CONSTRUCTION AND STANDARDIZATION OF TABLE TENNIS SKILL TEST

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INTRODUCTION

Sports are an integral part of a society. A sport by nature is enjoyable and challenging. McIntosh (1963) defined sports as an activity that contain one or more element of play and game but more specifically and having a components of competition, physical power, skill and superiority of performance. The phenomenon of sports today intervenes in many fields. Bucher (1976) point out that sports and the game are the popular time pass for every age group person which provides them relaxation. Sports play important part in developing physical fitness and helps in utilizing the leisure time. Many of the basic skills are developed through games and sports. In the modern age trend in sports are changed .In present sports are not played only for recreational purpose but for many other propose Renwes (1972) Good performance is a key factor in all sports .Since the sports have become the prestigious aspect to prove one's superiority the philosophy of participation in all sports has undergone a great change. In modern period many researches are going in the field of sports.

Every sport has some fundamental skills. All aspect of sports required skill and physical fitness. Fundamental skills are the backbones of any game, when fundamental skill are used properly they provide satisfaction for the participant and make his performance more efficient and save lot of time and energy. To check the skill performing ability of a player many tests has been constructed in various researches. Skill test are conducted to find out how far the student have under stood the material and subject matter which have been taught in the sports arena. As far as practical session is concerned in sports and physical education, the skill test are necessary to enlighten the progress of student in their subject. It is a turning point in learning curve from one station to another station.

In the field of table tennis there is a lack of standardized evaluative skill test for assessing the ability, grading and predicting the table tennis performance of table tennis player's .This study has been undertaken to construct and standardized a table tennis skill test so that it may fulfill this skill test need

OBJECTIVES OF THE STUDY

The main objectives of this study was following

To construct and standardized the skill test for table tennis players

PROCEDURE

The present study was conducted on 14 to 19 year aged male table tennis players from different institute of Punjab. The main purpose of this study was to construct and standardized the table tennis skill test .In the field of table tennis there is lack of standardized skill test for assessing the

performance of the player. This study was conducted to fulfill this need. Many experts, physical educators and table tennis SAI coaches appreciated this study. They admired the effort of the research scholar. For this purpose 1073 male table tennis players were selected from Punjab state. They have to undergone from three skill test items that was constructed by the researcher these test items were chop test, service test wall test .Their score was been recorded and was statistically treated to develop the norms and to standardized the skill test. The study was done in the two (2) phases

First phase

In this phase 6 test items were consulted with the expert and out of them 3 test items were finalized. They were as following:

Chop Test
Wall Test
Service Test

Second phase

In this phase norms were constructed by using percentile and sigma scales Standardization of skill test items was done by using t and hull scale. In the end the grading table was constructed to analysis the performance of any individual table tennis player

RESULTS

Two normative scales, namely, percentile and sigma scale were constructed for the purpose of the construction of the norms for table tennis skill test. Secondly hull scale and t scale were constructed for the purpose of standardization

TABLE 4.2
T-SCALE, HULL SCALE, SIGMA SCALE AND PERCENTILE FOR CHOP TEST

	T-SCALE	HULL-SCALE	SIGMA-SCALE	PERCENTILE
0	-16.60	-7.06	-3.88	1
10	-10.24	-2.61	-.06	7
20	-3.88	1.85	3.75	9
30	2.48	6.30	7.57	12
40	8.84	10.75	11.38	13
50	15.20	15.20	15.20	15
60	21.56	19.65	19.02	17
70	27.92	24.10	22.83	18
80	34.28	28.55	26.65	20
90	40.64	33.01	30.46	24
100	47.00	37.46	34.28	37

In the table 4.2 norms of various scales have been presented for measurement and evaluation of chop test. The standard score for 14 to 19 Boys age group is range from 1 to 37 with mean as 15. The lowest standard score T-scale was -16.60, Hull scale-7.06 and Sigma scale- 3.88 with mean

as15.20 and highest standard score were 47, 37.46 and 34.28 on the T, Hull and Sigma scale respectively.

TABLE 4.3
T-SCALE, HULL SCALE, SIGMA SCALE AND PERCENTILE FOR SERVICE TEST

SERVICE TEST	T-SCALE	HULL-SCALE	SIGMA-SCALE	PERCENTILE
0	-11.81	-4.59	-2.18	0
10	-6.99	-1.22	.71	5
20	-2.18	2.15	3.60	8
30	2.63	5.52	6.48	9
40	7.45	8.89	9.37	11
50	12.26	12.26	12.26	12
60	17.07	15.63	15.15	13
70	21.89	19.00	18.04	16
80	26.70	22.37	20.92	18
90	31.51	25.74	23.81	18
100	36.33	29.11	26.70	20

In the table 4.3 norms of various scales have been presented for measurement and evaluation of service test. The standard score for 14 to 19 years Boys age group is range from 0 to 20 with mean as 12. The lowest standard score T-scale was -11.81, Hull scale-4.59 and Sigma scale- 2.18 with mean as 12.26 and highest standard score were 36.33, 29.11 and 26.70 on the T, Hull and Sigma scale respectively.

TABLE 4.4
T-SCALE, HULL SCALE, SIGMA SCALE AND PERCENTILE FOR WALL TEST

WALL TEST	T-SCALE	HULL-SCALE	SIGMA-SCALE	PERCENTILE
0	-11.84	-4.23	-1.69	0
10	-6.77	-.68	1.35	6
20	1.69	2.87	4.40	9
30	3.38	6.43	7.44	11
40	8.45	9.98	10.48	13
50	13.53	13.53	13.53	14
60	18.60	17.08	16.57	15
70	23.68	20.64	19.62	16
80	28.75	24.19	22.66	18

90	33.83	27.74	25.71	20
100	38.90	31.29	28.75	29

In the table 4.4 norms of various scales have been presented for measurement and evaluation of wall test. The standard score for 14 to 19 Boys age group is range from 0 to 29 with mean as 14. The lowest standard score T-scale was -11.84, Hull scale-4.23 and Sigma scale-1.69 with mean as13.53 and highest standard score were 38.90, 31.29 and 28.75 on the T, Hull and Sigma scale respectively.

DISTRIBUTION OF GRADES UNDER PERCENTILE SCALE

In this study different grades were developed so that a person's performance can be measure individually in each skill test .For this study 5 types of grades viz. excellent, good, average, satisfactory and poor have been prepared under the percentile scale. This classification has been done to make selection criteria easier and better. Grades have been present in table 4.5 to table 4.7

TABLE 4.5
GRADING CRITERIA FOR CHOP TEST

Scores	Alphabetical grades	Interpretative grades
Above 20	A	Excellent
20 to 17	B	Good
16 to 13	C	Average
12to 9	D	Satisfactory
Below 9	E	Poor

Table 4.5 shows that in chop test performance of table tennis player divided into five categories. Performance under 5 categories are starting from above 20 excellent, 20-17good, 16-13 average, 12-9 satisfactory and below 9 poor, respectively

TABLE 4.6
GRADING CRITRIA FOR SERVICE TEST

Scores	Alphabetical grades	Interpretative grades
Above 18	A	Excellent
18 to 13	B	Good
12 to 11	C	Average
10 to 8	D	Satisfactory
Below 8	E	Poor

Table 4.6 shows that in service test performance of table tennis player divided into five categories. Performance under 5 categories are starting from above 18 excellent, 18-13 good, 12-11 average, 10-8 satisfactory and below 8 poor ,respectively

TABLE 4.7
GRADING CRITRIA FOR WALL TEST

Scores	Alphabetical grades	Interpretative grades
Above 18	A	Excellent
18 to 15	B	Good
14 to 13	C	Average
12 to 9	D	Satisfactory
Below 9	E	Poor

Table 4.7 shows that in wall test performance of table tennis player divided into five categories. Performance under 5 categories are starting from above 18 excellent, 18-15 good, 14-13 average, 12-9 satisfactory and below 9 poor, respectively

CONCLUSION

Based on findings and within the limitation of the study. The following conclusion were drawn
Three test items was constructed in this study
In reliability, the test retest scores was obtained by the tester on the same subjects was found highly correlated.
In objectivity, the three sets of scores collected by the three testers from the same subjects were found highly correlated.
Validity of all three test items were established
Hull scale was used to standardized the score
Percentile and sigma scale was used to construct the norms
Five scale were also prepared for chop, service and wall test on the basis of the results of the present score i.e. excellent, good, average, satisfactory, poor

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