

# Brain habits, Accuracy and Its Relationship to Self-Confidence for Handball Players

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## Abstract

The current research aims to identify the struggle for accuracy and its relationship with self-confidence among players of the Baghdad and Middle Euphrates clubs with handball, to achieve this goal, two tools have been prepared, one of which is to measure the struggle for accuracy and the other to measure self-confidence after finding their psychometric characteristics represented in honesty and constancy, the two tools were applied on the research sample of (152) players from the clubs of Baghdad and the Middle Euphrates with youth handball and after analyzing the data using statistical means the research resulted in the research sample enjoying the struggle for accuracy and self-confidence in them, as well as the existence of a statistically significant correlation between the struggle for accuracy and self-confidence of the players of Baghdad and Euphrates clubs with handball.

**Keywords:** Brain habits, self-confidence, handball players

## Introduction

Athletes generally try to achieve their own goals and they differ in their responses to different alerts and situations according to individual differences, the situation that includes a challenge to the player may be threatening to another player, and this is why he encourages <sup>1</sup> the first to deal with this situation and tries to solve the problem he is exposed to and sees in it an opportunity to enhance himself and his appreciation and increase his sense of self-confidence and confront the opponent with high spirit and ability as a result of the size of the stadiums, especially the handball court, due to the approach of the opponent and the continuous increase in pressure along the competition, the psychological <sup>2</sup> aspect plays an important, prominent and direct role, and the lack of interest in it leads to a lack of fulfillment of the duties, technical and planning skills, and adaptation to the opponent's reactions, through which the behavior of the players on the field can be determined with high and accurate performance, and this requires a continuous physical, <sup>3</sup> skill and psychological struggle. One of the habits of the mind is (the struggle for accuracy). When

a player matures in possessing this trait, he increases the care and focus of his work at the required level in the stadium this trait is related to what the player possesses in terms of cognitive, skill and psychological characteristics and characteristics, and it may have one of these traits, which is the subject of this research, which is self-confidence, and in that, given that a person's confidence in his abilities, skills and attributes is a catalyst factor to improve his performance, whether that performance is technical, physical or mental <sup>4</sup>. Hence, the problem of the current research is summarized in the answer to the following question: What is the strength and direction of the correlation between the struggle for accuracy and self-confidence of the players of the Baghdad clubs and the Middle Euphrates with hand reel?

## Research objectives:

- The struggle for accuracy among the players of the Baghdad and Euphrates clubs with handball.
- Self-confidence of the players of the clubs of Baghdad and the Euphrates through handball.

- Relationship the correlation between the struggle for accuracy and self-confidence of the players of the Baghdad clubs and the Middle Euphrates handball.

**Research fields:**

**The human field:** Includes players from Baghdad clubs middle Euphrates youth.

**Time field:** from 15/7/2020 to 22/10/2020.

**Spatial field:** Club halls in Baghdad and the middle Euphrates.

Terminology used:

- The struggle for accuracy:

**Definition (Kallick & Costa ,2000):** Individuals who value accuracy and perfection and take the time to check their products and to make sure that what they do is accurate and flawless in order to reach the highest possible standards and this makes them proud of their achievements that are characterized by perfection, craftsmanship and perfection<sup>(1)</sup>.

**Procedural definition:** The total score that the respondent obtains when answering the paragraphs of the Struggle for Accuracy scale adopted in the current research.

- Self- confidence:

**The researchers definition it:** It is a personality trait of a strong and balanced individual and his ability to deal with different situations and the direction of others by knowing himself as a result of continuous evaluation and appreciation.

**Procedural definition:** The total degree obtained by the respondent when answering the paragraphs of the self-confidence scale adopted in the current research.

Research methodology and field procedures:

**Research Methodology:**

The researcher used the descriptive approach in the survey method and correlational studies as a better way to solve the research problem due to its relevance and the nature of the current study.

Community and sample research:

The research community included (250) young handball players from clubs in Baghdad and the Middle Euphrates. The research sample included (\*). By applying the (Stephen) equation <sup>(2)</sup> to (152) youth players from Baghdad’s clubs with handball, it was withdrawn by a simple random method, as shown in table (1) below.

$$n = \left[ \frac{N \times p (1 - p)}{[(N - 1) \times (d^2 \div z^2)] + p (1 - p)} \right]$$

**Table (1) shows the numbers of community members and the research sample and the percentages for each club**

N	Clubs	Research community		Research sample
		Members	Percentage	
1	Clubs of Baghdad	65	26%	40
2	Karbala	45	18%	27
3	Babylon	50	20%	31
4	Diwaniya	45	18%	27
5	Najaf	45	18%	27
Total		250	%100	152

**Research tools:**

In order to achieve the goals of the current induction, two tools were required, one to measure the struggle for accuracy and the other to measure self-confidence, through reviewing the literature and previous studies, a scale (Struggle for Accuracy) prepared by (Asaad Abdul Hassan: 2019), In building this scale, it was based on the theory (Costa and Calic: 2000) of the habits of the mind with its (71) paragraphs and its (five) dimensions, and the measure of self-confidence prepared by (Marwa Abdul-Jabbar: 2014) with its (60) paragraphs and its (three) dimensions.

For the purpose of applying the two scales, it was necessary to verify their psychometric properties represented in validity and consistency, as follows:

**Validity:** Means that the test measures what it was set for, meaning that the honest test measures the job that it claims to measure and does not measure anything else in place of it or in addition to it <sup>(3)</sup>. Therefore, the two scales were presented to a group of specialized arbitrators, the results have resulted through (deleting, amending and merging) the paragraphs of the two main scales, as shown in table (2) below.

**Table (2) shows the opinions of specialists in the paragraphs of the scale of struggle for accuracy, the Scale of self-confidence, and the Chi-square for agree and disagree.**

Struggle for accuracy scale					Self-confidence scale				
Paragraphs	Agree	Disagree	Chi square	Sig type	Paragraphs	Agree	Disagree	Chi-square	Sig type
1.2.10.13.15.16. 18.21 22.24.30.33.50.55.60.65.	10	0	10	Sig	2.5.6.7.8.9.10.11.15.2 0.22.25.30.	10	0	10	Sig
34.35.36.37.38.39.40.41.68	9	1	6.4	Sig	.35.40.44.50. 55.60	9	1	6.4	Sig
3.4.5.6.7.8.9.11.12.14.17.27.28 48.49.51.52.53.66.67.69	8	2	3.6	Non sig	1.3.4.7.12.21.22 .28.29.31.45.46.47.48 .54.56.57.58	8	2	3.6	Non sig
19.20.23.25.26.29.31.45.46.47 54.56.57.58.59.70	6	4	0.4	Non sig	13.14.16.24.26.32.33 34.39.41.42.43.49	7	3	1.6	Non sig
32.36.42.43.44.61.62.63.64.71	5	5	0	Non sig	17.18.19.23.27.36.37. 38.51.52.53.59	5	5	0	Non sig

Chi-tabular value = 3.84 , degree of freedom = 1, significance level = 0.05

It is noted from table (2) above that the number of remaining paragraphs of the scale of (Struggle for accuracy) reached (25), because the value of the Chi calculated ranged between (10 - 6.4) which is greater than the tabular value (3.84) at the level of significance (0.05), and the degree of freedom (1) while (46) paragraphs

were deleted because the value of chi calculated for it ranged between (0 \_3.6), which is less than the tabular value of chi (3.84) at a level of significance (0.05) and a degree of freedom (1). As for the measure of self-confidence, (20) items were kept because the value of

Kai which was calculated for it ranged between (6.4-10), which is higher than the value of Kai of (3.84), While (40) paragraphs were deleted, the value of chi ranged between (0\_3.6), which is less than the tabular value of (Ki) of (3.84) at the level of significance (0.05) and the degree of freedom (1).

**Reliability:** A static test is a test that has a high degree of accuracy, proficiency, consistency, and objectivity in relation to its measurement (4), to achieve this, the two measures were applied to a sample of the youth group of (25) players, and after a two-week period, the two scales were re-applied to the same sample. according to the (Pearson) correlation coefficient, its value appeared (0.86), which is a good indication of the reliability of the Struggle for accuracy scale, and (0.80) for the self-confidence scale.

**Statistical means:** The statistical data were processed using the following laws:

1. The arithmetic mean
2. Standard deviation
3. T test for a sample and the community
4. Pearson Correlation Coefficient

**Table (3) shows the arithmetic, hypothetical, and T-value calculated for the sample of Baghdad and the Middle Euphrates clubs for the Struggle for accuracy scale.**

Sample	mean	Std. deviation	hypothesis mean	T value	Sig type
152	93	8.6	62.5	43.36	Sig

It appears from table (3) above that the calculated value of (t) of (43.36) is higher than the tabular value of (t) of (1.96) at the level of significance (0.05) and the degree of freedom (151), this means that the research sample represented by (youth handball players for Baghdad and Euphrates clubs) have a high level of struggle for accuracy, this may be attributed to the nature of the game practiced by these players and the high ability to focus on performance to achieve achievement, and this high ability stems from the fact that the members of the sample are in most of them students of the Faculties

5. The chi-square test for good matching

**The final application:** After the psychometric characteristics were found, represented by validity and reliability in the scale of the struggle for accuracy and self-confidence, they were applied to the research sample of (152) players from the clubs of Baghdad and the Middle Euphrates with handball.

**Presentation, analysis and discussion of results:**

This chapter includes a presentation, explanation and discussion of the findings of the researchers after analyzing the answers and performance of the sample members and treating them with appropriate statistical means as follows:

In order to achieve the first objective of the research, which is to identify the level of struggle for accuracy of the clubs of Baghdad and the Middle Euphrates with handball, the answers of the individuals of the research sample (152) were analyzed, and it appeared that the arithmetic mean reached (93) with a standard deviation (8.6), which is higher than the hypothesis mean of (62.5) to verify the differences between the arithmetic mean achieved and the hypothesis, a t-test was used for one sample, and the results appeared in table (3) below.

of Physical Education and Sports Sciences, which was positively reflected on their performance considering that the vocabulary of the school curriculum and the information it contains were reflected in their motivation and desire for the better.

And to achieve the second goal of the research, which is to identify the level of self-confidence of (players of Baghdad and Euphrates clubs with handball), after analyzing their answers, it was found that the arithmetic mean (83) with a standard deviation (6.02), which is higher than the hypothesis mean (60), and

for the purpose of identifying the statistical significance of the apparent differences between the arithmetic and hypothetical mean, test (T) was used for one sample, the results appeared as shown in table (4) below:

**Table (4) Shows the arithmetic and hypothetical average and the calculated T-value for the sample of Baghdad and Euphrates clubs for the measure of accuracy and self-confidence**

Sample	mean	Std. deviation	hypothesis mean	T value	Sig type
152	83	6.2	60	11.5	Sig

It emerged from table (4) above that the calculated value of (t) amounted to (11.5), which is higher than the tabular value of (t) of (1.96) at the level of significance (0.05) and the degree of freedom (151), this means that the research sample represented by (youth handball players for Baghdad and Euphrates clubs) have self-confidence, as previously mentioned, it comes from two sources, one of which is represented by the psychological and cognitive culture that the players possess, since most of them are students of the Faculties of Physical

Education, so they kept their practice of this game and their mastery of its skills, which was positively reflected in raising their self-confidence.

To achieve the third goal of identifying the correlation between (the struggle for accuracy and its relationship to self-confidence), a Pearson correlation coefficient was used that reached (0.72), for the purpose of identifying the statistical significance of the correlation coefficient, the (t-t) test was used, as shown in table (5) below.

**Table (5) Shows the correlation coefficient of the research sample.**

Sample	correlation coefficient	T .R	T value	Sig type
152	0.72	12.87	1.96	Sig

It appears from table (5) above that the calculated value (T .R) of (12.87) is higher than the tabular value of (T) of (1.96) at a level of significance (0.05) and a degree of freedom (150). The more keen and eager to achieve accuracy in performance and this is what appeared through this result.

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**Conflict of Interest:** None to declare.

**Ethical Clearance:** All experimental protocols were approved and all experiments were carried out in accordance with approved guidelines.

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