

The relative contribution of athletes' mental skills to some integrated attacking skills among junior football players

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Abstract

This study addressed the importance of mental skills in the field of sports and its association with the performance of players, especially junior football players with focus on their attacking skills. The problem of this study was that most coaches do not pay attention to the psychological aspect and mental skills of junior players, but focus only on the physical and skill aspects in their training units. Therefore, the importance of research lies in identifying the contribution of mental skills to the integrated attacking skills so that the coach and psychologist can develop the appropriate mental strategies to improve the attacking skills and predict their level among their players. In this study, the descriptive method of correlation was employed to analyze research data. The research sample consisted of (72) junior players. The Ottawa mental skills assessment tool (henceforth, OMSAT-3) was applied to determine the relationship between mental skills and some integrated attacking tests. The study concluded that there is a negative correlation between the variables of OMSAT-3 and some integrated attacking skills among junior football players at the level of (0.01) and (0.05). In addition, equations were formed to predict the time of integrated attacking tests in relation to some variables of OMSAT-3.

Keywords: athletes' skills, integrated, junior.

Introduction

Sports psychology has become an interesting area for many coaches and athletes according to the Association of Applied Sports Psychology (AASP). AASP states that applied sports psychology aims to teach and train the psychological skills required for good performance to continue training and competition (Yaseen, 2017). Shilpi, Singh and Kumar (2015) explain that many athletes devote their entire life to training and focus under elite team to increase their performance to get advanced positions. This requires the athlete to have the mental abilities enabling him/ her to achieve the highest rates of sport achievement. Makker, Singh and Pramanik (2012) indicate that many studies revealed the close relationship between mental skills and athletic performance, and these skills can be taught and trained. However, the prevailing theories on mental skills training have focused on purely psychological mechanisms for teaching and training. This is because the possession of mental skills reduces cognitive anxiety and improves attention when performing the required kinetic tasks. In addition, the player's sport competence diminishes in the case of physical fatigue, especially in sports that require a high degree of knowledge skills and decision-making. Gardner and Moore (2006) and Moran (2012) agree that there are many mental skills that directly contribute to raising the level of sport performance, including goal-setting, self-confidence,

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relaxation, stress control, mental imagery, and mental practice. On the other hand, the researcher believes that the nature of high sport levels requires the athlete to use his skill and mental abilities integratively. That is sport training aims to raise the mental competence of the player. The skill and mental state of the player is a good indicator of the training situation of the player. Various football situations also require players to use complex and many forms of kinetic skills, including a combination of integrated performances. It is therefore important to use training formats that are close to the form of competition in the type of activity practiced, providing that their acquisition should be as early as possible so that sufficient time can be used to train for these kinetic performances.

Al-Busati (1994) states that the footballer's kinetic activity during matches or training is not an abstract skill set, but a multi-skill and interconnected performance. The elite players tend to merge skilled performances with a kinetic activity, such as controlling the ball, running it and then passing. It is kinetic, i.e., concise in terms of its total time and total space for its performance. These performances perform a complex preliminary function of the type of performance and thus its performance becomes more continuous, compatible and economic. Moreover, Kushk and Al-Busati (2000) and Abu-Abdah (2017) mention that the recent trend in training skilled performances in football emphasizes the need to integrate these performances to form complex skilled performances, such as the player changes his speed and directions, stops suddenly, shots after dribbling, or running forward past the opponent to receive the ball and control it smoothly in the least time and effort. This requires the player to possess mental abilities to help him achieve the highest rates of sport achievement.

Hammad (1996) points out that mastery of the complex skills performances is the key to the first win in the football matches and its mastery requires the player to exert effort and perseverance during training. Hence, the player's skill does not develop and improve within a short period of time. Correcting performance errors through proper feedback and repetition of performance more times under different conditions plays an important role in improving the level of skilled performance. Additionally, the process of training integrated skills, especially attacking skills, must receive the great attention it deserves through the planning of training programs for juniors. The majority has time allocated to the preparation of the skills. The process of training the integrated attacking skills and its derivatives and kinetic exercises to be developed and improved continues till reaching the highest sport levels. The integrated mental and attacking skills have a significant role in changing the result of the matches, controlling and possessing the ball and changing the course of match. That is the team that is good at applying integrated attacking skills will be able to decide the result of the match in its favor. Thus, the importance of integrated attacking skills is evident. Through literature review, the researcher could not find a study addressing the contribution of mental skills to the integrated attacking skills of football players. Therefore, the researcher opines the necessity to conduct this study.

Research Problem

The process of preparation for the purpose of reaching the high level whereby the athlete can achieve the prominent achievements to occupy advanced positions requires a lot of research in various physical, skill and psychological aspects affecting performance. Mental abilities play an important role in the process of skill learning and application of plans during matches. Also, they represent the critical factor in many situations during matches. Based on the experience as a player, a football coach and a physical education teacher, the researcher observed a weakness in the process of attention to mental skills and their variables, such as the ability to imagine, mental preparation, self-confidence, fear control and other mental skills. In addition, the coaches and those responsible for the training process have not paid sufficient attention to the type of their relationship with basic attacking skills despite their impact on the player's ability to

perform optimally if mastered and trained. This is because of the traditional way of training complex skills, especially for junior players. Since the mastery of performing different integrated attacking skills is the key to the first win in football matches, this requires the player to exert effort and perseverance during training. This is often attributed to the lack of psychological preparation in training curricula. This, in turn, forms the research problem; therefore, the researcher aimed at studying the contribution of mental skills to some integrated attacking skills among junior football players.

Research Objectives

The research aims to:

1. Identify the correlation between the mental skills of athletes and some integrated attacking skills among junior football players.
2. Determine the relative contribution of the mental skills of athletes to some integrated attacking skills among junior football players.
3. Predict the level of some integrated attacking skills among junior football players with the knowledge of mental skills depending on their contribution.

Research Hypotheses

1. There is a negative correlation between the mental skills of athletes and some integrated attacking skills among junior football players.
2. Some mental skills contribute differently to the integrated attacking skills among junior football players.
3. The level of some integrated attacking skills among junior football players can be predicted with the knowledge of some psychological skills depending on their contribution.

Research Significance

The theoretical importance of research lies in that it sheds light on a sample with a particular importance in its future orientations, which is the basic ground for future champions, namely, junior players. It also deals with a relatively new topic in the field of sports, i.e., mental skills. Concerning the practical importance, it lies in identifying the contribution of mental skills to integrated attacking skills so that the coach and psychologist can develop the appropriate mental strategies to develop them and predict the level of integrated attacking skills among their players.

Definition of Terms

1. Mental skills: refer to an adaptive organized sequence of cognitive processes, developed by training to obtain optimal performance results (Durand-Bush, 1995).
2. Athletes' mental skills: are mental abilities that can be learned and mastered through learning and training, including relaxation, energizing, imagery, attention, achievement motivation, and self-confidence (Abdul-Hakim & Hassan, 2015).
3. Integrated attacking skills: refer to a set of individual attacking skill performances combined in a complex skilled activity, characterized with speed and accuracy in performance so that one or some of these performances are a preliminary stage for the main part of this activity (Abdul-Halim & Omar, 2001).

Research Method

a. Research Approach

The descriptive approach of correlations was employed for being appropriate for the nature of this research.

b. Research Sample

The research community was represented by junior players of Baghdad football clubs (2018-2019). The research sample included (88) junior football players randomly selected, representing clubs of Al-Talaba (students), al-Zawraa, Al-Kahrabaa (electricity), Al-Quwa Al-Jawiya (air force), Al-Shorta (police), and Baghdad. A survey was conducted on (16) junior players; while the main study was conducted on (72) junior players. Tables (1, 2, and 3) illustrate the statistical description of the total sample data in relation to the foundation variables, the skills and variables of OMSAT-3, and the tests of some integrated attacking skills in question.

c. Conditions for Selecting the Research Sample

The junior player must:

1. Be registered in Iraq Football Association.
2. Have a minimum training age of three years.
3. Be participated in the championships of Iraq or governorate during the season (2018-2019).
4. Be regular in training without injury or stoppage until conducting this research.
5. Agree to participate in the research procedures and complete all tests.

Table 1: the statistical description of the total sample data at foundation variables (n = 88)

Variables	Statistical significance of description				
	Arithmetic mean	Median	Standard deviation	Flattening coefficient	Skewness coefficient
Age (year)	15.02	15	0.69	1.09-	0.05-
Height (cm)	165.44	165	5.90	0.98-	0.41
Mass (kg)	53.99	52.64	6.16	0.68-	0.20
Years of practice	4.40	4.5	0.89	0.69-	0.07

Based on data presented in table (1), the coefficient of skewness ranged between (-0.05-0.20). This indicates that the measurements derived were close to normality, as the normal values of the skewness coefficient ranged between (± 3) and were very close to zero. The flattening coefficient was between (-0.68) and (-1.09). This means that the oscillation of the normal curve is acceptable and average, not oscillating up or down. This confirms the homogeneity of the total sample in relation to the foundation variables.

Table 2: the statistical description of basic research sample data at integrated attacking skills tests for junior football players (n = 72)

Variables	Statistical significance of description				
	Arithmetic mean	Median	Standard deviation	Flattening coefficient	Skewness coefficient
Receiving, dribbling and then passing	3.01	2.97	0.30	1.13	0.26
Zigzag running with ball around cones, then shooting	13.42	13.29	0.82	6.99	1.33
Receiving, running, dribbling, and then passing	6.62	6.46	0.73	1.16	0.88
Control, dribbling and then shooting	3.75	3.72	0.52	0.51-	0.20
Control, running and then shooting	4.94	4.89	0.80	0.23-	0.35

Table (2) clarifies that the coefficient of skewness ranged between (0.20-1.33). This indicates that the measurements derived were close to normality, as the normal values of the skewness coefficient ranged between (± 3) and were very close to zero. The flattening coefficient was between (-0.51) and (1.16). This means that the oscillation of the normal curve is acceptable and average, not oscillating up or down. This confirms the homogeneity of the total sample in relation to the integrated attacking skills tests for junior football players.

Table 3: basic sample data in relation to the skills and variables of OMSAT-3 (n = 72)

Skills and variables		Statistical significance of description				
		Arithmetic mean	Median	Standard deviation	Flattening coefficient	Skewness coefficient
Foundation skills	Goal-setting	20.14	21	2.06	0.15-	0.66-
	Self-confidence	22.04	23	2.15	0.98-	0.10
	Commitment	18.22	18	2.01	0.09	0.18
Physical and psychological skills	Refocusing	20.75	21	2.01	0.42-	0.15
	Fear Control	20.03	19.5	2.99	0.83-	0.41
	Relaxation	19.22	19	2.33	0.43-	0.18
	Energizing	18.16	18	1.66	1.32	0.81
Cognitive skills	Focusing	21.94	22	2.57	0.83-	0.23-
	Stress control	22.08	22	2.30	0.68-	0.20-
	Imagery	18.79	19	2.24	0.49-	0.28-
	Practice	16.07	16	1.93	0.70-	0.34-
	Planning	18.55	18	2.00	0.16-	0.09

From table (3), it is clear that the coefficient of skewness ranged between (-0.66-0.81). This indicates that the measurements derived were close to normality, as the normal values of the skewness coefficient ranged between (± 3) and were very close to zero. The flattening coefficient was between (-0.98) and (1.32). This means that the oscillation of the normal curve is acceptable and average, not oscillating up or down. This confirms the homogeneity of the total sample in relation to the skills and variables of OMSAT-3.

d. Research Tool

OMSAT-3 presented by Durand-Bush et al. (2001) was used in this study, consisting of (48) items divided into (3) axes. Each item had a seven-grade estimate, ranging between (strongly agree, agree, agree to some extent, neutral, disagree to some extent, disagree, strongly disagree). This tool was used to evaluate (12) classified mental skills, as follows:

- Foundation skills: goal-setting, self-confidence, and commitment.
- Physical and psychological skills: refocusing, fear control, relaxation, and energizing.
- Cognitive skills: focusing, stress control, imagery, mental practice, competition planning.

e. Tests of Integrated Attacking Skills

Previous studies were reviewed to identify tests for integrated attacking skills in football, including the study of Ajmi (2001), Abdul-Halim and Omar (2001), Sultan (2004), Mahmoud (2005), As-Sayed (2008) and Hamdoun (2008). The identification of these tests was based on the analytical study conducted by Kushk and Al-Busati (2000) to identify the most important of these skills. They are presented as follows:

1. Direct pass from running.
2. Receive, dribble and pass.
3. Receive with dribbling, and then running with the ball and pass.
4. Receive, run with the ball, and then dribble and pass.
5. Receive, dribble, and then running with the ball and pass.
6. Receive, run with the ball, dribble and then run and pass.
7. The same previous skill activities, but ends with a shot.

After presenting previous tests to the experts (Appendix 1), the researcher reached the following tests (Appendix 2):

1. Receiving, dribbling and then passing
2. Zigzag running with ball around cones, then shooting
3. Receiving, running, dribbling, and then passing
4. Control, dribbling and then shooting
5. Control, running and then shooting

f. Scientific Criteria for Research Tool

1. Scientific Variables of OMSAT-3

- Validity: internal consistency validity refers to the correlation between the item score and the total score of variable to which this item belongs.

Table 4: coefficient of internal consistency validity for items of variables of OMSAT-3 (n = 16)

Type of skill	Variables	Item no.	Item	Coefficient of internal consistency validity
Foundation skills	Goal-setting	1	I set daily training goals	**0.738
		10	I set difficult targets but are easy to achieve	**0.631
		23	I set goals to improve the daily aspects of my performance	**0.803
		41	My goals drive me to work more seriously	**0.670
	Self-confidence	2	I believe that I can succeed in activities I chose despite the presence of any obstacles I face	**0.655
		12	I act with confidence even in difficult sport situations	**0.708
		36	I compete in training better than in match	**0.673
		48	I trust most aspects of my performance	**0.676
	Commitment	7	I am determined to never give up my sport	**0.680
			17	I am committed to becoming a famous or distinguished competitor
30			I am willing to sacrifice so many things to excel in my sport	**0.626
39			I feel more committed to my sport than anything	**0.741

			else in my life	
Physical and psychological skills	Refocusing	22	Mistakes often lead to other mistakes in competition	**0.615
		27	I find it difficult to control myself after stress during performance	**0.598
		34	I find it difficult to keep my mind far from an unexpected event during the competition	**0.636
		44	I work to reduce mistakes during training	**0.806
	Fear control	4	There are many things in my sport that can be dangerous and make me fearful	**0.653
		16	I find it difficult to train because of my fear of participating in sports	**0.685
		24	I am afraid of defeat	**0.596
		43	I find it difficult to control things to reduce my training concerns	**0.699
	Relaxation	3	I find it easy to relax	**0.737
		28	I think I have the personal ability to achieve my goals	**0.716
		29	I find it easy to relax quickly	**0.626
		42	I can effectively relax during the critical moments of competition	**0.593
	Energizing	5	I can increase my energy level when I am tired in training	**0.665
		20	I can increase my energy level when I am very comfortable in the competition	**0.727
		37	I can easily energize myself to the optimum level when I am performing well	**0.701
		46	I can easily energize myself before the match if my level is low	**0.681
Cognitive skills	Focusing	8	I lose my focus during important competitions	**0.666
		15	I lose my focus during the daily training	**0.720
		31	I find it difficult to focus on specific training situations	**0.674
		38	I find it difficult to keep my focus throughout the competition	**0.708
	Stress control	6	I am experiencing technical performance problems because I am very nervous	**0.667
		14	Physical strengthening is unnecessary in	**0.785

			competition	
		19	I can reduce tension in my muscles	**0.652
		32	I find that the big crowd makes me nervous during the competition	**0.771
	Imagery	9	I find it easy to create mental images	**0.668
		18	I find it easy to change the images in my mind	**0.712
		26	I have clear mental images	**0.655
		33	I can feel the movement in my perceptions	**0.717
	Practice	13	I mentally practice sport every day	**0.804
		21	I can mentally practice my sport by taking the maximum performance into consideration	**0.682
		35	My mental practice is planned	**0.734
		45	I use my brain to solve critical situations while competing	**0.730
	Planning	11	I am planning a set of things to do before the competition	**0.680
		25	I am planning a regular set of things that I would not think of before the competition	**0.660
		40	I am planning a regular set of things that I would not do during the competition	**0.748
		47	I have a plan that includes some words I say to myself in the competition	**0.680

** Significant at 0.01 = 0.536, * Significant at 0.05 = 0.413

Table (4) shows the increase in the values of internal consistency which ranged between (0.593-0.806). These values are significant at (0.01), indicating the validity of variables of OMSAT-3. In addition, the items are characterized by intrinsic validity and are linked to the total score of variables. Therefore, they are combined to measure what the variable measures, and thus the items are valid.

- Reliability through employing Cronbach's alpha.

Table 5: Cronbach's alpha for variables of OMSAT-3 (n= 16)

Type of skill	Variables	Reliability of Cronbach's alpha	
		For variables	For skills
Foundation skills	Goal-setting	0.742	0.796
	Self-confidence	0.731	
	Commitment	0.744	
Physical and psychological skills	Refocusing	0.750	0.801
	Fear control	0.758	
	Relaxation	0.733	
	Energizing	0.769	

Cognitive skills	Focusing	0.771	0.788
	Stress control	0.764	
	Imagery	0.745	
	Practice	0.741	
	Planning	0.739	

Table (5) shows the increase in the values of Cronbach's alpha for variables of OMSAT-3 between (0.731-0.771), which are greater than (0.700). This confirms that the items of each variable are homogenous, consistent, integrated and contributing to the construction of the variable. Also, the values of alpha coefficient of skills ranged between (0.788-0.801), which are greater than the values of variables. Hence, any omission or addition of any of these items may have a negative impact on the construction of the variables.

2. Tests of Integrated Attacking Skill for Junior Football Players

- Validity: the difference between the distinctive and non-distinctive groups.

Table 6: the difference between the distinctive and non-distinctive groups to find the validity of integrated attacking skill tests

Tests	Statistical significance						
	Distinctive group N= 8		Non-distinctive group N= 8		The difference between them	T-value	Validity coefficient
	X	± P	X	± P			
Receiving, dribbling and then passing	2.73	0.23	3.41	0.26	0.68	*5.54	0.829
Zigzag running with ball around cones, then shooting	12.59	0.59	13.75	0.25	1.17	*5.19	0.811
Receiving, running, dribbling, and then passing	5.98	0.36	7.22	0.57	1.25	*5.24	0.814
Control, dribbling and then shooting	3.35	0.26	4.32	0.35	0.97	*6.29	0.859
Control, running and then shooting	4.15	0.43	5.31	0.42	1.16	*5.50	0.827

* Significant at 0.05 = 2.14

It is clear from table (6) that there is a significant difference between the two groups in favor of the distinctive group. Hence, the calculated T-value ranged between (5.19) and (6.29), which were significant at (0.05). The validity coefficient was between (0.811) and (0.859). This confirms that the integrated attacking skills tests for junior football players are characterized by discriminant validity and measure what they claim to measure.

- Reliability: test and retest

Table 7: the difference between the first and second applications of the two groups to find the reliability of the integrated attacking skills tests for junior football players (n = 16)

Variables	Statistical significance							
	First application		Second application		The difference between them		T-value	Reliability coefficient
	X	± P	X	± P	X	± P		

Receiving, dribbling and then passing	3.07	0.42	3.15	0.30	0.08	0.46	0.69	0.887
Zigzag running with ball around cones, then shooting	13.17	0.74	13.29	0.34	0.12	0.67	0.74	0.895
Receiving, running, dribbling, and then passing	6.60	0.79	6.56	0.33	0.04	0.68	0.21	0.886
Control, dribbling and then shooting	3.83	0.58	3.79	0.41	0.04	0.62	0.28	0.928
Control, running and then shooting	4.73	0.73	4.72	0.35	0.01	0.64	0.05	0.901

* Significant at 0.05 = 2.15

Based on results presented in table (7), there is no significant difference between the first and second applications. The calculated T-value was between (0.21) and (0.69), which were non-significant at (0.05). The reliability coefficient ranged between (0.886-0.928), confirming that the integrated attacking skills testes for junior football players are reliable. This means that they will give the same results if they are reapplied to the same sample and under the same conditions.

Results

1. The results of correlation between variables of OMSAT-3 and some integrated attacking skills among junior football players are presented in table (8), as follows:

Table 8: the correlation between variables of OMSAT-3 and integrated attacking skills among junior football players (n = 72)

Variables of OMSAT-3	Tests of integrated skills performance among junior football players				
	Receiving, dribbling and then passing (s)	Zigzag running with ball around cones, then shooting (s)	Receiving, running, dribbling, and then passing (s)	Control, dribbling and then shooting (s)	Control, running and then shooting (s)
Goal-setting	**0.497-	0.194-	**0.347-	**0.497-	0.211-
Self-confidence	**0.769-	**0.384-	**0.725-	**0.726-	**0.419-
Commitment	**0.350-	**0.751-	**0.603-	**0.336-	**0.812-
Refocusing	**0.575-	**0.430-	**0.543-	**0.610-	**0.550-
Fear control	**0.805-	0.079-	**0.546-	**0.833-	0.172-
Relaxation	**0.733-	**0.494-	**0.490-	**0.744-	**0.613-
Energizing	**0.314-	**0.676-	**0.617-	**0.313-	**0.730-
Focusing	**0.852-	**0.327-	**0.542-	**0.892-	**0.403-
Stress control	**0.574-	**0.524-	**0.861-	**0.535-	**0.626-
Imagery	*0.293-	**0.476-	**0.390-	0.203-	**0.611-
Practice	**0.573-	**0.654-	**0.754-	**0.518-	**0.763-
Planning	0.220-	**0.808-	**0.597-	0.232-	**0.824-

** Significant at 0.01 = 0.302, * Significant at 0.05 = 0.23

Table (8) clarifies that there is inverse negative correlation at (0.01) and (0.05) between variables of OMSAT-3 and integrated attacking skills among junior football players. This means that the lower the performance time of the integrated skill tests, the higher the values of variables of OMSAT-3, and vice versa, the higher the time of the integrated skill performances among junior football players, the lower the values of variables of OMSAT-3.

2. The extent to which the variables of OMSAT-3 contribute to some tests of integrated attacking skills among junior football players

Table 9: indications of the stepwise equation for the variables of OMSAT-3 at (Receiving, dribbling and then passing) among junior football players (n = 72)

Variables of OMSAT-3	Predictive indications						
	Coefficient of multiple correlation (R)	The total contribution of variables (R ²)	Contribution percentage	Partial regression coefficient	T-value for addition	F-value	Standard error
Focusing	0.852	0.726	72.581	0.039-	6.917-	375.880	0.010
Self-confidence	0.897	0.804	7.858	0.033-	5.879-	234.575	0.008
Fear control	0.926	0.858	5.335	0.043-	5.670-	170.630	0.008
Goal-setting	0.949	0.901	4.287	0.027	4.956	144.975	0.006
Mental imagery	0.964	0.929	2.870	0.035-	4.603-	127.013	0.008
Energizing	0.973	0.947	1.743	0.030	3.825	118.834	0.010
Relaxation	0.981	0.962	1.563	0.047-	3.611-	116.993	0.008
Refocusing	0.987	0.974	1.181	0.045	3.184	115.657	0.009
Mental practice	0.990	0.980	0.593	0.040-	2.553-	111.805	0.009
Commitment	0.992	0.984	0.396	0.038	3.487	110.221	0.011
The value of secant	4.919						

* Significant value

Equation of predicting the time of (Receiving, dribbling and then passing) with some variables of OMSAT-3:

- Receiving, dribbling and then passing (s) = 4.919 + (focusing × -0.039) + (self-confidence × -0.033) + (fear control × -0.043) + (goal-setting × 0.027) + (mental imagery × -0.035) + (energizing × 0.030) + (relaxation × -0.047) + (refocusing × 0.045) + (mental practice × -0.040) + (commitment × 0.038)

Table (9) illustrates that focusing contributes by 0.726%, self-confidence by 0.804%, fear control by 0.858%, goal-setting by 0.901%, mental imagery by 0.929%, energizing by 0.947%, relaxation by 0.962%, refocusing by 0.974%, mental practice by 0.980%, and commitment by 0.984%.

These ten variables contribute to the time of (Receiving, dribbling and then passing) by (98.4%). It is also clear that all statistical variables eligible for time-prediction equation of (Receiving, dribbling and then passing) confirm the effectiveness of the equation in prediction.

Table 10: indications of the stepwise equation for the variables of OMSAT-3 at (Zigzag running with ball around cones, then shooting) among junior football players (n = 72)

Variables of	Predictive indications
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OMSAT-3	Coefficient of multiple correlation (R)	The total contribution of variables (R ²)	Contribution percentage	Partial regression coefficient	T-value for addition	F-value	Standard error
Planning	0.808	0.653	65.327	0.351-	11.936-	267.538	0.029
Commitment	0.881	0.777	12.336	0.285-	8.440-	157.656	0.034
Mental imagery	0.912	0.831	5.430	0.180	6.831	134.403	0.026
Stress control	0.931	0.868	3.674	0.060	5.995	121.093	0.030
Focusing	0.950	0.903	3.500	0.137-	4.718-	105.259	0.029
Self-confidence	0.967	0.936	3.323	0.133	3.857	94.477	0.034
Refocusing	0.972	0.945	0.867	0.079	2.421	84.691	0.033
The value of secant	18.855						

* Significant value

Equation of predicting the time of (Zigzag running with ball around cones, then shooting) with some variables of OMSAT-3:

- Zigzag running with ball around cones, then shooting (s) = 18.855+ (planning × -0.351) + (commitment × -0.285) + (mental imagery × 0.180) + (stress control × 0.060) + (focusing × -0.137) + (self-confidence × 0.133) + (refocusing × 0.079)

Table (10) demonstrates that planning contributes by 0.653%, commitment by 0.777%, mental imagery by 0.831%, stress control by 0.868%, focusing by 0.903%, self-confidence by 0.936%, and refocusing by 0.945%.

These seven variables contribute to the time of (Zigzag running with ball around cones, then shooting) by (94.5%). It is also clear that all statistical variables eligible for time-prediction equation of (Zigzag running with ball around cones, then shooting) confirm the effectiveness of the equation in prediction.

Table 11: indications of the stepwise equation for the variables of OMSAT-3 at (Receiving, running, dribbling, and then passing) among junior football players (n = 72)

Variables of OMSAT-3	Predictive indications						
	Coefficient of multiple correlation (R)	The total contribution of variables (R ²)	Contribution percentage	Partial regression coefficient	T-value for addition	F-value	Standard error
Stress control	0.861	0.741	74.140	0.166-	8.118-	407.110	0.020
Fear control	0.909	0.826	8.486	0.111-	6.663-	239.551	0.017
Mental practice	0.928	0.861	3.442	0.098-	4.979-	173.523	0.024
Relaxation	0.943	0.888	2.772	0.111	4.647	142.364	0.024
Goal-setting	0.956	0.915	2.611	0.072	3.689	121.872	0.019
Refocusing	0.966	0.934	1.952	0.062-	2.371-	105.195	0.026
Energizing	0.973	0.947	1.334	0.057-	2.365-	93.990	0.024

The value of secant	12.828
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* Significant value

Equation of predicting the time of (Receiving, running, dribbling, and then passing) with some variables of OMSAT-3:

- Receiving, running, dribbling, and then passing (s) = 12.828+ (stress control × -0.166) + (fear control × -0.111) + (mental practice × -0.098) + (relaxation × 0.111) + (goal-setting × 0.072) + (refocusing × -0.062) + (energizing × -0.057)

Table (11) demonstrates that stress control contributes by 0.741%, fear control by 0.826%, mental practice by 0.861%, relaxation by 0.888%, goal-setting by 0.915%, refocusing by 0.934%, and energizing by 0.947%.

These seven variables contribute to the time of (Receiving, running, dribbling, and then passing) by (94.7%). It is also clear that all statistical variables eligible for time-prediction equation of (Receiving, running, dribbling, and then passing) confirm the effectiveness of the equation in prediction.

Table 12: indications of the stepwise equation for the variables of OMSAT-3 at (Control, dribbling and then shooting) among junior football players (n = 72)

Variables of OMSAT-3	Predictive indications						
	Coefficient of multiple correlation (R)	The total contribution of variables (R ²)	Contribution percentage	Partial regression coefficient	T-value for addition	F-value	Standard error
Focusing	0.892	0.796	79.646	0.131-	9.214-	555.655	0.014
Fear control	0.943	0.889	9.271	0.080-	7.145-	311.261	0.011
Goal-setting	0.975	0.950	6.105	0.055	6.959	239.355	0.011
Refocusing	0.988	0.977	2.631	0.098	6.556	200.507	0.015
Mental practice	0.998	0.995	1.890	0.040-	4.261-	194.189	0.009
Relaxation	0.999	0.998	0.232	0.054-	3.748-	179.461	0.014
The value of secant	6.771						

* Significant value

Equation of predicting the time of (Control, dribbling and then shooting) with some variables of OMSAT-3:

- Control, dribbling and then shooting (s) = 6.771+ (focusing × -0.131) + (fear control × -0.080) + (goal-setting × 0.055) + (refocusing × 0.098) + (mental practice × -0.040) + (relaxation × -0.054)

Table (12) indicates that focusing contributes by 0.796%, fear control by 0.889%, goal-setting by 0.950%, refocusing by 0.977%, mental practice by 0.995%, and relaxation by 0.998%.

These six variables contribute to the time of (Control, dribbling and then shooting) by (99.8%). It is also clear that all statistical variables eligible for time-prediction equation of (Control, dribbling and then shooting) confirm the effectiveness of the equation in prediction.

Table 13: indications of the stepwise equation for the variables of OMSAT-3 at (Control, running and then shooting) among junior football players (n = 72)

Variables of	Predictive indications
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OMSAT-3	Coefficient of multiple correlation (R)	The total contribution of variables (R ²)	Contribution percentage	Partial regression coefficient	T-value for addition	F-value	Standard error
Planning	0.824	0.679	67.879	0.181-	8.713-	300.084	0.021
Relaxation	0.911	0.829	15.042	0.135-	9.875-	220.783	0.014
Commitment	0.948	0.898	6.866	0.139-	6.230-	193.408	0.022
Self-confidence	0.967	0.935	3.761	0.144	8.597	223.189	0.017
Mental practice	0.975	0.950	1.432	0.075-	2.983-	190.473	0.025
The value of secant	11.471						

* Significant value

Equation of predicting the time of (Control, running and then shooting) with some variables of OMSAT-3:

- Time of relay agility (s) = 11.471 + (planning × -0.181) + (relaxation × -0.135) + (commitment × -0.139) + (self-confidence × 0.144) + (mental practice × -0.075)

Table (13) clarifies that planning contributes by 0.679%, relaxation by 0.829%, commitment by 0.898%, self-confidence by 0.935%, and mental practice by 0.950%.

These seven variables contribute to the time of (Control, running and then shooting) by (95.0%). It is also clear that all statistical variables eligible for time-prediction equation of (Control, running and then shooting) confirm the effectiveness of the equation in prediction.

Discussion

Table (8) shows that there is inverse negative correlation between the variables of OMSAT-3 and integrated attacking skills among junior football players. This result is attributed to the fact that the speed and directions of the athlete increase in the integrated attacking skills whereby shooting is done after dribbling, running or passing forward past the opponent to receive the ball or control it smoothly in the least time and effort. Therefore, their implementation requires the athlete to have high mental skills enabling him to implement these skills in the least possible time with technical performance. The current result is consistent with that found by Weinberg and Williams (2001) who indicate that it is commonly wrong to believe that psychological skills are only applicable to the elite and professional athletes, but the benefit extends to beginners and juniors, as well. It is important to take into account that young athlete needs some appropriate adjustments to improve this skill, including: fewer goals; short training sessions, simpler verbal instruction, and integrated practice of psychological and attacking skills. These findings are consistent with those of Hille (2014), Quinn (2012), Aufenanger (2005), Vadoa, Halle and Moritz (1997) who found that mental skills are closely linked to the athletes' performance level in sport activities in general and football in particular. They are also consistent with the results of Abu-Abdah (2017) that football requires speed attacking performances and thus it is necessary for the athlete to master these performances. In addition, it is necessary to pay attention to teach young athletes the basic and integrated skills of football because they represent a key factor for football players. The researcher agrees with [Hammad \(1996\)](#), Mukhtar (1994) and Abdul-Halim (1998) that the skilled performances of football are clearly important as being a crucial factor, without which the player cannot carry out the plans or perform his duties as they are numerous. The method of football training is different from that of other games due to its diversity and different conditions in terms of the player's position in the stadium and the

association of his movement and performance with the competitor or colleague. The researcher believes that the more skilled performances performed by the player under all easy and difficult conditions in the game with the required limit of mental abilities, the player thus can perform the tasks assigned to him through the duties of the position he occupies in the different lines of play during the match. Consequently, training on those skilled performances through training units is one of the basic necessities that the coaches must pay attention to because they represent an essential element to implement lots of tactical plans during the match.

Conclusion

1. There is inverse negative correlation between the variables of OMSAT-3 and integrated attacking skills among junior football players at (0.01) and (0.05).
2. Equations are created to predict the time of (Receiving, dribbling and then passing; zigzag running with ball around cones, then shooting; receiving, running, dribbling, and then passing; control, dribbling and then shooting ; and control, running and then shooting) with some variables of OMATS-3.

Recommendations

1. Coaches have to develop mental skills training programs for athletes because they have a positive impact on improving integrated attacking skills among football players to achieve the highest rates of sport achievement.
2. Predictive equations should be employed to predict the level of integrated attacking skills with mental skills for athletes.
3. Researchers have to conduct studies with the aim of identifying the relationship between mental skills of football players and some individual and integrated attacking and defensive skills in various sport activities.

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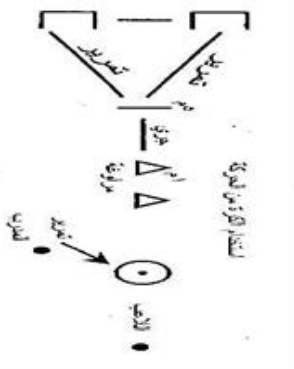
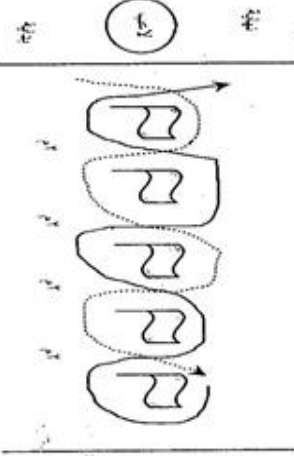
Appendices

Appendix 1: Experts who reviewed the tests of integrated attacking skills for junior players

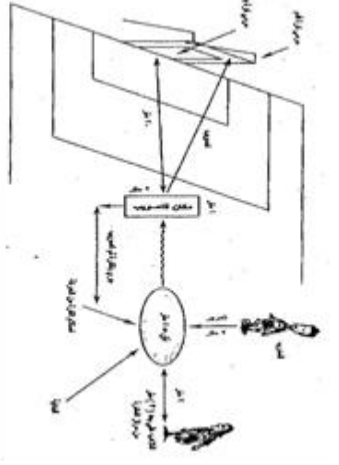
No.	Name	Major	Workplace
1	Prof. Dr. Asa'ad Lazim Ali	Tests, Football	Baghdad University
2	Prof. Dr. Furat Jabbar Saadullah	Football Professor, Former	Diyala University

		Referee	
3	Prof. Dr. Ari Anwar Zubair	Sports psychology	Diyala University
4	Assist. Prof. Dr. Qusay Hatem Khalaf	Football training professor	Diyala University
5	Assist. Prof. Dr. Sadiq Jaafar Mahmoud	Training, Football	Diyala University

Appendix 2: Tests of integrated attacking skills in football

No.	Test content	Test diagram
1	<p>• Test of receiving, dribbling and then passing</p> <p>Aim: measure receiving, dribbling and then passing.</p> <p>Tools: legal footballs, stop watch, measuring tape, cones, and mini-goals.</p> <p>Description: the player stands behind the starting line with a distance of (3 m). Upon hearing the referee's whistle, the player starts quickly to receive the ball passed to him by the coach from inside the circle drawn, whose radius is (1 m). Then, he performs deception by moving the body and dribbling around cones with the distance between them (1 m), followed by running with the ball at full speed for a distance of (5 m). After that, he passes the ball before the line, which is about (6 m) from the two goals, using the preferred foot to one of the two goals.</p> <p>Conditions: the player performs two complete attempts of the test on the two goals.</p> <p>Recording method: the performance time is recorded for each attempt for the one goal from the moment the ball is received until it crosses the goal line.</p>	 <p>The diagram illustrates the test setup. It shows a starting line (خط البداية) at the top. A circle with a radius of 1 meter (دائرة نصف قطرها 1 متر) is drawn. A player (لاعب) is positioned behind the starting line. A coach (مدرب) is positioned inside the circle, passing the ball (كرة) to the player. The player then dribbles around cones (خارطة) spaced 1 meter apart. The player runs for 5 meters and passes the ball (كرة) before a line (خط) that is 6 meters from two goals (مرمى). The diagram also shows a goal line (خط المرمى) and a goal (مرمى).</p>
2	<p>• Test of zigzag running with ball around cones, then shooting</p> <p>Aim: measure the skill of dribbling and speed of performance.</p> <p>Tools: legal footballs, stop watch, and five barriers, seats or cones with suitable height.</p> <p>Description: the test area is planned by drawing the starting line with (5) barriers in front of it with a distance of (2 m) between them. The player stands with the ball behind the start line. When given the start signal, he runs with the ball around cones using the preferred foot and then back to the finish line, which is at the same time the starting line, and then shooting.</p> <p>Conditions: the player performs two complete attempts of the test, and the time is recorded.</p> <p>Recording method: Each player's performance time is recorded to the nearest 1/10 second. The player's score is the total time taken to perform the two attempts.</p>	 <p>The diagram shows a starting line (خط البداية) at the top. A player (لاعب) is positioned behind the starting line with a ball (كرة). In front of the starting line, there are five barriers (حواجز) spaced 2 meters apart. The player runs with the ball around the barriers in a zigzag pattern. After passing the barriers, the player runs back to the starting line (خط النهاية) and then shoots the ball (كرة) into a goal (مرمى). The diagram also shows a goal line (خط المرمى) and a goal (مرمى).</p>

<p>3</p>	<ul style="list-style-type: none"> • Test of receiving, running, dribbling, and then passing <p>Aim: measure receiving, running, dribbling, and then passing.</p> <p>Tools: footballs, stop watch, measuring tape, cones, and mini-goals.</p> <p>Description: the player stands behind the starting line with a distance of (3 m). Upon hearing the referee's whistle, the player starts quickly to receive the ball passed to him by the coach from inside the circle drawn, whose radius is (1 m). Then, he runs with the ball at full speed for a distance of (10 m) and then performs deception by passing the ball (the player pretends passing the ball and passes his foot near it and then moves with it using the same foot around cones with a distance of (1 m) between them). After that, he passes the ball before the line that is far from the cone about (1.5 m) and from the goals about (12 m) using the preferred foot on one of the two goals.</p> <p>Conditions: the player performs two complete attempts of the test on the two mini-goals.</p> <p>Recording method: the performance time of each attempt for the one goal is recorded from the moment the ball is received until it crosses the goal line. The final score is recorded for the best attempt of the two in terms of time.</p>	
<p>4</p>	<ul style="list-style-type: none"> • Test of control, dribbling and then shooting <p>Aim: measure control, dribbling and then shooting.</p> <p>Tools: footballs, stop watch, measuring tape, cones, and mini-goals.</p> <p>Description: the player stands behind the starting line with a distance of (3 m). Upon hearing the referee's whistle, the player starts quickly to control the ball passed to him by the coach from inside the circle drawn, whose radius is (1 m). Then, he performs deception by moving the body and dribbling around cones with the distance between them (1 m), and then shooting from inside the rectangle drawn, whose width is (2 m) and length (1 m) and far from the cones about (2 m), by the preferred foot on the goal that is away from the place of shooting (20 m).</p> <p>Conditions: the player performs two complete attempts of the test on the two mini-goals.</p> <p>Recording method: the performance time of each attempt for the one goal is recorded from the moment the ball is received until it crosses the goal line in second. The final score is recorded for the best attempt of the two.</p>	

5	<ul style="list-style-type: none">• Test of control, running and then shooting <p>Aim: measure control, running, and then shooting.</p> <p>Tools: footballs, stop watch, Swedish seat, measuring tape, and mini-goals.</p> <p>Description: The player stands behind the starting line with a distance of (3 m). Upon hearing the referee's whistle, the player starts quickly to control the ball passed to him by the coach from inside the circle drawn, whose radius is (1 m). Then, he runs with the ball at full speed in a straight line for a distance of (8 m), and then shooting from inside the rectangle drawn, whose width is (2 m) and length (1 m) and far from the cones about (2 m), by the preferred foot on the goal that is away from the place of shooting (20 m).</p> <p>Conditions: the player performs two complete attempts of the test, and the time is recorded.</p> <p>Recording method: Each player's performance time is recorded to the nearest 1/10 second. The player's score is the total time taken to perform the two attempts.</p>	 <p>The diagram illustrates the experimental setup for the 'Test of control, running and then shooting'. It shows a starting line, a circle with a 1m radius, an 8m running path, a 2m x 1m shooting rectangle, and a goal 20m away. The diagram is labeled with various measurements and components, including 'starting line', 'circle', '8m', '2m x 1m', and '20m'.</p>
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