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PRACTICE IN SKILLS DESIGNED TO IMPROVE ABILITY IN PLAYING HANDBALL

H. C. BENNION

INTRODUCTION

Practice sessions in the skill described in this paper were carried on by the writer during the months of January and February, 1939. The object of the practice sessions was to develop skill in handball, in which the subject had had no previous experience.

Before deciding on the method of procedure, the subject observed several expert players. He then decided to practice along three lines which seemed most important in securing proficiency in the game.

CONDITIONS UNDER WHICH PRACTICE WAS CARRIED ON

A. The subject went to the handball courts on Monday, Wednesday and Friday at 4:30 P.M.

B. Subjective data were recorded concerning the subject's physical and mental condition, unusual weather conditions, and other factors which might influence the subject.

C. In each of the three activities practiced, fifty attempts were made; each attempt was counted as either a success or as a failure.

D. The entire practice period for each day took approximately thirty minutes. After the practice period was completed, the subject usually played one or two games of handball with other players.

E. Activities Practiced:

1. In practicing, the subject stood behind the serving area, approximately in the middle of the handball court, and threw the handball against the front playing wall; after the ball rebounded and bounced once, he attempted to hit the ball with the right hand in a manner to make it strike the front playing wall within six inches of the floor. This is ordinarily called a kill shot.

2. Same as in (1), except that the ball was hit with the left hand instead of the right hand.

To aid in judging the place where the ball struck the front wall after being hit by the subject, a line was drawn with a black wax crayon on the front playing wall six inches from the floor. The distance of six inches was arbitrarily set after observing several games played by expert players and noting that when a player was

successful in making a kill-shot, the ball usually struck the front playing wall within six inches of the floor. Such a ball is seldom recovered by an opponent.

3. The subject stood in the serving area and attempted to serve the ball against the front playing wall in a manner to cause the ball to rebound to the back-court wall. He then ran back into the black-court area and as the handball bounced off the back-wall, he attempted to hit the ball with either hand in a manner to cause it to strike the front playing wall.

4. To determine whether accuracy in serving would result as a by-product of practice in the above three activities, a test of serving accuracy was made on the first, tenth and twentieth practice sessions.

To make this test of serving accuracy, an eighteen inch circle was drawn with a black wax crayon on the front playing wall about five to six feet above the floor. The subject stood in the serving area and attempted to serve the ball so that it would hit the playing wall within the eighteen inch circle. Fifty such attempts were made each time serving accuracy was tested.

RESULTS

The results obtained from practice of these activities are shown in Table I and Table II, and in the accompanying graphs.

Table I—Number of "Kill-Shots" Obtained at Each Practice Period of 50 Trials

| Practice Periods | Right Hand | | Left Hands | |
|------------------|---------------------|-----------------------|---------------------|-----------------------|
| | Number of Successes | Per Cent of Successes | Number of Successes | Per Cent of Successes |
| 1 | 7 | 14 | 4 | 8 |
| 2 | 9 | 18 | 4 | 8 |
| 3 | 9 | 18 | 8 | 16 |
| 4 | 11 | 22 | 9 | 18 |
| 5 | 10 | 20 | 9 | 18 |
| 6 | 17 | 34 | 12 | 24 |
| 7 | 14 | 28 | 15 | 30 |
| 8 | 21 | 42 | 16 | 32 |
| 9 | 24 | 48 | 18 | 36 |
| 10 | 23 | 46 | 20 | 40 |
| 11 | 24 | 48 | 22 | 44 |
| 12 | 26 | 52 | 23 | 46 |
| 13 | 25 | 50 | 20 | 40 |
| 14 | 23 | 46 | 20 | 40 |
| 15 | 22 | 44 | 21 | 42 |
| 16 | 24 | 48 | 20 | 40 |
| 17 | 25 | 50 | 21 | 42 |
| 18 | 24 | 48 | 22 | 44 |
| 19 | 27 | 54 | 23 | 46 |
| 20 | 28 | 56 | 22 | 44 |

Table II—Report of Serving Accuracy and “Back-wall Shots” Obtained at Each Practice Period of 50 Trials

| Practice Periods | Serving Accuracy | | Back-wall Shot | |
|------------------|---------------------|-----------------------|---------------------|-----------------------|
| | Number of Successes | Per Cent of Successes | Number of Successes | Per Cent of Successes |
| 1 | 10 | 20 | 13 | 26 |
| 2 | | | 14 | 28 |
| 3 | | | 25 | 50 |
| 4 | | | 23 | 46 |
| 5 | | | 22 | 44 |
| 6 | | | 26 | 52 |
| 7 | | | 30 | 60 |
| 8 | | | 29 | 58 |
| 9 | | | 33 | 66 |
| 10 | | | 20 | 40 |
| 11 | 35 | 70 | | |
| 12 | 31 | 62 | | |
| 13 | 34 | 68 | | |
| 14 | 30 | 60 | | |
| 15 | 31 | 62 | | |
| 16 | 32 | 64 | | |
| 17 | 30 | 60 | | |
| 18 | 30 | 60 | | |
| 19 | 34 | 68 | | |
| 20 | 26 | 52 | 35 | 70 |

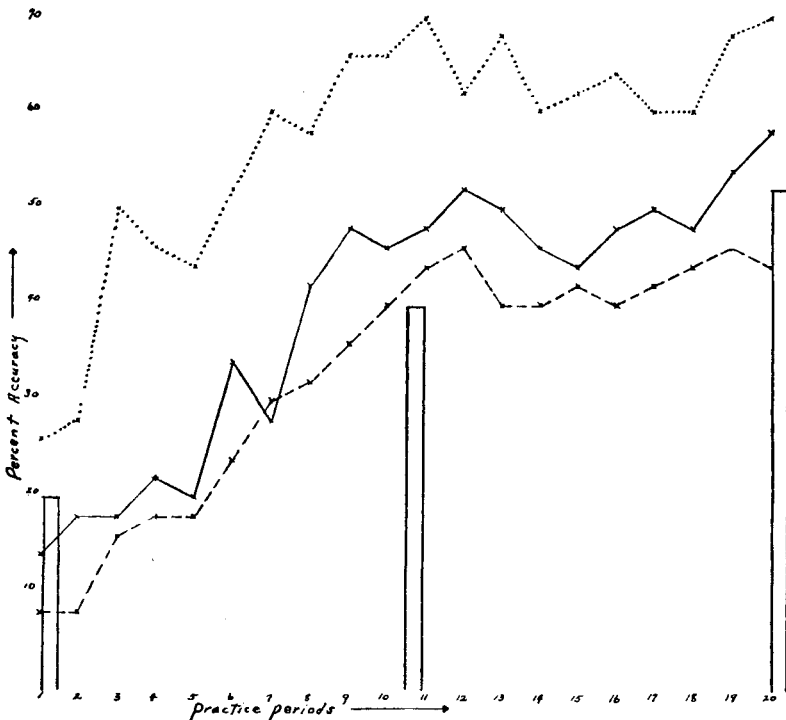


Fig. 1. Improvement in skills designed to increase ability in playing handball.
 Backwall
 ——— Right hand
 - - - - - Left hand
 □ Serving accuracy

A. Skill in making kill-shots with the right hand increased from seven attempts out of fifty trials resulting in success, in the first practice session, to twenty-six attempts out of fifty trials resulting in success, or an increase of from fourteen per cent to fifty-six per cent.

B. Skill in making kill-shots with the left hand increased from eight per cent to forty-four per cent.

C. Skill in taking the handball off the back-wall increased from twenty-six per cent to seventy per cent.

D. Accuracy in serving increased from twenty per cent to fifty-two per cent.

E. Improvement in the two hands increased fairly uniformly.

F. No relation seemed to exist between weather conditions, or physical and mental conditions of the subject and the amount or consistency of improvement in the activities practiced.

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