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## Perceived self-efficacy in terms of creative motivation and self-programming of information among advanced Basketball players in Iraq

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### Abstract

This paper's objective is to build measures of perceived self-efficacy, creative motivation and self-programming of information among advanced basketball players in Iraq, know The self-efficacy that is viewed, creative motivation and self-programming of information among advanced basketball players in Iraq , and know the connection between self-efficacy perception and, creative motivation and self-programming of information among advanced basketball players in Iraq and predict perceived self-efficacy in terms of creative motivation and self-programming of information among advanced basketball players in Iraq. The survey method was employed by the researchers in their descriptive approach to measure perceived self-efficacy, creative motivation, and information that is self-programmed, and using the correlation method to know the relationship between variables and predictive studies to predict perceived self-efficacy in terms of creative motivation and self-programming of information for advanced basketball players in Iraq. A total of 110 elite basketball players from the Iraqi Premier League for the 2023–2024 season made up the research community. At a rate of 90.90 percent, 100 players were chosen from the research community. to build measures of perceived self-efficacy, creative motivation, and self-programming of information after following the scientific steps for that. After that, the measures were applied to (40) players representing (36.36%) of the scientific community in order to carry out suitable statistical analyses. The data was processed using the statistical software (SPSS) twenty-fifth edition and appropriate statistical techniques. Based on the findings of the present study and the ensuing interpretations, the following most important conclusions were reached: Advanced basketball players in Iraq have perceived self-efficacy, creative motivation, and self-programming of information, there is a strong positive correlation between perceived self-efficacy, creative motivation, and self-programming of information among advanced basketball players in Iraq, there is a possibility of predicting perceived self-efficacy in terms of creative motivation and self-programming of information among advanced basketball players in Iraq. According to the research In light of these findings, the researchers suggest the following crucial suggestions: Take advantage of the scales of perceived self-efficacy, creative motivation, and self-programming of information that the researchers built and applied to detect these variables among advanced basketball players in Iraq, the need that athletes get in-depth lectures from a professional in sports psychology and psychological therapy during training units, and putting the scales for the variables of the current research in the hands of the Iraqi Central Basketball Federation, specialists, and researchers to test and select their samples accurately.

**Keywords:** Perceived self-efficacy, creative motivation, self-programming of information, basketball players

### Introduction

Perceived self-efficacy is among the fundamentals that gamers generally and basketball players specifically must have. Players must possess it in order to develop themselves mentally in matches that support other training aspects. Players must employ it in performance in matches, especially in basketball, which is a developed and fast game. The match may decide important matters such as perceived self-efficacy. This helps the player to perform balanced on the field and his knowledge of his self-efficacy, considering that the A psychological component is crucial to the players' performance, i.e. it helps them stabilize and is an important tributary in performing the duties that coaches require from their players on the field

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in order to control, given its important and necessary matters. It is also an important and complementary part of other training aspects such as physical and tactical fitness and healthy nutrition, which no player should neglect.

Players must also be able to generate a sufficient amount of important motivations, such as creative motivation, in order for the player to be able to satisfy his internal needs and the needs of the basketball game in matches and to be more eager to prove himself and achieve his selves. The player always seeks to achieve satisfaction for himself, and this makes him a player satisfied with the efforts he makes on the field. The player's ability to confront, solve and deal with problems makes him a self-confident individual. Also, his work on the field in a creative way through innovative and new ideas makes his feelings full of joy and satisfaction with his performance. Self-programming of information is one of the fields of cognitive psychology that provides players with important information that makes them open-minded, creative and distinguished from their peers, which has benefits in improving mental processes through the use and processing of information. It is suitable for knowing the individual differences between players in information and the extent of their success or failure while using information and performing the process of selecting information and rejecting other information through the preparation process. The use of any cognitive strategy by players can contribute to coordinating and organizing scientific concepts for it, which leads to better results in the ideal performance of players as much as possible, which serves the game of basketball. Therefore, the importance of the research came in knowing the perceived self-efficacy, creative motivation and self-programming of information for advanced basketball players in Iraq, and knowing the relationship between them, and also predicting the perceived self-efficacy in terms of creative motivation and self-programming of information for advanced basketball players in Iraq.

### Research problem

There are things that the player must have because they work to continue the ideal performance for long periods and this helps the player in developing their ideas, and the researchers discovered via their basketball expertise that there are important variables that must be studied and applied to basketball players. These variables are related to the players' self-efficacy, creative motivation and self-programming of the information that they must possess on the one hand, and on the other hand, according to the researchers' knowledge, there are no studies related to the variables of the current study on basketball players in order to understand these factors and how they relate to one another, so the researchers decided to study these variables and provide tools to measure them in an accurate scientific manner and then derive an equation to predict the perceived self-efficacy in terms of creative motivation and self-programming of information on advanced basketball players in Iraq in order to advance this important category, the results of which are reflected in the interest of Iraqi basketball.

Additionally, the following can be used to identify the research problem: questions:-

- To what extent do advanced basketball players possess perceived self-efficacy, creative motivation and self-programming of information.
- What is the connection between self-efficacy perception and, creative motivation and self-programming of information among advanced basketball players in Iraq.

- Can an equation be derived to predict perceived self-efficacy in terms of creative motivation and self-programming of information among advanced basketball players in Iraq?

### Research objectives

- Build measures of perceived self-efficacy, creative motivation and self-programming of information among advanced basketball players in Iraq.
- Know The self-efficacy that is viewed, creative motivation and self-programming of information among advanced basketball players in Iraq.
- Know the connection between self-efficacy perception and, creative motivation and self-programming of information among advanced basketball players in Iraq.
- Predict perceived self-efficacy in terms of creative motivation and self-programming of information among advanced basketball players in Iraq.

### Research hypotheses

- A correlation exists between perceived self-efficacy and, creative motivation and self-programming of information among advanced basketball players in Iraq.
- There is a possibility of predicting perceived self-efficacy in terms of creative motivation and self-programming of information among advanced basketball players in Iraq.

### Research fields

**Human field:** Advanced basketball players in Iraq for the 2023-2024 sports season.

**Time field:** From October 10, 2023, until October 6, 2024.

**Spatial field:** Sports halls and places where basketball players are located in Iraq.

### Definition of terms

- **Perceived self-efficacy:** It is all the individual possesses of self-potential that enables him to practice standard control or criteria for his skills, ideas, emotions, and behavior. It serves as the framework for the actions he prescribes based on the environmental, social, and physical factors that influence training. in which he lives. (Amer Saeed Al-Khaikani (and others)
- **The operational definition of self-efficacy perception:** It is the total score that the player obtains as a result of his answer to the paragraphs of the perceived self-efficacy scale.
- **Creative motivation:** It is the stimulation of the individual's motivation towards things that allow him to practice and use his abilities and potential in actions that make him see himself performing special activities that are valuable to him and constitute a latent source of creativity (Abdel Hamid Shaker, 1987, p. 84) <sup>[2-15]</sup>.
- **The operational definition of creative motivation:** It is the total score that the player obtains as a result of his answer to the paragraphs of the creative motivation scale.
- **Self-programming of information:** It means the final result or behavior, as well as the term preparation or handling, which means the process that the inputs undergo until the individual reaches the final response. It is also a set of mental processes that occur from the time the individual is exposed to the stimulus until the response appears, and it is viewed as a procedure arising from the information that the individual has reached, whether from the procedures that occurred previously within the framework of these mental processes or from

the stimuli themselves. (Mustafa Suwaif., 2000, p. 77) <sup>[3]</sup>  
 The operational definition of self-programming of information: It is the total score that the player obtains as a result of his answer to the paragraphs of the self-programming of information scale.

## Fieldwork techniques and research methods

### Methods of research

The researchers measured perceived self-efficacy, creative drive, and self-programming of knowledge using a descriptive technique and the survey method. using the correlation method to determine the relationship between variables and predictive studies to predict perceived self-efficacy in terms of creative motivation and self-programming of information for advanced basketball players in Iraq.

**The scientific community and its samples:** Advanced basketball players in the Iraqi Premier League for the 2023–2024 season were used to identify the study community, with numbers 110.

- The exploratory experiment's sample for the measures of perceived self-efficacy, creative motivation, and self-programming of information: It included (10) players, representing (9.09%).
- The sample for constructing the measures of perceived self-efficacy, creative motivation, and self-programming of information: It included (100) players, representing (90.90%) of the research community.
- Sample application of the scales (perceived self-efficacy, creative motivation and self-programming of information): It included (40) players representing (36.36%) of the research community, and the study tools were utilized in order to carry out relationships and extracting the regression equation.

### Research methods, instruments, and gadgets

- Methods of research: Among them are: • Interviews (see to Appendix 1).
- A survey.
- Foreign and Arabic references and sources.
- Scales.

### Equipment and instruments utilized for the study

- The CLTON kind of electronic calculator.
- One (1) personal calculator of the Dell kind.
- Office materials, such as pencils and paper.
- Kenko type manual stopwatch number (3).

### Methods used in field research

**Procedures for constructing scales of perceived self-efficacy, creative motivation and self-programming of information:** To achieve the first research objective in constructing the scales, the researchers followed the scientific steps for that, which were summarized as follows: (Amer Saeed Al-Khaikani and Ayman Hani Al-Jabouri, 2016, p. 59) <sup>[4]</sup>.

**Determining the objective of the scales of perceived self-efficacy, creative motivation, and self-programming of information:** The objective of each measurement tool was determined, as the scale of perceived self-efficacy aimed to measure perceived self-efficacy, the scale of creative motivation aimed to measure creative motivation, and self-programming of information aimed to measure self-programming of information for advanced basketball players in Iraq.

### Determining the theoretical framework of the scales of

**perceived self-efficacy, creative motivation, and self-programming of information:** After determining the objective of the scales, the theoretical definition of the scales of perceived self-efficacy, creative motivation, and self-programming of information was relied upon and used in determining the wording of the paragraphs.

**Developing the initial formula for the scales of perceived self-efficacy, creative motivation, and self-programming of information:** The researchers used a number of scientific techniques to create the scales' original formula, which may be summed up as follows:

**Assembling and getting ready the paragraphs of the initial formula:** In order to collect the paragraphs of the scales, previous studies were reviewed, and the researchers prepared some of the paragraphs, so the total number for each scale became (15) paragraphs, see Appendix (2, 3, 4).

**Choosing the tone and underlying principles for writing the first paragraphs:** The style of formulating the test and scale paragraphs was determined in the form of declarative phrases, and the first-person formula was used to unify the pattern of the paragraphs. The researchers took into account when formulating their paragraphs (that the paragraph should have one meaning, and that each paragraph should be independent from the others, and avoid using the method of negating the negation, and the phrases or paragraphs should be clear and not ambiguous).

**Choosing answer alternatives:** The researchers chose answer alternatives from three alternatives (always, sometimes, rarely) for all scales.

**Assessing the paragraphs' validity in the perceived self-efficacy, creative motivation, and self-programming of information scales:** After collecting and preparing the paragraphs and determining the answer alternatives, the scales were presented (see Appendix (2, 3, 4) to the experts (for a list of the paragraphs' validity and a list of those that are invalid, see Appendix (5)). and indicate the possibility of modifying them. In light of that, they were approved with an agreement rate of (100%).

After verifying the scale paragraphs' authenticity, they were shown to M.M. Muhammad Hassan Aziz, an expert in Arabic, to ensure that they were accurate and devoid of grammatical faults.. The comments and modifications he made were taken into account, and thus the scale paragraphs are free of linguistic errors.

Instructions for the scales of perceived self-efficacy, creative motivation, and self-programming of information: Instructions for answering were provided, see Appendix (2, 3, 4), and the researchers followed in presenting all paragraphs of their scales a list of phrases containing a method in which the answer was placed with the phrases and its advantage was avoiding errors in placing marks, and emphasis was focused on accuracy and honesty in the response, on keeping the true purpose of the scale a secret, and on telling the study sample that their responses would be kept private and used exclusively for scientific research.

### The exploratory experiment

- The experiment will take place on December 18, 2023, at five o'clock. in the afternoon.
- The quantity of samples: (10) players from Al-Hillah Sports Club in Babil Governorate.



- Location of the experiment: Sports Hall of the Directorate of Youth and Sports of Babil Governorate - Al-Karamah neighborhood.
- **Tools used**
  - Office supplies.
  - The second stopwatch number.
  - The experiment's objectives:
- Ensuring the steadiness of the scales.
- It will be a practical training for researchers to stand on the drawbacks and advantages they experience throughout the primary exam.
- Determining how long it took to respond to the scales.
- Determining the circumstances for using the scales and the challenges they provide;
- Determining the study sample's comprehension and clarity of the scale instructions.
- Identifying the support team's understanding of the nature of the work, see Appendix (6).

### The most important results

- The dependability of the scales was identified.
- • The typical amount of time spent responding to the perceived self-efficacy scale was (4.40) minutes, the creative motivation scale was (4.50) minutes, and the self-programming information scale was (4.55) minutes.
- The research sample understood the instructions, and the circumstances for using the scales were favorable.
- The efficiency of the support team and its understanding of the nature of the work, after which the scales became ready to be applied to the construction sample in their original form.

**The main experiment for the scales of perceived self-efficacy, creative motivation and self-programming of information:** The scales were applied to the 100 players in the construction sample throughout the time frame from 20/2/2024 to 28/2/2024.

**Correction of the scales of perceived self-efficacy, creative motivation and self-programming of information:** After applying the scales to the construction sample and gathering the response forms, the researchers' correction key was used to derive the overall scores for each scale, as indicated in Table (1).

**Table 1:** The answer options and their corrections are displayed for the scales of perceived self-efficacy, creative motivation and self-programming of information

Measures of perceived self-efficacy, creative motivation, and self-programming of information	Answer alternatives	Correction
	Always	3
	Sometimes	2
	Rarely	1

**Objectivity of response:** (3) paragraphs were selected from each scale, then paragraphs Though the wording is different,

the meaning and content are comparable were formulated, and the following procedures were taken: (Abdul Majeed Sayed Ahmed (and others), 2000, p. 77) <sup>[6]</sup>

- Paragraphs (4-16), (8-17) and (12-18) were repeated from each scale.
- Extracting the absolute differences between the two scores (original - repeated) for similar paragraphs of each form.
- Extracting the absolute differences between these scores for every sample member.
- Calculating the standard deviation and arithmetic mean for the sums of these absolute differences.
- When these forms were subjected to response objectivity and the previously mentioned procedures were used, no form was excluded and all of them were valid for analysis. The arithmetic mean and standard deviation were gathered in order to determine the spoken score at which or without which the answers of any player in the sample are accepted.

### Analysis of paragraphs of the scales of perceived self-efficacy, creative motivation, and self-programming of information

#### The two extreme groups (discrimination ability)

"Discrimination The correlation between each paragraph's score and the scale's overall score shows how homogeneous the paragraphs are in measuring the trait, indicating that this method offers a homogeneous scale in its paragraphs. "Ability refers to the ability to differentiate or distinguish between individuals who obtain high scores and individuals who obtain low scores on the same scale" (Qasim Hamid, 2003, p. 32) <sup>[7]</sup>. Paragraph analysis "means keeping the good paragraphs," according to this. in the test" (Huda Jalal Muhammad, 2004, p. 33) <sup>[8]</sup>, so the researchers used these two methods.

The researchers verified the paragraph's ability to distinguish the researchers used the two extreme groups based on the construction sample forms of 100 players, and they took the following actions to determine the paragraphs' discriminating power: -

- Apply the test paragraphs to the construction sample and correct and return the total score obtained by each player.
- Sort the scores that the construction sample produced from highest to lowest in descending order.
- Give the forms 27% of the highest and 27% of the lowest scores. This percentage creates two groups with the greatest size and differentiation because there were 27 players in each category.
- Using the Statistical Package for Social Sciences (SPSS), determine the discriminating power of each scale paragraph by comparing the arithmetic means of the two extreme groups at each paragraph and testing the differences between the scores of the highest and lowest groups for each paragraph using the t-test (t) for two independent samples, and Table (2, 3, 4) shows the discrimination coefficients for the scales of perceived self-efficacy, creative motivation, and self-programming of information.

**Table 2:** Displays the computed t-value, the statistical significance of the perceived self-efficacy scale, and the arithmetic mean and standard deviation for the upper and lower groups.

No.	Minimum 27%		Upper limits 27%		Calculated value of (t)	Sig value	Power of paragraph Distinction
	Mean	Standard deviation	Mean	Standard deviation			
1	1.00	0.000	2.52	0.51	22.11	0.000	Distinction
2	1.64	0.49	2.82	0.39	17.69	0.000	Distinction
3	1.00	0.000	2.41	0.50	21.49	0.000	Distinction
4	1.51	0.61	2.59	0.50	14.89	0.002	Distinction
5	1.44	0.48	2.88	0.33	19.11	0.000	Distinction
6	1.32	0.45	2.64	0.49	15.51	0.001	Distinction
7	1.00	0.000	2.58	0.47	22.28	0.000	Distinction
8	1.35	0.49	2.47	0.50	16.18	0.000	Distinction
9	1.54	0.52	2.47	0.51	15.43	0.001	Distinction
10	1.23	0.43	2.89	0.33	22.38	0.000	Distinction
11	1.46	0.53	2.84	0.44	19.50	0.000	Distinction
12	1.48	0.47	2.42	0.51	16.44	0.000	Distinction
13	1.41	0.50	2.49	0.51	17.39	0.000	Distinction
14	1.70	0.46	2.48	0.51	15.53	0.003	Distinction
15	1.24	0.41	3.00	0.00	27.22	0.000	Distinction

Through Table (2) it is shown that every paragraph on the perceived self-efficacy scale is unique (significant) since each

paragraph's value of (sig) is less than the degree of freedom and the significance threshold (0.05). (52).

**Table 3:** The higher and lower groups' arithmetic means and standard deviations, as well as the scale's computed t-value and statistical significance, are displayed of the creative motivation scale

No.	Minimum 27%		Upper limits 27%		Calculated value of (t)	Sig value	Power of paragraph Distinction
	Mean	Standard deviation	Mean	Standard deviation			
1	1.17	0.33	2.35	0.48	17.69	0.000	Distinction
2	1.44	0.50	2.36	0.50	16.04	0.000	Distinction
3	1.24	0.31	2.27	0.44	15.91	0.000	Distinction
4	1.33	0.50	2.37	0.48	17.92	0.000	Distinction
5	1.42	0.51	2.58	0.43	21.13	0.000	Distinction
6	1.49	0.41	2.67	0.39	19.44	0.000	Distinction
7	1.41	0.50	2.88	0.33	21.09	0.000	Distinction
8	1.47	0.50	2.84	0.39	17.93	0.000	Distinction
9	1.64	0.44	2.49	0.51	14.76	0.002	Distinction
10	1.09	0.27	2.84	0.32	25.75	0.000	Distinction
11	1.35	0.49	2.70	0.46	18.19	0.000	Distinction
12	1.70	0.68	2.68	0.50	15.26	0.002	Distinction
13	1.42	0.44	2.88	0.33	21.61	0.000	Distinction
14	1.58	0.51	2.62	0.41	16.66	0.000	Distinction
15	1.43	0.48	2.67	0.41	17.47	0.000	Distinction
16	1.31	0.46	2.65	0.49	18.20	0.000	Distinction

Table (3) shows that every paragraph on the creative motivation scale is unique (significant) as each paragraph's

value of (sig) is less than the degree of freedom and the significance threshold (0.05). (52).

**Table 4:** The higher and lower groups' arithmetic means and standard deviations, as well as the scale's computed t-value and statistical significance, are displayed for the self-programming scale of information

No.	Minimum 27%		Upper limits 27%		Calculated value of (t)	Sig value	Power of paragraph Distinction
	Mean	Standard deviation	Mean	Standard deviation			
1	1.17	0.33	2.47	0.48	18.80	0.000	Distinction
2	1.21	0.44	3.00	0.00	19.92	0.000	Distinction
3	1.00	0.000	2.52	0.51	22.25	0.000	Distinction
4	1.12	0.31	2.59	0.52	20.44	0.000	Distinction
5	1.00	0.000	2.72	0.49	23.78	0.000	Distinction
6	1.05	0.24	2.88	0.33	28.33	0.000	Distinction
7	1.00	0.000	2.75	0.39	26.77	0.000	Distinction
8	1.11	0.33	2.55	0.49	19.50	0.000	Distinction
9	1.16	0.42	2.46	0.47	19.78	0.000	Distinction
10	1.32	0.53	2.70	0.45	21.38	0.000	Distinction
11	1.23	0.42	2.85	0.41	24.67	0.000	Distinction
12	1.00	0.000	2.64	0.48	23.78	0.000	Distinction
13	1.00	0.000	2.72	0.38	24.97	0.000	Distinction
14	1.00	0.000	2.94	0.24	30.22	0.000	Distinction
15	1.00	0.000	2.91	0.25	29.65	0.000	Distinction

Through Table (4) it is shown that the value of (sig) for each paragraph of the self-programming scale for information is less than the degree of freedom and the significance threshold (0.05), indicating that each paragraph is unique (significant). (52).

### Coefficient of internal consistency

The degree of homogeneity of the paragraphs in assessing the observed behavioral phenomena is ascertained using the internal consistency coefficient. This approach has been employed by researchers to differentiate it in the following ways: (Amer Saeed Al-Khaikani and Ayman Hani Al-Jabouri, 2017, p. 69) <sup>[9]</sup>

- In order for each paragraph to assess the same behavioral dimension that measures the scale overall, it gives us a

homogenous scale across all of its paragraphs.

- -The scale's discriminating power and the paragraph's discriminating power are comparable.
- The capacity to draw attention to the relationship between the scale's paragraphs.

### Relationship of the paragraph score to the scale's overall score:

Since the value of (sig) was less than the significance level (0.05) at a degree of freedom (98), the correlation coefficient (Pearson) between the paragraph score and the total score of the scales was determined in order to allocate the construction sample of (100) players. Table (5, 6, 7) displays the correlation coefficients between the paragraph score and the total score for each scale.

**Table 5:** The correlation coefficients between each paragraph's score and the perceived self-efficacy scale's overall score

No.	R value	Sig value	Significance	No.	R value	Sig value	Significance	No.	R value	Sig value	Type of significance
1	0.60	0.000	Sig	6	0.60	0.000	Sig	11	0.63	0.000	Sig
2	0.58	0.000	Sig	7	0.67	0.000	Sig	12	0.57	0.000	Sig
3	0.62	0.000	Sig	8	0.51	0.000	Sig	13	0.62	0.000	Sig
4	0.53	0.000	Sig	9	0.76	0.000	Sig	14	0.64	0.000	Sig
5	0.55	0.000	Sig	10	0.68	0.000	Sig	15	0.69	0.000	Sig

**Table 6:** The correlation coefficients between each paragraph's score and the overall creative motivation scale score

No.	R value	Sig value	Significance	No.	R value	Sig value	Significance	No.	R value	Sig value	Type of significance
1	0.52	0.000	Sig	6	0.64	0.000	Sig	11	0.63	0.000	Sig
2	0.68	0.000	Sig	7	0.59	0.000	Sig	12	0.68	0.000	Sig
3	0.63	0.000	Sig	8	0.70	0.000	Sig	13	0.65	0.000	Sig
4	0.66	0.000	Sig	9	0.64	0.000	Sig	14	0.59	0.000	Sig
5	0.60	0.000	Sig	10	0.61	0.000	Sig	15	0.62	0.000	No.

**Table 7:** The correlation coefficients between each paragraph's score and the overall score of the self-programming information scale

No.	R value	Sig value	Significance	No.	R value	Sig value	Significance	No.	R value	Sig value	Type of significance
1	0.52	0.000	Sig	6	0.67	0.000	Sig	11	0.58	0.000	Sig
2	0.60	0.000	Sig	7	0.63	0.000	Sig	12	0.67	0.000	Sig
3	0.65	0.000	Sig	8	0.57	0.000	Sig	13	0.55	0.000	Sig
4	0.61	0.000	Sig	9	0.65	0.000	Sig	14	0.66	0.000	Sig
5	0.56	0.000	Sig	10	0.69	0.000	Sig	15	0.62	0.000	Sig

Psychometric properties of the scales of perceived self-efficacy, creative motivation, and self-programming of information:

### The legitimacy of the scales

The degree of validity is the most essential aspect for the criteria of the quality of the scales. A test that properly measures the phenomena it was intended to evaluate and does not measure anything in addition to or instead of it is said to be a valid scale (1). When the three measures were shown to fifteen experts and specialists, the researchers employed content validity to verify their validity. Refer to Appendix (5). Regarding the legitimacy of the hypothetical framework and the validity of each paragraph of the scales, the experts unanimously concurred. The researchers verified the validity of the hypothetical structure or construction using the following methods:

- Finding discrimination coefficients by the two extreme groups. This was relied upon to keep the paragraphs with high distinction as shown in Table (2, 3, 4).
- When determining the correlation coefficients between each paragraph and the scale's overall score, the researchers employed the internal consistency approach, as shown in Tables (5, 6, 7).

**Stability of scales:** To verify stability, The following techniques were employed by the researchers:

First, the test and retest technique was used to determine the test stability coefficient. The test was first administered on December 18, 2023, and then again on December 29, 2023. The researchers determined that the scales have a high degree of stability after extracting the value (r) after the data had been emptied, as the stability coefficient for the perceived self-efficacy scale reached (0.88), for the creative motivation scale (0.91), and for the self-programming information scale (0.92).

### Applying the measures of perceived self-efficacy, creative motivation and self-programming of information to the example application

The measuring instruments for the study variables were constructed and prepared, and then they were used on the application sample, which amounted to (40) players, on the date of (20-25/3/2024), in order to collect the results, conduct correlations, extract the regression equation and achieve the main research objectives.

### Methods of statistics

The following techniques were extracted by the researchers using the seventeenth edition of the Statistical Package for

Social Sciences (SPSS):

### Results presentation, analysis, and debate

Chapter Four includes presenting the results that were reached, analyzing and discussing them according to the sequence of the main research objectives.

(Knowledge of perceived self-efficacy, creative motivation

and self-programming of information among advanced basketball players in Iraq): - In order to achieve In order to do this, the three metrics were used on the 40-player study sample, and the outcomes were as follows: -

**First:** Knowing the perceived self-efficacy of advanced basketball players in Iraq: -

**Table 8:** Displays the statistical breakdown of the perceived self-efficacy scale outcomes among advanced basketball players in Iraq

No.	Unit of measure	Arithmetic mean	Standard deviation	Hypothetical average	Coefficient of skewness	Calculated value of (t)	Sig value	Type of significance
15	Degree	39.18	0.88	30	0.78	30.44	0.000	Sig

The arithmetic mean for all efficiencies was 39.18, with a standard deviation of 0.88 and a skewness coefficient of 0.78, indicating that the degrees of the research sample members are distributed moderately on this efficiency. Table (8) displays the degrees of the perceived self-efficacy scale among basketball players in Iraq. When contrasting the research sample's mean degrees with its fictitious mean of thirty degrees revealed that the sample had felt self-efficacy since the average levels of perceived self-efficacy are greater than the hypothetical average. The t-test was employed for one sample to assess the statistical significance of the differences; the computed (t) value was (30.44), which is significant since the degree of freedom and the (sig) value of (0.000) are less than the significance threshold (0.05). is (39). Researchers attribute the reason for players' possession of perceived self-efficacy to its importance, and this is what (Bandura) confirms in this regard that the perception of self-efficacy by individuals is related to the nature of their assessment of their abilities to achieve certain levels of achievement, and the ability to control events, and the judgment affects the levels of perceived self-efficacy, the goals they seek to achieve, the nature of the work and the amount of effort they will exert, the extent of their perseverance to confront the obstacles that hinder the course of their lives, their way of thinking and the amount of stress they feel and suffer from in order to adapt to the training and environmental demands they face. (Fawaz Ali Abdul 2019, p. 55) <sup>[10]</sup> Therefore, individuals' beliefs about their perceived self-efficacy are the key to their success, and if individuals believe that they cannot achieve the desired and desired results, they will not take the initiative to make attempts that would accomplish and achieve what they aspire to. Perceived self-efficacy is a cognitive mediator of behavior, as individuals' knowledge and expectation of their self-efficacy The perceived self-efficacy will determine the nature and

extent of the behavior they will perform, i.e. it will determine the amount of effort individuals exert and the degree of perseverance they will show in the face of obstacles and difficulties that they encounter. (Hussein Musa Abdul, 2013, p. 20)

The expectations of individuals and the knowledge they possess about their perceived self-efficacy affect their initiative behavior in situations of information, knowledge, and achievement, as well as the nature of their decisions related to doing a certain job or refraining from doing it, because perceived self-efficacy will determine whether they will perceive the nature of the task they intend to do as a real opportunity.

(Bandura and Shank) indicated during their studies that proved that individuals who have high levels of knowledge about their perceived academic self-efficacy have an automatic ability to perform a set of difficult tasks that require additional effort from them when performing those tasks, and that these individuals are exposed to less disturbances than others, and have the ability to organize themselves to a high degree, so interest has increased significantly in recent years (in perceived self-efficacy) as an important axis of the teaching and learning process, due to its great importance and its impact In learning individuals how to organize their information and knowledge that they acquire on their own, and strengthening the strength of individuals in solving their problems, and these processes, if learned in the correct ways and mastered by individuals, can be used by them spontaneously, so that they become automatic and can be retained and do not need to be repeated for the purpose of learning them again. (Nibras Younis Muhammad Al Murad 2008, p. 250) <sup>[13]</sup>

### Knowing the creative motivation of advanced basketball players in Iraq

**Table 9:** Displays the findings of the creative motivation scale's statistical analysis among advanced basketball players in Iraq

No.	Unit of measure	Arithmetic mean	Standard deviation	Hypothetical average	Coefficient of skewness	Calculated value of (t)	Sig value	Type of indication
15	Degree	38.77	0.81	30	0.68	29.17	0.000	Sig

With an arithmetic mean of 38.77, a standard deviation of 0.81, and a skewness coefficient of 0.68, the findings of the creative motivation scale are displayed in Table 9. This suggests that the study sample's scores are spread reasonably on the scale. When contrasting the research sample's average scores with the fictitious average of (30) degrees, It became evident that the sample had creative drive since the average scores on the creative motivation measure are greater than the hypothetical average. The t-test was used for one sample to ascertain the statistical significance of the differences between

the two averages. The calculated (t) value was (29.17), which is significant because the degree of freedom and the significance level (0.05) are both smaller than the (sig) value of (0.000). is (39). Researchers attribute the reason why players have creative motivation to the fact that motivation is one of the most important variables that researchers have indicated to be important in creativity. It is a basic component in most of the models presented to explain the components of creative behavior. It can be noted that creative behavior can be understood and predicted in light of three basic variables,



which are abilities, skills, and motivations. The interaction between these three variables is the decisive factor in predicting the extent of creativity among individuals. (Naseer Mohammed Hamoud. 2017, p. 176) <sup>[14]</sup>

(Carl Rogers) emphasized the great and effective role of self-realization motivation, as the individual creates primarily in his opinion to satisfy himself, and therefore there is no need to question the extent to which the production is good or bad from the moral and social perspectives, as he indicates that what he means by creative motivation is that (guiding current that is clear in all our organic and human life, it is the expectation of spread, extension, development and maturity, and it is the tendency to activate our abilities to the extent that this activity enhances the existence and life of the human being), and he also sees the importance of openness to experience, as he described it as (low rigidity and the ability to penetrate) and exceeding the limits of concepts, beliefs,

perceptions and assumptions and the ability to receive a lot of conflicting information without resorting to closing the position or tricks and defensive means (Shaker Abdul Hamid, 1987, p. 82) <sup>[2-15]</sup>. (Amabile) and others focused on the importance of motivation in creative productivity and distinguished between the real motivation within the individual and the non-essential external motivation outside the individual. For example, internal motivations may include pure entertainment with creativity or a personal desire to solve a problem. While external motivations may include a desire for fame or wealth, according to (Amabile) internal motivation is essential in creativity, while external motivation may hinder creativity under many circumstances, but not all of them (Arwa Mohammed Rabi Al-Khairi2012, p. 262) <sup>[16]</sup>.

### **Knowledge of self-programming of information for advanced basketball players in Iraq**

**Table 10:** The outcomes of the information scale's self-programming are statistically described in advanced basketball players in Iraq

No.	Unit of measure	Arithmetic mean	Standard deviation	Hypothetical average	Coefficient of skewness	Calculated value of (t)	Sig value	Type of indication
15	Degree	38.44	0.72	30	0.57	29.87	0.000	Sig

The findings of the self-programming scale for information are displayed in Table (10) with an arithmetic mean of 38.44, a standard deviation of 0.72, and a skewness coefficient of 0.57. These results suggest that the study sample members' scores are dispersed moderately on the scale. It was evident by comparing the research sample's average scores with the fictitious average of (30) degrees that the average scores of the self-programming scale for information are higher than its hypothetical average, which means that the sample enjoys self-programming of information. The t-test was used for one sample to ascertain the statistical significance of the differences between the two averages. The calculated (t) value was (29.87), which is significant because the degree of freedom and the significance level (0.05) are both smaller than the (sig) value of (0.000). is (39). The importance of self-programming of information lies in enhancing the ability to solve problems facing players through familiarity with diverse information that helps them build objective judgments when they face problems by dealing with the information available to them in various aspects, which justifies the importance of self-programming skills for information that enable us to use this information effectively and distinguish between them in

terms of their quality. (Dalal Abdul Karim Thamer Al-Qaisi, 2021, p. 60) <sup>[17]</sup>.

The researchers attribute the reason for players having this variable, which increased the information among the players, which makes them want to know more about the things and topics they care about, which prompts them to try to establish the most important foundations of self-learning. In addition, it works to reduce the burden on different types of memory through the information that the player obtains with a similar meaning because its connection becomes easier and its acquisition becomes easier, and all of this leads to the need for players at all levels to know the methods of preparing and mastering information because this helps them to be creative at any stage they need it. (Muhammad Abdul Sami Rizq, 2004, p. 91) <sup>[18]</sup>.

**(Knowing the connection between Iraqi basketball players' self-programming of knowledge, creative motivation, and perceived self-efficacy: - The researchers employed the Pearson simple correlation coefficient in the following manner to accomplish this goal:**

**Table 11:** The nature of the correlations between the variables under consideration is displayed Study

Variables	Perceived self-efficacy	Creative motivation	Self-programming of information
Perceived self-efficacy	-	0.92	0.90
Creative motivation	0.92	-	0.89
Self-programming of information	0.90	0.89	-

Table (11) shows that all simple correlation coefficients (Pearson) between perceived self-efficacy, creative motivation, and self-programming of information are significant, i.e. there is a direct relationship between perceived self-efficacy, creative motivation, and self-programming of information. The more creative motivation and self-programming of information increase in a good way for the player, the more his perceived self-efficacy increases. The researchers believe that the importance of these variables and the extent of their close relationship makes players able to deal with data and analyze it with high accuracy, which contributes to improving their decisions during training and competition based on strong evidence to communicate

effectively with the coaching staff, which contributes to achievement and good reading of the match. Not only that, but it also contributes to following up on developments and updates in the world of basketball, and thus they are constantly informed of changes in the game at various levels. 3-3 (Deriving a predictive equation to predict perceived self-efficacy in terms of creative motivation and self-programming of information for basketball players in Iraq):-

To accomplish the study's primary goal, which entails creating a prediction equation to predict perceived self-efficacy in terms of creative motivation and self-programming of information for basketball players in Iraq), and in order to determine a predictive value, the researchers sought to use



multiple linear regression equations through which this relationship can be predicted, and the researchers shed light on the following:-

First: Extracting the linear regression equation model's quality indicators:-

**Table 12:** The linear regression equation model's quality indicators are displayed

Variables	Link value	Nature of the association	Contribution rate	Adjusted ratio	Calculated f value	Sig value	Type of significance
Perceived self-efficacy + creative motivation + self-programming of information	0.92	Multiple	0.84	0.88	40.77	0.000	sig

Table (13) shows that the value of the multiple correlation coefficient reached (0.92), which indicates that the variables (perceived self-efficacy + creative motivation + self-programming of information) among basketball players in Iraq explain (0.84%) of the changes that occur in the values of the variable represented by (perceived self-efficacy), and the same table shows that the multiple linear regression model is significant, meaning it best captures the relationship between the variables under study. The value of the (F) test,

which is computed for the multiple correlation coefficient, reached 40.77, which is significant at a significance level of 0.05.

#### Regression equation coefficient values are extracted

As indicated in Table, the researchers provided insight into the linear regression's structure and the values of the linear regression coefficients between the variables <sup>[13]</sup>.

**Table 13:** The estimated values for prediction are displayed in perceived self-efficacy, creative motivation and self-programming of information among basketball players in Iraq

Variables	Nature of the factor	Factor value	Estimated standard error	Value of (t)	Significance level	Type of indication
Constant	A	5.97				
Creative motivation	B1	0.44	0.49	16.33	0.000	Sig
Self-programming of information	B2	0.42	0.45	12.89	0.000	Sig

It is clear from Table (13) for the values of the regression equation (perceived self-efficacy, creative motivation and self-programming of information among basketball players in Iraq), a predictive equation can be derived or an expected value can be derived for each player as follows: -  
 Predictive value (perceived self-efficacy) = constant (a) + (b1 × creative motivation) + (b2 × self-programming of information).

**Table 13:** For example, the player (Mohammed Abdul Karim Mohammed) obtained the following ratings

Variables	Degree
Creative motivation scale	38.77
Information self-programming scale	38.44

#### When applying the above equation

Predictive value (perceived self-efficacy) =  $5.97 + (0.44 \times 38.77) + (0.42 \times 38.44) = 33.18$

While the arithmetic mean of the sample's perceived self-efficacy reached (38.18), which indicates that the player has a good level of perceived self-efficacy, and this confirms that we can expect him to achieve a higher level than the arithmetic mean for his perceived self-efficacy.

Consequently, the primary goal of the study has been accomplished by developing a predictive equation to predict perceived self-efficacy in terms of creative motivation and self-programming of information among advanced basketball players in Iraq.

#### Conclusions and recommendations

##### Conclusions

- The ability of the scale of perceived self-efficacy, creative motivation and self-programming of information with (15) items for each scale, which were built to measure perceived self-efficacy, creative motivation and self-programming of information among advanced basketball players in Iraq.

- Advanced basketball players in Iraq enjoy perceived self-efficacy, creative motivation and self-programming of information.
- There is a strong positive correlation between perceived self-efficacy, creative motivation and self-programming of information among advanced basketball players in Iraq.
- There is a possibility of predicting perceived self-efficacy in terms of creative motivation and self-programming of information among advanced basketball players in Iraq.

#### Recommendations

- Benefit from the scales of perceived self-efficacy, creative motivation, and self-programming of information, which the researchers built and applied to detect these variables among advanced basketball players in Iraq.
- Use psychological counseling to develop perceived self-efficacy, creative motivation, and self-programming of information among basketball players in Iraq.
- The requirement that athletes get in-depth lectures from a sports psychologist and psychological counseling professional during training units.
- Take advantage of these scales and use them to evaluate players in different games.
- Give the Iraqi Central Basketball Federation, experts, and researchers the scales for the variables of the present study so they may precisely test and choose their samples.

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**Appendix 1:** Shows the names of the experts and specialists with whom the researchers conducted personal interviews.

No.	Name	Specialization	Workplace	Interview date	Purpose of the interview
1	Prof. Dr. Amer saeed al-khaikani	Sports psychology	University of babylon - college of physical education and sports sciences	15/10/2023	Regarding the measures of perceived self-efficacy, creative motivation, and self-programming of information
2	Prof. Dr. Amna fadel mahmoud	Test and measure	University of babylon	15/10/2023	Regarding the measures of perceived self-efficacy, creative motivation, and self-programming of information
3	Dr. Naima zidane khalaf	Test and measure	University of baghdad	16/10/2023	Regarding the measures of perceived self-efficacy, creative motivation, and self-programming of information
4	Asst. Prof. Dr. Hala razzaq madloul	Test and measure	University of kufa - college of physical education and sports sciences	18/10/2023	Regarding the measures of perceived self-efficacy and creative motivation and self-programming of information

**Appendix 2:** Shows a questionnaire to survey the opinions of experts and specialists in determining the validity of the paragraphs of the perceived self-efficacy scale

Dear Professor .....

Greetings:-

The researchers aim to conduct their research entitled (Perceived self-efficacy in terms of creative motivation and self-programming of information for advanced basketball players in Iraq). Given your scientific and practical experience in your field of specialization, I would be grateful if you could provide possible assistance regarding the validity of (the paragraphs of the perceived self-efficacy scale), by placing a check mark (✓) in the check box that you see as the most appropriate to measure what it was designed for. You can also make any observation that the specialist finds important and that was not included in the form at the end of the form. Thank you very much. Note that the alternative

answers are (always, sometimes, rarely).

Perceived self-efficacy is defined as: all the individual possesses of self-capabilities that enable him to practice standard control or criteria for his abilities, thoughts, feelings and actions. It represents the frame of reference for the behaviors that he issues according to the physical, social and training environmental determinants in which he lives.

Expert's name:-

Title, academic degree and date of obtaining:-

Specialization:-

Place of work:-

Signature:- Researchers

Date:-

Shows the paragraphs of the perceived self-efficacy scale in its final form

Self-esteem scale (The real purpose of the scale was hidden to increase the desirability of answering its items.)

Dear player, Greetings:

You have a list of phrases in your hands. Please answer them taking into account the following notes:

- Read each phrase and after understanding its meaning, answer directly with what applies to you personally. Note that there is no right or wrong answer.

- Put a check mark (✓) in front of the phrase and below the word if the phrase applies to you even to a small degree.
- Be sure that your answer will be confidential and for scientific research purposes only, so please answer all phrases accurately and honestly and do not leave any phrase unanswered.

No.	Paragraph	Always	Sometimes	Rarely
1	I have the desire to learn everything new in basketball			
2	Training helps me learn and keep up with modern basketball			
3	My modern ideas that I have make me reduce my mistakes			
4	I face problems with the information I have			
5	I am a player with a strong will			
6	I have the ability to think about how to win decisive matches			
7	Some describe me as being loved by everyone			
8	I have the ability to form good relationships with players and assistant staff			
9	My ideas make me a player who sees the match as very easy			
10	I am more determined if my colleagues criticize my performance			
11	I continue with my will and determination despite failing in some matches			
12	I insist on doing my duty on the field despite the pressure from the audience			
13	My strong will is the secret of my success in achieving victory and repeated achievements			
14	I am keen to show my best level on the field			
15	My self-confidence makes me brave in decisive matches			

**Appendix 3:** Shows a questionnaire to survey the opinions of experts and specialists in determining the validity of the paragraphs of the creative motivation scale.

Dear Professor .....

Greetings: -

The researchers aim to conduct their research entitled (Perceived self-efficacy in terms of creative motivation and self-programming of information for advanced basketball players in Iraq). Given your scientific and practical experience in your field of specialization, I would be grateful if you could provide possible assistance regarding the validity of (the paragraphs of the creative motivation scale), by placing a mark (✓) in the check box that you see as the most appropriate to measure what it was designed for. You can also make any observation that the specialist finds important and that was not included in the form at the end of the form. Thank you very much. Note that the alternative answers are (always, sometimes, rarely). Creative motivation is defined as the stimulation of an individual's motivation towards things

that allow him to practice and use his abilities and potential in actions that make him see himself doing special activities that are valuable to him and constitute a latent source of creativity. The paragraph of the Creative Motivation Scale is shown in its final form

Self-Esteem Scale

Dear Player:

Greetings:

You have a list of phrases in your hands. Please answer them taking into account the following notes:

- Read each phrase and after understanding its meaning, answer directly with what applies to you personally. Note that there is no right or wrong answer.
- Put a check mark (✓) in front of the phrase and below the word if the phrase applies to you even to a small degree.
- Be sure that your answer will be confidential and for scientific research purposes only, so please answer all phrases accurately and honestly and do not leave any phrase unanswered.

No.	Paragraph	Always	Sometimes	Rarely
1	I have the ability to apply skills in a creative way that pleases the onlookers			
2	I have the ability to perform new and innovative activities			
3	I have the ability to retry my performance when I lose			
4	I have the ability to perform innovative activities that make me excel over my fellow players			
5	I have the desire to complete every activity that the coach asks of me, and in an innovative way			
6	I have the ability to obtain up-to-date information for any task			
7	I try to invest my ideas to achieve my goals			
8	I have the ability to decide a difficult match			
9	I carry out the coach's duties actively and energetically even if they are difficult			
10	I have the ability to deal with problems in a unique way			
11	I do my best to apply new ideas			
12	I focus on achieving my goals in a new and creative way			
13	I suggest to my coaches unconventional ways to implement the plan in difficult matches			
14	I evaluate my own achievements from time to time			
15	I struggle in a distinctive way to achieve my goals.			

**Appendix 4:** Shows a questionnaire to survey the opinions of experts and specialists in determining the validity of the paragraphs of the self-programming scale for information

Dear Professor .....

Greetings:-

The researchers aim to conduct their research entitled

(Perceived self-efficacy in terms of creative motivation and self-programming of information for advanced basketball players in Iraq). Given your scientific and practical experience in your field of specialization, I would be grateful if you could provide possible assistance regarding the validity of (the paragraphs of the self-programming scale for

information), by placing a check mark (✓) in the check box that you see as the most appropriate to measure what it was designed for. You can also make any observation that the specialist finds important and that was not included in the form at the end of the form. Thank you very much. Note that the alternative answers are (always, sometimes, rarely).

Self-programming of information is defined as: a set of mental processes that occur from the time the individual is exposed to the stimulus until the response appears and is viewed as a procedure arising from the information that the individual has reached, whether from the procedures that occurred previously within the framework of these mental processes or from the stimuli themselves.

The paragraphs of the self-programming of information scale

are shown in its final form

Self-esteem scale

Dear player, Greetings:

You have a list of phrases in your hands. Please answer them, taking into account the following notes:

- Read each phrase and after understanding its meaning, answer directly with what applies to you personally. Note that there is no right or wrong answer.
- Put a check mark (✓) in front of the phrase and below the word if the phrase applies to you even to a small degree.
- Be sure that your answer will be confidential and for scientific research purposes only, so please answer all phrases accurately and honestly and do not leave any phrase unanswered.

No.	Phrases	Always	Sometimes	Rarely
1	I have the ability to receive information from the coach on the field easily.			
2	I have a high ability to store what the coach asks of me during the match.			
3	I have the ability to apply what he asks of me in more than one way on the field.			
4	I have the ability to search for new information that helps me during the match.			
5	I have the ability to remember important information in the match without difficulty.			
6	I use more than one method to find solutions that will help my team.			
7	I have the ability to memorize information well.			
8	I absorb the information presented by the coach in an organized manner.			
9	I set specific symbols for myself to remember the main topics when the coach explains the new tactic.			
10	I have a high ability to remember and retrieve information.			
11	I review what the coach wants from me before the match.			
12	I anticipate the results of my thinking before starting to implement what is required of me.			
13	I have the ability to quickly and in a new way solve any situation i encounter.			
14	I can retrieve old ideas and link them to new ones.			
15	I have the ability to receive new information from any fellow player.			

**Appendix 5:** A table shows the names of the experts who were relied upon by the researchers in the validity of the scales of perceived self-efficacy, creative motivation, and self-programming of information.

No.	Expert name	Specialization	Affiliations
1	Prof. Dr. Amer saeed jassim al-khaikani	Sports psychology	College of physical education and sports sciences / university of babylon
2	Prof. Dr. Salman akab sarhan	Sports psychology	College of physical education and sports sciences - university of kufa
3	Prof. Dr. Haider naji habash	Sports psychology	College of education for girls - department of physical education and sports sciences / university of kufa
4	Prof. Dr. Nizar hussein al-nafakh	Testing and measurement	College of education for girls - department of physical education and sports sciences / university of kufa
5	Prof. Dr. Fadhel kurdi shalaka	Sports psychology	College of physical education and sports sciences - university of kufa
6	Prof. Dr. Hassan hadi saleh	Sports psychology	College of physical education and sports sciences - university of kufa
7	Assist. Prof. Dr. Warda ali abbas	Testing and measurement	College of physical education and sports sciences for girls / university of baghdad
8	Assist. Prof. Dr. Janan naji zouin	Sports psychology	College of physical education and sports sciences / university of baghdad
9	Assist. Prof. Dr. Salam mohammed al-karaawi	Sports psychology	College of physical education and sports sciences - university of babylon
10	Asst. Prof. Dr. Mohsen mohammed hassan	Sports psychology	College of physical education and sports sciences / university of kufa
11	Assist. Prof. Dr. Ali bakhit hassan	Sports psychology	College of physical education and sports sciences / university of kufa
12	Asst. Prof. Dr. Hala razaq madloul	Test and measurement	College of physical education and sports sciences / university of kufa
13	Assist. Prof. Dr. Marwa ali hamza	Sports psychology	College of physical education and sports sciences / university of karbala
14	Assist. Prof. Dr. Suad khairy kazim	Sports psychology	College of physical education and sports sciences / university of babylon
15	Assist. Prof. Dr. Ghaith mohammed karim	Test and measurement	College of physical education and sports sciences / university of kufa

**Appendix 6:** Names of the assistant work team, their specializations and addresses

No.	Name	Specialization	Affiliations
1-	Dr. Hassanein jumaa asri	Ph.d. Physical education and sports sciences - basketball coach	Babylon governorate
2-	Dr. Ali bakhit hassan	Ph.d. Physical education and sports sciences - testing and measurement	Babylon governorate
3-	Dr. Mohamed hassan shaalan	Ph.d. Physical education and sports sciences - international basketball referee	Babylon governorate
4-	Assist. Lec. Ghaith mohamed al-lawza	Master's - physical education and sports sciences	Babylon governorate