International Journal of Physiology, Nutrition and Physical Education



ISSN: 2456-0057 IJPNPE 2021; 6(1): 263-266 © 2021 IJPNPE www.journalofsports.com Received: 13-02-2021 Accepted: 15-04-2021

Dr. Surekha S Daptare

Director of Physical Education, Samajshri Prashantdada Hiray Arts, Nashik, Maharashtra, India

Corresponding Author: Dr. Surekha S Daptare Director of Physical Education, Samajshri Prashantdada Hiray Arts, Nashik, Maharashtra, India

Development of norms for collegiate of Pune university

Dr. Surekha S Daptare

Abstract

The study titled "Development of Norms for collegiate Korfball players of Pune University" was done aged 18 to 29 years. The objective of the study was to norms for select Korfball Players. This study was restricted for the Korfball players of Pune University. A total of 414 subjects were chosen for the study. This study was delimited to test norms necessary for the excellent performance in korfball. After going through various reviews, books, and articles certain tests were not found in the any test battery. Researcher selected five major skills of korfball and constructed 4 korfball skill tests 1) Field Goal Test, 2) Speed Pass Test, 3) Footwork and Agility test and 4) Pivot Test. The tests were standardized by determining the objectivity, reliability and validity. Test retest method was used for reliability, correlation between different observers for objectivity and face validity were taken in to consideration for the standardization of the test. The Validity of skill tests found .87, .83, .88 and .85 respectively. The Reliability of skill tests for female found .78, .85, .83 and .8811 respectively and male 0.81, 0.88, 0.86, and 0.84 respectively. The Objectivity of skill tests for female found .96, .97, .98 and 1.00 respectively and for male 0.97, 0.95, 0.99 and 1.00 respectively. Descriptive analysis was done by testing the Mean, Median and Standard Deviation. The normality of the scores was tested through skewness and kurtosis. The outliers from the scores were removed using the Boxplots. The present norms of 4 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 performance norms of each skill test (items) were graded as poor, fair, average, good, and excellent on the basis of Rank order method. Grading scale of the score was given to help in selection separately for male and female.

Keywords: development teat, Pune university, collegiate, korfball players

Introduction

The study titled "Development of Norms for collegiate players of Pune University" was done on female aged 18 to 29 years. The objective of the study was to Development of a suitable 'Norms' to select Korfball Players. This study was restricted for the Korfball players of Pune University. A total of 414 subjects were chosen for the study.

This study was delimited to Skill test necessary for the excellent performance in korfball. After going through various reviews, books, and articles certain tests were not found in the any test battery. Researcher selected four major skills of korfball and constructed 4 korfball skill tests 1) Field Goal Test, 2) Speed Pass Test, 3) Footwork and Agility test and 4) Pivot Test. Construction of skill tests was done by reviewing following steps. In the beginning, purpose and format of the tests was decided by reviewing references and by discussion with the experts. Many criterions and literatures were reviewed and tests items were selected. Then the equipment and ground measurements were then decided after several experiments with the guidance of the experts. After the establishment of purpose of the test, proper procedure acquiring required equipment needed, a pilot study was conducted on the Korfball women players from Nashik and desired changes were made in the tests in order to make tests easier to administer. These constructed Korfball tests were then administered on the korfball players from Nashik District and to derive reliability, validity & objectivity.

Reliability, validity and objectivity were established by following procedure given in various books of tests, measurement and evaluation. A test is called reliable because there are reasons for believing the test to be stable and trustworthy. There are several methods of determining reliability of the test out of these; researcher used test-retest (repetition) method. The tests were given repeatedly on the same group and correlation computed between.

In this stage fifty (N = 50) college level 50 players (25 male and 25 female) korfball players from Nashik zone s different colleges from Pune University between 18 to 29 years were tested primarily by administrating the newly constructed test on first try out basis for reliability. The limitation in administrating each test item was recorded for further improvement of the test. After one month, the test item administered for second try out. The test retest was assessed for each test item and also for a test battery a whole. The significant reliability coefficient ensured the priminialy form of the test for develop validity.

The validity of test depends on the fidelity with which it measures what it supposed tomeasures. Researcher referred many ways for validating the skill tests as determining validity by means of judgements (face validity), determining the validity experimentally, factorial validity etc. and from these methods, determining the validity experimentally was used to find out validity of all constructed skill tests. Total 50 korfball players were selected and administered constructed skill tests on them. Also their rating of skill performance was done with the help of their coaches and teachers. Correlation between these skill tests scores and ranking was calculated to decide the validity of all constructed skill tests.

To decide the objectivity of all constructed skill tests, researcher took the help of experts from korfball field. Researcher administered all constructed korfball skill tests on 50 men players and made correlation between these two data sets to find out the objectivity of the tests.

Name of test item	Reliability	Reliability coefficient		Objectivity coefficient		
Name of test item	Female	Male	Male	Female	Validity coefficient	
Field goal test	0.785	0.815	0.97	0.96	0.87	
Speed Pass Test	0.852	0.882	0.95	0.97	0.83	
Footwork & Agility Test	0.831	0.861	0.99	0.98	0.88	
Pivot Test	0.819	0.849	1.00	1.00	0.85	

Table 1: Reliability, validity and objectivity of korfball test for female players

The Validity of skill tests found .87, .83, .88 and .85 respectively. The Reliability of skill tests for female found .78, .85, .83 and .8811 respectively and male 0.81, 0.88, 0.86, and 0.84 respectively. The Objectivity of skill tests for female found .96, .97, .98 and 1.00 respectively and for male 0.97, 0.95, 0.99 and 1.00 respectively. Descriptive analysis was done by testing the Mean, Median and Standard Deviation. The normality of the scores was tested through skewness and kurtosis. The outliers from the scores were removed using the Boxplots. The present norms of 4 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

performance norms of each skill test (items) were graded as poor, fair, average, good, and excellent on the basis of Rank order method.

The findings indicate that the Korfball players must be selected on the basis of following criteria. The 'Tests' can be successfully administered to discriminate between Korfball players for selection. Selection Committee and coaches can use these Tests as "selection criteria" for District, University, State, National and International Korfball Teams. This study will give players a guideline and target to prepare themselves for selection. Hence researcher recommends the use of tests, norms and grading prepared.

Test-items	Poor	Fair	Average	Good	Excellent
Field Goal Test	7 & below	8 to 9	10 to 11	12 to 13	14 & above
Speed Pass Test	32 & below	33 to 36	37 to 39	40 to 42	43& above
Footwork And Agility	20.01& above	20.00 to 19.09	19.08 to 18.19	18.18 to 17.15	17.14 & below
Pivot Test	11.32 & above	11.31 to 10.28	10.27 to 9.39	9.38 to 8.32	8.31 & below

Table 2: Grading scale on item-wise performance for selection of korfball male players

Table 3: Grading scale on item-wise performance fo	or selection of korfball female players
--	---

Test-items	Poor	Fair	Average	Good	Excellent
Field Goal Test	6 & below	7 to 9	10 to 11	11 to 12	13 & above
Speed Pass Test	32 & below	33 to 36	37 to 39	40 to 41	42 & above
Footwork And Agility	20.11 & above	20.10 to 19.12	19.11 to 18.40	18.39 to 17.20	17.19 & below
Pivot Test	11.94 & above	11.93 to 10.77	10.76 to 10.14	10.13 to 9.41	9.40 below

Norms of korfball skill tests

Percentile norms were developed for constructed skill tests as follows.

Percentile norms for female Percentile norms of korfball test for female

Table 4: Field goal speed pass footwork and agility pivoting test percentile points

	-			
99	17	50	16.20	8.08
95	16	46	16.66	8.51
90	15	44	16.90	9.10
85	14	42	17.06	9.29
80	12	41	17.20	9.41
75	12	41	17.66	9.78
70	11	40	17.90	9.88
65	11	40	18.19	10.00
60	11	39	18.40	10.14
55	10	39	18.73	10.22

International Journal of Physiology, Nutrition and Physical Education

50	10	38	18.92	10.39
45	9	38	19.06	10.41
40	9	36	19.12	10.77
35	9	35	19.28	11.08
30	8	34	19.38	11.21
25	7	32	19.77	11.46
20	6	32	20.11	11.94
15	6	30	20.36	12.38
10	5	28	21.10	13.14
5	3	25	21.79	13.71

Table shows the norms prepared for field goal test, foot work and agility test, pivoting skill test and speed pass test. Minimum percentile of field goal test is 3 points (5th Percentile) and that of Foot Work and Agility test, Pivoting Skill test and Speed Pass test are 21.79 sec., 13.71 sec. and 25 points respectively. Maximum percentile of field goal test is 17 points (99th Percentile) and that of Foot Work and Agility test, Pivoting Skill test and Speed Pass test are 16.20 sec., 8.08sec. And 50 points respectively. The fiftieth (0th Percentile) of field goal test is 10 points and that of Foot Work and Agility test, Pivoting Skill test and Speed Pass test are 18.31 sec., 9.57 sec. and 39 points respectively.

Percentile norms for male Percentile norms of korfball test for male

Table 5: Percentile norm	s of korfball test for male
--------------------------	-----------------------------

	Field goal test	Speed pass test	Footwork and agility test	Pivoting test
99	19	50	16.03	7.17
95	17	47	16.48	7.39
90	16	45	16.90	7.50
85	14	44	17.01	8.07
80	13	42	17.15	8.32
75	12	41	17.34	8.88
70	11	40	17.78	9.11
65	11	40	17.19	9.28
60	11	39	18.19	9.39
55	10	39	18.28	9.57
50	10	38	18.59	10.00
45	9	38	18.88	10.11
40	9	36	19.09	10.28
35	9	35	19.12	10.41
30	8	35	19.30	10.78
25	7	32	19.78	11.10
20	7	32	20.01	11.32
15	5	30	20.17	11.81
10	4	28	20.29	12.70
5	2	25	21.64	13.67

Table shows the norms prepared for field goal test, foot work and agility test, pivoting skill test and speed pass test. Minimum percentile of field goal test is 2 points (5th Percentile) and that of Foot Work and Agility test, Pivoting Skill test and Speed Pass test are 21.64 sec., 13.67 sec. and 25 points respectively. Maximum percentile of field goal test is 19 points (99th Percentile) and that of Foot Work and Agility test, Pivoting Skill test and Speed Pass test are 16.03 sec., 7.17 sec. And 50 points respectively. The fiftieth (0th Percentile) of field goal test is 10 points and that of Foot Work and Agility test, Pivoting Skill test and Speed Pass test are 18.59 sec., 9.57 sec. and 38 points respectively.

Conclusion

- Field goal skill test can measure the goal shooting skill of Female Korfball players.
- The field goal test is Valid, Reliable and Objective.
- Speed pass skill test can measure the passing skill of Female korfball Players.
- The Speed Pass test is Valid, Reliable and Objective.
- Foot work and Agility skill test can measure the Foot work and Agility skill of Female korfball players.
- The Foot work and Agility test is Valid, Reliable and

Objective.

- Pivot skill can measure the Pivoting skill test of Female korfball players.
- The Pivot test is Valid, Reliable and Objective.
- The norms of the test are gradable and can be useful to distinguish Korfball Female players having a good level of skill performance.

Recommendation

As the results appeared are promising, this study recommended that-

- The "Korfball Skill test" can be used as an additional criterion for making decision in team selection in korfball game.
- Similar study on different age groups and different levels has been recommended.
- Further study on some psychological variables is suggested.
- This newly develop test may, reasonably, be applied as a kind of guide or research tool to develop insights among the coaches, selection committee and Korfball players in relation to game performance and even to search talents in this game

- The Grading table prepared can be used but has to be updated time and again.
- The literature of physical education and sports is less informative with reference to the game "Korfball". The knowledge being evolved from the present piece of research could contribute a new direction by presenting a standardized "Korfball Skill Test" for the promotion of international game, which in turn could enrich the literature of physical education and sports.
- International Olympic association or international korfball association or sports scientist would get a proper insight for developing a nation wise norm of "Korfball Skill Test" which could be an additional contribution of knowledge to the sport literature.

Korfball clubs and teams

- The 'Test items' can be successfully administered to discriminate talented Korfball player.
- The score received using test items will help of the coaches to know the shortcoming of players in specific area and bring improvement.

Selection committee

- Selection Committee and coaches can use this Test items as a" selection criteria" Korfball players for the team.
- The test can be used as assessment tool and will help to adopt new strategies in training, coaching, and teaching so as to enhance the efficiency of players or Korfball team.

Players

• This study will give players a guideline and target to prepare themselves for selection. Hence researcher recommends the use of test items, norms and grading prepared.

References

- Vaidya D, Karvande A, Thorat B, Jinturkar S. Sharirik Shikshan Hastapustika: standard 5th. Mumbai: Maharashtra State Bureau of Textbook Production and Research 2006, P117.
- 2. Ajmer Singh, Jagdish Bains, Gill JS, Brar RS, Rathee N. Essential of Physical Education. New Delhi: Xpress Grafics 2004, 30-37.
- 3. Kamlesh ML, Physical Education Paper III. New Delhi: Khel Sahitya Kendra 2009, 100-114.
- 4. Vaidya D, Karvande A, Thorat B, Jinturkar S. Sharirik Shikshan Hastapustika: Standard 5th. Mumbai: Maharashtra State Bureau of Textbook Production and Research 2006, 117.
- Hastad DN. Measurement & Evaluation In Physical Education & Exercise Science (3 ed.). USA: Joseph E. Burns 1998, 3.
- 6. Verducci FM. Measurement Concept in Physical Education. St Louis: Mobsy Company 1980, 4.
- 7. Morrow JR. Measurement & Evaluation in Human Performance (2 ed.). USA: Human Kinetics 2000, 5.
- 8. Korfball history (N.D) Korfball. Retrieved on 12.01.08 from www.korfball.co.uk/whatiskorfball.html
- 9. Alston JD. The physical performance of high school girls on three physical tests. Completed research In health,

physical education and recreation Including International Sources 1965;7:74.

- 10. Bitcon LE. Validation of four item fitness test and norms for high school boys in state of lowa. Completed research In health, physical education and recreation 1965;8:37.
- 11. Beulah W. Comparison of selected tests of elementary school children. Completed research In health, physical education and recreation 1960;2:49.
- 12. Gormer MD. A Battery of tennis skill test for beginning and intermediate tennis players, Completed research in Health, Physical Education And Recreation 1987;29:75.
- 13. Kelley A. The validity and reliability of Borg's RPE scale in a field test. Completed research in Health, Physical Education and Recreation 1982;24:47.
- 14. Poteat CE. A Skill test battery to determine overall racquetball playing ability. Completed Research in Health, Physical Education And Recreation 1985;27:215.
- 15. Umfress LS. Test reliability and validity of basketball skills battery for secondary Girls. Completed Research in Health, Physical Education And Recreation 1978;20:38.