

Effect of tactical package exercises on determinants of attack activity to kumite players in Karate

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Introduction and Problem of the Research

The sport planning is the essence of the training process, in which it's considered the core mean for achieving the Coach Goal. The specialized coach will adopt both long and short-term planning to achieve the highest sporting achievement rates for the player, through balancing between the karate requirements on one side, and the level of constructive components of the player's training status on the other side. The progress of tactical situation to the player is considered an important input to cement the structural components for the tactical state of the player. (11)

Around the world, the Karate sport is recently experiencing a lot of developments. Such developments were reflected in karate competitions in general and the actual combat (kumite) particularly, especially since this interest has comprised all aspects of the preparation of the player. A bunch of such developments was oriented for addressing the aspects of education, where the ways and means of teaching and learning as well as the used tools are ensured, other bunch was oriented in respect of the training aspects, including but not limited to, the physical, physiological, psychological and tactical state of the player; meanwhile the other bunch was oriented for addressing the arbitration aspects in karate where you find the successive amendments in international law of Karate to keep pace, cope with the scientific development, technological progress and all forms of interests from the concerned ones, a matter that pushed them to progressively and continuously adopting amendments in their plans or planning for teaching and transferring the sport of karate.

The Kumite competitions are considered one of the Combat/Fight competitions, in which the player depends largely on his abilities and potentials as well as his efficacy of using them in face of, against those of the competitor during the match in accordance with what has been determined by international law of Karate.

The Rationalization of training loads through adopting tactical exercises in Kumite is one of the modern training methods that commensurate with the capabilities, potentials and attack style to each player, which are being consistent with the principle of individual differences at athletic training of higher-level players, in which the results of highly-competitive matches would be greatly affected by the extent of the Coach's ability in absorbing the emerging and modern methods of training in the actual combat "Kumite" on one hand, and how to apply them to suit the individual players' abilities on the other hand, especially since the tactical renderings' methods are developing quickly and permanently in accordance with the amendments of the international law of Karate, concerning the count of points and then the final results of the match, so the tactical exercises are of great importance for the actual combat "Kumite" players.

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The tactical exercises of defensive and offensive basic skills, shall be cared, rationed, oriented and nurtured by every coach in accordance with what was narrated by Ahmed Mahmoud Ibrahim (2015) "The coach shall: determine the levels of training loads throughout the training units, identify the characteristics of the adopted training manners, and define the trends of training loads during the preparation of players, so as to not expose the player to the damaging training through the energy and human potential. Such a damage erupts from the trainer's unawareness of the determinants of scientific planning for development and the upgrading of the determinants of tactical activity of the player. (11)

In light of the foregoing, the importance of tactical exercises and its impact on the determinants of attack activity of Kumite player will be presented as it:

- Enables the player for controlling, managing events and reins of the match.
- Helps the player opening gaps at the competitor's defenses and scoring points during the match.
- Contributes to bolstering the player's ability in penetrating the opponent's defenses effectively through diversifying the player tactical sentences in a timely-way that is consistent with preparation for this attack.
- Helps finding quick and effective solutions to the changing attitudes of the game through diversifying the tactical manners.
- Participates in changing the competitor's ways of playing, and habitually resorts to using of defensive methods rather than the offensive ones.
- Allows opting between offensive methods suitable for the nature of the competitor's performance module.

The researcher has noted, through his work as an instructor at Karate Division, Faculty of Physical Education in Sadat University, through his follow-up of many of the local and international championships, and through his work as a coach for Egypt Karate Team, the non-optimal use of tactical plays in different areas of playground, the players' weak capacities toward the fast or sudden move for conducting an effective attack despite there are a lot of gaps in the competitor's defenses, and also the inability of the players on diversifying the use of tactical exercises and using it indiscriminately.

Therefore, the researcher believes on the importance of developing the tactical exercises so that they can use different tactical techniques at the different types of attacks, and then they can exploit the competitive positions for their benefits through organizing offensive plans by different kinds of attacks, or through carrying out performances of counterattack via the proper rapid movement of an offensive or defensive performance.

Through inspecting the referential survey and assaying the desk count, the researcher has found several Kumite studies addressing all aspects of physical, psychological and physiological performance-related skills, but there was a feeble focus on the tactical side. Most of these researches have addressed the educational and training aspects of many of the defensive and offensive skills, whether simple or compound, meanwhile the tactical exercises have not received enough focus, despite their importance and direct impact on scoring points and therefore on the result of the match.

And thus the importance of developing a training program, which includes a training for tactical plays in a move for assessing their impact on some offensive performance's determinants

in Kumite in terms of the standby mode, the different offensive techniques, the types of attack (Direct attack – counterattack), the playground areas and the intensity of offensive performance during the games, is cleared.

Terms of the study:

Tactical maps

A tactical Map distinguishes each player for the other and is greatly linked with his ability and his capability in devoting offensive and defensive tactics as well as the feet movements and the effectiveness of the skillful methods. (11)

Direct Attack

Are those simple or complex procedures carried out by the player to initiate the attack on his rival through performing tactical duties in order to get a point or more, according to the law of karate(1)

The counter-attack

Are those simple or complex procedures carried out by the player in response to an attack by a rival through one of the following methods:

Sin No Sin: Is an attack being conducted in response to the rival attack him at the same timing of the rival attack.

Tai No Sin: Is a defense reaction being conducted in response to the rival attack with attacking him at the same time.

Go No Sin: Is an escape from the rival attack with attacking him at the

Determinants of attack activity:

It's all aspects contained within the offensive performance at Kumite competitions starting from the standby mode, the type of attack, tactical offensive methods used by hand or foot, or by both, playground areas, and the calculated points.

Simple Attack:

It is the player's attack over his rival through carrying out a one offensive skill using either a hand or a leg. (1)

Compound attack (Complex Attack)

It is the player's attack over his rival through carrying out two offensive skills using a (hand- two hands- leg –two legs or a blend from both). (2)

Objectives of the study:

The study aims at identifying the impact of the tactical exercises over the determinants of offensive activity for Kumite players in the karate.

The study hypotheses:

The Researcher seeks in this study to confirm the following hypotheses:

1) There is a positive improvement in the percentage of the values of some special kinetic capabilities of tactical plays among the study sample.

2) There is a positive improvement in the percentage of the values of determinants of offensive activity in the study sample.

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- Operational definition

Procedures of the study:

Study Approach:

The researcher has used the experimental curriculum through designing a before/after measurement for a sole experimental group as it suits the nature of the study.

The study sample

The study sample was selected purposively of Egypt team players for junior (under 16 years) participating in the world championship in Indonesia 2015 with a total NO., of (24) players divided between (20) main players of basic weights and other (4) players joining the list of Egypt national team for juniors. The (4) players were submitted for conducting the basic study (experimental), meanwhile the remaining (20) players were submitted for conducting the survey study.

Homogeneity of the study sample:

The researcher has conducted a homogeneity procedure for the study sample through the variables of (age, height, training age). Table (1) shows whether the persons of the study sample are laying under the equinoctial curve or not.

Table (1) The homogeneity of the study sample through the variables of (age, height and training age)

variables under study	measurement	Arithmetic average	mediator	The standard deviation	Torsion modulus
Age	Year	14.700	15.000	0.733	0.553
Height	CM	161.700	163.500	5.110	-.553
Training age	Year	6.950	7.000	1.572	-.541

Through studying table (1), it's cleared that the Coefficient modulus of the variables (age, height, training age) has ranged between (0.553, 0.553) that means: it's limited between (± 3) and gives a clear evidence over the homogeneity of the sample in the previous variants.

The means used in data collection:

Tests of special kinetic capabilities used in the study:

- Straight-reversal punch (Gayku.Zuki, 10 Sec, and 20 Sec) for measuring the forced distinguished with speed and the degree of arms' endurance for such a speed. (7)
- Short, half-circular Kick (Kizame Mawashi Geri 10sec, 20 sec) for measuring the force distinguished with speed and the degree of feet's endurance for such a speed (7)
- Test of kinetic response speed of arms and legs. Attachment (2)

The under-study, used forms:

- Form of tactical plays' analysis of under-study offensive activity determinants. Attachment (3).

Scientific Modulus of special kinetic capabilities' tests:

Credibility of special kinetic capabilities' tests:

The credibility of the under-study tests has been counted through the midterm retail manner between the lowest and highest spring for a study sample comprising at (20) players, in which the lowest calculated (t) values was stood at (3.795), meanwhile the value of the tabled (T) at a (6) as degree of freedom and a (0.05) as a moral level was stood at (1.860) which shows the sincerity and credibility of these tests and its ratification as a mean of measuring and evaluation.

- A credibility procedure, for the form of tactical plays' analysis of under-study offensive activity determinants, has been through the arbitrators' credibility manner. In such a manner, all the arbitrators have agreed on the dimensions of the form. All arbitrators are experts from the teaching personnel, a matter that gives the researcher a push to believe on the credibility of the under-study form.

Constancy of special kinetic capabilities tests:

- The constancy of under-study tests has been counted through applying tests and reapplying them within seven days of date (Test - Retest) for an exploratory sample comprising (20) players. In such an operation, the correlation coefficient between the first and second application through using the Pearson Coefficient Simple Correlation, has been counted as the (t) values calculated between (0.800: 0.989) has been ranged representing high values, which gives a reflection that these under-study tests were of a high and acceptable degree of consistency.
- The form of tactical plays' analysis of under-study offensive activity determinants has been applied over (5) matches (which have been photographed/Filmed from Egypt's junior championship under the (16) years, season 2013/2014, held in Cairo Stadium from 20-23/11/2014) by a match for each weight. The content of these films have been emptied and re-emptied again within seven days of date to be used as an exploratory study through using the Pearson Coefficient Simple Correlation, has been counted as the (t) values calculated between (0.784: 1.000), has been ranged representing high values, which gives a reflection that these under-study tests were of a high and acceptable degree of consistency.

Survey Studies:

- The first application for special kinetic capabilities tests has been conducted on Thursday 25-6-2015 AD.
- The form of tactical plays' analysis of under-study offensive activity determinants has been submitted to arbitrators during the period from 26-6-2015 AD till 31-6-2015 AD to check the veracity of the form.
- The second application for special kinetic capabilities tests has been conducted on Wednesday 1-7-2015AD.
- The first application for the form of tactical plays' analysis of under-study offensive activity determinants has been conducted on Friday 10-7-2015AD.
- The second application for the form of tactical plays' analysis of under-study offensive activity determinants has been conducted on Wednesday 15-7-2015 AD.

The proposed training program

A training program for the basic study sample has been conducted at a period of 6 weeks ,with (5) days of training a week, from Sunday 25/7/2015 AD to Thursday 03/09/2015 AD at Tulip Hotel in accordance with the following schedule:

**Table (2)
Time distribution of the main experiment of the study**

Measurements	Day	Measures taken at this day
The prior measurement	First day: Wednesday 22-7-2015m AD	The prior measurement of the under-study of offensive activity determinants
	Second day: Thursday 23-7-2015 AD	The prior measurement of the under-study of offensive

		activity determinants
The basic experiment	6 weeks from Sunday to Thursday 25-7-2015m 3-9-2015m	The basic experiment for applying the training program, consisting of 30 proposed training units by 5 units weekly
The post measurement	First day: Saturday 5-9-2015m	telemetric tests of under-study kinetic capabilities
	- Second day: Sunday 6-9-2015m	telemetric tests of under-study kinetic capabilities

The content and characteristics of the proposed training program:

With the assistance of the previous references and studies (7), (8), (11), (14), (17), (18) the content and characteristics of the proposed training program have been identified as follows:

Table (3)

The general content of the proposed training program

Serial NO.,	Variables	Content
1	General period for applying the study	Special preparation period and before competitions
2	The total NO., of program's weeks	(6) weeks of training
3	Weekly training days	(5) training units weekly
4	The NO., of training units during the program	(30) training units
5	Unit time	(110.5 to 159.75) minutes
6	The total time of the program	(3974) minutes
7	The rate of intra- rest periods between training units	1: 1.1: 0.5 (work: rest)
8	The rate of intra- rest period between groups	1: 1.1: 0.5 (work: rest)

Table (4) General distribution of time over the training module parts

Serial	Training module parts		Percentage	Times (minutes)	
1	Preliminary part	Warm-up (initialization)	14.22% (565 Minute)	11.32 %	450
		Special physical preparation		2.89 %	115
2	Basic part	Feet kinetic Exercise	82.01 % 3259 minutes	6.21 %	246.75
		Exercises of competition (1)		13.02 %	517.50
		Exercises of competition (2)		27.50 %	1092.75
		Exercises of competition (3)		20.84 %	828
		Competition training (for matches)		14.44 %	574
3	The concluding part		3.77 %	150	
Total			100 %	3974	

Table (5) Dynamic of the temporal distribution and load intensity for the under-study training program

week	NO. of unit	The preliminary part				The basic part										Conclusion part (calming)	
		Warm-up		Special physical preparation		Feet movements		Exercises of competition (1)		Exercises of competition (2)		Exercises of competition (3)		Gaming exercises			
		Intensity	Groups	Intensity	Groups	Intensity	Groups	Intensity	Groups	Intensity	Groups	Intensity	Groups	Intensity	Groups		
The first week	1	40	1	62	2	64	2	76	2	78	1	84	1	84	1	35	1
	2	40	1	64	2	68	1	72	1	76	2	86	2	86	1	35	1
	3	45	1	62	3	66	2	74	1	78	2	88	1	88	1	35	1
	4	45	1	63	2	68	2	72	2	80	1	84	2	84	1	35	1
	5	40	1	64	1	64	1	78	2	80	1	90	2	90	1	35	1
The second week	6	40	1	66	2	62	1	78	1	78	2	95	1	95	1	40	1
	7	40	1	70	1	66	2	74	1	82	2	90	2	90	1	35	1
	8	40	1	68	1	70	1	80	1	84	2	92	2	92	1	40	1
	9	45	1	70	1	66	2	82	2	82	1	86	1	86	2	35	1
	10	40	1	66	2	68	1	78	2	84	1	88	1	88	1	35	1
The third week	11	45	1	68	2	66	1	78	2	84	2	90	2	90	1	35	1
	12	45	1	70	1	70	2	82	1	86	2	94	2	94	1	35	1
	13	45	1	74	2	72	2	84	1	84	2	90	2	90	2	35	1
	14	45	1	70	1	72	3	80	1	84	1	95	2	95	2	40	1
	15	40	1	72	2	68	1	84	3	82	1	90	1	90	1	40	1
The fourth week	16	40	1	74	1	68	2	80	1	86	2	86	2	86	1	40	1
	17	40	1	78	1	72	2	82	2	84	2	88	3	88	1	35	1
	18	42	1	80	3	74	2	80	1	86	2	92	1	92	2	35	1
	19	40	1	76	1	74	1	82	2	84	3	90	2	90	1	35	1
	20	40	1	78	1	76	1	86	2	86	1	95	2	95	2	35	1
The fifth week	21	40	1	82	2	72	2	80	1	84	1	90	2	90	2	30	1
	22	40	1	80	1	70	1	86	1	86	2	92	3	92	1	30	1
	23	45	1	80	2	68	3	80	2	86	1	90	1	90	1	30	1
	24	45	1	82	2	66	2	86	1	88	2	90	2	90	1	30	1
	25	40	1	84	1	70	1	84	2	86	2	92	2	92	2	30	1
The sixth week	26	45	1	76	1	70	2	78	2	84	1	92	1	92	2	35	1
	27	45	1	78	2	66	1	80	1	86	2	88	2	88	1	35	1
	28	45	1	80	1	74	1	84	2	84	2	90	1	90	1	35	1
	29	45	1	78	2	72	1	82	1	86	1	92	1	92	2	35	1
	30	45	1	80	1	70	1	84	1	88	1	95	1	95	1	35	1

The proposed training loads through the modules of the proposed training program:

The proposed training program has been applied at a manner in which daily training module is included three parts (preliminary, basic, and final)

First: the preliminary part:

Warm-up:

This section includes some exercises for initializing muscles and stimulating the blood general circulation; some exercises that contribute in raising the temperature of the body in a move for pushing the body neurological and physiological organs to accept the module content, the light running exercises as well as the prolongation exercises, and also some other exercises target raising the psychological preparedness, potentials of the player. In such a section, the load intensity has ranged between (40: 45%) at maximum capacity of a player, meanwhile the total time of this section has registered (450 minutes), which represents a 11.32% of the total aggregate time for the under-study proposed program.

Special physical preparation:

It includes physical preparation exercises oriented for forming the training modules, and directing the content of this stage to (aerial + anaerobic) work. In such a section the load intensity is ranging between (62:80%) at a maximum capacity of a player, meanwhile the total time of this section has registered (115 minutes), which represents a 2.89% of the total aggregate time for the under-study proposed program. Figure(1)

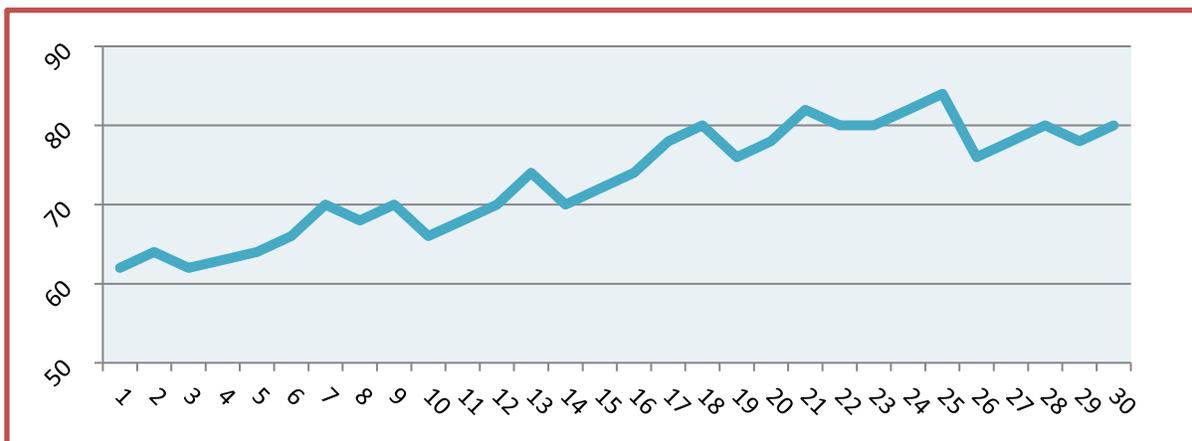


Figure (1)

The path of proposed loads' dynamics during the physical preparation part

Second: Basic Part:

This section includes five different sections represented in (Feet movements similar to the nature of the performance, Competitive exercises through using the attack methods of (punching –kicking), Competitive exercises for the technique methods via using tactical maps in a timely way with the attack inlets, and Competition exercises

using constructivist frame of (tactical maps, gaming training). Each section has its separate target and content. The total time of this section has registered (3259 minutes), which represents a 82.1% of the total time of the under-study proposed program.

Section 1: Feet movements similar to the nature of the performance:

This section includes intensive exercises designated for the feet movements that are greatly liking the nature of the player's performance during the game in different directions, taking into consideration the exploitation of playground, and the budging in different directions (moving: forwards and backwards at the right side, forwards and backwards at the left side, forward at the right and left side, as well as moving in irregular lines forwards and backwards at the right and the left side). In such a section the used-load intensity is ranging between (62:70%) at a maximum capacity of a player and at an (aerial + anaerobic) work, meanwhile the total time of this section has registered (246.75 minutes), which represents a 6.21% of the total aggregate time for the under-study proposed program. Figure (2)

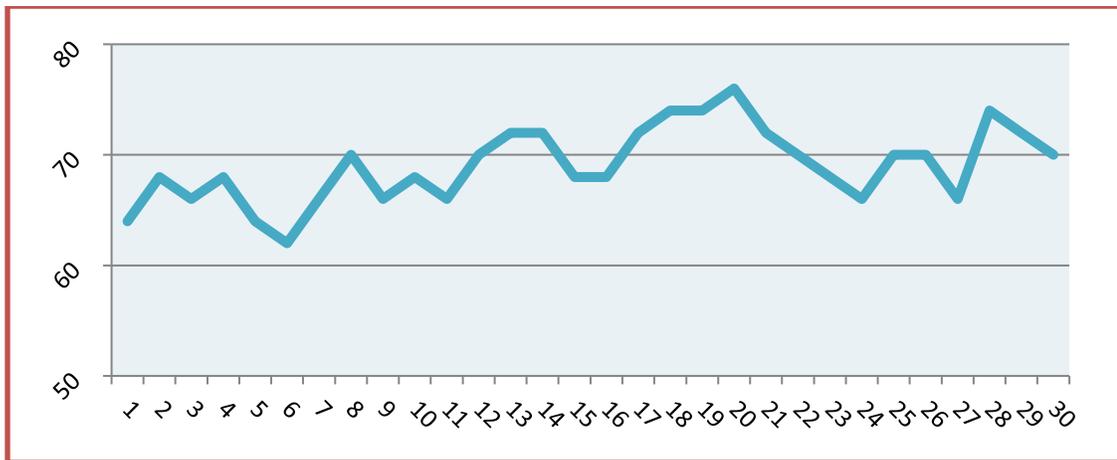


Figure (2)

The path of proposed loads' dynamics for "Feet movements similar to the nature of the performance" section

Section II: Competitive exercises through using the attack methods of (punching – kicking):

This section includes sequential performance for the under-study footwork methods in a timely way whether by punching or kicking or whether at a stable or a movable method (right - left) for forming training modules, and for forming an (aerial + anaerobic) work direction . In such a section the used-load intensity is ranging between (72:86%) at a maximum capacity of a player, meanwhile the total time of this section has registered (517.50 minutes), which represents a 13.02% of the total time for the under-study proposed program. Figure (3)

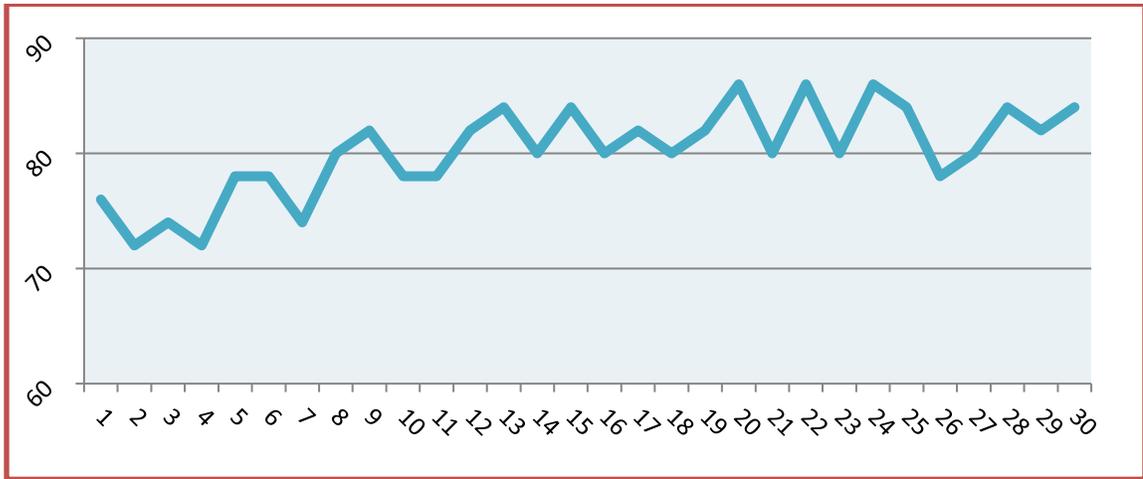


Figure (3)

The path of proposed loads' dynamics within "Competitive exercises through using the attack methods of (punching -kicking)

Section III: Competitive exercises for the technique methods via using tactical maps in a timely way with the attack inlets:

Such a section includes the performance of footwork methods via using tactical maps in the form of kinetic waves through merging both punches and kicks (right and left) in a timely way with the attack inlets for forming training modules. In such a section the used-load intensity is ranging between (76:88%) at a maximum capacity of a player, meanwhile the total time of this section has registered (1092.75 minutes), which represents a 27.50% of the total time for the under-study proposed program. Figure (4)

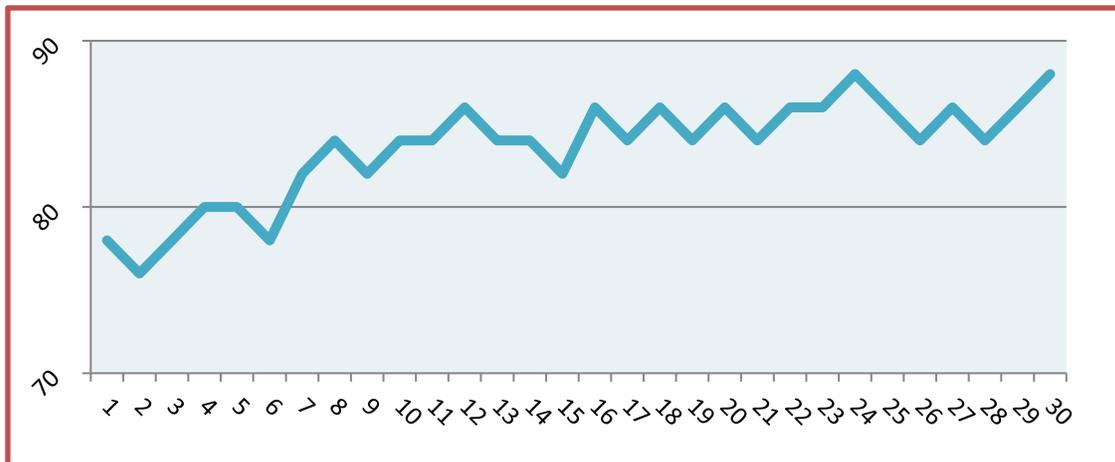


Figure (4)

The path of proposed loads' dynamics within "Competitive exercises for the technique methods via using tactical maps in a timely way with the attack inlets"

Section IV: competitive exercises using constructivist frame components of tactical maps:

Such a section includes competitive exercises using constructivist frame components of tactical maps within the play areas in accordance with the rationalization insured by the under-study program, giving a special focus for executing the play positions in accordance with the procedures designated for implementing the program in the form of training stations, and an aerial work direction. In such a section the used-load intensity is ranging between (84:95%) at a maximum capacity of a player, meanwhile the total time of this section has registered (828 minutes), which represents a 20.84% of the total time for the under-study proposed program. Figure (5).

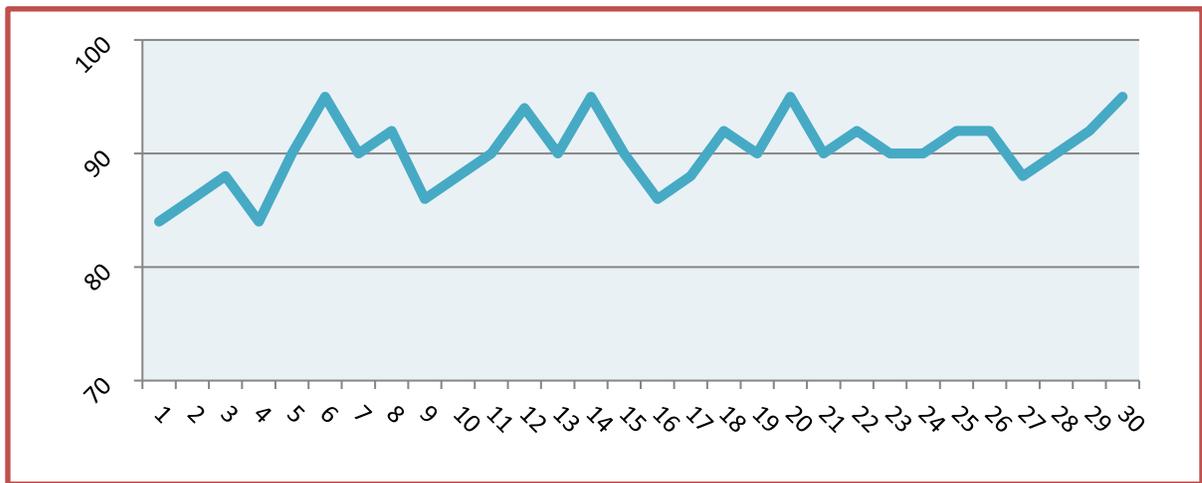


Figure (5)
The path of proposed loads' dynamics within "Competitive exercises using constructivist frame components of tactical maps"

SECTION V: Competition Drills (gaming training):

It includes the carry out of kinetics codified duties with the rival in (qualifiers / finals) form as the following:

- 1- The first qualifier: carrying out two consecutive games without a rest.
- 2- The second qualifier: carrying out two consecutive games without a rest.
- 3- Third qualifier: carrying out a single game.

We shall bear into consideration that the rate of effort to rest is (1: 0.5), the direction of work is anaerobic. In such a section the used-load intensity is ranging between (84:95%) at a maximum capacity of a player, meanwhile the total time of this section has registered (574 minutes), which represents a 14.44% of the total time for the under-study proposed program. Figure (6)

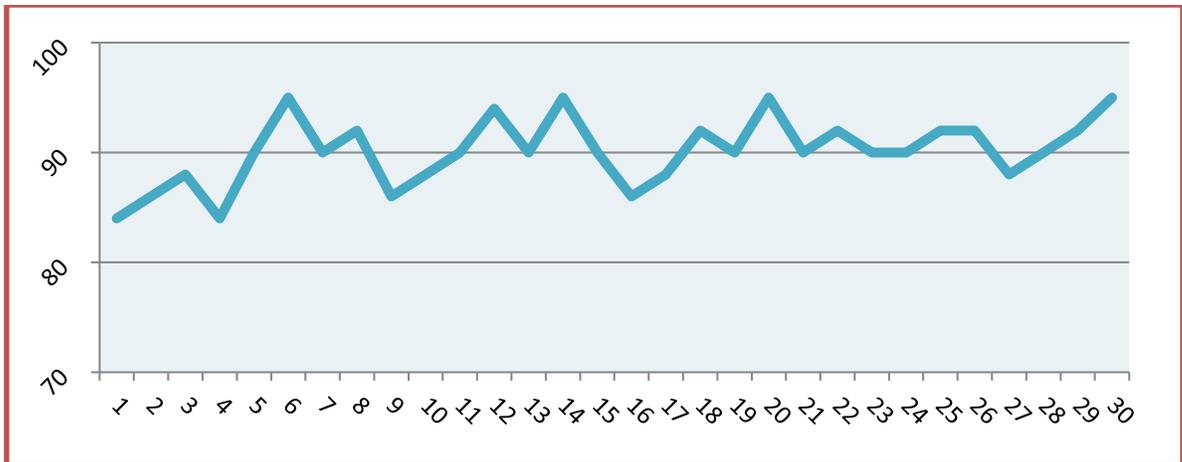


Figure (6)
The path of proposed loads' dynamics within "Competition Drills (gaming training)":

Third: The final part:

It contains calming exercises help in restoring recovery after executing the module content in accordance with the aerial power system. The intensity of the used-training has ranged between 30%: 40% of a maximum intensity of a player, meanwhile the total time of this section has registered(150 minutes) representing a 3.77 % increase at the total time for the proposed, under-study program.

Statistical treatments:

In such a section, the Statistical analysis software package (SPSS), comprising the arithmetic mean, median, standard deviation, coefficient torsion, ratio of improvement, and the Pearson simple correlation coefficient as well as test "t", is used for calculating the significance of differences of a one group.

Presentation and discussion of the study results:
 Presentation and discussion:

Table (6)

Differences and ratios of improvement between the values of (prior-post) measurements of the under-study kinetic capabilities results of the first player

Under-study variables				pre measurement	post measurement	Difference between the two	Ratio of improvement
Power distinguished with speed	Gyaku Zuki (10sec)	Rig	NO.	20	23	3.00	15.00
		Left	NO.	19	22	3.00	15.79
	KizameMawashi Geri (10sec)	Rig	NO.	10	12	2.00	20.00
		Left	NO.	11	12	1.00	9.09
Endurance of speed	Gyaku Zuki (20sec)	Rig	NO.	39	42	3.00	7.69
		Left	NO.	38	41	3.00	7.89
	Kizame Mawashi Geri (20sec)	Rig	NO.	17	19	2.00	11.76
		Left	N	16	18	2.00	12.50
Speed of kinetic response	GyakuZuki	Rig	W	2.00	1.75	0.25	14.29
		Left	W	2.03	1.95	0.08	4.10
	Kizame Mawashi Geri	Rig	W	2.11	2.6	0.05	2.43
		Left	W	2.09	2.01	0.08	3.98

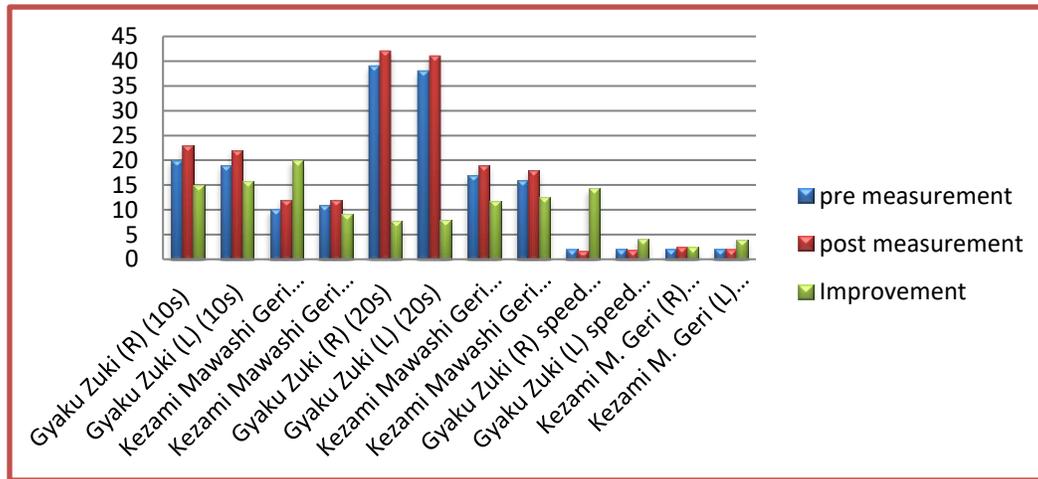


Figure (7)

Differences and ratios of improvement between the values of (prior-post) measurements of the under-study kinetic capabilities results of the First player

Table (7) Differences and ratios of improvement between the values of (prior-post) measurements of the under-study kinetic capabilities results of the Second Player

Under-study variables				Pre-measuremen	Post-measuremen	Difference between the	Ratio of improvemen
Power distinguished with speed	Adverse straight punch GyakuZuki(10sec)	Right	NO.	18	22	4.00	22.22
		Left	NO.	17	23	6.00	35.29
	A half-circular, short kick KizameMawashi Geri (10sec)	Right	NO.	11	12	1.00	9.09
		Left	NO.	11	13	2.00	18.18
Endurance of speed	Adverse straight punch GyakuZuki(20sec)	Right	NO.	36	43	7.00	19.44
		Left	NO.	36	41	5.00	13.89
	A half-circular, short kick KizameMawashi Geri	Right	NO.	16	18	2.00	12.50
		Left	NO.	16	19	3.00	18.75
Speed of kinetic response	Adverse straight punch GyakuZuki	Right	W	2.12	1.70	0.42	24.71
		Left	W	2.21	1.76	0.45	25.57
	A half-circular, short kick KizameMawashi Geri	Right	W	2.25	2.09	0.16	7.66
		Left	W	2.19	2.05	0.14	6.83

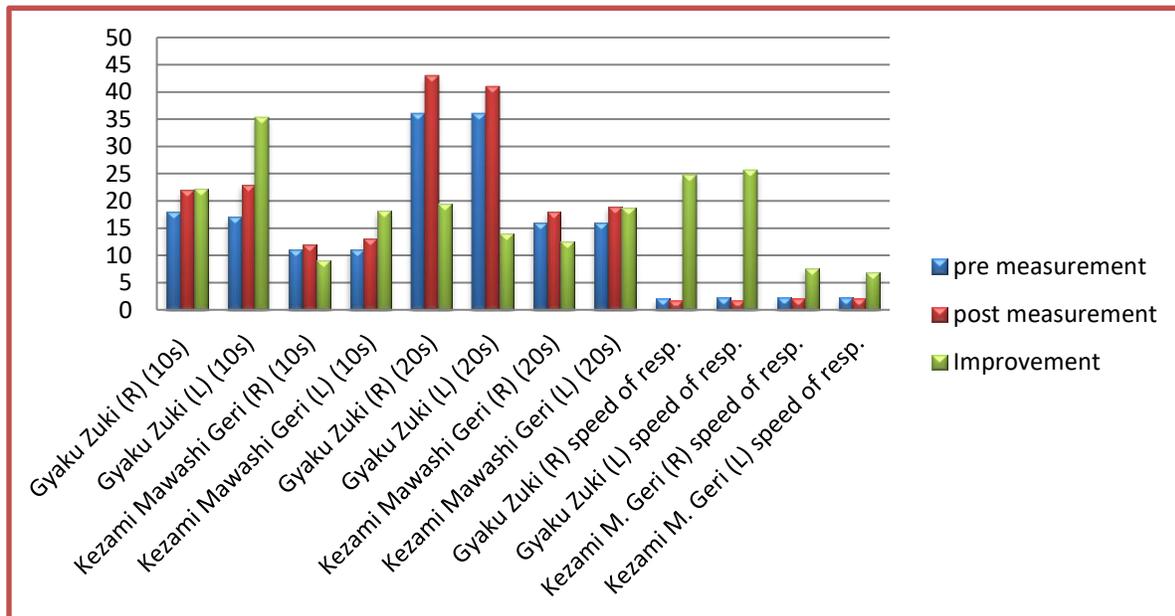


Figure (8)

Differences and ratios of improvement between the values of (prior-post) measurements of the under-study kinetic capabilities results of the Second Player

Table (8) Differences and ratios of improvement between the values of (prior-post) measurements of the under-study kinetic capabilities results of the Third Player

Under-study variables				Pre-measuremen	Post-measuremen	Difference between the	Ratio of improvemen
Power distinguished with speed	Gyaku Zuk (10sec)	Right	NO.	19	22	3.00	15.79
		Left	NO.	21	22	1.00	4.76
	Kizame Mawashi Geri (10sec)	Right	NO.	11	13	2.00	18.18
		Left	NO.	12	14	2.00	16.67
Endurance of speed	Gyaku Zuki (20sec)	Right	NO.	36	44	8.00	22.22
		Left	NO.	36	41	5.00	13.89
	Kizame Mawashi Geri 20 sec	Right	NO.	17	19	2.00	11.76
		Left	NO.	17	20	3.00	17.65
Speed of kinetic response	GyakuZuki	Right	W	2.11	1.65	0.46	27.88
		Left	W	2.19	1.69	0.50	29.59
	KizameMawashi Geri	Right	W	2.23	2.12	0.11	5.19
		Left	W	2.21	2.11	0.10	4.74

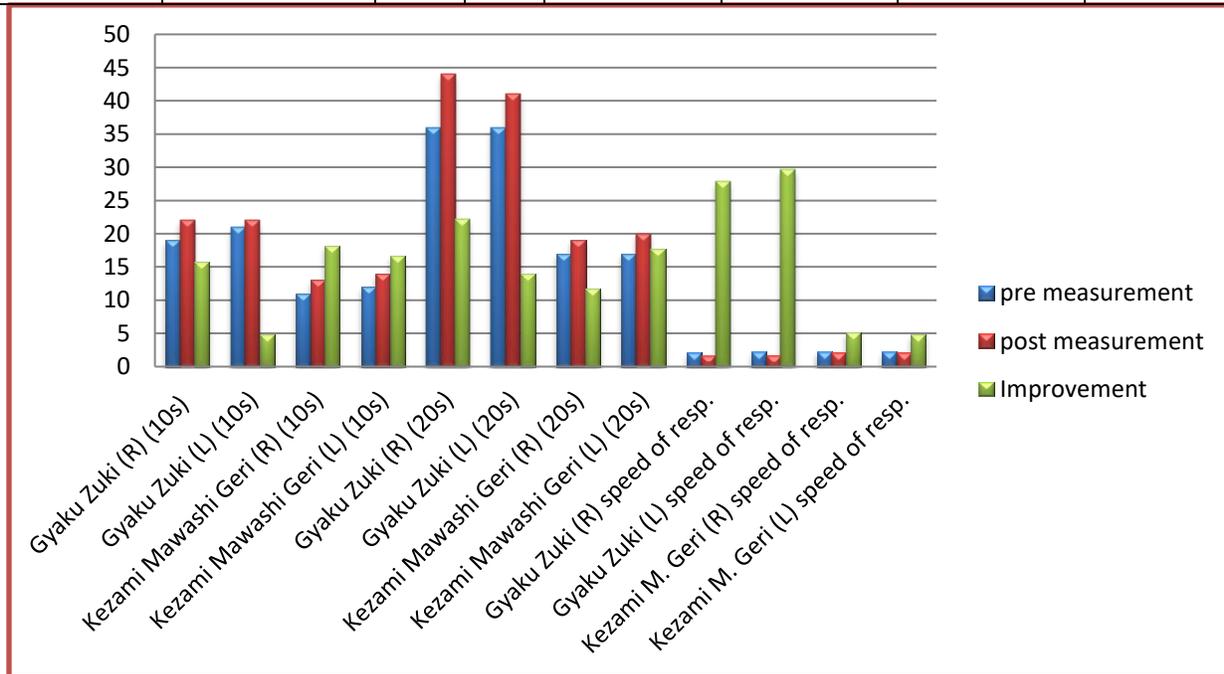


Figure (9)

Differences and ratios of improvement between the values of (prior-post) measurements of the under-study kinetic capabilities results of the Third Player

Table (9) Differences and ratios of improvement between the values of (prior-post) measurements of the under-study kinetic capabilities results of the Fourth Player

Under-study variables				Pre-measuremen	Post-measuremen	Difference between the	Ratio of improvemen
Power distinguished with speed	Adverse straight punch GyakuZuki(10sec)	Right	NO.	21	24	3.00	14.29
		Left	NO.	21	23	2.00	9.52
	A half-circular, short kick KizameMawashi Geri (10sec)	Right	NO.	11	13	2.00	18.18
		Left	NO.	12	13	1.00	8.33
Endurance of speed	Adverse straight punch GyakuZuki(20sec)	Right	NO.	36	39	3.00	8.33
		Left	NO.	39	40	1.00	2.56
	A half-circular, short kick KizameMawashi Geri	Right	NO.	17	18	1.00	5.88
		Left	NO.	17	19	2.00	11.76
Speed of kinetic response	Adverse straight punch GyakuZuki	Right	W	2.10	1.99	0.11	5.53
		Left	W	2.19	2.09	0.10	4.78
	A half-circular, short kick KizameMawashi Geri	Right	W	2.23	2.12	0.11	5.19
		Left	W	2.23	2.02	0.21	10.40

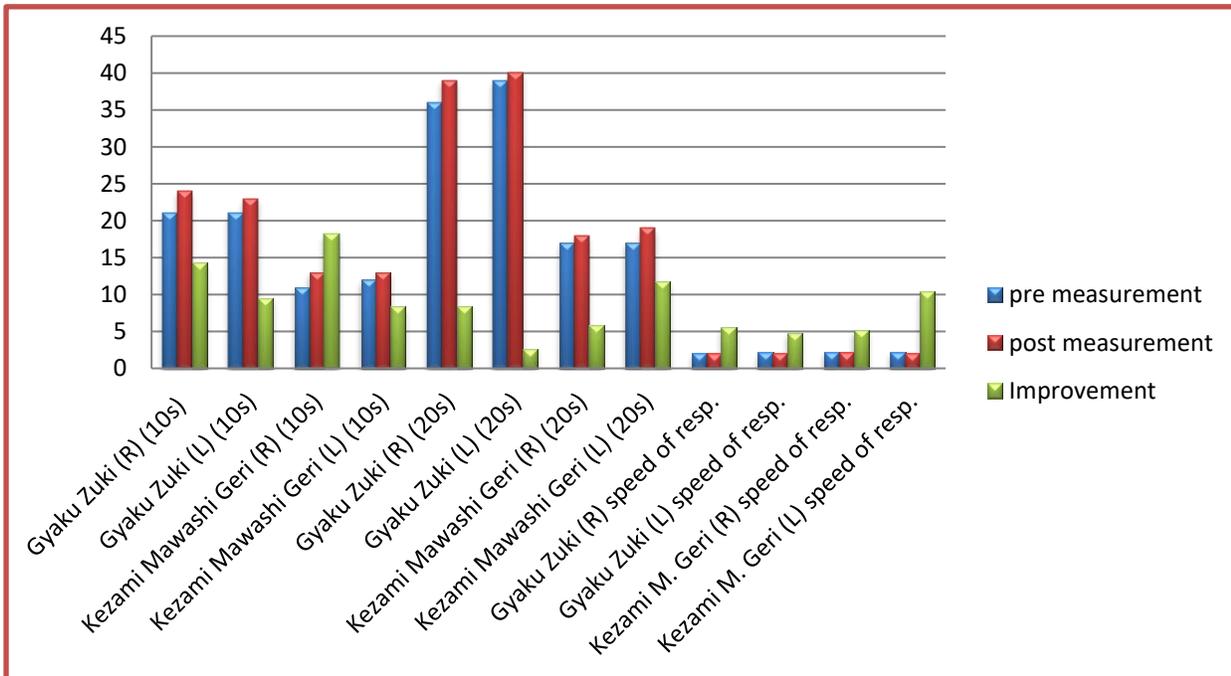


Figure (10)

Differences and ratios of improvement between the values of (prior-post) measurements of the under-study kinetic capabilities results of the Fourth Player

When reviewing tables (6), (7), (8), (9) and figures (7), (8), (9), (10), it was cleared that there a difference at the (pre-post) measures in the values of special, kinetic capabilities in favor of the post measurement with diverse positive improvement; in which the lowest percentage of improvement was registered with the first player while testing the response over short, half circular kick (Kizame Mawashi Geri) of the right foot. The improvement ratio has registered (2.43%), while the highest rate of improvement for the second was while testing the “Power distinguished with speed” (Gyaku Zuki) left, in which it reached (35.29%).

The ratios of improvement of the first player has been varied in terms of kinetic capabilities of tactical plays; in which the least degree of improvement was registered while testing the kinetic response over the short, half circular kick (Kizame Mawashi Geri) of the right-foot, representing a (2.43%) improvement ratio, meanwhile the highest rate of improvement was recorded at “ Power distinguished with speed” test at an experimental time (10sec) of right-footed, short and half circular kick (Kizame Mawashi Geri) amounting to 20.00%.

The lowest ratio of improvement at the second player’s kinetic capabilities for tactical plays was recorded while testing the kinetic response over the left-footed half circular and short kick (Kizame Mawashi Geri) recording (6.83%) improvement ratio, meanwhile the highest ratio of improvement was recorded while testing the “Power distinguished with speed” for the straight-reversed- left punch (Gyaku Zuki) reaching (35.29%).

The lowest ratio of improvement at the third player’s kinetic capabilities for tactical plays was recorded while testing the kinetic response over the left-footed half circular and short kick (Kizame Mawashi Geri) recording (4.74%) improvement ratio, meanwhile the highest ratio of improvement was recorded while testing the “Power distinguished with speed” for the straight-reversed- left punch (Gyaku Zuki) reaching (29.59%).

The lowest ratio of improvement at the fourth player’s kinetic capabilities for tactical plays was recorded while testing the kinetic response for the straight-reversed- left punch (Gyaku Zuki) reaching (2.56%) improvement ratio, meanwhile the highest ratio of improvement was recorded while testing the “Power distinguished with speed” at an experimental time of (10 sec) for the straight-reversed- right-footed kick (Kizame Mawashi Geri) reaching (18.18%).

The researcher agrees in opinion with “Emad Abdel Fattah al-Sersi” (1995 AD” in the importance of kinetic response of player through a competitive position with a competitor, believing that it is one of the most important kinetic capabilities and even at the forefront of these capabilities; in which it enables the player to take the decision of counter-attack or not, and helps in determining what will be suitable from various and diverse attack manner, using simple or compound attack. (14)

The “Power distinguished with speed” is considered one of the necessary physical demands for adding efficacy to the attack style and for considering the style one of the international legal standards. Such a trend could not be achieved without adopting the “power

distinguished with speed” style, a matter that classifies it one of the special kinetic capabilities for Kumite players. (15)

The “Endurance of speed” of Kumite players is considered one of special kinetic capabilities, in which the player can not face the persistent or alternating rival attacks during the match with high efficiency and high-quality performance without possessing a high level of kinetic capabilities, which could endure the speed offensive skills designated for responding over the counter-offensive of the rival.

The researcher believes, along with Mitchell David (1991 AD), Ahmed Ibrahim (1991 AD), Hickey Patrick (1997 AD), Mahmoud Saber (2013 AD), Nelson Junior (2013 AD), and Pawet Piepiora (2014 AD), that the nature of Kumite games is characterized by constant movement and sudden & variable performance, which makes the special kinetic capabilities as Endurance of speed, power distinguished with speed and the speed of kinetic response are of the most important kinetic capabilities while implementing the training programs “(24), (5), (23), (17), (25), (26)” for Kumite players.

The speed factor with its various kinds is putted at the forefront of kinetic capabilities in Kumite, as it is of the fundamental and important requirements according to the nature of Kumite contests, and is consistent with the results of studies (6), (12), (13) and (16).

The researcher attributes the ratios of improvement at kinetic capabilities to the proposed training program, as its main part of the training module contains a set of exercises competition in accordance with the determinants of attack activity, which has been meshed with skill and tactical skills through using physical variables (skillful methods with sequential perform- Move exercises similar to the nature of performance in playground- skillful methods according to tactical maps –structural frame for the tactical maps and the gaming training), a matter that has great influence in boosting kinetic capabilities tactical plays that are by the way had a positive and effective impact in the tactical plays and the pre and post measurement for the study sample. Such a trend is consistent with what was mentioned by Ahmed Ibrahim (1995) that the use of game training accompanied with the repetition exercises similar to the kinetic performance used in competitions works on improving the physical attributes of skillful performance. (7)

Thus kinetic capabilities are considered the common denominator for all the technical performance requirements ranging from the tactical performance to the planning performance during the games, the better the kinetic ability for Kumite’s players the greater their ability to diversity performance of different offensive methods, which increases the chances of recording points and then winning games.

The results of this study are consistent with the findings of the results of the studies (3), (4), (5), and (18)

Thus the first hypothesis of the study is achieved.

Presentation and discussion of results of the under-study attack activity determinants:

Table (10)
Differences and ratios of improvement between the pre& post measurements of the first player's attack activity determinants

Determinations of offensive playing			Pre	post	Differ	Improvement		
Preparation and execution stage of the under-study attack	Player's ready status		Left	19	11	-8	42.11	
			right	3	8	5	166.67	
	Time parts of the match	Minute 1		9	6	-3	33.33	
		Minute 2		5	6	1	20.00	
		Minute 3		8	7	-1	12.50	
	Playing areas	Area (A)		1	3	2	200.00	
		Area (12)		3	2	-1	33.33	
		Area (D)		1	1	0	0.00	
		Area (3)		1	2	1	100.00	
		Area (middle of canvas)		8	3	-5	62.50	
		Area (9)		2	2	0	0.00	
		Area (B)		2	2	0	0.00	
		Area (6)		3	2	-1	33.33	
Area (G)		1	2	1	100.00			
Execution stage of the attack which is	Offensive skills	Two arms	Shodan	1	5	4	400.00	
			Godan	12	9	-3	25.00	
		Two legs	Shodan	1	2	1	100.00	
			Godan	8	3	-5	62.50	
Effectiveness and execution stage of the attack which is under consideration	Attack's type	Direct attack		Simpl	5	7	2	40.00
				Compl	4	2	-2	50.00
	counterattack	Sin no sin	Simpl	7	4	-3	42.86	
			compl	0	1	1	100.00	
		Tai no sin	Simpl	6	2	-4	66.67	
			compl	0	1	1	100.00	
		Go no Sin	Simpl	0	1	1	100.00	
			compl	0	1	1	100.00	
Effectiveness stage of the attack which is under consideration	Using tactical map (1)			0	2	3	200.00	
	Using tactical map (2)			0	3	3	300.00	
	Using tactical map (3)			1	4	3	300.00	
	Results of offensive playing	Failed playing		18	6	-12	66.67	
		Successful playing	One point	3	9	6	200.00	
			Two points	0	1	1	100.00	
Three points	1		2	1	100.00			

Table (11)
Differences and ratios of improvement between the pre& post measurements of the second
player's attack activity determinants

Determinations of offensive playing				Pre	post	Differe	Improvement	
Preparation and execution stage of the under-study attack	Player's ready status		Left	21	12	-9	42.86	
			right	4	9	5	125.00	
	Time parts of the match	Minute 1		10	7	-3	30.00	
		Minute 2		6	7	1	16.67	
		Minute 3		9	7	-2	22.22	
	Playing areas	Area (A)		1	1	0	0.00	
		Area (12)		2	2	0	0.00	
		Area (D)		2	2	0	0.00	
		Area (3)		1	4	3	300.00	
		Area (middle of canvas)		9	3	-6	66.67	
		Area (9)		2	3	1	50.00	
		Area (B)		1	2	1	100.00	
Area (6)		4	3	-1	25.00			
Area (G)		3	1	-2	66.67			
Execution stage of the attack which is under consideration	Offensive skills	Two arms	Shodan	5	5	0	0.00	
			Godan	9	8	-1	11.11	
		Two legs	Shodan	3	2	-1	33.33	
			Godan	8	4	-4	50.00	
Effectiveness and execution stage of the attack which is under consideration	Attack's type	Direct attack		Simple	11	6	-5	45.45
				complex	5	3	-2	40.00
		counterattack	Sin no sin	Simple	4	4	0	0.00
				complex	1	1	0	0.00
			Tai no sin	Simple	4	2	-2	50.00
				complex	0	1	1	100.00
			Go no Sin	Simple	0	2	2	200.00
				complex	0	2	2	200.00
Effectiveness stage of the attack which is under consideration	Using tactical map (1)			1	4	3	300.00	
	Using tactical map (2)			0	3	3	300.00	
	Using tactical map (3)			0	3	3	300.00	
	Results of offensive playing	Failed playing		17	5	-12	70.59	
		Successful playing	One point	6	9	3	50.00	
			Two points	1	3	2	200.00	
Three points			1	2	1	100.00		

Table (12)

Differences and proportions of improvement between the two measures of pre and post in the determinants of the third player's offensive activity

Determinants of offensive playing				Pre	post	Differ	Improvement	
Preparation and execution stage of the attack which is under consideration	Player's ready status		Left	25	13	-12	48.00	
			right	5	10	5	100.00	
	Time parts of the match	Minute 1		9	6	-3	33.33	
		Minute 2		58	6	1	200.00	
		Minute 3		8	7	-1	12.50	
	Playing areas	Area (A)		3	2	-1	33.33	
		Area (12)		3	2	-1	33.33	
		Area (D)		3	2	-1	33.33	
		Area (3)		1	3	2	200.00	
		Area (middle of canvas)		12	4	-8	66.67	
		Area (9)		2	3	1	50.00	
		Area (B)		1	2	1	100.00	
		Area (6)		3	3	0	0.00	
Area (G)		2	2	0	0.00			
Execution stage of the attack which is under consideration	Offensive skills	Two arms	Shodan	4	5	1	25.00	
			Godan	14	10	-4	28.57	
	Two legs	Shodan	3	2	-1	33.33		
		Godan	9	6	-3	33.33		
Effectiveness and execution stage of the attack which is under studying	Attack's type	Direct attack	Simple	15	8	-7	46.67	
			comple	3	5	2	66.67	
		Counterattack	SennoSen	Simple	8	5	-3	37.50
				comple	1	1	0	0.00
		Tai no Sen	Simple	2	1	-1	50.00	
			comple	0	1	1	100.00	
		Go no Sen	Simple	1	1	0	0.00	
			comple	0	1	1	100.00	
Effectiveness stage of the attack which is under studying	Using tactical map (1)			1	4	3	300	
	Using tactical map (2)			1	3	2	200	
	Using tactical map (3)			1	4	3	300	
	Results of offensive playing	Failed playing			22	9	-13	59.09
		Successful playing	One point		7	11	4	57.14
			Two points		1	2	1	100.00
Three points			0	2	2	200.00		

Table 13

Differences and proportions of improvement between the two measures of pre and post in the determinants of the fourth player's offensive activity

Determinantsof offensive playing			Pre	post	Differe	Improve		
Preparation and execution stage of the attack which is under consideration	Player's ready status		Left	20	13	-7	35.00	
			right	6	11	5	83.33	
	Time parts of the match	Minute 1		10	7	-3	30.00	
		Minute 2		7	8	1	14.29	
		Minute 3		9	9	0	0.00	
	Playing areas	Area (A)		1	2	1	100.00	
		Area (12)		2	3	1	50.00	
		Area (D)		1	2	1	100.00	
		Area (3)		3	3	0	0.00	
		Area (middle of canvas)		12	4	-8	66.67	
		Area (9)		3	3	0	0.00	
		Area (B)		1	2	1	100.00	
		Area (6)		2	3	1	50.00	
	Area (G)		1	2	1	100.00		
Execution stage of the attack which is under consideration	Offensive skills	Two arms	Shodan	5	5	0	000	
			Godan	11	9	-2	18.18	
		Two legs	Shodan	2	4	2	100.00	
			Godan	8	6	-2	25.00	
Effectiveness and execution stage of the attack which is under studying	Attack's type	Direct attack		Simpl	9	3	-6	66.67
				compl	3	7	4	133.33
		Counterattack	SennoSen	Simpl	8	4	-4	50.00
				compl	0	1	1	100.00
			Tai no Sen	Simpl	5	5	0	0.00
				compl	0	1	1	100.00
			Go no Sen	Simpl	1	2	1	100.00
				compl	0	1	1	100.00
Effectiveness stage of the attack which is under studying	Using tactical map (1)		0	1	1	100.00		
	Using tactical map (2)		0	4	4	400.00		
	Using tactical map (3)		1	4	3	300		
	Results of offensive playing	Failed playing		17	9	-8	47.06	
		Successful playing	One point	7	11	4	57.14	
			Two points	1	2	1	100.00	
			Three points	1	2	1	100.00	

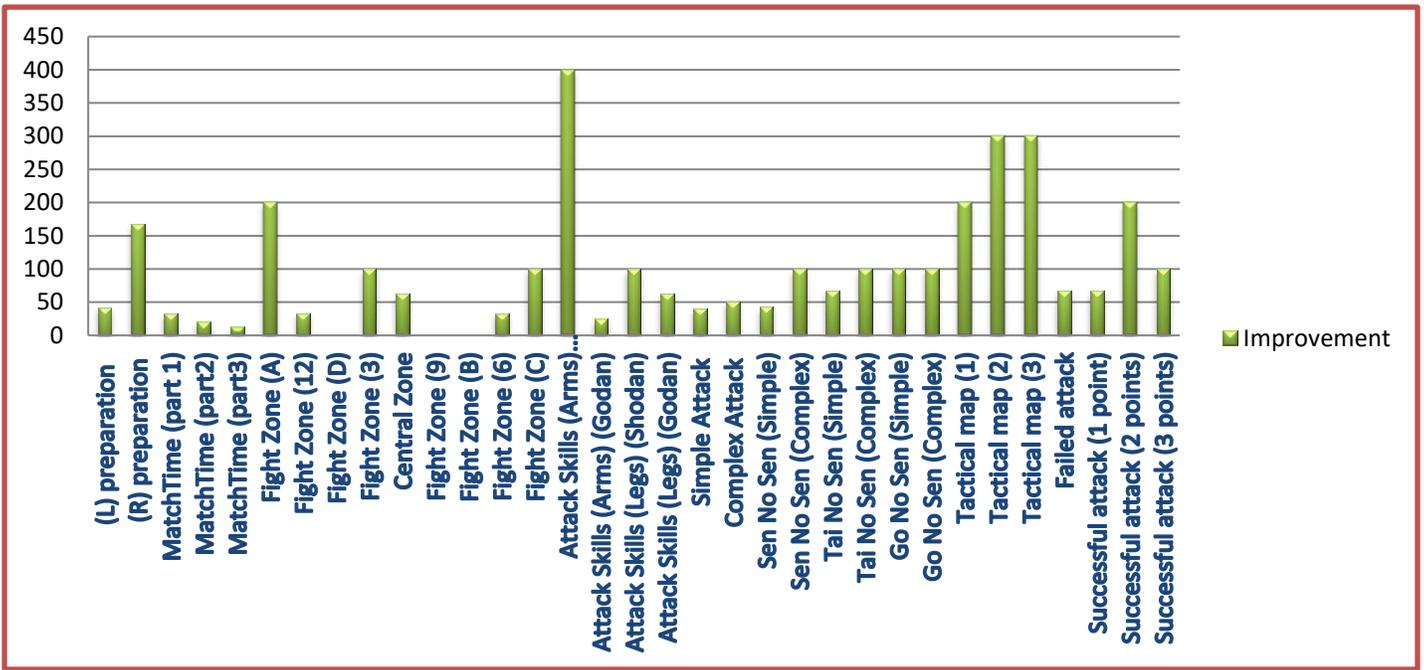


Figure (11) Ratios of Improvement at offensive activity determinants of (pre and post) measurements of the first player

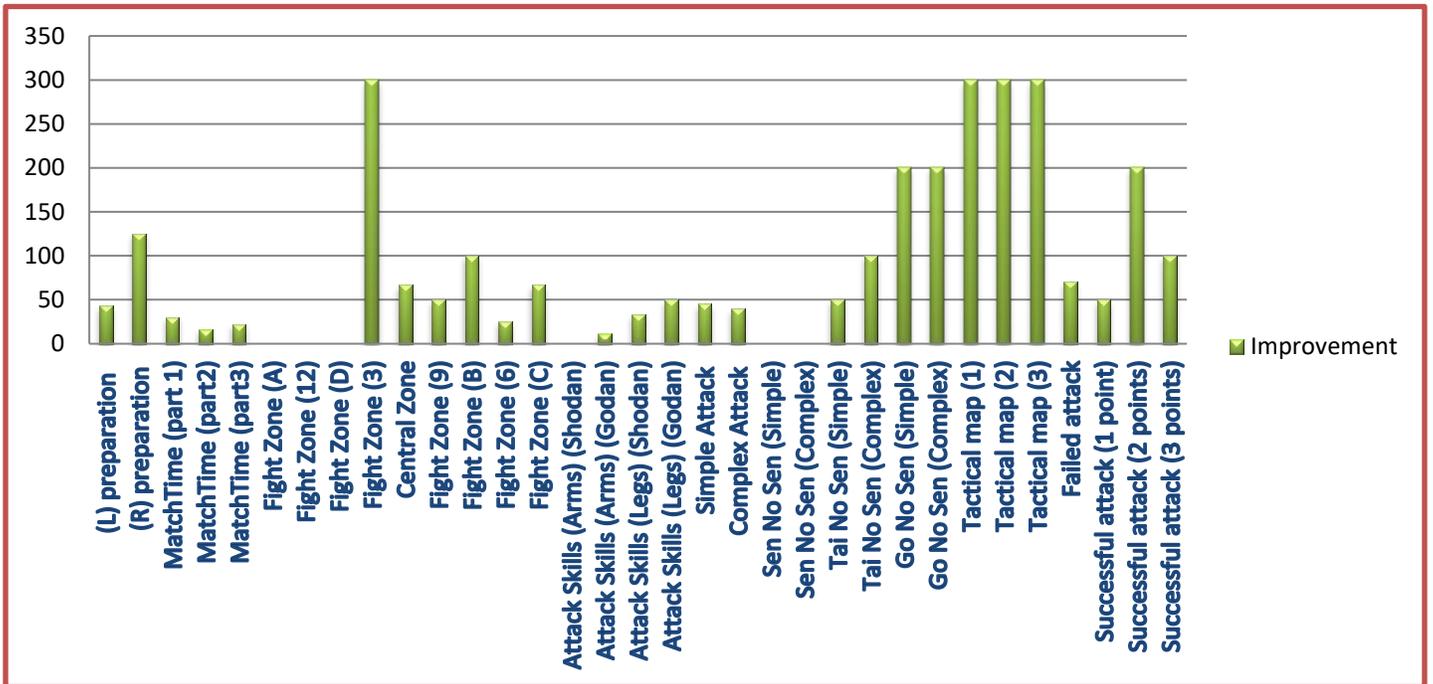


Figure (12) Ratios of Improvement at offensive activity determinants of (pre and post) measurements of the second player

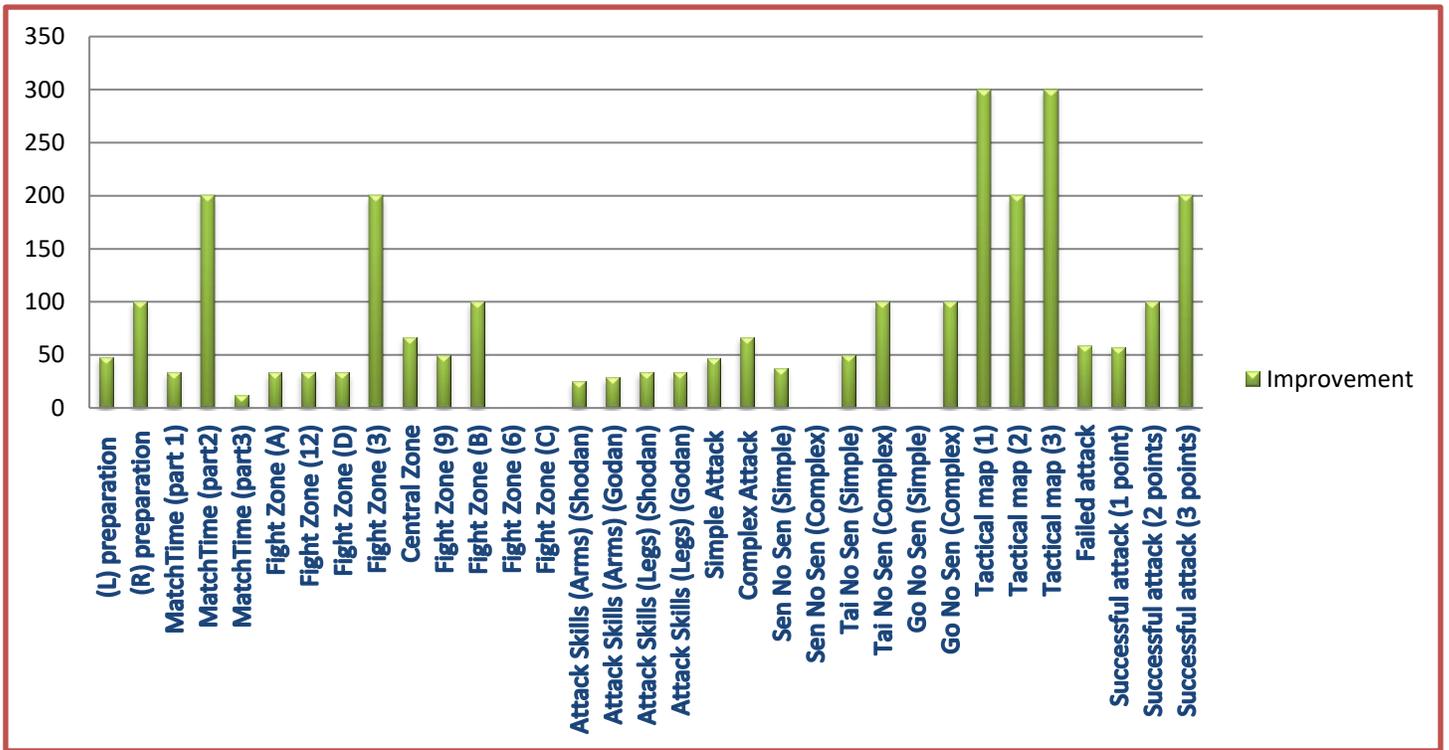


Figure 13 Proportions of improvement in the offensive activity determinants for the two measures of pre and post of the third player

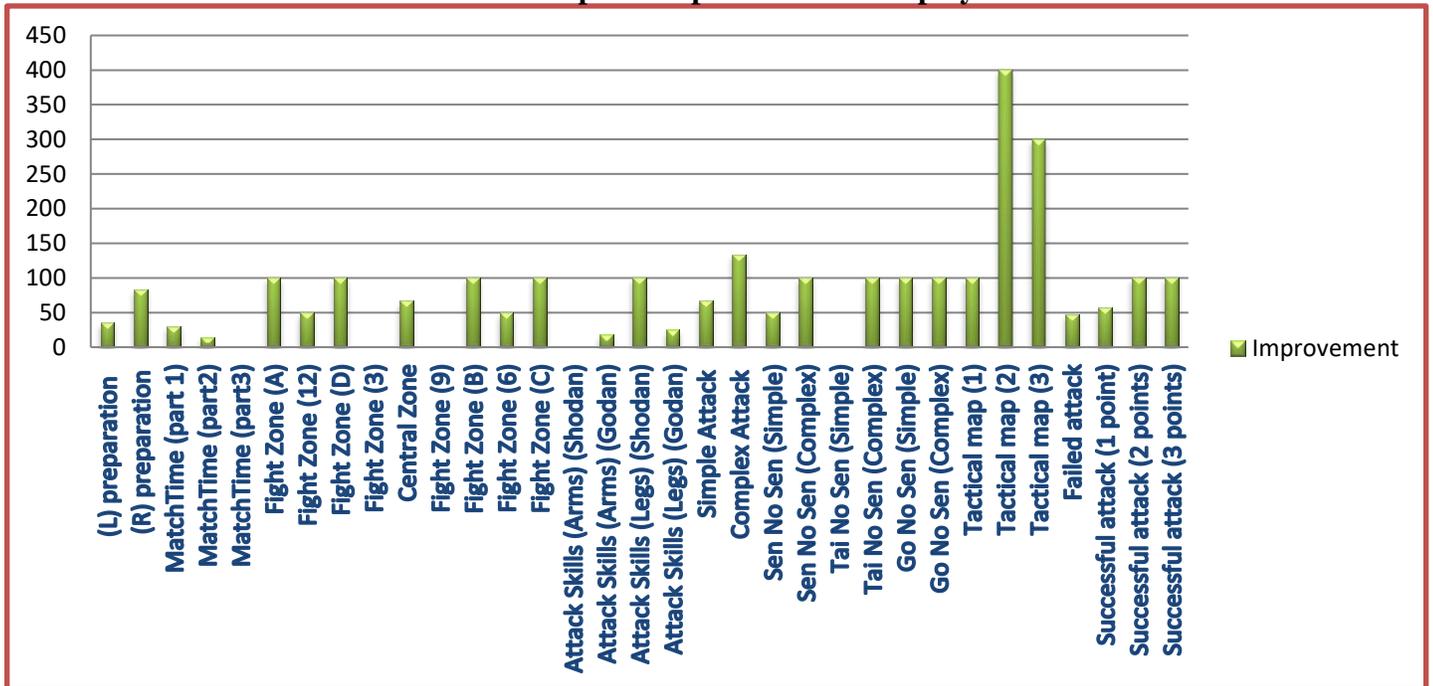


Figure 14 Proportions of improvement in the offensive attack determinants for the two measures of pre and post of the fourth player

It's shown from the tables (10, 11, 12, 13) and Figure s (11, 12 , 13, 14) that there are differences between the two measurements (Pro- Post) in the consideration's simple of the values of some determinants of exercise playing which is under studying for post measurement by positive improvement percentages, it's also shown that there are not differences between the two measurements (Pro- Post) in the consideration's simple of the values of some determinants of exercise playing which is under consideration. Therefore, there are nor any improvements in these determinations.

Improvements' percentages of some offensive exercise's determinants for the first player which is under studying have contrasted, improvement's percentage of the ready status for preparing and executing the attack (left and right) reached (42.11%), (166.67%) respectively. The lowest and highest improvement percentage of the match's parts in the first and third minute reached (12.5%), (33.33) respectively. The lowest improvement percentage of playing areas in the area (12) and the area (6) reached (33.33%), the highest improvement percentage in the area (A) reached (200.00%).

The lowest and highest improvement percentages of attack's skills by two arms and two legs to execute the attack by using legs in Godan area, and by using two arms in Godan areas reached (62.5%), (400.00%) respectively. The lowest improvement percentage of executed attack's types in the simple direct attack (40.0%), the highest improvement percentage of the complex counterattack (Tai No Sen) and the simple and complex counterattack (Go No Sen) reached (100.00%).

The lowest improvement percentage of using tactical maps which is under studying in using the first tactical map reached (200.00%). The highest improvement percentage of using the second and third tactical map reached (300.00%). The lowest improvement percentage of using tactical maps which is under studying in using the first tactical map reached (200.00%). The improvements percentage of offensive exercise's results of failed playing reached (66.67%), whereas the lowest improvement percentage of successful playing by scoring 2 points and three points reached (100.00%), the highest improvement percentage of successful playing by scoring one point reached (200.00%).

It's shown that there are not differences between the two measurements (pro and post) for the first player in rates of determinates of offensive exercise which is under studying. Therefore, there is a stability in performing these determinates which is the stage of preparing and executing of the attack in the playing area (D), area (9) and area (B).

Improvements' percentages of some offensive exercise's determinants for the second player which is under studying have contrasted, improvement's percentage of the ready status for preparing and executing the attack (left and right) reached (42.86%), (125.00%) respectively. The lowest and highest improvement percentage of the match's parts in the second and third minute reached (16.67%), (30.00) respectively. The lowest improvement percentage of playing

areas in the area (6) reached 25.00%), the highest improvement percentage in the area (3) reached (300.00%).

The lowest and highest improvement percentages of attack's skills by two arms and two legs to execute the attack by using legs in Godan area, and by using two arms in Godan areas reached (11.11%), (50.00%) respectively. The lowest improvement percentage of executed attack's types of the complex counterattack (Tai No Sen) reached (50.00%), and the simple and complex counterattack (Go No Sen) reached (200.00%).

The lowest improvement percentage of using tactical maps which is under studying in using the first, second and third tactical map reached (300.00%).The improvement percentage of offensive exercise's results of failed playing reached (70.59%), whereas the lowest improvement percentage of successful playing by scoring one point reached (50.00%), the highest improvement percentage of successful playing by scoring two points reached (200.00%).

It's shown that there are not differences between the two measurements (pro and post) for the second player in rates of some determinates of offensive exercise which is under studying. Therefore, there is a stability in performing level of these determinates which is the stage of preparing and executing of the attack in the playing area (A), area (12) and area (D), and attack's skills by two arms in Shodan area and the complex and simple counterattack Sen No SeNo.

Improvements' percentages of some offensive exercise's determinants for the third player which is under studying have contrasted, improvement's percentage of the ready status for preparing and executing the attack (left and right) reached (48.00%), (100.00%) respectively. The lowest and highest improvement percentage of the match's parts in the third and second minute has reached (12.5%), (200.00%) respectively. The lowest improvement percentage of playing areas in the area (A), the area (12) and the area (D) reached (33.33%), the highest improvement percentage in the area (3) reached (200.00%).

The lowest improvement percentages of attack's skills by two arms and two legs to execute the attack by using arms in Shodan area reached (25.00%), and by using two legs in Godanand Shodanareas reached (33.33%). The lowest improvement percentage of executed attack's types in the simple direct attack Sen No Sen (37.50%), the highest improvement percentage of the complex counterattack (Go No Sen) reached (100.00%).

The lowest improvement percentage of using tactical maps which is under studying in using the second tactical map reached (200.00%). The highest improvement percentage of using the first and third tactical map reached (300.00%). The improvements percentage of offensive exercise's results of failed playing reached (59.09%), whereas the lowest improvement percentage of successful playing by scoring one point reached (57.14.00%), the highest improvement percentage of successful playing by scoring three points reached (200.00%).

It's shown that there are not differences between the two measurements (pro and post) for the first player in rates of determinates of offensive exercise which is under studying. Therefore, there is a stability in performing these determinates which is the stage of preparing and executing of the attack in the playing area (6) and area (G), and the complex counterattack Sen No Sen and the simple counterattack Go No SeNo.

Improvements' percentages of some offensive exercise's determinants for the fourth player which is under studying have contrasted, improvement's percentage of the ready status for preparing and executing the attack (left and right) reached (35.00%), (83.00%) respectively. The lowest and highest improvement percentage of the match's parts in the second and first minute reached (14.29%), (30.00%) respectively. The lowest improvement percentage of playing areas in the area (6) and the area (12) reached (50%), the highest improvement percentage in the area (A), area (D), area (B) and area (G) reached (100.00%).

The lowest improvement percentages of attack's skills by two arms and two legs to execute the attack by using arms in Godan area reached (18.18%), and by using two legs in Shodan area reached (37.50%). The lowest improvement percentage of executed attack's types in the simple counterattack Sen No Sen reached (50.00%), the highest improvement percentage of the complex direct attack (Go No Sen) reached (133.33%).

The lowest improvement percentage of using tactical maps which is under studying in using the first tactical map reached (100.00%). The highest improvement percentage of using the second tactical map reached (400.00%). The improvement percentage of offensive exercise's results of failed playing reached (47.06%), whereas the lowest improvement percentage of successful playing by scoring one point reached (57.14.00%), the highest improvement percentage of successful playing by scoring two and three points reached (200.00%).

It's shown that there are not differences between the two measurements (pro and post) for the first player in rates of determinates of offensive exercise which is under studying. Therefore, there is a stability in performing these determinates which is the stage of preparing and executing of the attack in the match's parts in the first and third minute, is the stage of preparing and executing of the attack in the playing area (3) and area (9) and the stage of executing attacks by using offensive skills by two arms in Shodan area and the simple counterattack Tai No SeN.

The researcher explains these results for rising players ability to the efficiency use of the offensive exercise's determinants which is in under studying with a variation of player's using of these determinants in a balanced and clear way in post measurement instead of so much depending on specific determinants with a big difference like the pro measurement.

It shows there is an effect in developing the rates of offensive exercise's determinants "attack 'stage of preparing and executing the" which is under studying with the study sample. The researcher attributes this to the guiding training loads through using the skillful performance itself and look-alike performance exercises during the match, caring about privacy and wave

during the execution of training loads, using of the training phase shapes inside the content of the training unite which distinguishes with solo rationing of loads according to the individual differences and different situations of playing, planning to use the special exercises of poses of preparing to attack (right-left) in a good balanced way that affects positively the times of the player's using of these positions.

In addition that the feet's movements had an impact on some of the offensive exercise's determinants, as if the proposed training program contains a variety of exercises to developing the feet's movements and linking movements' types with the used attack type, the use of different play areas of the playground pitch, and the type of skills, whether the skills of the arms or the two legs with legs' movements in different directions and deceiving the opponent to open holes in the defense with the attack on the rival in the suitable time by the direct attack or any type of the counter-attack one of the types of simple or compound according to the position competitive with the more efficient players in the offensive performance and scoring points.

The researcher also attribute the positive change in preparation status of the attack to the right and left side, to the effect of proposed training program through exercises which is similar to the skillfully exercise and muscular nervous and compatibility, as well as the optimal use of the feet's movements by standardized way of the playing areas. As well this is reflected in increasing the improvement percentage in the players performance and their ability to rationalize the preparation and execution of the playing areas within the match's minutes as a whole, according to the components of the proposed tactical maps in the program, where players performance differed during the match's parts on the playing areas, where the percentage of the use of the players has increased according to the components of the proposed tactical maps in the program for what was available from the areas before proposed tactical maps in the program the proposed tactical maps in the program. As preparation and executing stage in the midfield area of the study sample before applying the proposed training program by using the proposed inhaler training which is standardized individually, while there was a remarkable improvement in the exploitation of most playground areas as individual differences among the study sample in the post measurement as a mark of the rationalization preparation and execution of the attack areas.

Through improving the attacks types whether by direct attack or counterattack by its various timings (Sen No Sen, Tai No Sen and Go No Sen), attacking and defending skillfully styles, legs' movements which lead finally to increasing the quantitative efficiency of the offensive exercise and scoring points that leads to wining the match and achieving the goal. This has been shown from the offensive playing which is under studying. The total of scoring points for studying's simple is (41) points in the pro measurement, whereas the total of scoring points for studying's simple is (80) points in the pro measurement by improvement percentage reaching to (95.12) as a clear mark for the attack's efficiency.

The researcher attributed the positive change in the rates of the special requirements (the area used for attack), Performed by the players of the study, to the impact of the rationalization of training features for applying the tactical maps components which is under studying that contributed to the positive impact of the players' strategies in preparation for an attack during the match, and that strategy has been training them through individual training stations. As it's characterized by the privacy in applying and choosing according to their different playing positions, during the main training unit segment, the characteristics of training loads and methods of implementation of the proposed program, and that the variation in the percentages of the effect of the content of training loads properties due to the rationalization of training principles of privacy and ripple according to individual rationing players, In addition that the researcher has used proposed training loads through exercises that is similar to the nature of the used skillful performance. In addition to applying the training course of competitive exercises using the timing of the attack which is under studying, with the rationalization of rates represent energy systems through the implementation of the training load over the proposed training program, as there is are makeable improvement in the preparing areas.

This is consistent with what indicated by Ahmed Mahmoud Ibrahim (2011 AD), (2015 AD) (9), (11). As it is consistent with the studies' results of Guillermo Paz (2000 AD), Moataz Hilal (2010 AD), RenYadong(2011AD), Ahmed Mahmoud Ibrahim (2013 AD), Mohammed Abdul Rahman (2013 AD), Ahmed Khamis (2014 AD), Wael Hassan (2014 AD). (21), (19), (27), (10), (18), (3), and (20).

The researcher believes that the positive change in the entrances of the attack is due to the impact of the proposed training program through exercises that are similar to the performance of skill, muscular and nervous compatibility and the optimal use of the movements of the feet in a systematized way for different places through the proposed training program, which gave the players the ability to make good use of the various areas of the playground and to impose control over the games through the development of the multi-types of counterattack with its Multiple timings (Sen No Sen, Tai No Sen and Go No Sen) and proper techniques and selection according to the positions of play, which train them through the implementation of the proposed program. This was achieved according to the systematized planning of the contents of the program which are addressed to rationalizing the counterattack at the training stations which are carried out during the second and third part of the main section of the training unit by using the most common timings of attack which exist during the counterattack and it increased the effectiveness of commanding the player to the match, that led to a positive change in the private variable values (using tactical maps) under the examination by the players of the study group. The researcher says that this is due to identify the capabilities of the players within the borders of karate rug of the places of preparation and execution the attack through its different stages as well as the acquisition of the players to the types of the counterattack with its multiple timings according to the positions of the play, and using the component of the updated tactical maps by

the players, which has been achieved the appropriate dynamism for developing physical and technique requirements.

The researcher also believes that it is through the presentation and discussion of the results and the percentages of the clear improvement between both pre and post measurements among the study sample in determining the attacking activity due to the use of the proposed training program, and make the players understand the types of attack, in general, and the direct counterattack, in particular, and the tactical performance within karate carpet, and the available areas for the preparation and execution of attack, and taking advantage of the exercises of feet movements which are similar to the performance of skill. Also the tactical playing and technique methods of punches and kicks, which consistent with what was said by Sharif Al Awadi (1989) that the training on basic skills in the form of tactical playing facilitate achieving the goal to the Karate player and this considers as an achievement to the most possible points in the least possible time, and one of the advantages of the tactical playing is the easiness of getting through the area of the competitor, as well as scoring points in less time, and also distract the attention of the competitor and force him to get out of playground, it also improves the speed of the player's performance and increases his tactical information, as well as the ability to act quickly, and also perfecting the skillful kinetic performance and support the player position by his frequently attack on the competitor in the case of achieving tie score in the match.(12)

And also through implementing the content of the part of using similar exercises to them and implementing the content of the part of using the timing of the entrances to the most common attacks (Sen No Sen, Tai No Sen, and Go No Sen) through the used tactical maps, which have a clear impact through the following measurements. Dynamic loads properties has been carried out and used at the training stations through the sections of the content of the training units to increase the quantitative efficiency of the attacking activity by using the skillful techniques of direct and counter-attack, and also the large NO., of experimental games with the competitor (negative - positive), and the specific duties games through the implementation of section V of the proposed program which reflected on the player's ability to maneuver and open gaps at the rival defenses by the methods of moving from a play area to another over the rug. High results of the successful attacking performance and the points that were scored, and the exploitation of the attack by the competitor in his favor to perform a counterattack, and implement simple and complex kinetics duties in a systematized way in the form of heats according to the structure of the components of the constructivist structure of used tactical maps, as it also reflected in the ability of the players to communicate with the requirements of the game and overcome competitor through the increase in the effectiveness of attack.

This is consistent with what noted by the each of Guillermo Paz (2000), Ahmed Mahmoud Ibrahim (2013), Mohamed Abdel Rahman (2013), Nelson Junior (2013), PawetPiepiora (2014), and HelmiChabene (2015). (21)•(10)•(18)•(25)•(26)•(22)

Thus, the second hypothesis of the study achieved.

Conclusions and recommendations:

Conclusions

- 1- The kinetic abilities which related to the tactical playing of the first player improved where it was the lowest percentage of improving the speed of kinetic response to the short half-circular kick skill (Kizame Mawashi Geri) with the right foot and it was (2.43%), while the highest proportion of improvement was in the distinctive force of speed in the experimental time (10 seconds) for the short half-circular kick skill (Kizama Mawashi Geri) with the right foot and it was (20.00%).
- 2- The kinetic abilities which related to the tactical playing of the second player improved where it was the lowest percentage of improving the speed of kinetic response to the short half-circular kick skill (Kizame Mawashi Geri) with the left foot and it was (6.83%), while the highest proportion of improvement was in the distinctive force of speed in the experimental time (10 seconds) for the counter straight punch skill (Gyaku Zuki) with the left and it was (35.29%).
- 3- The kinetic abilities which related to the tactical playing of the third player improved where it was the lowest percentage of improving the speed of kinetic response to the short half-circular kick skill (Kizame Mawashi Geri) with the left foot and it was (4.74 %), while the highest proportion of improvement was in the distinctive force of speed in the experimental time (10 seconds) for the counter straight punch skill (GyakuZuki) with the left and it was (29.59%).
- 4- The kinetic abilities which related to the tactical playing of the fourth player improved where it was the lowest percentage of improving the speed of the counter straight punch skill (GyakuZuki) with the left and it was (2.56 %), while the highest proportion of improvement was in the distinctive force of speed in the experimental time (10 seconds) for the short half-circular kick skill (KizamaMawashi Geri) with the right foot and it was (18.18%).
- 5- Some of the determinants of the attacking activity for the first player improved where the lowest percentage of improvement was in preparation and execution stage of attack in the variable parts of time of the match, the third minute, and the improvement percentage reached (12.50%), while the highest rate of improvement in the implementation stage of the attack of the variable attacking skills by using arms in the area of Shodan and it reached (400.00%).
- 6- Some of the determinants of the attacking activity for the second player improved where the lowest percentage of improvement was in the execution stage of attack in the variable attacking skills by using arms in the area of Jodan and the improvement percentage reached (11.11%), while the highest percentage of improvement was in preparation and execution stage in the variable of the playground areas in area (3), and in the stage of effective attack by using tactical maps (1), (2) and (3) which reached (300.00%).
- 7- Some of the determinants of the attacking activity for the third player improved where the lowest percentage of improvement was in preparation and execution stage of attack in the variable parts of time of the match, the third minute, and the improvement percentage reached (12.50%),while the highest percentage of improvement was in preparation and

execution stage in the variable of the playground areas in area (3), and in the stage of effective attack by using tactical maps (1) and (3) which reached (300.00%).

- 8- Some of the determinants of the attacking activity for the fourth player improved where the lowest percentage of improvement was in preparation and execution stage of attack in the variable parts of time of the match, the second minute, and the improvement percentage reached (14.29%), while the highest percentage of improvement was in preparation and execution stage in the variable of the playground areas in area (3), and in the stage of effective attack by using tactical maps (2) which reached (300.00%).
- 9- The stability in the level of performance of some of the determinants of the attacking activity for the first player, which is the preparation and execution stage of the attack on the playground areas (d), (9), (b)
- 10- The stability in the level of performance of some of the determinants of the attacking activity for the second player, which is the preparation and execution stage of the attack on the playground areas (a), (12), (d). The attacking skills by using arms in the area of Shodan, and the simple and complex counterattack.
- 11- The stability in the level of performance of some of the determinants of the attacking activity for the third player, which is the preparation and execution stage of the attack on the playground areas (6), (c) and the complex counterattack Sen No Sen and the simple counterattack Sen No SeNo.
- 12- The stability in the level of performance of some of the determinants of the attacking activity for the fourth player which is the preparation and execution stage for the variable parts of time of the match, the third minute, the preparation and execution stage in the playground area (3), (9) and in the execution stage of attack by using arms in the area of Shodan, and the simple counterattack Tai No SeN.

Recommendations:

- 1- The importance of kinetic capabilities under study to determine the training condition of the kumite players.
- 2- The importance of allocating a portion inside the training module by using tactical maps to improve the tactical side of the players.
- 3- Draw the attention of coaches to train the players on the determinants of the attacking activity under study.

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Summary of the Study

Effect of tactical package exercises on determinants of attack activity to kumite players in Karate

The study aims to identify the impact of the exercises of the tactical playing on the determinants of attacking activity of Kumite players in the karate sport, the experimental approach has been used by designing prior and subsequent measuring for a trial on a sample of (4) players of the Egyptian national team for juniors who are participating in the World Championship in Indonesia 2015. The program contains a NO., of 30 training module on rate of five exercises per week, it uses a suitable statistical method its results showed achieving to the objectives and hypotheses of the study and it showed the following:

1- The kinetic abilities which related to the tactical playing of the first player improved where it was the lowest percentage of improving the speed of kinetic response to the short half-circular kick skill (Kizame Mawashi Geri) with the right foot and it was (2.43%), while the highest proportion of improvement was in the distinctive force of speed in the experimental time (10 seconds) for the short half-circular kick skill (Kizama Mawashi Geri) with the right foot and it was (20.00%).

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5- Some of the determinants of the attacking activity for the first player improved where the lowest percentage of improvement was in preparation and execution stage of attack in the variable parts of time of the match, the third minute, and the improvement percentage reached (12.50%), while the highest rate of improvement in the implementation stage of the attack of the variable attack skills by using arms in the area of Shodan and it reached (400.00%).

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9- The stability in the level of performance of some of the determinants of the attacking activity for the first player, which is the preparation and execution stage of the attack on the playground areas (d), (9), (b)

10- The stability in the level of performance of some of the determinants of the attacking activity for the second player, which is the preparation and execution stage of the attack on the playground areas (a), (12), (d). The attacking skills by using arms in the area of Shodan, and the simple and complex counterattack.

11- The stability in the level of performance of some of the determinants of the attacking activity for the third player, which is the preparation and execution stage of the attack on the playground areas (6), (c) and the complex counterattack Sen No Sen and the simple counterattack Sen No SeN.

12- The stability in the level of performance of some of the determinants of the attacking activity for the fourth player which is the preparation and execution stage for the variable parts of time of the match, the third minute, the preparation and execution stage in the playground area (3), (9) and in the execution stage of attack by using arms in the area of Shodan, and the simple counterattack Tai No SeN.