Vol. (6)

Issue, (1)

January 2022



The effect of using interactive agility training on the effectiveness of (Go No Sen) style for kumite beginners

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Abstract

This study aims to design a program using interactive agility karate training for under-16y. Recognizing the impact of the use of the Interactive Agility Training Program on the effectiveness of the (Go No SEN) style in under - 16 kumite players. The researcher used the experimental method using the experimental design of a single group, following the tribal and dimensional measurement of its relevance to the nature of the research. The search sample was deliberately selected, 34 kumite players emerging from kamshish youth center with a black belt score. (Dan1) Maximum and minimum structural belt.

Introduction

karate Sport is a competitive individual sports based on athletic training to elevate their players in different physical, professional, planning and psychological aspects through different stages of preparation.

Ahmad Mahmoud **Ibrahim** (1995) points out that karate sports are competitive sports with changing attitudes that require mental and physical abilities and personal characteristics SO that their practitioners perform their can different artistic movements, such as different punches and kicks of equilibrium situations under competition conditions. It also requires a high-powered athlete to choose precisely for various kinetic

actions through motor compaction, speed, agility and power with a high degree of precision (5:215)

According to Adil Abdouzir (1999) To develop agility, a player must be fully prepared and equipped for all functional aspects, and agility should not be trained in the event of fatigue and fatigue, and it is best to start training agility at the very beginning of the module Understanding that agility manifested in karate sports through players' movements in the field by taking offensive positions that allow him to repay the opponent as well as the ability to change the direction from attack to defense and vice versa to open holes at the opponent and hit the target (14:149, 150)



Vol, (6)

Issue, (1)

January 2022



Louise Engelbrecht (2011m) explained that interactive agility is one of the modern concepts in sports education by incorporating cognitive agility and decision-making factors, and that it is open movements that are concerned with cognitive skills and making appropriate decisions during the game according to the new exciting, whether visual or acoustic (78:24)

Reactive agility requires a player to quickly change direction (re-energize agility) again on the move to match his or her movements with changing bushings (competitor, colleague, or putting him on the field) They add that (80%) of the information surrounding the player is transmitted by the eye and can carry out the kinetic duties.(161:21, (160:28), (305:22)

According to Chatzopoulos et "Sekulic"(2014m), al(2014m); "Delxestates et al." Delextrt et al."(2015m)," said, "due to frequent and rapid change in a player situation, a formal type of reactive agility appears to require a player to quickly change his direction (reenergize agility) again on the move to suit his movements with changing arteries (competitor, colleague, or putting him on the court). The surrounding brain-driven receptors provide a kinetic sensation in the eye (70%) of the total in the human body, and add that (80%) of the information surrounding the player is transmitted by the eye and can carry out kinetic duties. (161:21), (160:28),(305:22)

The "Scanlan" (2014m) Milanoovic (2013m), Ben Abdelkrim (2010m), both indicate that the interactive agility exercises contain specific exercises directed at him

To develop physical and functional capabilities that increase awareness and sense of correct motor performance and are in the same direction as active muscle work and in the same form as performance of game skills, they aim to improve ability to control players' bodies, develop speed, reduce motion and agility, as they build and design the principle of developing general skills for the athlete. The effect of which then shifts to specialized sport skills is diverse and exciting training that affects performance, improves technical performance of key skills, and has a significant impact on the development of footwork that is key the success of game (370:27),(102:25),(328:20)

In his experience as a teaching assistant in the Karate Division of the college and a follower of many local and international championships, the researcher analyzed the final roles of the sector Championship, where the researcher selected the young people



Vol, (6)

Issue, (1)

January 2022



under 16 in particular to conduct the research, as this stage is considered one of the stages characterized by special competitions and diversity Methods of attack, continuous interaction throughout the course, use of different techniques and techniques, and continuous change in the pace of match.

The researcher noticed that there are shortcomings in the level of productivity of the performance of the attacking methods during the matches, which is represented in the failure of these offensive performances in penetrating opponent's field, which led to the end of many matches by the end of the match time and not by achieving the eight-point difference between the player and the competition, as the competition continues until the time expires The match leads to a lot of effort and energy and exposure to the possibility of the player losing many points .From this point of view, the researcher saw the importance of addressing such a problem research, with the aim of identifying the effect of interactive agility on the effectiveness training Johnson's method iunior for karate

The researcher attributed these shortcomings to the lack of interest of many trainers in his karate sports in studying, analyzing, and understanding the performance of players to analyze their unique

gameplay, methods, and plans, as well as their weaknesses.

The research finds it important to diversify and develop offensive gameplay methods, and plans so that they can use them according to any changes that can be made to them in the games so that they can increase their chances of winning them, so the researcher has done this study, trying to develop the players' performance and emphasize the effectiveness of some of the attack methods of the Karate's 16-year-old youth.

reSearch objectives

1-Design a program with interactive agility training for karate juniors under 16.

2 -Identifying the effect of using the interactive agility training program on the effectiveness of the (GO NO SEN) style of a karate's juniors under 16 years old..

research hypotheses

There are statistically significant differences between the averages of the prejudicial and dimensional measurements of the experimental research group in the number of repetitions of the use of offensive methods (in question), and for the validity of the dimensional measurement.

There are statistically significant differences between the averages of the prejudicial and dimensional measurements of the experimental research group in the effectiveness of the use of offensive methods (in



Vol, (6)

Issue, (1)

January 2022



question), and in favor of dimensional measurement.

Terms used Reactive agility

The traditional concept agility by adding some cognitive (response abilities visual to excitation) is the most specialized power of agility, often used to describe the motor quality of agility that emerges in mathematical activities (effective change direction and speed of motion as a response to an unanticipated visual sensation).(18:78)

The counterattack Go No Sen

A player attack in response to a competitor's initiation of an attack after the escape or defense of a competitor's attack. (9:1)

he effectiveness of the attack

A player's ability to adapt and use his or her physical, skill, and plan capabilities correctly to score legal points (Yuko – Point, wazari – two points, Epon – three points) using the counter-attack in question Search actions

Methodology of research Search Curriculum

Using the one-group experimental design, the researcher

used the experimental method, following the tribal and dimensional measurement, to fit the nature of the search.

research community

The research community has included the junior karate stage, which is aged 14:16, registered with the Monofiya region and the Egyptian Karate Federation for the sports season (2021:2022).

Research sample

The sample number of the search in the blind way (34) kumite players with a maximum black belt score (1 DAN1) and brown belt (1) have been selected and the number of primary school members (14) have been selected, representing the kumite players of the Kamish Youth Center and (4) have been excluded for irregular attendance at the training modules. While the survey sample of 20 kumite players reached

Proposed training program

The researcher applied the training to the basic research sample from Wednesday, 5/12/2021m to Wednesday, 18/8/2021 M.

Table (1) the general content of the proposed training program

Content	Changes	M
The period of your numbers and before the competitions	General period of application of the study	1
(12) weeks	The total number of weeks for the program	2
(4) Weekly training modules	Weekly modules	3







Vol, (6)

Issue, (1)

January 2022



(48) Training module	Number of modules during the program	4
(90 minutes)	Module time	5
(4320 minutes or 72 hours)	The total time of the program	6
(High:Low) 1:1, 1:2	Training pregnancy	9
Medium (50:75). Less than maximum (75:90)%, maximum (90:100)%	Training load scores	1
You see high and low intensity – recursive	Training methods used	1

Table (2)
The general time distribution of the training program into the parts of the training unit

training unit								
Overall time in hours	Total time in minutes	The pppH	Parts of the pedagogical unit					
3.6 h	216-m	5%	Introductory warm-up part					
18h	1080m	25%	Interactive fitness training					
14.4 h	864 m	20%	Special physical numbers					
7.2 h	432 m	10%	Skilled setup					
14.4 h	864 m	20%	Skilled setup schematic preparation					
10.8 h	648 m	15%	match training					
3.6 h	216 m	5%	Concluding part calming down					
72h	4320 m	100%	Total					
the whole program			Total					

Suggested training loads during proposed training program units First: the introductory part (warm-up)

Includes warm-up for lightweight running, muscle conditioning, general circulation activation, prolongation exercises, and some drills that contribute to raising the body temperature until the

body's members and nervous and physiological organs are ready to accept the module content. The total body flexibility and focus on it to quickly recover from the effects of the technical training that immediately precedes the physical exercise, prepare them to perform the content of the main part, and raise their capabilities as the content of

that phase is directed to the antenna work from the maximum power of the player and the total time of this part (216 minutes) was reached by (5%) of the total time of the proposed program under consideration.

Second: The main part

This section includes five different sections (interactive agility training, special physical setup, skill





Vol, (6)

Issue, (1)

January 2022



setup, planning, and procedural training) and the total time of this section (3,888 minutes), i.e. 90% of the total total time of the proposed training in question has been used high and low intensity and iterative training methods.

Third: Final part

Contains calming exercises that help recover from the daily training load according to the air power system, and the total time for this section (216 minutes) is (5%) of the total time of the proposed program under consideration.

Steps to implement search First: Exploratory studies

- The first application of the special skilled physical capability tests in question was performed on Friday 30/4/2021m
- The counter-attack analysis form in question was presented to the expert arbitrators from 1/5 / 2021m to 5/5/2021 m to confirm the validity of the form.
- The second application of the special skilled physical capability tests in question took place on Tuesday 4/5/2021m
- The first application of the counter-attack analysis form under consideration was made on Saturday 1/5/2021m.

Fifth: Statistical treatments

The Statistical Program (SPSS) has been used for statistical data

- The second application of the counter-attack analysis form under discussion was carried out on Wednesday 5/5/2021m.

Second: tribal -measurement

The basic search sample for physical variables was pre-measured on Wednesday 12/5/2021m and a pre-measuring measure of the effectiveness of the attack in question was carried out through matches on Thursday, 13/5/2021m.

Third: implementation of the proposed training program

The researcher applied the training to the basic search sample Saturday 15/5/2021m to Sunday 15/8/2021m the search sample was selected in the blind (34) The number of participants in the survey was 14, and the number of participants in the survey center was eliminated (4) for irregular attendance at the training modules, while the number of participants in the survey sample was 4 (20) a player from the Kamesh Youth Center,

Fourth: A dimensional measurement

On Tuesday, 17/8/2021m, a dimensional measurement of the effectiveness of the attack in question was conducted through the matches on Wednesday

18/8/2021m, processing, using the following statistical methods:

- Arithmetic Average.
- Standard deviation.







Vol, (6)

Issue, (1)

January 2022



- Mode.
- , Skewness coefficient.
- "T", test.
- "Z" Test
- improvement rates by percentage.

View and discuss search results

First: Presentation and discussion of the results of the first hypothesis:

There are statistically significant differences between the averages of tribal and dimensional measurements the experimental research group in the number of repetitions of offensive methods (in question), and for the benefit of dimensional measurement.

Table (3)
Indication of differences between the averages of pre- and after-test search group measurements in the number of repetitions of the use of the offensive method (in question)

Improveme Calculated		Calculated	telemetry		Tribal measurement		Offensive methods
Improvement rates %	Z value	C value	±Ρ	Q/	±Ρ	Q/	– (in progress)
66.67 %	4.47 **	3.40 *	0.53	2.50	0.71	1.50	Simple
70.59 %	5.62 **	4.08 *	0.57	2.90	0.67	1.70	Compo site Jo No Sen

^{*} the value (c) of the tabular at D.H (n - 1 = 9), a significant

level (0.05) in one direction = 1.833

N = 10

** the value (z) of the tabular = \pm 1.96

From table (3), its results show that there are statistically significant differences

at a significant level (0.05) between the averages of the experimental research group's prescale and dimensional measurements in the number of repetitions of the use of offensive methods (in question), and for the benefit of the dimensional measurement.

The improvement rates ranged from 50.00% to 70.59%, the

offensive method came with an improvement rate of 70.59%, while the offensive method, Jo No-Sen, was a simple improvement rate of 66.67%. The researcher attributes this to the active agility training in question, which was characterized by comprehensiveness and comprehensiveness, and in which visual augmations were combined with physical, skill and plan driving performance, which contributed to





Vol, (6)

Issue, (1)

January 2022



the improvement of the number of repetitions of the use of the offensive method (in question), indicating that the visual aspect of combining optical augers with performance improved. This was agreed by Lockie and others (2013), Milanovic et al. (2013), Zaki Mohamed (2004), who pointed out that the visual aspects should be linked to the use of optical with performance during training. Because the mathematical performance includes a visual and a kinesthetic aspect, when the visual aspect develops, the evolution of the dynamic will occur accordingly. (768:23) (101:25) (100:11).

The research finds that the interactive exercise of agility is one of the recent trends in the development of sports performance in the karate, because this type of exercise is related to the theory of augments, where a variety of different visual augments (light) are offered. Color), which is integrated to enrich physical, skill, and plan performance, the agility is combined with a sense of motion and decision-making factors, because the requirements require game's player to quickly change direction and speed under the pressure of time and the frequent change of visual exciter movement (colleague. competitor or within the field), which has to change the plan decisions.

Visual augers play an important role in the emerging acquisition of brain-reaching information, with 75-90% moving through the eye and the rest

distributed to the other senses of the player.

This is what the Al et Scanlan" (2014) (30), Louise Engel "(2011) (23) referred to that it is the eye that leads the motor by the information that moves through the brain, if this information is correct and accurate, performance is easy streamlined, and all motor responses are healthy and timely, adding that the human brain is divided into two halves. Half-left is specialized in verbal language skills, and half-right is specialized in visual skills, so they recommended that visual handling capabilities should be applied to the maximum extent possible among players, especially as this age is the age of many optics and events that have a strong relationship to skills that require higher mental processes (the performance of the plan) It is difficult to do without visual and mental expressions and perceptions. Oliver et Oliver (2009) says that if

Oliver et Oliver (2009) says that it visual information is inaccurate because of poor optical capabilities, the body will miss the proper timing and cause a decrease in performance (26:346).

So the researcher sees that the better the trainer uses the interactive agility drills that depend on visual arduous practices, the more visual kinesthetic compatibility that contributes to the development of composite movements. It increases body control, especially footwork, which helps the player maintain the right



Vol, (6)

Issue, (1)

January 2022



kinetic conditions and thus achieve optimal kinetic performance.

The explosive power of foot movements and the dynamic speed of offensive skills, whether by arm or leg, is considered a special dynamic capability of the komtians, especially during the counterattack (Joe Nu Sen). It makes the player faster to do the style at a time before or at least at the same time as a competitor, so that points are calculated while slow speed in the players makes the competitor able to score points first and then win games.

The motion of the feet. whether in place or forward, in a straight line and at a 45-degree angle, as well as moving back in a straight line or 45-degree angle and quickly bouncing back to counterattack Jo No physical abilities Sen own quantum contests, through which the player can adjust offensive distances during the preparation phase of the attack and speed The movement of the whole body in case of defense or escape from a competitor's attack, then retracting with attack and performing the offensive style with the arm or leg or between them in a timely manner for the offensive position between the player and the competitor that precedes competitor's recording or getting out

group the research in measurement.

of the proper competition for the correct payment.

The special kinetic abilities in question with all their derivatives or types of motor velocity, transition velocity, speed of performance and endurance of speed, performance and force of speed and explosive force essential and important are requirements for counter-attack. (Jo No Son), which is consistent with the nature of the Comité competitions, all of which must be available in every offensive method performed by the player so that he can register the correct legal score and count points. This also stops with research and studies (1), (2), (3), (4), (8), (12), (13), (15), (17).

Thus, the first hypothesis of the which states: There are search. statistically differences subtle between the tribal and dimension measurements averages experimental research group in the number of iterations of the use of offensive methods (in question), and in the interest of the dimensional measurement.

Presentation and discussion of the results of the second submission

There are statistically subtle differences between the averages of tribal and remote measurements of the experimental effectiveness the use of offensive methods (in question), and in the interest of the dimensional





Issue, (1)

January 2022



Table (4)

The significance of the differences between the averages of the tribal and remote measurements of the experimental research group in the effectiveness N = 10 of using offensive methods (under research)

		Calculate t				ement	Offensive tactics
%	(z) value	d (t) value	±Ρ	Q/	±Ρ	Q/	—(under research)
121.43 %	10.41 **	4.20 *	1.10	3.10	0.52	1.40	Simple
116.67 %	7.00 **	2.97 *	1.26	2.60	0.63	1.20	Compo Go no sen site

^{*}Tabular value (T) at DH (n - 1 = 9), level of significance (0.05) in one direction = 1.833

Table 4 shows statistically significant differences At a moral level (0.05) between the averages of tribal and remote measurements of the experimental research group in the effectiveness of the use offensive methods (in question), and interest of remote the The of measurement. rate ranged from improvement also 71.43% to 100.00%. The simple firstorder Ju No Sen had an improvement of 121.43%, while the second-order Ju No Sen Composite had improvement of 116.67%.

The researcher explains these results by increasing the ability of players to effectively use the simple and complex Juno Sen counterattack determinants in question, with the variety of player use of these

of training programmes to include training in conditions similar to skilled, planned and competitive

determinants with some sort of more pronounced balance in remote measurement rather than relying heavily on only some of the determinants by a significant use difference as in tribal measurement.

The researcher of this improvement in post-tribal measurement is the result of the training programme, which included interactive agility exercises with training on both the right and the north, and planning and conditional and free competition training.

This is in line with the reference made by Ahmed Ibrahim (1995, 2005, 2011), Mohamed Said Abu ELNoor (2002) and Ibrahim Al-Abiari (2003, 2007) to the importance

performance to improve their technical competence through the requirements of their specialized

^{**}Values) Z (tabular = ± 1.96



Vol, (6)

Issue, (1)

January 2022



activity. (6: 185) (7: 176) (19) (1) (2)

This has increased players' skill gain, increased their ability to perform schematically, and the use of arms and men offensive tactics in simple and composite attack, while increasing the effectiveness of counter-attack. The results of this research are consistent with the results of studies (1), (2), (9), (10), (13), (15), (16) (19)

Conclusions and recommendations First: the conclusions

In the light of the objectives and obligations of the research, and within the sample of the research, and based on statistical treatments,

The results of the research showed that:

- 1. Statistical differences between tribal and remote measurements of the Experimental Research Group (Karate Young People Under 16) in the number of iterations of the (go no sen) method, and in the interest of remote measurement
- 2. Statistically subtle differences between the tribal and metameasurements averages of the experimental research group Karate Under- 16 in the effectiveness of the use of the (go no sen) method, and in the interest of remote measurement.

- 3. There are significant improvement rates between the average tribal and remote measurements of the experimental research group (karate originators under 16) in the number of iterations of the (go no sen) method, and in the interest of metrology.
- 4. There are significant improvements between the tribal and meta-measurements averages of the experimental research group Karate Under-16 in the effectiveness of the use of the (go no sen) method, and in the interest of remote measurement.

Second: Recommendations:

Based on the data, the main findings and conclusions of the research and the boundaries and areas of the research sample, the following recommendations can be made:

- 1. Interest in training players on offensive techniques with arms and legs and mixing them together using the simple and compound (go no sen) counterattacks on both the right and left sides.
- 2. Conducting similar research using the simple and compound (go no sen) counterattack on all age groups, both genders, boys and girls, and in the same age under study with different samples.
- 3. Coordinating refinement courses for trainers by the Egyptian





Vol, (6)

Issue, (1)

January 2022



Karate Federation to make them aware of the importance of interactive agility training and the use of modern techniques for visual stimuli, which helps raise the level of achievement in Karate.

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Vol, (6)

Issue, (1)

January 2022



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Vol, (6)

Issue, (1)

January 2022



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