

Construction of Knowledge Test in Badminton for Physical Education Students

S. K. YADAV and GYANENDRA PRAJAPATI

See end of the article for authors' affiliations

Correspondence to:

S. K. YADAV

School of Physical Education

Devi Ahilya University

INDORE (M. P.)

ABSTRACT

Main objective of the study was to construct a knowledge test in Badminton. For this purpose forty students from the School of Physical Education, Devi Ahilya University, Indore, in the session 2007–08, were randomly selected to serve as subjects. A 105 items objective test was first administered to 10 subjects to determine the clarity of question items and on that basis question items were refined. Then the test was administered to all the subjects, which they answered in the allotted time of 90 minutes. These response sheets were then evaluated. 15 items were eliminated on the basis of difficulty rating and 25 items were discarded on the basis of index of discrimination. The final test therefore contained 80 questions.

Yadav, S. K. and Prajapati, Gyanendra (2011) Construction of Knowledge Test in Badminton for Physical Education Students *International Journal of Physical Education, Sports and Yogic Sciences* 1(1): 21-23.

Key words: Badminton, Knowledge test, Index of discrimination, Difficulty rating

Badminton is the one of the greatest games that can be played indoors. It distinguishes from other racket sports by two intriguing features: the use of a shuttlecock and the fact that the shuttlecock must not touch the ground during the rally. The flight characteristics of the shuttlecock and the pace created by constant volleying combine to make badminton one of the exciting sports to play and to watch. Evaluation in physical education cannot be complete without the use of knowledge tests. The measurement of knowledge of physical education activity classes is just as important as knowledge measurement in other subject areas.

Methodology:

Main objective of the study was to construct a knowledge test in Badminton. Forty students from the School of Physical Education, Devi Ahilya University, Indore in the session 2007–08, were randomly selected to serve as subjects.

The knowledge test consisted of 105 objective type questions from different aspect of the game in a definite proportion. Questions were selected covering various aspects of game i.e. History and Developments, the New Laws and their interpretations, skill and terminologies, strategy and modern trends in the game. Before administering the test intensive instructional classes were conducted for the subjects to cover various aspect of the game Badminton. This was to make the subject well acquainted with the subject matter. Each explanation was taught with due explanations with the help of diagrams (wherever necessary).

Objective knowledge test was first administered to ten subjects to determine the clarity of question items and on that basis question items were refined and the subjected to careful analysis. Then the test was administered to all the subjects, which they answered in the allotted time of 90 minutes. These response sheets were then evaluated. On the basis of the response scores, the question items were further subjected to careful item analysis. The items, which were found unsatisfactory after analyses, were either rejected or modified.

Results and Discussion:

There were 105 objective type questions in the initial test. All the students were given ample directions before administrating the test. The answers to be written in blank were provided with each question. All questions carried equal marks and maximum marks were 105. One point was awarded for each correct response. The sum of the total number of correct responses was the final score of each subject. The range of scores for forty examinees was 22 to 99. The mean score was 61.35.

The findings of the study indicated that the degree of difficulty in rating for the knowledge test questions ranged from 0.02 to 1.00 and its mean difficulty was 0.583. Those questions, which were answered correctly by more than 80 percent of subjects, were judged to be too easy and answered correctly by less than 20 percent, were considered too difficult. A total of 15 items were eliminated from the test for this reason.

Index of discrimination indicated those questions in which poor students did well or better than the subjects of the upper group and the value is less than 0.30. Thus a total of 25 items were discarded. The items discarded due to various reasons are presented in Table – 1.

TABLE - 1
ITEMS DISCARDED AFTER ITEM ANALYSIS

S. No.	Q. No.	D.R.	I.D.	Total	S. No.	Q. No.	D.R.	I.D.	Total
1.	1				54.	54	X	X	X
2.	2				55.	55	X	X	X
3.	3				56.	56		X	X
4.	4				57.	57			
5.	5				58.	58			
6.	6	X	X	X	59.	59			
7.	7	X	X	X	60.	60	X	X	X
8.	8				61.	61			
9.	9				62.	62		X	X
10.	10	X	X	X	63.	63			
11.	11				64.	64			
12.	12				65.	65			
13.	13				66.	66			
14.	14	X	X	X	67.	67			
15.	15				68.	68	X	X	X
16.	16				69.	69	X	X	X
17.	17				70.	70			
18.	18				71.	71			
19.	19				72.	72			
20.	20				73.	73			
21.	21				74.	74	X	X	X
22.	22				75.	75			
23.	23	X	X	X	76.	76			
24.	24				77.	77			
25.	25				78.	78		X	X
26.	26				79.	79			
27.	27				80.	80	X	X	X
28.	28		X	X	81.	81			
29.	29				82.	82			
30.	30				83.	83			
31.	31				84.	84	X	X	X
32.	32				85.	85			
33.	33				86.	86		X	X
34.	34				87.	87			
35.	35				88.	88			
36.	36				89.	89			
37.	37				90.	90			
38.	38				91.	91			
39.	39				92.	92			
40.	40	X	X	X	93.	93	X	X	X
41.	41				94.	94			
42.	42				95.	95			
43.	43				96.	96			
44.	44				97.	97		X	X
45.	45		X	X	98.	98			
46.	46				99.	99			
47.	47				100.	100		X	X
48.	48				101.	101		X	X
49.	49				102.	102			
50.	50				103.	103			
51.	51				104.	104			
52.	52		X	X	105.	105			
53.	53								

The final test therefore contained 80 questions.

CONCLUSIONS:

1. Fifteen items were eliminated on the basis of difficulty rating, which contained items answered correctly by the students below 20 percent and above 80 percent.
2. Twenty-five items were discarded on the basis of index of discrimination in which poor students did well or better than upper group.
3. The revised test contained 80 objectives type questions in squash for college students of Physical Education.

REFERENCES:

Bloss, Margaret Varner and Hales, R. Stanton **Badminton** 5th Ed. Iowa: Wm. C. Brown Publishes, 1987.

Baumgartner, Ted A and Jackson, Andrew S. **Measurement for Evaluation in Physical Education and Exercise Science**, 4th Ed. Dubuque: Wm, C, Brown Publishers, 1991.

Barrow, Harold M.; McGee, Rosemary and Tritschler, Kathleen A. **Practical Measurement in Physical Education and Sports**, 4th ed., (Philadelphia: Lea and Febiger, 1989.

Authors' affiliations:

GYANENDRA PRAJAPATI
Physical Education Teacher
Pathways World School, Aravali
of Gurgaon Sohana Road, Haryana
