Mental arrangement in cognitive processes, processing information accurately, and performing the skill of shooting from both sides in basketball

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Abstract
Basketball is considered an open-surface game that requires the player to deal with the variables of the match according to the movement or stability of the opponent and in the form of motor responses and accuracy and the arrival of the balls to the different playing areas in which the teammate is present to obtain an appropriate opportunity for the process of possession and control of the course of the game that qualifies the team to win the game or achieve the required points in the matches. The response is the motor ability that a basketball player needs. It takes a short time to execute, provided that this execution is distinguished by the element of accuracy, which comes from the mental arrangement of cognitive processes through which information related to the details of the technical performance of skills, especially the skill of lateral shooting in basketball, is prepared. The research aims to identify the role of mental arrangement in cognitive processes and preparing information for the accuracy of performing the skill of shooting from both sides of the basket among young players. It is assumed that there is a statistically significant correlation between mental arrangement in cognitive processes and preparing information for the accuracy of performing shooting from both sides of the basket for the youth group, and it was the research sample was 30 young players from the Al-Zafaraniya Youth and Sports Center, Diyala Bridge, and the municipalities in Baghdad - Al-Rusafa. The descriptive approach was adopted using the method of correlational relations, and the researcher used

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statistical methods, percentages, correlation coefficient (Pearson), arithmetic mean, and standard deviation to reach the results, and the results were presented. Analyzing and discussing the results, and arriving at the most important conclusions, there is a significant correlation between the mental arrangement in the cognitive processes and processing of information and the accuracy of shooting from both sides of the basket for the youth group. It is recommended to emphasize the mental arrangement in the cognitive processes and processing of information, provided that it is coupled with the accuracy of shooting side tackles with the ball. Basketball for young players.

**Keywords:** mental arrangement, cognitive processes, accuracy, basketball handling, Basketball

**Introduction**

Paying attention to the details of executing basketball skills, reaching the strengths, establishing them, and areas of weakness, and treating them in a scientific, thoughtful, and non-random manner, (Abd & Shabba, 2021) paying attention to the details of the game, delving into its technical aspects, and taking into account the results we arrive at, is the ideal way to move towards the path of winning titles and taking the position that befits that game, so the accelerating events The many variables that a basketball player is exposed to during the match require him to deal with them in rhythms that suit those situations and events according to a mental and cognitive arrangement and the preparation of information in an elaborate manner, especially if the implementation is related to the skill of handling from both sides of the basket, (Abdel-Nabi, M., Taqi, B. M., & Hammood, 2020) and (Ahmed Amer Abdul Hussein, 2020) which is considered one of the important and decisive skills in most cases because it is skills that can Through which the player decides the result of the match points in his favor by performing tackles from or in a vehicle or in the form of groups for a quantity that suits the state of play of both sides, (Ahmed et al., 2023) which requires from the implementer a mental and cognitive arrangement and an organized preparation of information to reach the opponent’s basket in an accurate and non-random manner, through the ability of mental recall of the skill and its cognitive arrangement. Preparing the skill performance joints for them enables the kicker to advance the level through the mental arrangement of the performance details, which is considered one of the motor abilities that distinguish the player on the field in making his decision to execute the throws accurately and influencing the outcome of the half or match. (Ali Al-Attar & Jari, 2023) The goal of the research is to know the relationship between the role of mental arrangement in cognitive processes and information processing and its relationship to the accuracy of the performance of handling from both sides for young people in basketball. It was hypothesized that there is a statistically significant correlation between the role of mental arrangement in cognitive processes and the processing of information and its relationship to the accuracy of the performance of handling from both sides for youth. Basketball. (Ali, H., & Khalid, 2018)
Methods

The descriptive approach was adopted using the correlational method because it suits the nature of the research problem. The population and sample of the research were from the youth and sports centers in Baghdad/Al-Rusafa, consisting of youth basketball players aged 17-18 years, who numbered (30) players, (Al-Shammari & Al Sodani, 2022) they were from the Zafaraniya Youth and Sports Center, Jisr Diyala, and Al-Baladiyat, and their number was (45) players, representing 100% of the total community. (30) Players were chosen as a sample for the research by lottery, (Chermit K.D., Zabolotny A.G., Tikhonova I.V., 2022) and the percentage of the sample was (66.66%).

Some devices, research tools, and means of collecting information were used to perform the research tests. The methods used in the research were personal interviews with the sample with the help of a work team consisting of 5 specialized individuals. Two international referees also participated in the work. One Dell electronic calculator was used to collect data. One Sony Digital camera for photographing the tests, along with some tools used to help in performing the tests, (Dhahi et al., 2022) and (Dr. Zina Abdul-salam, 2020) including 30 funnels, 10 signs, 20 legal basketballs, 4 stopwatches, and recording records.

The steps to carry out the research were based on selected tests suitable for the study, which are: testing shooting at the basket from both sides. (Easa et al., 2022) and (Fahem & Wahid Easa, 2021) The purpose of the test: measuring the accuracy of shooting at the basket. Testing tools: a basketball, (Hadi, A., 2019) a legal basketball court, a whistle. Performance specifications: drawing two lines on one side of the ball. The sides of the court next to the corner area on each side are 20 feet from the basket, and the previous distance is calculated from the middle. (Zeb et al., 2020) The test taker stands on the line assigned to him and makes ten throws towards the basket. Then he moves to the other side of the court and makes ten throws at the same distance. The taker is allowed to use one hand or both hands, and each is granted only one shot. (Hadi & Kadhum, 2021) Two points are calculated for each ball that enters the basket, and one score is calculated for each ball that touches the ring but does not enter the basket. (Kzar & Kadhim, 2020)

Statistical methods: Appropriate statistical methods were used to process the results in the research, which are the arithmetic mean, (Mohsen, Y. F., Makttof, A. M., Sami, M. M., Hikmat, T. Z., Hammood, A. H., Abed, N., & Abdulhussein, 2024) standard deviation, percentages, and Pearson correlation coefficient.
Results

Results of the arithmetic mean and standard deviations for the mental arrangement of cognitive processes and information processing in handling performance from both sides of the research sample.

Table 1: Arithmetic means and standard deviations for mental organization and handling skills among the research sample

<table>
<thead>
<tr>
<th>Variables</th>
<th>Arithmetic mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental arrangement</td>
<td>9.4000</td>
<td>0.5264</td>
</tr>
<tr>
<td>Handling from the right side</td>
<td>8.4000</td>
<td>0.6649</td>
</tr>
<tr>
<td>Handling from the left side</td>
<td>8.8000</td>
<td>0.7178</td>
</tr>
</tbody>
</table>

Results of arithmetic means and standard deviations for the accuracy of performance of left-side handling and right-side handling skills for the research sample.

Table 2: Arithmetic means and standard deviations of accuracy of performance of handling skills among the research sample

<table>
<thead>
<tr>
<th>Variables</th>
<th>Arithmetic mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy of handling</td>
<td>7.6000</td>
<td>0.5164</td>
</tr>
<tr>
<td>Handling from the right side</td>
<td>7.1000</td>
<td>0.567</td>
</tr>
<tr>
<td>Handling from the left side</td>
<td>7.4000</td>
<td>0.699</td>
</tr>
</tbody>
</table>

The extent of the correlation between mental arrangement and the accuracy of performing lateral handling for the research sample

Table 3 shows the correlation, the calculated (t) value, and the tabulated (t) value for the variables in the research sample.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Calculated value</th>
<th>Tabular value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side handling</td>
<td>0.420</td>
<td></td>
</tr>
<tr>
<td>Handling from the right side</td>
<td>0.390</td>
<td>0.361</td>
</tr>
<tr>
<td>Handling from the left side</td>
<td>0.400</td>
<td></td>
</tr>
</tbody>
</table>

Below the level of significance (0.05) and the degree of freedom (28)

Discussion

It is clear to us from Table (2) that there is a correlation between the element of accuracy and mental arrangement and its role in cognitive processes and information processing in
the performance of ambidextrous skills for the left and right handlers of the experimental research sample through the results of the calculated value compared to the tabulated value, which the results of the data in the research attribute to that category. Young people have good experience in choosing the appropriate distances and speed of movement, which is compatible with the appropriate choice of performance time, and the nature of the activity of the basketball game, which requires precision in the technical performance of the skills of handling and shooting towards the basket and from both the left and right directions according to the appropriate responses and according to the requirements of the playing situation, the basketball player during Playing requires an element of speed and movement in accordance with the opponent’s movement and awareness, which requires him to move in transition when executing various skills or shots quickly and accurately, especially if he has good physical and skill preparation, which helps him to deliver tackles accurately while monitoring the opponent’s behavior and how he will react to the variables of the game. For the basketball player to obtain the points that qualify him to win the result of the match, it requires an appropriate and short-term response, which is the decisive factor for the basketball player’s behavior in an appropriate manner, especially when shooting shots at the basket in an orderly manner from the mind and knowing how to choose the information that the brain conjures up in an organized manner without rush and confusion to ensure that he does not fall. With legal mistakes in play and the loss of the opportunity to score scoring points, the researcher believes that the basketball player’s ability to diversify and connect, use proper timing, and good judgment to form and diversify tackles in a way that is appropriate to the close distances from the competitors and the basketball board, the capabilities, movement or stability of the opponent, and the variables of play, while providing the necessary defenses and with coordinated and studied movements by the requirements. The situation in which the basketball player is among his teammates and competitors and the basic types of shots are shot in an effective and non-random manner to obtain points in the game and control the course of the matches in his favor through the process of linking and diversifying skill shots according to the requirements of the playing situation and its variables that the basketball player faces during execution, which Through it, he can deal with these variables and find appropriate solutions through a coordinated formation of the various maneuvers to obtain the points required to win or deter the risk of wasting opportunities to score points. This comes through mentally arranging the priorities of skill performance and his ability to organize cognitive processes, save information, and prepare it for implementation when it is needed during the match. To reach the achievement and the set goal in a way that helps the player not to waste effort, which regulates the work of the muscles according to coordinated nervous instructions that shift from the storage stage to the implementation stage. Accordingly, this research concluded that the stages of storing information in the mind for technical basketball skills must be in an orderly and consistent manner, especially in the learning stage. Motor skills to perform these skills, and when referring to them and translating them in the field, they are arranged in an organized
manner while preparing the information required to be implemented in the field for motor performance, especially during competitions.

**Conclusions**

In this research, it was concluded that there is a significant correlation between the accuracy of the tackles and the motor response to the performance through the role of mental arrangement in the cognitive processes and processing of information for young people in basketball. Also, there is a significant correlation between the accuracy of the handling performance from the left side towards the basket and the mental arrangement of the cognitive processes and processing of information. For youth in basketball, it also appeared that there is a significant correlation between the accuracy of handling from the left and the mental arrangement in cognitive processes and processing of information for youth in basketball.

**Recommendations**

It was found in this research that it is necessary to emphasize the element of motor accuracy, which has an effective impact in achieving game points in basketball and developing them by coaches when developing their training or educational curricula, also with the necessity of emphasizing the motor response according to the mental arrangement and developing it provided that it is coupled with accuracy. Shooting tackles towards the basket or a teammate, as well as the basic skills in the game of basketball. It is also necessary to rely on innovative devices and tools according to special exercises to develop the elements of accuracy and in a sequential mental arrangement to reach the motor response in the game of basketball. Conducting studies similar to the current study on different categories and games to reach scientific results that serve those games.
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