

Mental abilities and their relationship to emotional balance of young weight throw players

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Abstract

The purpose of this paper is to identifying the mental abilities and emotional balance of young weight throw players, and identifying the relationship between mental abilities and emotional balance of young weight throw players. The researchers used the descriptive approach using the survey and correlational methods due to their suitability to the nature of problem solving. The research community was determined by young weight throw players, who numbered (20) players for the sports season 2022-2023, and (15) players were selected by (75%) of the research community by random method, and a sample of (5) players was selected for the reconnaissance experiment by (25%) from the research community. One of the most important results reached by the researcher is that : Young weight throw have a good level of mental abilities and emotional balance, there is a significant correlation between mental abilities and the emotional stability of young weight throw players, and the higher mental abilities and emotional balance, the better the results for young weight throw . One of the most important recommendations recommended by the researchers is that : Benefiting from the mental abilities and emotional balance test that the researchers used and applied to detect the mental abilities and emotional balance of young weight throw players , and using other psychological variables to find out the psychological states of the young weight throw players, in order to take into consideration how to give them directions and instructions.

Introduction:

Sports psychology is one of the applied fields of modern psychology, which aims to achieve the happiness and development of the sports individual, by being a scientific and practical means that helps the sports individual to reach the best appropriate options and the fact that this process is a process of learning and growth of the personality and the acquisition of self-information that can be translated into a Better understanding of the human role and more effective behaviour. Emotional balance is considered an axis in which aspects of psychological activity are regulated, and this is what the player needs when practicing sports activity. Different psychological schools emphasized the importance of balance, and most theorists agreed that it is the basic component of behavior, as William James (1842-1910), one of the pioneers of the traditional theory, saw In psychology, the volitional act is a directed act because the individual wants and intends before he moves, and he performs the action and moves to initiate it as a result of perceiving the sensory results (Atkinson, 1976, 190).

Therefore, the current study is a very important step in this field by dealing with the concept of the mental abilities of the players, as it plays a major role in motivating them to perform well, as well as pushing them to achieve success and trying to overcome difficulties, and then reflects on his behavior and his ability to withstand the pressures he faces during training. Alternatively, competition and thus shows good emotional balance. The effectiveness of athletics is one of the important individual games that require when performing and learning its skills and races a high degree of control over the individual's emotions during the preparation and competition period.

Research problem:

The psychology of sports is interested in studying the methods through which the behavior of the players is known, and the psychological aspects are very important for the player during the races, and their importance increases greatly the more intense the competition in sports that require individual competition between players as a result of changing situations during the race, including athletics, so the more these The sides are well-prepared whenever it is easy to win it. Through the experience of the researchers and their interest in athletics, they noticed that there is a discrepancy in the mental abilities and emotional balance facing young weight throw players before and during the race period, and this discrepancy has a significant impact on the player's focus and the outcome of the race, which leads to the emergence of Performance anxiety, and this anxiety leads to undesirable behavior that affects the results of the players, so the researchers decided to study these variables and know the relationship of these variables in an accurate scientific way.

Research objective:

- Identifying the mental abilities and emotional balance of young weight throw players.
- Identifying the relationship between mental abilities and emotional balance of young weight throw players.

Research hypotheses:

- There is a correlation between mental abilities and emotional balance of young weight throw players.

Research fields:

- Human field: Young weight throw for the 2022-2023 sports season in Baghdad Governorate.
- Time field: (5/9/2022) to (12/2/2023).
- Spatial field: Athletics stadium in the College of Physical Education and Sports Sciences at the University of Baghdad.

Definition of terms:

- **Mental abilities:** They are mental physiological processes that occur within the brain, interact with the environment, and transform information from one form to another. (1)
- **Emotional balance:** It is the ability of an athlete to feel strong emotions without lacking control over his thoughts and actions.

Research methodology and field procedures:

Research Methodology:

The nature of the problem to be studied is what determines the nature of the approach. The researchers used the descriptive approach using the survey and correlational methods due to their suitability to the nature of problem solving.

Community and sample research:

The research community was determined by young weight throw players, who numbered (20) players for the sports season 2022-2023, and (15) players were selected by (75%) of the research community by random method, and a sample of (5) players was selected for the reconnaissance experiment by (25%) from the research community.

Equipment, tools and means used in the research:

Equipment and tools used in the research:

- One (1) stopwatch.
- (1) Dell portable calculator.
- Stationery (papers - pens).

Means of collecting information:

- Arabic and foreign sources.
- Test and measure.

Field Research Procedures:

Procedures for selecting the mental abilities test and the emotional balance scale:

The researchers used the mental abilities test and the emotional balance scale of the researcher (Majeed. 2022), where the mental abilities test consisted of two parts, and the emotional balance scale consisted of (45) items.

In order to apply the test and the scale, the two researchers presented them (see Appendix 1) to a group of experts and specialists (see Appendix 2), for the purpose of evaluating and judging it in terms of its honesty in what it was set for. By extracting the value of (chi-2) calculated for the agreement of experts and specialists, and accepting the nomination of the paragraphs, in which the value of (chi-2) calculated, is greater than its tabular value of (3.84), as shown in Tables (1).

Table (1) shows the number of agreements, the calculated (chi-2) values, and the significant significance of the mental abilities and emotional balance test items

Test	Number of agreements	Number of disagree	calculated (chi-2) values	Type sig
Mental abilities test and emotional balance scale (all paragraphs)	6	Zero	6	sig

After the honesty of the test and the scale were approved by the experts, they became ready for application in its final form.

Exploratory Experiment to Test Mental Abilities and Emotional Balance:

After setting the instructions for the test and the scale, the two researchers conducted the exploratory experiment on 17/10/2022 on (5) players to reveal the following:

- 1- To ensure that the instructions, test paragraphs and scale of the sample are clear.
- 2- Identify the time taken to answer the test and scale.
- 3- Identifying the conditions for applying the test and the scale and the accompanying difficulties.
- 4- The researchers will have practical training to find out for themselves the negatives and positives that meet it during the main test.
- 5- Extract stability coefficient.

The experiment revealed the following:

- 1- The instructions were clear by the respondents.
- 2- The paragraphs were clear and unambiguous.
- 3- The test and scale were suitable for the sample.
- 4- The time taken for the scale is between (6-10) minutes.
- 5- The answer alternatives were suitable for the level of the sample.
- 6- The stability coefficient was extracted.

Psychometric properties of testing mental abilities and emotional balance:

A- Honesty of the test:

The degree of honesty is the most important factor for the quality of tests and standards. The test or honest test is defined as (a test that measures with sufficient accuracy the phenomenon that it was designed to measure and does not measure anything instead of it or in addition to it). (Mustafa Mahmoud Al-Imam). In addition, honesty has several meanings that differ according to the use of the test, and it is intended by the honesty that the test measures what it was set for, that is, the honest test measures the function that it claims to measure and does not measure anything else instead of it or in addition to it. (Hafeez and Bahi. 2000)

Honesty of the content

This type of honesty aims to know the extent to which the test or test represents the aspects of the characteristic or characteristic to be measured, and whether the test or test measures a specific aspect of the phenomenon or measures all of it, i.e. the extent to which its content matches what it wants to measure and uses the opinions of experts specialized in the field in which it is determined the test is trying to measure it. (Allawi and al-Din Radwan, 2000)

The researchers verified the honesty of the test and the scale through the indicator of the honesty of the content or content, which is often done by logical judgment on the existence of the characteristic, trait, or ability in question to check whether the proposed measurement method actually measures it or not when the test was presented to a group of experts and specialists appendix (2) to confirm their honesty.

Test stability:

The concept of stability is one of the basic concepts in measurement, and it must be available in the test in order for it to be usable (Al-Ajili and et al . 2001), and the test stability coefficient was found by testing and re-testing on the survey sample, as the test was done on 17/10/2022 and the test was re-tested on 29/10/2022 After unloading the data, the value of (r) was extracted, from which the researchers concluded that the test has a high degree of stability. If the value of (r) was (0.90) for the test and scale, the value of (r) was (0.92).

Main experiment to test mental abilities and emotional balance:

The researchers conducted the application of the test on the sample (15) players on 10/11/2022 in order to identify these variables and the relationship between them.

Statistical methods: The search data was processed through the Statistical Package for the Social Sciences (SPSS).

Results and discussion:

This chapter includes presenting and analyzing the results that were reached by analyzing the responses of the sample members to the research variables and according to the objectives contained in it, as follows:

Presenting, analyzing and discussing the results of mental abilities and emotional balance:

After obtaining the results through the test, the research variables were identified, and Table (2) shows that:

Table (2) shows the value of the arithmetic mean, the standard deviation, the value of (t) for the test of mental abilities, and the measure of emotional balance

Test	Number of sample	arithmetic mean	standard deviation	Skewness	T value calculated	Level Sig	Type Sig
Mental abilities	15	41.16	3.44	0.88	29.31	0.000	Sig
Emotional balance	15	111.44	4.12	0.79	25.66	0.000	Sig

Table (2) shows the results of the research variables in testing mental abilities and emotional balance, and extracting the results shows that there are significant differences among the players because the value of (sig) is smaller than the significance level of (0.05) and the degree of freedom (14).

Presenting, analyzing and discussing the results of the relationship between mental abilities and emotional balance:

After obtaining the results through the test, the relationship between the research variables was identified, and Table (3) shows this:

Table (3) shows the value of the arithmetic mean, standard deviation, correlation coefficient for testing mental abilities, and the measure of emotional balance

Test	arithmetic mean	standard deviation	correlation coefficient	Level Sig	Type Sig
Mental abilities	41.16	3.44	0.83	0.000	Sig
Emotional balance	111.44	4.12			

Table (3) shows the results of the relationship between mental abilities and emotional balance, and by extracting the results; it was found that there is a significant correlation because the value of (sig) is smaller than the level of significance of (0.05) and the degree of freedom (13).

Discussing the results:

Through what was presented in Tables (2) and (3), it was found that all the results indicated the existence of real differences and a significant correlation between the players. Training units and making their performance in a high format, and this, in turn, is reflected in the high morale that they possess, which contributes to achieving high achievement in performance and thus improvement in mental abilities, and this comes through the coach's directives, the employment of players and their psychological preparation because the nature of the event needs a decisive factor, which is the mental and psychological aspect.

And that the players must be characterized by a high level of mental abilities and emotional balance, in addition to the fact that they possess a kind of physical and skillful aspect, balance, emotional maturity, and they have the ability to mental capabilities and emotional balance, and therefore they have the ability to achieve themselves, and the result is the ability to achieve. Continuous interaction between the players "The player interacts with others within the training unit and during the race in order to implement the appropriate coach strategy, which contributes to giving the player a clear perception of himself and his personality, and this leads to others having an impression of him, and thus makes him have special knowledge through the connection between himself Independent, and the selves of others in a specific social content.

Conclusions and Recommendations:

Conclusions:

According to the results reached, the following conclusions can be formulated:

- Young weight throw have a good level of mental abilities and emotional balance.
- There is a significant correlation between mental abilities and the emotional stability of young weight throw players.
- The higher the mental abilities and emotional balance, the better the results for young weight throw .

Recommendations:

Based on the findings of the research, the researchers recommend the following:

- Benefiting from the mental abilities and emotional balance test that the researchers used and applied to detect the mental abilities and emotional balance of young weight throw players.
- Using other psychological variables to find out the psychological states of the young weight throw players, in order to take into consideration how to give them directions and instructions.
- Need to give qualitative lectures to young weight throw players during the training units and before the races by a specialist in psychological counseling and sports psychology.

Researchers also suggest:

- Conducting a similar study on female players.
- Make a comparison between male and female players and in all other events.

References:

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- 2- Amir Jaber Abdul Majeed. 2022. The effectiveness of a counseling program according to the theory of mental-emotional therapy to develop mental processes and emotional balance for junior short-distance runners, Master Thesis, University of Kufa, College of Physical Education and Sports Sciences.
- 3- Mustafa Mahmoud Al-Imam (and others): Calendar and Measurement, Baghdad, Dar Al-Hikma for Printing and Publishing, (B, T), p. 102.
- 4- Ikhlas Muhammad Abdel Hafeez and Mustafa Hussein Bahi. 2000. Scientific Research Methods and Statistical Analysis in the Educational, Psychological and Sports Fields, Cairo, Al-Kitab Center for Publishing, p. 173.
- 5- Muhammad Hassan Allawi and Muhammad Nasr al-Din Radwan. 2000. Measurement in Physical Education and Sports Psychology, Cairo, Dar Al-Fikr Al-Arabi, p. 258.

- 6- Sabah Hussein Al-Ajili and et al . 2001.Principles of Educational Measurement and Evaluation, Baghdad, Ahmed Al-Dabbagh Printing Office, p. 78.

Appendix (1)

shows the paragraphs of the emotional balance scale that was distributed to the research sample

Dear player:

You have a list of statements; please answer them, taking into account the following notes:

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

No.	Paragraphs	Always	Sometimes	Rarely
1	I am a good person			
2	I feel good about myself when I do an athletic achievement			
3	I feel happy when I am cheered on by the sports fans			
4	I get angry when I can't do what the coach asks of me			
5	When I feel hopeless, I lose the desire to engage in any activity			
6	I am a very meaningful person			
7	The coach looks at me with respect and appreciation			
8	I am completely satisfied with my life and myself			
9	I miss a lot of opportunities because I didn't make the right decision			
10	I feel happy when others give me advice			
11	I believe that patience is the key to all success			
12	I feel sad and depressed most of the time			
13	My spirits are low most of the time			
14	I feel good about my physique			
15	I feel confident in myself before participating in the competition			

16	Feel calm and inner peace			
17	I tend to relax after physical exertion			
18	I control my emotions when I am exposed to difficult situations during the race			
19	I feel relieved and pleased when I accomplish my training duty			
20	I feel myself pulling when I am exposed to difficult situations			
21	I receive enough praise from the coach and the players.			
22	I get nervous and my mood changes before the race			
23	I feel that I am unable to control myself when I am exposed to difficult situations			
24	I trust myself before running a race			
25	I feel satisfied with my level of athletic performance.			
26	I am used to being calm and not easily agitated			
27	I care a lot about what the audience thinks about what I do during the competition.			
28	I always feel the fear of competition			
29	I can control my emotions in situations of winning and losing.			
30	I can't sleep the day before the competition			
31	I am an optimistic person			
32	I cannot contain the crises that face me in competition			
33	I am hostile towards my fellow players			
34	I revolt easily and for any reason			
35	I resort to violence to prove my presence and reach the top			
36	I accept the race with all strength and determination			
37	I feel anxious when I don't put in a convincing performance in a race			
38	I get angry if someone makes fun of me while training			
39	I always want to start fights with my colleagues			
40	Not being selected in the national team made me resort to violence			
41	I am very optimistic about my sporting future			
42	I apologize for the mistake when I am not successful in making a decision			
43	I enjoy a high sportsmanship when I participate			

	in the race			
44	Resort to violence to get out of competition			
45	I find it difficult to control my emotions during the race			
46	My fellow players describe me as having a high spirits			
47	When I encounter difficult situations during the race, I try to control it			
48	When I exposure any crisis, I do not face it			

Test name: Mental Abilities Test

The objective of the test: measuring the mental abilities of the players.

Test specification:

The test is a good indicator of mental processes.

- It consists of two parts (A, B), and the first part is a group of circles inside each of which there is a number (serial numbers) distributed randomly over an area free of obstacles 20 x 20 m.
- The player is required to connect the numbered cones in the middle to the same circle that bears the same number of cones within a time of (5) seconds for each cone, and then the player returns to the starting line to continue completing the rest of the cones and distributing them to the circles.
- While the second part of the test consists of the player running without cones to the circles and in sequence from (1) to (20) until he reaches the last sequence within a time of (30) seconds.

Functions measured by the test:

A- Performance on the first part requires visual-spatial examination and numerical sequence, visual attention, focus, motor speed, motor sequence skills, transition in the organizing process, the ability to search and differentiate between numbers and circles, and sequence recognition.

B- The second part measures sequence storage, and integrity.

- The two parts measure spatial organization, motor speed, number and circle recognition, attention and alertness.
- The test is a means of measuring thinking, sensory-kinesthetic perception, memory, and attention load.

Correction:

- 1- Each part is calculated separately, and the score is the sum of the time spent on the application in seconds.
- 2- The second part is a good indicator because its cognitive requirements include visual inspection and visual-kinetic synergy to move between numbers and circles.

Tools required:

- 1- A yard free of obstacles 20 x 20 m.
- 2- A box containing cones numbered from (1) to (20).
- 3- Cones number (20).
- 4- Stopwatch number (2).

Register:

First part:

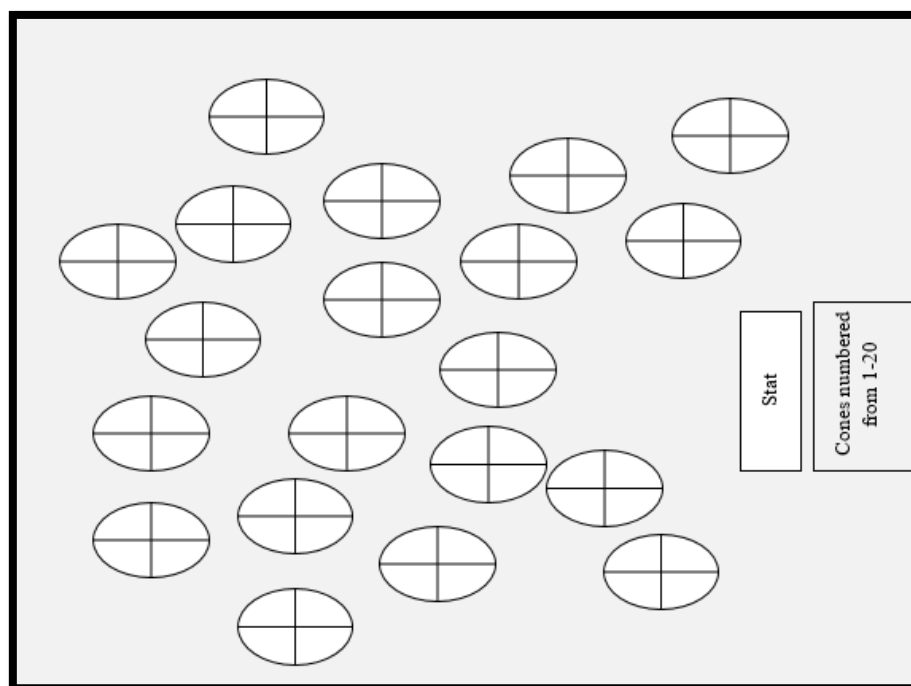
- One point is given for each correct attempt (its time is 5 seconds).
- (2) Marks are given for each attempt of (4) seconds.
- (3) Marks are given for each attempt whose time is (3) or less.
- Any attempt that does not comply with the instructions will be deleted.
- Any attempt that exceeds (5) seconds in time will be deleted.

Second part:

- If the circles are reached according to their sequence within the specified time, (15) degrees are given directly to him.
- If the laboratory finishes within (25) seconds to (29) seconds, (20) marks are given to it.
- If the laboratory finishes within (20) seconds to (24) seconds, (25) marks are given to it.
- If the laboratory is finished within (19) seconds or less, (30) marks are given to it.
- Any attempt that does not comply with the instructions will be deleted.
- Any attempt that exceeds (30) seconds in time will be deleted.

Note: The highest score obtained by the laboratory is (60).

The following figure shows the test



Appendix (2)

Shows the names of the experts approved by the two researchers in matters related to their research procedures

No.	names of experts	Specialization	Affiliations
1	Prof. Dr. Amer Saeed Jassim	Sports psychology	College of Physical Education and Sports Sciences / University of Babylon
2	Prof. Dr. Fadel Kurdi Al-Shammari	Sports psychology	Faculty of Physical Education and Sports Sciences / University of Kufa
3	Assist. Prof. Dr. Marwa Ali Hamza	Sports psychology	College of Physical Education and Sports Sciences / University of Kerbala
4	Assist. Prof. Dr. Ali Bakhit Hassan	Sports psychology	Faculty of Physical Education and Sports Sciences / University of Kufa
5	Assist. Prof. Dr. Hala Razzaq Madloul	Test and measure	Faculty of Physical Education and Sports Sciences / University of Kufa
6	Lec. Dr. Ghaith Muhammad Karim	Test and measure	Faculty of Physical Education and Sports Sciences / University of Kufa