COORDINATIVE ABILITIES OF HIGHER PRIMARY AND HIGH SCHOOL STUDENTS.

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ABSTRACT :

        The research scholar has adopted required guidelines and precautions to be followed. The prescriptions suggested by Rikli and Jones for administration of the selected test items were taken into consideration. The detailed procedures for administering different tests have been described here as under:

KEYWORDS : Coordinative Abilities, higher Primary, High School Students.

INTRODUCTION :

1. BACKWARD MEDICINE BALL THROW TEST (DIFFERENTIATION ABILITY)

Purpose: The test was administered to assess the differentiation ability of the subjects.

Equipments: A Gymnastic Mat size 3x6, One Medicine Ball Weighing 2 kg, Five Medicine Balls weighing 1 kg each, Pencil, Papers and Pad.

Test administration: The tests were held individually one by one with the subject, helper and researcher present at the place of experiment. As a first step in the test procedure the subject was told the general nature and purposes of each test before starting actual test. Before applying the test, demo was given to the subject.

Procedure: A gymnastic mat was kept 2m away from the starting line as shown in figure 3.1. A circle of 40 cm. radius was drawn in the middle of the mat and a medicine ball of 2 kgs. kept at the centre of the circle. The subjects were asked to stand behind the starting line facing the opposite direction. They were asked to throw five medicine balls (1kg) over the head to hit the 2 kgs ball kept on the mat, one after another by using both the hands. One practice trial was given to all the subjects.

Instructions:
1. Five Overhead throws were permitted.
2. The students were not allowed to look back

Fig.1.1: Backward Medicine Ball Throw Test
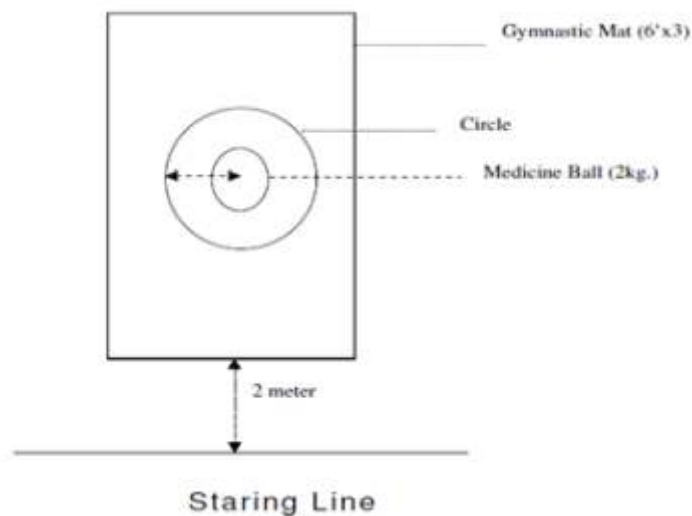
Scoring
a. Medicine ball touching the mat = 1 pt.
b. Medicine ball touching the circle line = 2pts.
c. Medicine ball inside the circle = 3 pts.
d. Medicine ball touching the ball (2kg medicine ball kept at the center of the circle) = 4 pts. Points were decided considering the 1st pitch of the ball. The score of the individuals was the total points scored in

all the five throws.

PHOTO - 1

Researcher administering backward medicine ball throw test to measure the differentiation ability of the subject

2. ALTERNATIVE HAND WALL TOSS TEST (COORDINATION ABILITY)

Purpose: The objective of the test is to monitor the ability of the student's vision system to coordinate the information received through the eyes to control, guide, and direct the hands in the accomplishment of catching a ball (hand-eye coordination).

Equipment: Tennis Ball, Stopwatch, Smooth Wall.

Procedure :This test requires the subject to throw and catch a tennis ball off a wall. The subject warms up for 10 minutes. The subject stands two metres away from a smooth wall. The examiner gives the command 'GO' and starts the stopwatch. The subject throws a tennis ball with their right hand against the wall and catches it with the left hand, throws the ball with the left hand and catches it with the right hand. This cycle of throwing and catching was repeated for 30 seconds. The examiner counts the number of catches and stops the test after 30 seconds. The examiner records the number of catches for 30 seconds. For each subjects three trails were given and best score was recorded.

Scoring :
The examiner counts the number of catches and stops the test after 30 seconds. The examiner records the number of catches in numbers for 30 seconds.

PHOTO - 2

Researcher administering alternative hand wall toss test to measure the hand-eye coordination of the subject

3. NUMBERED MEDICINE BALL RUN TEST   (ORIENTATION ABILITY)

Purpose: To determine orientation ability of the subjects.

Equipments: Five medicine balls each weighing 3 kgs., One medicine ball weighing 4 kgs. Number Plates (1 to 5), Stop watch, Clapper, Pencil, Papers and Pads.

Test administration: The experiment was done in the school ground where data was collected. The test was held individually one by one with only the subject, helper and researcher present at the place of experiment. As a first step in the test procedure the subject was told the general nature and purposes of each test before starting actual test. Before applying the test, demo was given to the subject.

Procedure: All the medicine balls weighing 3 kgs were arranged as shown in Fig.3.2 on an even ground in a semi circle with a distance of 1.5 m. between the balls. The subject's medicine ball weighing 4 kgs was kept 3 mts. away from these medicine balls. Behind all the medicine balls of 3 kg weight, metallic number plates of 1 sq. foot size were kept, from 1 to 5. Before the start of the test the subjects were asked to stand behind the sixth medicine ball facing toward the opposite direction. On signal the subjects turned and ran towards the number called by the tester and touched the medicine ball and run back to touch the sixth medicine ball, immediately another number was called. Similarly, a total of three times the number was called by the tester and the subjects performed accordingly. Before the actual test was administered, one practice trial was given to all the subjects.

Scoring: The time taken to complete the course was noted in seconds. Three trials were given to each subject and the better one was recorded as score.
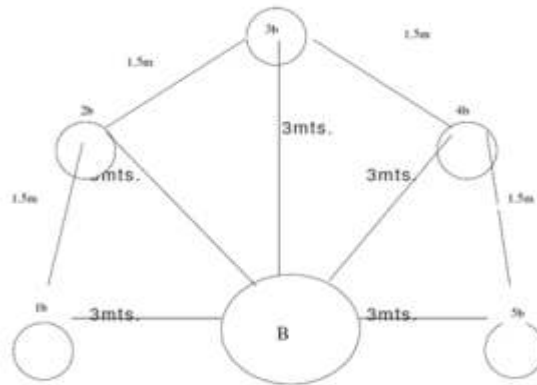
Fig.1.2:Number Medicine Ball Run Test

PHOTO : 3

Researcher administering number medicine ball run test
to measure the space orientation ability of the subject

C. BALANCING ABILITIES.

The detailed procedures for administering balancing abilities have been described here as under:

1. STORK BALANCING STAND TEST (STATIC BALANCING ABILITY)
Purpose: The test was used to measure static balancing ability of the subject.

Equipment: Stopwatch.

Test administration: The tests were held individually one by one with the subject, helper and researcher present at the place of experiment. As a first step in the test procedure the subject was told the general nature and purposes of each test before starting actual test. Before applying the test, demo was given to the subject.

Procedure: The performer was asked to stand on the foot of the dominant leg, place the other foot on the inside of the supporting knee. The subject was instructed to place the hands on the respective sides of the waist. The subject was informed that he should stand on the ball of the foot by raising his heel from the floor on the signal start. On the signal start, the subject raises the heel from the floor to

maintain the balance as long possible without moving the ball of the foot from its initial position, and the tester starts the stopwatch. The performer is also recognized to maintain balance with his best efforts and not let the heel to touch the floor for the longest duration. As soon as the subject loses the balance by touching the heel to the floor or loses the movement of the foot from initial position, the tester stops the stopwatch.

Instructions:
1 Place the hands on the respective sides of the waist.
2 Stop the watch immediately when subject loses the balance or heel touches the floor.

Scoring: The score memorized the time in 1/100th seconds for the maintenance of the balance on the ball of foot.

PHOTO - 4

Researcher administering stork balance stand test to measure the static balance of the subject

2. MODIFIED BASS TEST (DYNAMIC BALANCING ABILITY)

Purpose: Modified Bass Test was used to measure one's ability to jump accurately and to maintain balance during repeated jumping (Carter, 1982).

Equipment: A stopwatch, ¾ inch wide color marking tape and yardstick. The marking of the floor as per Fig.3.3.

Procedure: This subject stood with right foot on the starting mark, the performer then leaped to the first tape mark with the left foot and tried to hold a standing position on the ball of his left foot for as many seconds as possible up to 5 seconds. He then leaped to the second tape mark with right foot and so on. Alternate the feet from tape to tape and tried to remain on the ball at each tape for as many seconds as possible up to 5 seconds. With the tape mark completely covered with the ball of the foot as that it could not be seen.

Scoring : The score for each mark successfully landed was give points in addition, one point was awarded for each second the balance was maintain upto 5 seconds per mark. Thus a performer could

score 10 points per mark or a total of 100 points for the test.
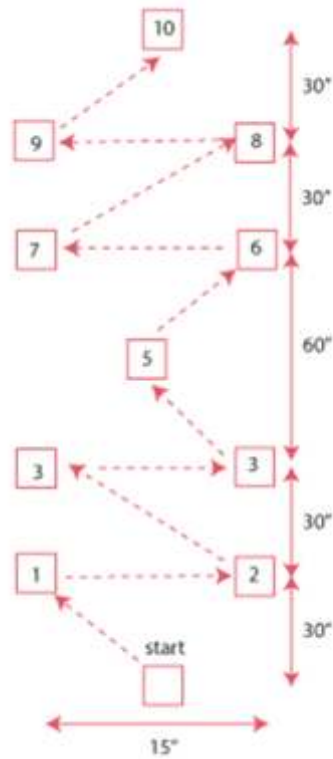
Fig.1.3 : Modified Bass Test

PHOTO : 5

Researcher administering modified bass test to measure
the dynamic balance of the subject

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