form a standard Inter University Level Kabaddi.

Delimitations

This study would be delimited to the Senior Kabaddi game only. More specifically, the researcher intends to developed and standardized "Test battery" for selection of Senior Kabaddi players.

This study would be delimited to the selected major morphological, physical fitness components, and test variables necessary for the excellent performance in Kabaddi.

This study is restricted for the male senior Kabaddi players only.

Methodology

The population for the present study is the senior Kabbadi players participating in various tournaments conducted by different districts Kabbadi associations and Vidharbha region Kabbadi association in the Maharashtra state. Due to time constraint and for the convenience of research, the purposive sampling method has been used for the selection of sample for the study. Sample for the study is the senior Kabbadi players those who have been participated in senior Kabbadi championships which were organised by Vidharbha region Kabbadi association in 2011 and 2012. 14 Teams i.e. Total 1680 Players were selected out of that 500 was

selected randomly for the test. To measure the Morphological - Height, Standing Height measured in Centimeters, Weight measured in Kilograms, Waist-Hip Ratio and Body Fat was measured in Kilograms. In Physical Fitness Test 12 Min R/ Walk to measure the cardiovascular endurance scored in meters. 50 meter dash to measure the speed and recorded in seconds. Shuttle run to measure the agility and recorded in seconds. Standing broad jump to measure the explosive strength of leg muscles and recorded in meters. Sit & reach to measure the flexibility of back & hamstring and recorded in centimeters. Sit ups to measure the muscular endurance of abdominal muscles and recorded in numbers. Power hand grip to measure the muscular strength of forearm and recorded in kilogram.

Standard tests were administered to measure the items of each dimension for the data collection. Based on the nature of the variables (i.e. Morphological, Physical Fitness) the researcher collected proper equipments to conduct all the tests. To get reliable and valid result from the tests the equipments were thoroughly checked and their functional status was verified to ensure accuracy in data collection.

After step wise data collection, they were processed through a series of statistical analysis. The descriptive statistical of the collected score was done. The mean, median, and standard deviation was calculated. To find out the normality of the scores the skewness and the kurtosis were found with the help of box plots through SPSS.

Results

Consolidated chart of norms for physical fitness variables of Kabaddi players

| Percentile | Sit ups | Sit & Reach | Shuttle Run | 50 Meter Dash | Standing Broad Jump | 12 Min Run/Walk | Power Handgrip |
|------------|---------|-------------|-------------|---------------|---------------------|-----------------|----------------|
| 99 | 43 | 21.40 | 9.39 | 7.01 | 2.35 | 2730 | 42.00 |
| 95 | 42 | 18.76 | 9.58 | 7.08 | 2.25 | 2699 | 41.51 |
| 90 | 41 | 16.95 | 9.64 | 7.21 | 2.14 | 2641 | 39.75 |
| 85 | 40 | 15.84 | 9.76 | 7.24 | 2.08 | 2607 | 39.14 |
| 80 | 38 | 15.18 | 9.87 | 7.29 | 2.02 | 2587 | 38.76 |
| 75 | 37 | 14.56 | 9.91 | 7.41 | 1.96 | 2542 | 38.20 |
| 70 | 35 | 13.94 | 9.94 | 7.53 | 1.92 | 2487 | 37.24 |
| 65 | 34 | 13.25 | 9.96 | 7.60 | 1.88 | 2460 | 36.65 |
| 60 | 32 | 12.57 | 9.98 | 7.72 | 1.85 | 2442 | 35.08 |
| 55 | 30 | 11.92 | 10.09 | 7.89 | 1.82 | 2431 | 34.10 |
| 50 | 29 | 11.28 | 10.34 | 8.00 | 1.79 | 2405 | 33.29 |
| 45 | 28 | 10.66 | 10.45 | 8.01 | 1.75 | 2345 | 32.47 |
| 40 | 28 | 10.07 | 10.54 | 8.19 | 1.70 | 2305 | 32.27 |
| 35 | 27 | 9.48 | 10.62 | 8.39 | 1.63 | 2262 | 31.99 |
| 30 | 25 | 8.88 | 10.90 | 8.58 | 1.58 | 2196 | 31.32 |

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|----|----|------|-------|------|------|------|-------|
| 25 | 24 | 8.27 | 10.98 | 8.72 | 1.57 | 2180 | 30.80 |
| 20 | 23 | 7.64 | 11.70 | 8.93 | 1.55 | 2163 | 30.50 |
| 15 | 22 | 7.01 | 11.80 | 9.40 | 1.52 | 2143 | 29.85 |
| 10 | 21 | 6.20 | 12.22 | 9.59 | 1.50 | 2108 | 29.15 |
| 5 | 20 | 5.09 | 12.80 | 9.93 | 1.41 | 2019 | 29.03 |

Grading Scales of Variables

| Variables | Grades | | | | |
|---------------------|---------------|----------------|----------------|----------------|---------------|
| | Poor | Fair | Average | Good | Excellent |
| Sit ups | 23 & Below | 24 to 28 | 29 to 32 | 33 to 38 | 39 & Above |
| Sit & Reach | 7 & Below | 8 to 10 | 11 to 12 | 13 to 15 | 16 & Above |
| Shuttle Run | 12.22 & Above | 12.23 to 10.98 | 10.97 to 9.98 | 9.97 to 9.87 | 9.86 & Below |
| 50 Meter Dash | 9.93 & Above | 9.92 to 8.72 | 8.71 to 8.01 | 8.00 to 7.60 | 7.59 & Below |
| Standing Broad Jump | 1.55 & Below | 1.56 to 1.70 | 1.71 to 1.85 | 1.86 to 2.02 | 2.03 & Above |
| 12 Min Run/Walk | 2163 & Below | 2164 to 2305 | 2306 to 2442 | 2443 to 2587 | 2588 & Above |
| Power Hand Grip | 30.50 & Below | 30.51 to 32.27 | 32.28 to 35.08 | 35.09 to 38.76 | 38.77 & Above |

Conclusion:

Norms : Percentile scales for all the test items for male senior Kabaddi players constructed. Percentile scale seems to be appropriate because the heights performance in skill test receives the maximum scores whereas the lowest performance in the test items receives a score of 0. This type of scale is only suitable for the sample selected as in future as excellent player may exhibit better performance than the maximum performance of the scale in comparison to the given sample. In that case, still the performance will be given the maximum score. This seems to be the drawback in the percentile scale as this is only suitable for given group and it does not take any consideration for any performance i.e. either good or bad in feature.

Grading : Keeping the drawbacks of percentile scale in mind, it was thought appropriate to construct grading scales. This scale was appropriate for all the test items as a specific performance got a specific grade. It was thought appropriate to categories players into five categories i.e. excellent, very good, good, average and poor. Keeping the educational reforms in mind, there is a tend to award grades rather than the score in order to reduce stress and anxiety among the players. Thus, grading under normal distribution yielded a suitable scale. Status: The status of the player clearly indicates the lack of player's fitness and their skill level being nominal even when the players are playing at state level. Only 18 to 26 percent of players are found to be in the excellent category which is appalling aspect of the players and should be taken into consideration while planning training schedules for players. The percentage of players in the poor and average category is a reason to worry as they form a large chunk of the total population of players and this is one major reason for

teams not being successful. Status indicates that there is a need for using the norms for evaluation and assessing process which could bring in improvement in the players and the team.

The findings of the study are the percentile norms of 9 finally selected tests items indicate that the distribution of scores of almost all the test-items resides in the normal range of the probability curve. The norms of each item were graded as poor fair average good and excellent on the basis of criterion reference grading percentage methods. These findings indicate that the Kabaddi players must be selected on the basis of following criteria. To find out the Kabaddi players status, they were categorize according to points obtained by players as less than five points as poor, six to twenty five as fair, twenty six to fifty as average, fifty one to seventy five as good and seventy six above as a excellent. The Kabaddi players must develop their physical fitness for better performance.

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