The relationship of manifestations of attention in some basketball skills among female students of physical education and sports sciences

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Abstract---The study aimed to identify the relationship between the manifestations of attention and the accuracy of the skill of handling and shooting basketball for female students. As for the research sample, the research community was identified as students of the College of Physical Education and Sports Sciences - University of Al-Qadisiyah for the academic year 2021-2022. Their number is (39) students, where the proportion of the sample from the community reached 100%. In light of the preceding, the results were a positive relationship between the concentration of attention and the skills of free and peaceful scoring among students of physical education and sports sciences, as well as a positive relationship between the intensity of attention and the skills of free and peaceful scoring among students of physical education and sports sciences.

Keywords---some basketball skills, students of physical education, sports sciences.

Introduction

Mental operations, including attention, are important issues related to decision-making. Attention is one of the foundations on which various mental operations are based. Without attention, a person cannot learn, remember, or think about anything. Attention helps in knowing things and deducing them quickly. In basketball, the importance of attention appears for basketball players, especially...
in the skill of handling and shooting, because it needs attention and focuses
during its implementation. From this, the researcher managed his study on the
importance of focusing attention and performing critical offensive skills in
basketball.

**Research problem**

Basketball is one of the games that has received ample attention and critical
studies and is still improving for the better. Despite this, the research is still going
on to find the best training methods that can keep pace with the advanced team
or teams, whether at the level of local or international tournaments that require a
game of basketball from the player to make a great effort during the time of the
match and this effort includes the technical performance of the player such as
handling, as it is one of the basic skills in the game of basketball and that the
effect of its level affects the general technical level of the team—directed in the
right way, as well as the lack of concentration of attention in the special offensive
corrections when progressing during the match, which led the researcher to study
this problem and identify its causes and find appropriate solutions to it.

**Research aims**

**This study aims to identify**

- The relationship between the manifestations of attention and the accuracy
  of the skills of handling basketball for female students.
- The relationship between some aspects of attention and the accuracy of the
  female students’ basketball shooting skills.

**Practical part**

The two researchers used the descriptive approach in the style of relationships to
suit the research problem on the students of the College of Physical Education
and Sports Sciences - University of Al-Qadisiyah for the academic year 2021-
2022, and their number is (39) students, where the proportion of the sample from
the community is 100%.

**Field actions**

**Attention network test**

This test, called the Grid concentration test, measures a player’s ability to focus
their attention. The test duration is only one minute, and the player is asked to
put a dash (/) on the most significant number of numbers that follow the specific
number specified by the test taker. ) on the number (18), then the number (19)
and not trying to put a dash (/) on the number (19) first and then (18) again. This
test can be used several times by changing the primary number specified for each
subsequent time. It is also possible to change the numbers of the focus network
and make multiple copies of them by changing the place of their numbers so that
the tester does not get used to memorizing and remembering the place of the
numbers and taking into account that the numbers are all made up of two
numbers such as (01), (02), (23) The test can also be conducted in many
experimental situations such as performance in front of colleagues or by adding some distracting variables.

**Correction:** Correction is done by counting the numbers the athlete has correctly crossed out within the minute specified for taking the test. One point is given for each number that has been crossed out correctly. The higher the athlete's score, the higher his ability to focus attention, as in Figure (1).

<table>
<thead>
<tr>
<th>Shape 1</th>
<th>Attention network test</th>
</tr>
</thead>
<tbody>
<tr>
<td>84 27 51 78 59 52 13 85 61 55</td>
<td></td>
</tr>
<tr>
<td>28 60 92 04 97 90 31 57 29 33</td>
<td></td>
</tr>
<tr>
<td>32 96 95 39 80 77 49 86 18 70</td>
<td></td>
</tr>
<tr>
<td>76 87 71 95 98 81 01 46 88 00</td>
<td></td>
</tr>
<tr>
<td>48 82 89 47 35 17 10 42 62 34</td>
<td></td>
</tr>
<tr>
<td>44 67 93 11 07 43 72 94 69 56</td>
<td></td>
</tr>
<tr>
<td>53 79 05 22 54 74 58 14 91 02</td>
<td></td>
</tr>
<tr>
<td>06 68 99 75 26 15 41 66 20 40</td>
<td></td>
</tr>
<tr>
<td>50 09 64 08 38 30 36 45 83 24</td>
<td></td>
</tr>
<tr>
<td>03 73 21 23 16 37 25 19 12 63</td>
<td></td>
</tr>
</tbody>
</table>

**Borden-Angimoff test**

This test is a form that contains (31) lines of Russian numbers; each line contains (40) numbers, so the test contains (1240) numbers. Different numbers, distribution and arrangements to ensure that the laboratory does not memorize them, to calculate the different manifestations of attention, the following must be known:

- Number of letters seen by the player during the test (general size) = \( a \)
- The number of combinations that should be crossed out in the test paper = \( b \)
- General number of errors (number of wrong compositions that were crossed out + number of compositions that were not crossed out = \( B \))

The number of combinations crossed out = \( r \)

Coefficient of the accuracy of work and test execution = \( e \)

\[
E = \frac{b - B}{b}
\]

**A-Attention**

**Performance method**

(The test is executed in one minute)

The player is asked to turn the page and cross out the composition (B.C) quickly and accurately without errors and when the signal (stop) refrains from continuing and puts a transverse condition at the stopping point. Then the intensity of attention is calculated from:
Attention Acuity = Calculated in a previous way

Ax u=axe ·u

**Free throw test**

- **Purpose of the test:** To measure the accuracy of free-throw scoring from behind the free-throw line
- **Critical equipment:** basketball court, basketball goal, legal basketball.
- **Number of Attempts:** Each player is given (10) attempts. Points are calculated as each player scores one point from each successful throw (a ball that enters the basket), and the player does not count any ball that does not enter the basket. The highest point that can be obtained is (10) points (Figure 2).

![Image](image.png)

Shape 2. It shows the free throw test

**Peaceful movement scoring test after performing the trumpet**

- **For the test:** Measuring the accuracy of scoring after performing the skills of tababa and peaceful movement.
- **Necessary equipment:** basketball court, legal basketball goal, four basketballs, whistle to signal the start.
- **Performance specifications:** The laboratory performs the drum from the middle of the field to perform the peaceful movement and then score. Each laboratory is given (10) attempts, and one point is calculated for each successful attempt to score without legal errors.
- **Recording:** It records the number of goals scored by the laboratory after (10) attempts, knowing that the highest points that can be obtained are (10) points.

**Survey experience**

Before carrying out the main experiment, an exploratory study must be carried out on a small sample similar to the research sample. Where the researcher conducted the exploratory experiment on a sample of the research sample numbering (19) students of the third stage - University of Al-Qadisiyah / College of Education for Girls on Monday, 5/3/2022, and from this, it is determined:
• The difficulties that the researcher may face during the tests.
• Efficiency of the assistant staff.
• The time required to take the tests
• Knowing the validity of devices and tools

**The scientific basis for testing**

**Test validity**

Honesty is one of the essential qualities that a good test must be characterized by.

**Test stability**

The researcher tested the sample of the exploratory experiment, retested them after seven days, and then processed the test data statistically through the simple correlation coefficient (Pearson), as shown in Table (1).

**Objectivity**

The researcher extracted the objectivity value of the tests by calculating the two test scores and treating them using the simple correlation coefficient (Pearson). The test’s objectivity was extracted, indicating that the test was objective, as shown in Table (1).

<table>
<thead>
<tr>
<th>Tests</th>
<th>Reliability coefficient</th>
<th>Objectivity coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attention concentration</td>
<td>0.811</td>
<td>0.930</td>
</tr>
<tr>
<td>Attention Acuity</td>
<td>0.7882</td>
<td>0.852</td>
</tr>
<tr>
<td>Scoring from stability</td>
<td>0.9781</td>
<td>0.923</td>
</tr>
<tr>
<td>Peaceful scoring</td>
<td>0.7645</td>
<td>0.796</td>
</tr>
</tbody>
</table>

**The main experience**

The main experiment was conducted in the closed hall in physical education and sports sciences on (Saturday), corresponding 3/22/2022. The work was carried out under the supervision of the researcher and the assistance of the assistant work team. After the experiment, the forms were unloaded, data were obtained, and statistical treatments were performed.

**Statistical means**

The researcher used the Statistical Package for Social Sciences (SPSS) to perform the statistical operations.
Results

To clarify the information that the researcher extracted, she presented it in the form of tables and then analyzed and discussed it after its presentation. Presentation and analysis of the results of the arithmetic mean values and standard deviations of the variables under study.

Table 2
It shows the results of the arithmetic means and standard deviations of the scores

<table>
<thead>
<tr>
<th>Variables</th>
<th>Arithmetic Mean</th>
<th>Standard Deviation</th>
<th>Standard Error</th>
<th>Maximum</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentration</td>
<td>12.190</td>
<td>1.844</td>
<td>0.412</td>
<td>15.50</td>
<td>10.30</td>
</tr>
<tr>
<td>Attention Acuity</td>
<td>106.63</td>
<td>0.685</td>
<td>0.1533</td>
<td>108.00</td>
<td>106.00</td>
</tr>
<tr>
<td>Under-basket scoring</td>
<td>9.76</td>
<td>0.996</td>
<td>0.2876</td>
<td>16.70</td>
<td>12.38</td>
</tr>
<tr>
<td>Peaceful Scoring</td>
<td>14.79</td>
<td>1.286</td>
<td>0.222</td>
<td>12.16</td>
<td>8.16</td>
</tr>
</tbody>
</table>

Table (2) shows the arithmetic mean of the focus test, which amounted to (12.190) and the standard deviation (1.844). As for the arithmetic mean of the attention-deepening test, it reached (106.63) and with a standard deviation of (0.685), while in the case of the skill of scoring under the basket (30 seconds), the arithmetic means reached (9.76). With a standard deviation of (0.996), the skill of peaceful scoring reached the arithmetic mean (14.79) with a standard deviation of (1.286).

Presentation and analysis of the results of the relationship of manifestations of attention in the basketball skills of a sample under study

Table 3
It builds a relationship between attention and basketball skills

<table>
<thead>
<tr>
<th>Variables</th>
<th>Scoring under the basket 30-sec</th>
<th>Significance level</th>
<th>Peaceful Scoring</th>
<th>Significance level</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentration</td>
<td>0.504*</td>
<td>0.024</td>
<td>0.742**</td>
<td>0.000</td>
<td>Significant</td>
</tr>
<tr>
<td>Attention Acuity</td>
<td>.519*</td>
<td>0.019</td>
<td>.771**</td>
<td>0.000</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Table (3) shows that the value of (the correlation coefficient) was positive and significant between the attention and basketball skills of the research sample. The researcher attributes this to the essential basic skills of basketball, which require neuromuscular coordination between the eye, the ball, the throwing and receiving hand, and good focus and attention to the movement of the arms and their compatibility with the learner's eyes. Therefore, the practice of skill performance requires attention as it positively affects the creation of matches Neuromuscular
by focusing attention and visualization to repeat the skill again and again, and the motor sense of the skill increases with accuracy with the repetition of the skill and the continuous practice of it, and that the increase in the repetition of the skill and its practice will give preference in determining the accuracy of the movement and reducing the percentage of its errors, and this is what was indicated by (Mohammed & Muhammad, 1987), "The feeling of skill, both mentally and physically, contributes to its development, especially if it is part of a program based on scientific standards to which the educational process is subject." Also indicated by (Mohammed, 1975), "The high degree of mastery of motor skills is not only related to training qualifications but also to the individual's ability to focus his attention."

Conclusions

In light of the research procedures, the following was concluded:

- There is a positive relationship between focusing attention and the skills of free and peaceful scoring among female students of physical education and sports sciences.
- There is a positive relationship between the intensity of attention and the skills of free and peaceful scoring among female students of physical education and sports sciences.

References


