



BUILDING A MEASURE OF PSYCHOLOGICAL MOMENTUM FOR YOUNG WEIGHTLIFTING PLAYERS

A.M.D.Hayde rSoud Hassan¹ & Prof. Dr. Ferdous Majeed Ameen²

AFFILIATIONS

1. Professor of Testing and Measurement, Weightlifting, University of Diyala –Iraq - College of Physical Education and Sports Sciences. haider.saud@uodiyala.edu.iq
2. Professor of Sports Psychology, Football, University of Diyala – Iraq - College of Physical Education and Sports Sciences. ferdos_ameen@uodiyala.edu.iq

ABSTRACT

The research aims to build a measure of the psychological momentum of young weightlifting players in Iraq. The descriptive approach was used using the survey method. The research sample consisted of (154) young weightlifting players. The necessary scientific steps were followed to build psychological measures in the sports field, and the values of the two groups were extracted. Two-tailedness, discriminatory ability, factor analysis and intercorrelations matrix. After completing the statistical treatments and applying the basic conditions for accepting and interpreting the factors, the researchers arrived at five components that represent a measure of the psychological momentum of young weightlifting players in Iraq. The measure includes (45) phrases, including (14) negative phrases. And (31) is a positive statement, as it turns out that the highest degree of the scale is (225), the lowest degree is (45), and the degree of neutrality is (135). The phrases were distributed among the components: (14) phrases for the (human energy) component, (10) phrases for the (physical and cognitive energy) component, (9) phrases for the (psychological energy burden) component, and (7) phrases for the (morale spirit) component. And (5) statements for the component (cognitive momentum).

Keywords: Weightlifting, Players, Psychological, Test Construction, Momentum

1. INTRODUCTION

In view of the physical, skill and tactical development that weightlifting has achieved in the world, coaches have begun searching in the minutest matters for the reasons for excellence and development, if not maintaining the continuity of the player's activity during the entire competition, making optimal use of the preparation conditions and isolating all negative external influences that would affect his performance. The level of the player in training and competitions. In addition to physical training, coaches and sports psychologists devote an important part of their attention to the issue of mental training in an effort to achieve stability in the level of the player and as a complementary factor that cannot be ignored, as special requirements have emerged to achieve the psychological suitability required for competition conditions through... Means and procedures taken by the coach or psychologist with the player, or sometimes even by the player with himself. This is what is called psychological mobilization - psyching-up - for the purpose of bringing psychological impetus to integration and coexistence with physical energy, which cannot be achieved without raising the level of psychological momentum as well. In order to reach the optimal physical and psychological state, which is the goal sought by those in charge of the training process, the term psychological momentum initially appeared as an alternative to the term emotional arousal. Then some considered it an independent topic in itself. In some sources, it was called psychological energy or raising morale. In general, psychological momentum It is the procedure that aims to bring the player to the best mental and psychological preparation through which he can achieve the best performance by controlling the intensity, vitality, and strength with which the mind launches its functions.

From here, the importance of this research appeared to support the sports and scientific process by placing the research results in the hands of training and scientific staff working in the sports field in general and weightlifting coaches in particular, due to the lack of research that touched on this topic.

1.1 Research Problem

The issue of achieving optimal psychological efficiency is the endeavor sought by weightlifting coaches and players to achieve the best results. Given the long and exhausting conditions of preparation to which players of high-level teams are exposed, it may leave negative effects and psychological pressures that negatively affect achieving the desired level.

Through the researchers' follow-ups and continuous meetings with weightlifting players and coaches in Iraq, it was found that there are different methods used in psychological mobilization (psyching-up) among the players by their coaches, as well as the diversity of sources of mobilization and its components, and the lack of a scientific standard and objective measurement for identifying the limits and levels of psychological momentum, and the importance of this variable in stability. The level of the player in competitions and his achievement of the best results and levels. Because there is no tool to measure the psychological momentum of weightlifters, the researchers decided to build a measure of the psychological momentum of young weightlifters in Iraq.

- Psychological momentum: It is the positive or negative change in perception, affect, physiology, and behavior resulting from a movement or a series of movements that affects the player and the competitor or the quality of performance and results of sports competition.

1.2 Objective

Building a measure of psychological momentum for young weightlifting players in Iraq.

1.3 Delimitation

1-3-1 Human field: Advanced weightlifters in Iraq with a strength of (154) athletes.

1-3-2 Time frame: The period from 1/14/2023 to 5/10/2023.

1-3-3 Spatial area: The sports halls in which players conduct their training and competitions

2. METHODOLOGY:

The researcher chose the descriptive method using the survey method because it suits the nature of the research problem.

2.1 Sample

It represents a population of young Iraqi weightlifters aged (17-19) years, numbering (207) weightlifters. The research sample was randomly selected from the young weightlifters for the year (2023), numbering (154) weightlifters, with a percentage of (74.396%). Detail is shown in the Table 1

**TABLE 1
CLUBS AND THE NUMBER OF SELECTED PLAYERS IN EACH WEIGHT CATEGORY**

Category									Sample	Research culture	club	ت
109+	109	102	96	89	73	67	61	55				
---	1	---	1	1	1	---	1	2	7	10	Kut	1
1	---	1	---	1	1	1	---	1	6	9	Hilla	2
---	1	1	1	1	---	1	2	2	10	12	Diyala	1
---	1	1	2	---	1	---	2	2	9	13	Najaf	4
1	---	---	1	1	2	2	1	---	8	10	The crowd	5
---	---	2	---	1	2	1	1	1	8	11	Maysan	6
---	---	1	---	2	---	1	---	2	6	9	Port	7
---	1	1	1	2	1	---	1	1	6	11	Mosul	8
1	---	---	1	1	1	2	---	2	8	10	Freedom	9
1	1	---	1	2	2	1	1	2	11	15	Al-Kadhimiya	10
---	1	1	1	2	2	---	2	3	12	15	Al amana	11
1	1	1	1	1	1	1	1	2	10	14	Badra	12
---	---	2	---	2	2	1	---	1	6	8	Khanaqin	13
1	1	1	1	1	1	1	1	2	10	13	Aljaysh	14
1	1	1	2	1	2	1	2	1	12	15	Alshurta	15
---	---	---	---	2	1	---	1	1	5	8	Alearabi	16
---	---	---	1	1	---	1	1	---	4	7	altadamun	17
---	---	---	1	---	1	1	1	2	6	8	almithaq	18
1	1	---	---	---	2	1	---	1	7	9	altahadiy	19
8	10	13	16	22	23	16	18	28	154	207	Total	

2.2 Means for Collecting Data

- Electronic personal calculator (SHARP EL – 531).
 1. Electronic calculator (DELL CORE i7).
 2. Camera.
 3. stopwatch.
 4. Assistant work team.
 5. Arab and foreign sources.
 6. Personal interviews.
 7. A form for collecting and translating data.

2.3 Construction the Scale

One of the goals of the current research is to build a measure of psychological momentum for young weightlifters. Identify the phenomenon or concept to be measured:

The concept that the researcher intends to measure is the psychological momentum of young weightlifters.

In order to achieve the goal of the research, which is to build a measure of psychological momentum, the steps specified by (4, 2000: 319) were followed, as well as some detailed steps that the researcher needs to complete the construction process.

2.4 Determine the Theoretical Literature to Construct the Scale

Relevant theoretical literature was relied upon in defining the concept of psychological momentum, relying on the principle of analyzing the trait into its primary components, determining the relative importance of each component in the measurement and adopting it in determining the number of statements that must be prepared to measure the component. The method of declarative statements was also adopted in Constructing scale statements The classical theory of measurement was adopted, which is based on the fact that the distribution of individuals’ scores on the trait measured by the test takes the form of a moderate curve (11: 1983: 118), and that the degree of judgment in the scale is a linear linear function. Apostasy, meaning that the higher the degree of the scale, the greater the amount of presence. The trait or characteristic he has.

2.5 Determine the Components of the Scale

In the current study, the concept of the theory of psychological behavioral momentum (John Anthony Niven, 1988) was adopted to determine the components of the scale, in addition to reviewing available scientific sources and previous literature, as well as studies and research that dealt with the concept of psychological momentum. The International Information Network (the Internet) was also used. The following components were reached (human energy, self-efficacy, physical energy, cognitive momentum, psychological burden, internal psychological energy, morale, and psychological endurance).

2.6 Determine the validity of Components

To determine the validity of the components, a questionnaire for the proposed components, along with the theoretical definition of each component, was presented to a number of experts, namely (15) experts from the disciplines of measurement, evaluation, sports psychology, and sports training, to express their opinions on the validity of the proposed components of the scale. In order to analyze the opinions of the experts statistically, the chi-square was used. (K2) for the purpose of demonstrating the agreement of the opinions of experts and specialists regarding the components of the scale, as shown in Table (2).

**TABLE 2
RESULTS OF THE KA2 SQUARE FOR EXPERTS’ OPINIONS ABOUT THE
VALIDITY OF THE COMPONENTS OF THE PSYCHOLOGICAL MOMENTUM
SCALE.**

Significant level	K2 table values	value of Ka2	Dis agreed	Agreed	Number of experts	Components	T
Significance	3.84	11.26	1	14	15	Human energy	1
Insignificance		0.06	8	7	15	Self active	2
Significance		8.06	2	13	15	Body energy	3
Significance		8.06	2	13	15	Cognitive momentum	4
Significance		5.4	3	12	15	Psychological burden	5
Significance		5.4	3	12	15	Internal self-energy	6
Significance		8.06	2	13	15	Morale	7
Insignificance		0.06	8	7	15	Psychological load	8

The value of Ka2 = (3.84) under a degree of freedom (1) and a significance level (0.05)

It is clear from Table 2 that the components that have been approved by the experts for their validity in measuring the psychological momentum of young weightlifting players are (6) components: (human energy, physical energy, cognitive momentum, psychological burden, internal psychological energy, morale) .

2.7 Determine the Relative Importance of the Components

The relative importance of components form was presented to a group of (19) experts, and they were asked to determine the relative importance of the components according to a graduated scale consisting of (1 - 10) grades, where a grade of (10) is given to the most important component and a grade of (1) is given to the least important component. The total score for each component was extracted as follows:

First Step: We calculate the total scores collected by each component: Total scores = number of occurrences x degree of importance The number of repetitions is the number of expert references for each degree of importance

Second Step: We calculate the upper value of the range of grades: The maximum value of the range = the number of experts x the highest degree of relative importance of the range

Third Step: We calculate the relative importance of each component: The relative importance of the component = the sum of the component scores ÷ the upper value of the range x 100 As shown in Table 3.

**TABLE 3
COMPONENTS OF KNOWLEDGE MANAGEMENT, THEIR PERCENTAGE,
RELATIVE IMPORTANCE, AND THE NUMBER OF STATEMENTS
FOR EACH COMPONENT**

Number of phrases after rounding	Number of phrases	Percentage of relative importance	Relative importance of the component	The score obtained by the component	Components	T
15	15.29	21.24	55.78	106	Human energy	1
14	13.98	19.43	51.05	97	Physical energy	2
13	13.26	18.43	48.42	92	Cognitive momentum	3
10	10.10	14.02	36.84	70	Psychologic al burden	4
10	9.66	13.42	35.26	67	Internal psychologic al energy	5
10	9.66	13.42	35.26	67	Morale	6
72	72	99.96	262.61		Total	

2.8 Preparing Measurement Statements

A large portion of the statements were prepared based on the theoretical framework of the concept of psychological momentum theory and the definition that addresses the concept of psychological momentum, so that the total number of psychological momentum statements in its initial form is (72) statements distributed among the components according to the weight of the

importance of each component. The statements were formulated in the form of declarative statements, each statement being followed by five answer alternatives: (never, rarely, sometimes, often, always).

2.9 Determine the Method of Formulating the Measurement Statements

In formulating the scale's phrases, the researcher relied on the Likert method in constructing the current scale.

2.10 Validity of Statements

Elbe (1972) asserts that “the best way to ensure the validity of the scale’s statements is for a number of experts and specialists to assess its validity to measure the characteristic for which it was developed” (1972, 12: 555), and after formulating the (72) statements of the psychological momentum scale in its form Initial and distributed into (6) components, the experts were left with the freedom to delete or modify the scale phrases and answer alternatives, and to analyze the opinions of the experts statistically, the researcher used the (K2) test, as in Table (4).

**TABLE 4
RESULTS OF THE K2 SQUARE FOR EXPERTS’ OPINIONS ABOUT THE VALIDITY OF THE STATEMENTS FOR THE PSYCHOLOGICAL MOMENTUM SCALE**

Significant level	K2 table values	value of Ka2	The Disagreed	Disagreed	of experts	The Number of items	Components	T
Significance	3.84	15	0	15	15	12-8-4-1	Human energy	1
Significance		11.26	1	14		13-10-2		
Significance		8.06	2	13		11-5-3		
Significance		5.4	3	12		9-6		
Insignificance		0.06	8	7		15-14-7		
Significance		15	0	15		12-9-5-3	Body energy	2
Significance		11.26	1	14		10-7-6		
Significance		8.06	2	13		13-4-1		
Significance		5.4	3	12		14-2		
Insignificance		0.06	8	7		11-8		
Significance		15	0	15		10-8-7-2	Cognitive momentum	3
Significance		11.26	1	14		6-4-1		
Significance		8.06	2	13		9-5-3		
Significance		5.4	3	12		13-12		
Insignificance		0.06	8	7		11		
Significance		15	0	15		10-2-1	Psychologic al burden	4
Significance		8.06	2	13		4-3		
Significance		5.4	3	12		7-6-5		
Insignificance		0.06	8	7		9-8		
Significance		15	0	15		9-5-1		
Significance	11.26	1	14	10-7	Internal psychologic al energy	5		
Significance	5.4	3	12	8-3-2				
Insignificance	0.06	8	7	6-4				

Significance		15	0	15		10-7-2	Morale	6
Significance		8.06	2	13		4-3-1		
Significance		5.4	3	12		9-8-5		
Insignificance		0.06	8	7		6		

The tabular value of (Ka2) at a degree of freedom (1) and an error rate of (0.05) equals (3.84)

It is clear from Table (4) that there are (11) statements whose value was less than the value of (Ka2) at the degree of freedom (1), so they were excluded from the scale’s statements. In light of this, (61) statements were adopted and applied to the construction sample.

2.11 Scale Correction:

The questionnaires were corrected on the basis of (61) statements after giving scores for responding to the statements of the psychological momentum scale for one of the five alternatives, as shown in Table 5.

**TABLE 5
DISTRIBUTION OF SCORES AMONG THE ANSWER ALTERNATIVES FOR THE PSYCHOLOGICAL\ MOMENTUM SCALE**

Never	Rarely	Sometimes	Often	Always	item
1	2	3	4	5	Positive items
5	4	3	2	1	Negative items

48, 51, 58) As for the positive phrases, they are (45) phrases.

To extract the total score for the scale, the scores obtained by the respondent are summed in his response to the scale’s 61 statements. Therefore, the highest score that can be obtained for the scale is (305), and the lowest score that can be obtained is (61), while the degree of neutrality is (183). Which can be obtained by summing the ratings scale scores (5,4,3,2,1), then dividing them by (5) alternatives, then multiplying them by the number of (61) statements, and thus we obtain the degree of neutrality.

2.12 Exploratory Trial of the Scale:

The exploratory experiment was conducted on a sample of (11) young lifters, who were randomly selected from outside the sample of the main experiment of the scale. The experiment was conducted in order to confirm the clarity of the instructions and phrases of the scale.

2.13 Main Experience of the Scale:

The psychological momentum measure was applied with the assistant work team for the period from 2/4/2023 to 4/21/2023, as the number of sample members reached (154) young weightlifters.

2.14 Extracting the Scientific Foundations of the Scale:

Recently, the efforts of those concerned with psychological measurement have directed towards increasing the accuracy of the scales to identify some (psychometric) characteristics of the scales and their expressions that can be indicators of their accuracy in measuring... It was designed to measure it and carry out the measurement process with as few errors as possible (8, 2009: 36).

3. VALIDITY OF THE SCALE

The validity of the scale was verified using two types of validity:

3.1 Content veracity

The scale was prepared and its components and phrases were determined with the help of a group of professors and experts in the field of sports psychology, measurement, evaluation, and

weightlifting training to confirm the validity of the phrases and the extent to which each phrase measures the dimensions of the scale. The researcher took the percentage of significance according to the value of (Ka2) for the components and phrases, as the components and phrases that were... Value The calculated (Ka) value is greater than the tabular value, and the components and expressions whose value (Ka) was calculated were less than the tabular value and at a significance level (0.05) were excluded. Thus, the statements that obtained the approval of the experts were accepted and the untruthful statements were deleted, and thus the work was settled. L on (61) expression for the momentum scale Psychological.

3. 2 Vacuity of construction:

It is one of the most appropriate types of validity for constructing scales because it depends on experimental verification of the extent to which the scores of the statements match the characteristic or concept to be measured (2, 1984: 43). To achieve construct validity, the researcher used the following methods:

3.3 Discriminant validity (two extreme groups):

To reveal the discriminating ability of the phrases of the Psychological Momentum Scale, the two extreme groups method was used, as it is considered one of the appropriate methods for distinguishing the phrases. After correcting the scale, the total scores obtained by the young quadrants were arranged in descending order for all (154) questionnaires, as the number of questionnaires for the upper group reached (46) Interview form (46) Questionnaire for the lower group. Marwan Abdel Majeed (1999) points out that “the percentage of (27%) from the upper group and (27%) from the lower group is the best percentage through which we obtain the highest discrimination coefficients” (9, 1999). : 140), and excluding (46%), i.e. (78) questionnaires, which is the middle group. For the purpose of calculating the discrimination coefficient for each of the (61) measured statements, the t-test was used for two independent samples using the Statistical Package for the Social Sciences (SpSS). The statistically significant T-value was considered an indicator of the distinctiveness of expressions, and Table 6 below shows us the calculated T-values at a significance level (0.05).

**TABLE 6
VALUES OF THE ARITHMETIC MEANS, STANDARD DEVIATIONS, AND T-VALUES CALCULATED FOR THE UPPER AND LOWER GROUPS AND THEIR MORAL SIGNIFICANCE FOR THE SCALE EXPRESSIONS.**

Item classification	Significant level	T, value	standard deviation	mean	sample	Too groups	item
marked	.000	21.524	0.309	4.896	42	Upper group	1
			0.758	2.354	42	Lower group	
marked	.000	20.473	0.459	4.708	42	Upper group	2
			0.526	2.646	42	Lower group	
marked	.000	18.809	0.000	5.000	42	Upper group	3
			0.729	3.021	42	Lower group	
marked	.000	20.814	0.000	5.000	42	Upper group	4
			0.714	2.854	42	Lower group	
marked	.000	25.938	0.144	4.979	42	Upper group	5
			0.652	2.479	42	Lower group	

marked	.000	20.612	0.309	4.896	42	Upper group	6
			0.744	2.500	42	Lower group	
marked	.000	24.148	0.394	4.813	42	Upper group	7
			0.449	2.729	42	Lower group	
marked	.000	21.299	0.438	4.750	42	Upper group	8
			0.472	2.771	42	Lower group	
Non- marked	0.191	1.316	0.57189	4.6304	42	Upper group	9
			0.68982	4.4565	42	Lower group	
marked	.000	28.166	0.144	4.979	42	Upper group	10
			0.582	2.542	42	Lower group	
marked	.000	23.216	0.425	4.771	42	Upper group	11
			0.410	2.792	42	Lower group	
marked	.000	20.358	0.483	4.646	42	Upper group	12
			0.489	2.625	42	Lower group	
marked	.000	26.353	0.144	4.979	42	Upper group	13
			0.613	2.583	42	Lower group	
Non-marked	0.678	0.417	0.62322	4.4783	42	Upper group	14
			0.85832	4.4130	42	Lower group	
marked	.000	27.344	0.000	5.000	42	Upper group	15
			0.649	2.438	42	Lower group	
marked	.000	22.945	0.394	4.813	42	Upper group	16
			0.651	2.292	42	Lower group	
marked	.000	21.462	0.377	4.833	42	Upper group	17
			0.652	2.500	42	Lower group	
Non-marked	0.202	1.285	0.71963	4.5652	42	Upper group	18
			0.74113	4.3696	42	Lower group	
Marked	.000	26.607	0.309	4.896	42	Upper group	19
			0.610	2.271	42	Lower group	
Marked	.000	29.178	0.000	5.000	42	Upper group	20
			0.544	2.708	42	Lower group	
Marked	.000	24.391	0.357	4.854	42	Upper group	21
			0.472	2.771	42	Lower group	
Marked	.000	23.804	0.309	4.896	42	Upper group	22
			0.618	2.521	42	Lower group	
Marked	.000	30.035	0.144	4.979	42	Upper group	23
			0.504	2.708	42	Lower group	
Marked	.000	30.521	0.489	4.625	42	Upper group	24
			0.425	1.771	42	Lower group	

Marked	.000	31.542	0.279	4.917	42	Upper group	25
			0.357	2.854	42	Lower group	
Non-marked	0.165	1.401	0.67852	4.6304	42	Upper group	26
			0.80488	4.4130	42	Lower group	
Marked	.000	27.260	0.000	5.000	42	Upper group	27
			0.545	2.854	42	Lower group	
Non-marked	0.525	0.638	0.68242	4.6087	42	Upper group	28
			0.62322	4.5217	42	Lower group	
Non-marked	0.231	1.207	0.91181	4.4565	42	Upper group	29
			0.98687	4.2174	42	Lower group	
marked	.000	21.584	0.357	4.854	42	Upper group	30
			0.651	2.542	42	Lower group	
Non-marked	0.262	1.130	0.74762	4.5870	42	Upper group	31
			0.90623	4.3913	42	Lower group	
Marked	.000	22.362	0.357	4.854	42	Upper group	32
			0.651	2.458	42	Lower group	
Marked	.000	20.996	0.357	4.854	42	Upper group	33
			0.635	2.646	42	Lower group	
Marked	.000	23.003	0.394	4.813	42	Upper group	34
			0.536	2.604	42	Lower group	
Marked	.000	23.070	0.357	4.854	42	Upper group	35
			0.574	2.604	42	Lower group	
Marked	.000	23.408	0.410	4.792	42	Upper group	36
			0.468	2.688	42	Lower group	
Marked	.000	16.854	0.494	4.604	42	Upper group	37
			0.635	2.646	42	Lower group	
Non-marked	0.340	0.959	0.90623	4.3913	42	Upper group	38
			1.04604	4.1957	42	Lower group	
Non-marked	0.148	1.459	0.64005	4.6522	42	Upper group	39
			0.90863	4.4130	42	Lower group	
marked	.000	29.290	0.245	4.938	42	Upper group	40
			0.489	2.625	42	Lower group	
marked	.000	24.565	0.144	4.979	42	Upper group	41
			0.684	2.500	42	Lower group	
Non-marked	0.260	1.134	0.78143	4.5217	42	Upper group	42
			0.87062	4.3261	42	Lower group	
Marked	.000	21.214	0.483	4.646	42	Upper group	43
			0.589	2.313	42	Lower group	
Marked	.000	18.166	0.498	4.583	42	Upper group	44
			0.649	2.438	42	Lower group	
Marked	.000	16.262	0.501	4.438	42	Upper group	45
			0.552	2.688	42	Lower group	

Marked	.000	17.772	0.505	4.500	42	Upper group	46
			0.583	2.521	42	Lower group	
Non-marked	0.386	0.870	0.50169	4.7174	42	Upper group	47
			0.68242	4.6087	42	Lower group	
Marked	.000	27.432	0.000	5.000	42	Upper group	48
			0.616	2.563	42	Lower group	
Non-marked	0.191	1.318	0.63436	4.6739	42	Upper group	49
			0.78143	4.4783	42	Lower group	
Marked	.000	22.348	0.245	4.938	42	Upper group	50
			0.776	2.313	42	Lower group	
Marked	.000	29.178	0.000	5.000	42	Upper group	51
			0.544	2.708	42	Lower group	
Marked	.000	25.787	0.000	5.000	42	Upper group	52
			0.683	2.458	42	Lower group	
Marked	.000	27.806	0.144	4.979	42	Upper group	53
			0.574	2.604	42	Lower group	
Marked	.000	32.708	0.000	5.000	42	Upper group	54
			0.472	2.771	42	Lower group	
Marked	.000	24.780	0.334	4.875	42	Upper group	55
			0.519	2.667	42	Lower group	
Marked	.000	22.449	0.334	4.875	42	Upper group	56
			0.652	2.500	42	Lower group	
Marked	.000	24.517	0.000	5.000	42	Upper group	57
			0.636	2.750	42	Lower group	
Non-marked	0.255	1.147	0.95730	4.1957	42	Upper group	58
			0.85832	4.4130	42	Lower group	
Non-marked	0.489	0.694	0.88711	4.4565	42	Upper group	59
			0.58318	4.5652	42	Lower group	
Non-marked	0.000	11.309	0.54418	4.7174	42	Upper group	60
			1.24198	2.4565	42	Lower group	
Non-marked	0.097	1.678	0.72232	4.4783	42	Upper group	61
			0.88492	4.1957	42	Lower group	

It is clear from Table (6) that there are (16) unmarked phrases (9, 14, 18, 26, 28, 29, 31, 38, 39, 42, 47, 49, 58, 59, 60, 61). Therefore, it was excluded if its significance level was greater than (0.05), so the scale consisted of (45) statements.

Internal consistency coefficient:

The value of this indicator was extracted using the Pearson correlation coefficient (person) between the score of each statement and the total score of the scale for all members of

the sample of (154) players using the Statistical Package for the Social Sciences (SPSS). Table 7 shows the results of the correlation coefficients for the score of each phrase. In the overall degree of the scale.

TABLE 14
CONSTRUCTS THE FACTOR MATRIX FOR THE PSYCHOLOGICAL MOMENTUM
SCALE EXPRESSIONS

0.247	0.181	0.215	0.175	0.773	1
0.154	0.180	0.266	0.231	0.812	2
0.124	0.141	0.155	0.308	0.819	3
0.137	0.169	0.188	0.317	0.837	4
0.148	0.144	0.184	0.290	0.865	5
0.097	0.162	0.219	0.309	0.830	6
0.162	0.171	0.196	0.319	0.836	7
0.075	0.176	0.198	0.355	0.784	8
0.088	0.185	0.242	0.327	0.815	9
0.201	0.107	0.224	0.262	0.803	10
0.140	0.185	0.228	0.335	0.739	11
0.178	0.201	0.277	0.502	0.606	12
0.099	0.119	0.359	0.542	0.620	13
0.105	0.152	0.267	0.549	0.599	14
0.159	0.082	0.264	0.587	0.575	15
0.115	0.135	0.228	0.669	0.502	16
0.114	0.178	0.216	0.737	0.467	17

0.181	0.166	0.211	0.756	0.430	18
0.188	0.184	0.304	0.726	0.360	19
0.187	0.168	0.205	0.770	0.370	20
0.195	0.167	0.230	0.775	0.383	21
0.130	0.139	0.213	0.789	0.355	22
0.233	0.152	0.296	0.726	0.407	23
0.343	0.150	0.351	0.608	0.368	24
0.585	0.115	0.426	0.420	0.381	25
0.586	0.099	0.392	0.413	0.338	26
0.672	0.132	0.368	0.366	0.345	27
0.556	0.205	0.400	0.421	0.317	28
0.548	0.211	0.427	0.381	0.324	29
0.418	0.226	0.517	0.440	0.280	30
0.342	0.128	0.706	0.286	0.227	31
0.309	0.104	0.738	0.286	0.238	32
0.192	0.100	0.735	0.192	0.381	33
0.121	0.121	0.814	0.202	0.270	34
0.075	0.165	0.820	0.164	0.195	35
0.092	0.175	0.800	0.196	0.252	36
0.162	0.260	0.705	0.214	0.205	37
0.021	0.499	0.620	0.261	0.156	38
-0.019	0.718	0.506	0.205	0.119	39
-0.035	0.728	0.442	0.208	0.101	40
-0.031	0.792	0.279	0.171	0.102	41
0.047	0.775	0.183	0.164	0.242	42
0.162	0.883	0.078	0.061	0.267	43
0.156	0.825	0.081	0.079	0.079	44
0.136	0.834	-0.085	0.059	0.203	45

9 Conditions for the worker to accept the statements of the psychological momentum scale:

- 1- The factor that is satisfied with at least three significant statements accepts this according to the Guilford test.
- 2- The factors are interpreted in light of major saturations that are equal to or greater than (+0.50) (3: 2006: 110).
- 3- Dopting the factor matrix after orthogonal rotation to help interpret the results.
- 4- Significant factors are those whose latent roots are at least equal to one correct factor according to the Kaiser test.

2-10 Interpretation of these extracted factors:

Interpretation of the first factor:

This factor is from (14) phrase that obtained the highest satisfaction on the conditions of the interpretation of the approved factors and with a sign of significance (0.05+), so he increased by (31.11%) from the total complex of the phrases subject to the global and adult analyzing (45) phrases and the saturation of its saturation (0.599 - 0.865) as this factor explained a variance of (11.537%) of the total variance, and Table (15) shows the statements that make up this factor.

**TABLE 15
NUMBER OF STATEMENTS FOR THE FIRST FACTOR, THEIR NUMBERS, AND
THEIR DESCENDING ORDER ACCORDING TO THEIR
DEGREE OF SATURATION**

Degree of Saturation	Components	Items	TheNumber of Items	T
0.865	Human energy	I feel weak-willed when there is a player better than me at lifting weights.	5	1
0.837	Human energy	I feel that my physical abilities are weaker than my fellow players on the team	4	2
0.836	Human energy	I avoid challenging my fellow players because they are superior to me	7	3
0.830	Human energy	I do my best while lifting weights	6	4
0.819	Human energy	The coach's dissatisfaction with me negatively affects my ability to compete	3	5
0.815	Human energy	My sense of excitement makes me perform at my best in training or competition	9	6
0.812	Human energy	I tend to compete strongly with strong competitors	2	7
0.803	Human energy	When I face strong competitors, I focus a lot on my performance	10	8
0.784	Human energy	I realize my strengths and weaknesses	8	9
0.773	Human energy	Difficult situations in competition excite me	1	10
0.739	Human energy	My performance in competition is stronger than in training	11	11
0.620	Body energy	My performance level drops when I feel certain defeat	13	12
0.606	Body energy	I love the challenge and enjoy the critical moments of competition	12	13
0.599	Body energy	I feel like I have limitless physical energy	14	14

Table 15 We note that the statements that are saturated on the first factor are (14) statements, (11) statements from the (human energy) component; and (3) statements from the “physical energy” component.

The best saturation on the first factor was in favor of the component (human energy), after presenting the statements of the first factor to a group of experts specialized in testing and measurement, sports psychology, and general psychology. They agreed to call it the “human energy” component.

Interpretation of the second factor

This factor consisted of (10) statements that obtained the highest saturations according to the conditions for interpreting the adopted factors, with values of significance (0.05+) or more, at a rate of (22.22%) of the total number of statements subject to factor analysis, which amounted

to (45) statements, and whose saturation reached between (0.587). 0.789), as this factor explained (18.984%) of the total variance, and Table (16) shows the statements that make up this factor.

TABLE 16
SEQUENCE OF STATEMENTS FOR THE SECOND FACTOR AND THEIR NUMBERS
FROM THE CONSTRUCTION FORM AND THEIR ESCENDING ORDER
ACCORDING TO THE DEGREE F THEIR SATURATION
ON THE FACTOR.

Degree of Saturation	Components	Items	TheNumber of Items	T
0.789	Cognitive momentum	I find it difficult to apply the performance that the coach has set for me	22	1
0.775	Body energy	My performance gets stronger the more exciting the competition becomes	21	2
0.770	Cognitive momentum	It's hard to reach the level that qualifies me to represent the national team	29	3
0.756	Body energy	I perform at my best if the competition is at a high level	18	4
0.737	Body energy	I am willing to train and compete all year long to achieve the desired achievement	17	5
0.726	Body energy	I find it difficult to distribute the physical effort during tough competitions	19	6
0.725	Cognitive momentum	I think a lot about performing non-stop weightlifting	23	7
0.669	Body energy	My high physical energy pushes me to perform well in competition	16	8
0.608	Psychological burden	I have great knowledge of the principles of effective weight lifting	24	9
0.587	Body energy	My physical stamina diminishes from time to time	15	10

From Table 16 we notice that the statements that were saturated on the second factor are (10) statements, (6) statements from the (physical energy) component; (3) statements from the (cognitive momentum) component, and (1) one statement from the (psychological play) component.

The best saturation on the first factor was in favor of the component (physical energy), after presenting the phrases of the second factor to a group of experts specialized in testing and measurement, sportspsychology, and general psychology. They agreed to call it the (physical and cognitive energy) component.

Interpretation of the third factor:

This factor consisted of (9) statements, which obtained the highest saturations according to the conditions for interpreting the adopted factors, with significant values (0.05 +) or more, at a rate of (16.66%) of the total total subject to factor analysis, amounting to (45) statements, whose saturation reached between (0.517, 0.820), as this factor explained (16.738%) of the total variance, and Table (17) shows the statements that make up this factor.

TABLE 17
SEQUENCE OF EXPRESSIONS FOR THE THIRD FACTOR AND THEIR NUMBERS
FROM THE CONSTRUCTION FORM AND THEIR ESCENDING ORDER
ACCORDING TO THEIR DEGREE F SATURATION
ON THIS FACTOR.

Degree of Saturation	Components	Items	TheNumber of Items	T
0.820	Internal psychological energy	I compete with my utmost effort whether I am winning or losing in the competition.	35	1
0.814	Psychological burden	have the ability to regulate my effort when performing difficult lifts	34	2
0.800	Internal psychological energy	I feel very energized when I start competing	36	3
0.738	Psychological burden	tay away from problems that cause me psychological pressure in training	32	4
0.735	Psychological burden	It is easy to return to my normal state after anger	33	5
0.706	Psychological burden	I find it difficult to correct mistakes that occur while performing in competition	31	6
0.705	Internal psychological energy	I feel completely exhausted after the training session.	37	7
0.620	Internal psychological energy	vigorously defend my point of view in front of the coach in competition	38	8
0.517	Psychological burden	I feel bad before competing	30	9

From Table 17 we notice that the statements that are saturated on the third factor are (9) statements, (5) statements from the (psychological burden) component; And (4) phrases from the component (internal psychological energy).

After presenting the statements of the third factor to a group of experts specialized in testing and measurement, sports psychology, and general psychology. They agreed to call it the “psychological energy burden” component.

Interpretation of the fourth factor:

This factor consisted of (7) statements that obtained the highest saturations according to the conditions for interpreting the adopted factors, with significant values (0.05+) or more, at a

rate of (15.55%) of the total number of statements subject to factor analysis, which amounted to (45) statements, and whose saturation reached between (0.718). 0.883) as this factor explained (6.630) of the total variance, and Table (18) shows the expressions that make up this factor:

TABLE 18
SEQUENCE OF EXPRESSIONS FOR THE FOURTH FACTOR AND THEIR
NUMBERS FROM THE CONSTRUCTION FORM AND THEIR ORDER N
DESCENDING ORDER ACCORDING TO THE DEGREE OF HEIR SATURATION
mON THE FACTOR.

Degree of Saturation	Components	Items	The Number of Items	T
0.883	Morale	Strong competitions are devoid of fun and excitement	43	1
0.834	Morale	Weightlifting is a sport that helps me achieve self-realization	45	2
0.825	Morale	I feel proud to be a weightlifter	44	3
0.792	Morale	I am rewarded when I achieve a new achievement in competition	41	4
0.775	Morale	Financial incentives affect my performance improvement	42	5
0.728	Internal psychological energy	I depend on myself to solve problems in training or competition	40	6
0.718	Internal psychological energy	I exclude from my thoughts defeat or failure in competition.	39	7

From Table 18, we note that the statements that are saturated on the fourth factor are (7) statements, (5) statements from the (morale spirit) component; And (3) statements from the component (internal psychological energy).

The best saturation on the fourth factor was in favor of the component (morale), after presenting the phrases of the fourth factor to a group of experts specialized in testing and measurement, sports psychology, and general psychology. They agreed to call it the “morale” component.

Interpretation of the fifth factor:

The factor consisted of (5) statements that obtained the highest saturations according to the conditions for interpreting the adopted factors, with significant values (0.05+) or more, at a

rate of (11.11%) of the total number of statements subject to factor analysis, which amounted to (45), and whose saturation reached (0.585, 0.548), as this factor explained (6.630%) of the total variance, and Table (19) shows the expressions that make up this factor.

TABLE 19
SEQUENCE OF STATEMENTS FOR THE FIFTH FACTOR AND THEIR NUMBERS
FROM THE CONSTRUCTION FORM AND THEIR ASCENDING ORDER
ACCORDING TO THE DEGREE OF THEIR SATURATION ON
THE FACTOR

Degree of Saturation	Components	Items	TheNumber of Items	T
0.672	Cognitive momentum	I can use my skills to perform during difficult stages of competition	27	1
0.586	Cognitive momentum	I have adequate knowledge of my mental potential and physical energy	26	2
0.585	Cognitive momentum	I can read the kinetic chain I am training to lift weights	25	3
0.556	Cognitive momentum	I have knowledge of using modern training strategies in weight lifting	28	4
0.548	Cognitive momentum	It's hard to reach the level that qualifies me to represent the national team	29	5

From Table (19) we notice that the statements that are saturated on the fifth factor are (5) statements, all of them from the (cognitive momentum) component.

After presenting the statements of the fifth factor to a group of experts specialized in testing and measurement, sports psychology, and general psychology. They agreed to call it the “cognitive momentum” component.

2-11 Stability of the scale:

In order to ensure the stability of the psychological momentum scale, the Cronbach’s alpha coefficient was used: To calculate the reliability in this way, he relied on a sample of (154) players to construct the scale that was valid for statistical work. When calculating the reliability coefficient, it turned out to be (0.983), which is a very good value and a high and reliable reliability coefficient. It can be adopted.

2-12 The scale in its final form:

After completing the statistical treatments and applying the basic conditions for accepting and interpreting the factors, the researcher arrived at five components that represent a measure of the psychological momentum of young weightlifting players in Iraq. The scale includes (45) statements, including (14) negative statements and (31) positive statements. It was also shown that The highest score on the scale is (225), the lowest score is (45), and the degree of neutrality is (135). The phrases were distributed among the components: (14) phrases for the (human energy) component, (10) phrases for the (physical and cognitive energy) component, (9) phrases

for the (psychological energy burden) component, and (7) phrases for the (morale spirit) component. And (5) statements for the component (cognitive momentum).

REFERENCES

1. SafwatFarag; Psychometrics, 2nd edition: (Cairo, Anglo-Egyptian Library, 2007) p. 269.
2. Abdul-Jalil Ibrahim Al-Zubaie and (others); Psychological Tests and Measures: (Mosul, University of Mosul, 1984) p. 43.
3. Abdul Razzaq Wahib Yassin; Building a measure of psychological adjustment among advanced players for some individual games in Iraq (Diyala, Master's thesis, College of Physical Education - University of Diyala, 2006), p. 110.
4. Muhammad Hassan Allawi and Muhammad Nasr al-Din Radwan; Measurement in physical education and sports psychology: (Cairo, Dar Al-Fikr Al-Arabi, 2000), pp. 319-332.
5. Muhammad Subhi Hassanein; Factor analysis of physical abilities in the components of physical education, 1st edition: (Cairo, Fawzi Publishing House, 1983) p. 245.
6. Muhammad Subhi Hassanein; Factor analysis of physical abilities in the components of physical education, 2nd edition: (Cairo, Dar Al-Fikr Al-Arabi, 1996), p. 147.
7. Muhammad Abdel Hamid Al-Masry; The effect of the direction of the paragraph and the style of its formulation on the psychometric properties: (PhD dissertation, University of Baghdad, College of Education, Ibn Rushd, 2006), p. 36.
8. Marwan Abdel Majeed Ibrahim; Sports Strategy: (Amman, Al-Warraq Publishing and Distribution Foundation, 2009), p. 65.
9. Marwan Abdel Majeed Ibrahim; Scientific foundations and statistical methods for tests and measurement in physical education, 1st edition: (Jordan, Dar Al-Fikr for Printing, Publishing and Distribution, 1999) p. 140.
10. Wadih Yassin Muhammad Al-Takriti and Hassan Muhammad Al-Obaidi; Applications of statistics and uses of computers in physical education research: (Mosul, Dar Al-Hekma, 1999) p. 369.
11. Brown. F.G.; Principles of Education and psychological Tasting Holt. Rinehart and Winston, New York, 1983, p118.
12. Eble, R, Essential of educational measurement 2nd edition, New York, Prentice-Hill, 1972, p555.
13. Sam Ashe-Edmunds; "Types of Management Goals" www.smallbusiness.chron.com, Retrieved 07-05-2018. Edited.