Original Research Paper

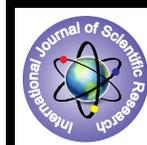# Construction of Shooting Test and Compilation of Norms for Women Handball Players

Physical Education

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ABSTRACT The purpose of this study was to construct a new skill battery and to develop standard norms for women Handball players. To achieve these purpose One hundred (N=100) women Handball players excluding goal keepers were randomly selected from various Colleges of Karnataka state, India and their age ranged between 18 to 23 years. The subject had past experience of in the Field of Handball and only those who represented their respective college teams were taken as subjects irrespective of their playing positions. The construction of skill tests are done in the pre pilot study and pilot study is explained in pre pilot study and pilot study. For this purpose, the investigator selected one hundred (N=100) women Handball players who participated in the intercollegiate tournament representing colleges. They were voluntarily involved in this process. Since the selected subjects were playing the game for many years together from their schools to colleges and they have adequate exposure on different skills of Handball. To compute norms, Hull scale was used. Within the limitations and delimitations of this study, the following conclusions were drawn, the scores were further classified into seven grades i.e. Very poor, poor, below average, average, above average, good and excellent.

INTRODUCTION

Handball is a recreational and enjoyable game; collegiate students like to play it both to enjoy it amateurly and to raise their career graph. Handball has always been regarded as a game of perception, timing, accuracy, and agility along with a high level of physical fitness. However, since a player has to change his situation/position in the game frequently, it tests a player's reserve state of athletic ability.

Measurement and evaluation are two sides of the same coin and are inseparable and help the physical educators and coaches in various stages of physical education programme such as planning, assessing, evaluating and restructuring. Such systematic and scientific values of measurement and evaluation direct the physical educators in the right direction, at the right time in the right place. Basically measurement and evaluation helps the physical educators in the following ways: evaluation of programme, classification of students, motivation, instruction, prediction, research and diagnosis in any.

Sports skill test are designed to measure the basic skills used in the playing of a specific sport. Because of the wide range of skills in most sports, a selection of the most important skill is invariably necessary. The selection is usually based keeping in mind the literature available, opinion of experts as well as by applying appropriate statistical techniques. The skill items collectively are called test battery. The skill test helps the students to evaluate their performance in the fundamental skills the game and to provide an incentive for improvement. The test also serves the purpose of helping the teachers/coach to measure student's/player's performance and to evaluate their own teaching/coaching procedure and programme.

Norms are necessary if the test scores are to be adequately interpreted. There are several types and it depends on the purposes of the test and the characteristics of the group to be tested as to which type is selected. The procedure for developing norms starts with the collection of scores on the test from a large sampling of students from the population for which the test was intended. The large collection of scores can be converted into some type of normative scores. On the basis of these norms performance and achievement can be adequately evaluated, scores can be properly interpreted and groups can be compared *(Anbarasu and Stephen 2014).*

MATERIALS AND METHOD

SELECTION OF SUBJECTS

The purpose of this study was to construct a new skill battery and to develop standard norms for women Handball players. To achieve these purpose One hundred (N=100) women Handball players excluding goal keepers were randomly selected from various Colleges of Karnataka state, India and their age ranged between 18 to 23 years. The subject had past experience of in the Field of Handball and only those who represented their respective college teams were taken as subjects irrespective of their playing positions.

CONSTRUCTION OF SKILL TESTS

The construction of skill tests are done in the pre pilot study and pilot study is explained in pre pilot study and pilot study. For this purpose, the investigator selected one hundred (N=100) women Handball players who participated in the intercollegiate tournament representing colleges. They were voluntarily involved in this process. Since the selected subjects were playing the game for many years together from their schools to colleges and they have adequate exposure on different skills of Handball.

SELECTION OF SKILLS

With a thorough observation of the requirements of the skills in the game of Handball and the assessment of existing Handball skill test, the investigator identified that skill test can be constructed to assess the Shooting (Front Shoot) following skill in Handball.
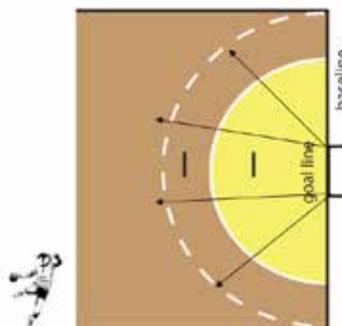
ADMINISTRATION OF THE TESTS
Front Shoot

Figure: 1

Shooting Test

Objective:
To measure the front shooting ability.

Equipments:
Handball Court with required markings, standard inflated Handball, Whistle, Chalk, cones, pad, pencil and goal post with marking hard board sheet were used.

Markings:
The one side handball court with goal area line and free throw line is marked with 5 zones namely Right Zone (RZ), Left Zone (LZ) and Centre Zone (CZ). The Right Zone (RZ) is divided into two Right Zone (RZ), i.e., Right Zone 1 (RZ1), and Right Zone 2 (RZ2). The Left Zone (RZ) is divided into two Left Zone (RZ), i.e., Left Zone 1 (RZ1), and Left Zone 2 (RZ2) and Centre Zone has only one. The Right Zone 1 (RZ1) is marked from the inner edge of the left side goal post with the degree of 36· degree angle, and Left side Zone 1 (LZ1) is marked from the inner edge of the right side goal post with the degree of 36· degree angle. The Center Zone and the Left Zone 2 (LZ2) and centre zone and Right Zone 2 (RZ2) is marked from the centre point of the goal post line with 36 degree angle.

A strong and hard, card board sheet marked as showed in the Figure-1 is fixed at the back side of the goal post.

Administration
The subjects have to take shots from the7 meters line in between the Goal are line 6 meters and free throw line 9 meters. Twenty attempts are given in a trail in which the subject has to make four attempts from each zone. Each of the four shots should not be taken from the same place, but from different places according to the subject's connivance, inside the zone making.

Note:
The subjects is allowed to take any type of shot, she should not touch the 6 meters goal area line.

Scoring
The points are awarded according to the place where the ball hits on the marking bard board sheet fixed behind the goal post. The number of points scored in the 20 attempts will be the trail score. Three trails will be given. The test score is the best out of three trails.

RESULTS
Computation of Norms
To compute norms, Hull scare was used. Norms were computed for each skill test constructed and the subjects were classified according to their ability, thereby establishing the objectivity of the skill tests constructed (*Barry and Nelson 1982).*

SHOOTING TEST
The data collected from one hundred Karnataka state women Handball players on constructed t Shoot test were statistically analyzed with the help of mean and standard deviation. The norms were prepared by using Hull Scale.

To construct the norms for the subject's shoot test were made statistical treatment. The mean value obtained was 35.90 points with standard deviation of ± 4.46. The hull scale was worked out to 0.12. To construct norms, the Hull scale value 0.12 was serially added to and subtracted from the mean for determining the values from zero to hundred in the scale.

Since numeral value of points and the standard of performance go in parallel proportions, the Hull Scale value of 0.19 points was added from the mean score of 35.90. Hence the college women front shoot performance for 51st score was 36.02 points. Similarly for the 49th score Hull scale value was deducted to mean score resulting 35.78 points. A subject performing 38.90 obtained 75 points in the scale. A subject performing 34.10 obtained 35 points in the scale. A subject performing 41.90 obtained 100 points in the scale.

The norms thus constructed from zero to hundred for Karnataka state women Handball players in Shooting skill is presented in Table- 1.

TABLE - 1
THE HULL SCALE OF NORMS FOR THE EVALUATION OF SHOOTING SKILL TEST AMONG KARNATAKA STATE WOMEN HANDBALL PLAYERS

	0	1	2	3	4	5	6	7	8	9
0		30.02	30.14	30.26	30.38	30.50	30.62	30.74	30.86	30.98
10	31.10	31.22	31.34	31.46	31.58	31.70	31.82	31.94	32.06	32.18
20	32.30	32.42	32.54	32.66	32.78	32.90	33.02	33.14	33.26	33.38
30	33.50	33.62	33.74	33.86	33.98	34.10	34.22	34.34	34.46	34.58
40	34.70	34.82	34.94	35.06	35.18	35.30	35.42	35.54	35.66	35.78
50	35.90	36.02	36.14	36.26	36.38	36.50	36.62	36.74	36.86	36.98
60	37.10	37.22	37.34	37.46	37.58	37.70	37.82	37.94	38.06	38.18
70	38.30	38.42	38.54	38.66	38.78	38.90	39.02	39.14	39.26	39.38
80	39.50	39.62	39.74	39.86	39.98	40.10	40.22	40.34	40.46	40.58
90	40.70	40.82	40.94	41.06	41.18	41.30	41.42	41.54	41.66	41.78
100	41.90									

Table - 2
THE QUALITATIVE GRADING FOR THE CONSTRUCTED NORMS FOR THE EVALUATION OF SHOOTING SKILL OF KARNATAKA STATE WOMEN HANDBALL PLAYERS

Score	Qualitative Grading	Number of Subjects in Each Grade	Percentage
0-10	Very Poor	12	12
11-25	Poor	10	10
26-40	Below Average	8	8
41-55	Average	27	27
56-70	Above Average	14	14
71-85	Good	27	27
86-100	Excellent	2	2

Based on the norms constructed, the qualitative grading was done among the Karnataka State women Handball players in Table -2. It was found that 12 players forming than 12% of the total tested were very poor and 10 players forming 10% of them were poor, while 8 players forming 8% were below average; 14 players forming 14% were above average, 27 players forming 27% were Good and 2 players forming were 2% of the total population were Excellent.

The evaluation made on the basis of the norms and gradation was presented through pie diagram in Figure –1 for better understanding of the results of this study.
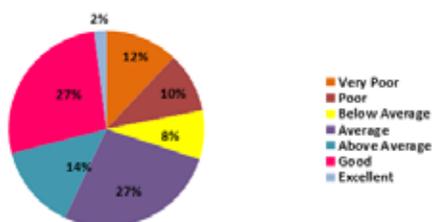

Figure-1 PIE DIAGRAM SHOWING THE GRADATION OF KARNATAKA STATE WOMEN HANDBALL PLAYERS IN SHOOTING SKILL TEST

CONCLUSIONS

Within the limitations and delimitations of this study, the following conclusions were drawn.

It was concluded that the skill tests constructed possessed objectivity as the tests have been carefully constructed with great care, clear test directions, precise scoring methods, and adherence of them. Through the constructed skill tests norms have been constructed and the women players were classified.

It was concluded that the newly constructed battery of tests would truly measure the women Handball skills of an individual.

REFERENCES

1. Anbarasu Pon and Sheila Stephen(2014), Construction of Skill Tests qnd Compilation of Norms for Scoop and Drag Flick Skills in Field Hockey, *Star Phy. Edn.*Vol.2 Issue 6(13), June.
2. Barry L. Johnson and Jack K. Nelson (1982), *Practical Measurement for Evaluation in Physical Education (Third Edition)*, pp. 367-368.