COMPARATIVE STUDY OF WUSHU HITTING AND KICKING TECHNIQUE FOR JUNIORS 14-18 YEARS

Mihai Cristian NEGOESCU, Sanda Toma URICHIANU
candidate PhD. USEFS, of Moldova, Prof. PhD. Ecologic University of Bucharest

Abstract. In this paper was aimed at improving technique blows arms and legs wushu martial arts specific to the semi contact at juniors 14 - 18 years. For it was considered that the comparative analysis techniques blows arms and legs specific wushu -his juniors of 14-18 years, we will highlight if there are significant differences between them and influence means training on improving the technique of execution.
This scientific approach has led to organizing a study Sports Club "Jad" in Bucharest on a group of junior athletes aged 14-18 years, from wushu station.
In the study we used the following research methods: bibliographical study method, pedagogical observation method, the method of testing, pedagogical experiment method, method of mathematical statistics and graphical representation.
Technique for highlighting specific strokes arms and legs wushu - samples were used to control the penetrating hits and snap hits. Also during the course of the study was implemented a program of exercises for improving technique blows both arms and legs.
The results of the study highlight the significant differences between arms and legs kicks wushu specific - his juniors 14 - 18 years of training means and influence on improving the technique of execution.
Key words: wushu, qinda, technical training, stripes, competition, performance.

Introduction.
Chinese martial arts have great diversity and variety of fighting styles. All these styles have the same aim, namely victory in battle, making it resulted centralize their four internal martial arts and several hundred external martial arts. The link between these two classes is represented variants competition for sports competitions to test the technical and tactical training of fighters. Thus appeared the wrestling sport as arbitrated by Sanda Sanshou (full contact fighting), Qinda (semi contact fighting), Shuai Jiao (free fighting melee), and Chi Sao (box in enclosed spaces). Of these Qinda believe that competition is best adapted to beginners who have no experience and no driving skills developed [1, 2, 3, 4].
After Dragnea A. and S. Mate - Teodorescu (2002) sport training is a "complex process systematically and continuously developed gradually adapting athlete body to intense physical and mental effort involved in participating in competitions" . Qinda Wu Shu competition is specifically designed for groups of beginners, they did not have sports experience nor developed body to withstand and absorb the blows they receive. An important feature is that all the fighting techniques with speed and then apply the force reduced to only 10% of the maximum potential athletes for the body to adapt accordingly requests the real battle. In addition linear blows to the head are prohibited because Beginners properly appreciate the distance of struggle and do not have time to beware of direct hits[5]. Performance in sport aims to destroy each other but do not assume the existence of communication relations between opponents in the spirit of fair play - acquis [6].
Technical any sport branches include driving the set of all actions carried out with maximum accuracy and efficiency envisages principle with minimal effort. Wu Shu sport technical branch Qinda include [7]:
- Strokes and blockages in the arms;
- Strokes and blockages in the legs;
- Trips, falls and tumbles, slits, dodge and sockets on the opponent;
- Throws, projects and slamming the opponent.
Techniques for influencing psychological battle cries represented by discharge energy; we remark that all these classes of important techniques must be present to be effective. The importance of technical and tactical training is vital for harmonious and sustainable development, but in the area of sports wushu has a major characteristic Qinda general physical preparation and physical preparation specific technical working simultaneously with tactical training [8, 9].
According to A. Dragnea (adapted) have a basic rule in working with novice athletes namely to ensure constant availability under the required physical properties of the new elements and it is through a large number of repetitions in front of the mirror for self-

correction. This type of training we call "shadow boxing". Briefly illustrate the art of Wu Shu Qinda components:

Technical element is a fundamental structure underlying motive of practicing sports industry is represented by various kicks and blocking with his arms and legs. Technical processing is a specific and complex motor structure is a particular way of making technical element, here we illustrate the action of specific technical counter attack. Attack with direct kick back with your right hand to the body (you chong quan) and against the attack lateral right foot shot from behind the body (you ce chuai tui).

The basic mechanism of any techniques is the natural and logical sequence of motor acts needed to ensure objective.

Here we give an example: any kicks will be start first on ball of the foot pivot to avoid stress and tear over the ligaments foot support. Personal style comes as a culmination of three technical components above, and is in fact what defines a particular sport namely by way of personal footprint by conducting a technical process.

This subtly visible only for specialists in the field. Morphological, functional (blocking execution recent injury) and mental form personal style that gradually grow stronger with the passage of time in sports practice.

From the historical perspective Qinda Wu Shu competition is the newest and adopted with the spread of global sports industry wushu, but athletes who began attending the Wu Shu sports competitions have greater longevity Qinda performance in sporting competitions. This is due to the fact that they learned to avoid injuries through technical and tactical execution speed and low power. Qinda Wu Shu competitions are local, national, European and international.

The main features of the rules of competition are:

- Strength and speed are reduced to 10% of capacity;
- Two rounds of 2 minutes with a minute break between them;
- Fighting area rug is an elastic 8x8 m without being high on a platform;
- Athletes before competition should come with a health certificate and annex electro-cardiogram and electroencephalogram (not to exceed 20 days from the date of issue);
- Competitive system allows direct elimination, double elimination tournament and system.

Tournament consider most useful system because it offers more opportunities for promotion and affirmation of future champions. The tournament is the type used in meetings friendlies verification. Athletes are necessarily equipped with braces, helmet, jacket, gloves, shin guards and protectors testes in boys and girls breasts protection;

- Valid striking areas are the sides of the head, torso, legs and back sides.

The techniques are prohibited:

- Hitting or even reaching the opponent's face;
- Direct attack on the joints and limbs;
- Header, elbow, knee;
- Throws, projections, sweeping dangerous;
- Buying time;
- Using fingers as gun attack;
- Bottlenecks and choke;
- Wresling specific ground fighting;
- Young passive (clinch) more than 3 seconds;
- Joint actions;
- Hitting opponent from the socket;
- Scratching, hair pulling, spitting
- Hitting series continue or what part of the body;
- Pushing - pulling opponent more than 1 meter;
- Prohibited attack areas are the face, neck, eyes and throat, testicles, spine, knees, elbows and other joints.

Criteria scoring enumerate them as follows:

- 2 points are awarded when (an athlete out of the fighting area, design safe and clean, and the performer remains standing right foot shot on a valid area (head or body, the opponent is penalized).
- 1 point is awarded when (kick right arm over a zone valid; kick right leg on the thigh side, the opponent is warned; if the athlete that is above simultaneous fall, when the opponent is counted.

The main purpose of the work is to improve the technique blows arms and legs wu shu martial arts specific to the sample level juniors 14 - 18 years.

Hypothesis work.

We believe that by conducting comparative analysis techniques specific strokes arms and legs-his junior wushu of 14-18 years, we will highlight if there are significant differences between them and influence means training on improving the technique of execution.

Research methodology and organization.
This scientific approach has led to organizing a study Sports Club "Jad" in Bucharest on a group of junior athletes aged 14-18 years, from wushu department. The research was conducted over a 6 month period (January 2015 - June 2015).

In the study we used the following research methods [10]: bibliographic study method, pedagogical observation method, the method of testing, pedagogical experiment method, mathematical statistical method and graphical representation.. Technique for highlighting specific strokes arms and legs Wushu were used as control samples, the penetrating hits and reportisante.

Control samples applied:
1- sample directly hit the front left hand to the body (zuo chong quan);
2- proof direct hit from behind with his right hand to the body (you chong quan);
3 - circular kick with his left hand in front of the body (zuo guan quan);
4 - kick back with your right hand circular to the body (you guan quan);
5 - direct kick with the left foot in front of the body (zuo deng tui);
6 - direct kick with the right foot back to the body (you deng tui);
7 - side kick with the left foot in front of the body (zuo ce chuai tui);
8 - side kick with the right foot back to the body (you ce chuai tui);
9 - circular kick with the left foot in front of the body (zuo ce tan tui);
10 - circular kick with the right foot back to the body (you ce tan tui).

Content means used in training:
Exercises for arms
1. Exercise "with direct bunnies".
2. Exercise "bunnies with clubs".
3. "Zhanxiong Kunda" - swinging / swaying horizontal arms.
4. "Swimming virtual".
Leg exercises (dynamic stretching):
5. Zhen ti tui - kick straight forwards balance - leg stretched forward.
6. Xie ti tui - kick forward obliques - swaying leg stretched diagonally.
7. Ce ti tui - straight kick to the side - balance right foot to the side.
8. Lihe tui - inward crescent kick straight: balance with outstretched leg inward.
9. Wai bai tui - straight outward crescent kick - balance with leg stretched out.
10. "Shadow Boxing with the mirror".

The results and their interpretation. Comparative analysis techniques specific strokes arms and legs Wushu's juniors 14-18 years was conducted upon registration at the match fighting Semi blows penetrating initial testing and final testing. Table 1 presents the results of specific techniques kicks Wushu's arms juniors 14-18 years, the average error of the arithmetic mean and the Half penetrating strokes 1, 2 and their total.

Table 1. Results arms kicks techniques juniors 14 - 18 years

Statist. Indic. samples		Initial testing (x±m)			Initial testing (x±m)		
		1 st half	Round 2	Total	1st half	Round 2	Total
1 (No. Repet.)	T	5,70; 1,32	5,40; 1,18	11,10; 2,49	9,10; 0,53	8,90; 0,66	18,00; 1,17
	S	4,70; 1,17	4,50; 1,18	9,10; 2,35	8,50; 0,72	8,40; 0,76	16,90; 1,46
2 (No. Repet.)	T	5,60; 1,06	5,10, 0,79	10,70; 1,81	7,10; 0,43	6,60; 0,6	13,70; 1,02
	S	3,20; 1,38	3,30; 1,20	6,50; 2,56	6,50; 0,62	6,30; 0,76	12,80; 1,36
3 (No. Repet.)	T	4,40; 1,27	4,80; 1,2	8,20; 1,61	8,40; 0,70	8,10; 0,66	16,50; 1,34
	S	2,40; 0,72	2,20; 0,65	4,60; 1,33	7,60; 0,81	7,10; 0,86	14,70; 1,65
4 (No. Repet.)	T	6,10; 1,53	6,50; 1,51	12,60; 3,03	7,50; 0,52	7,20; 0,44	14,70; 0,94
	S	2,50; 0,87	2,60; 0,83	5,10; 1,68	6,70; 0,47	6,40; 0,4	13,10; 0,86

Note: T - shot thrust penetrating arms; S - shot snap arms; x - arithmetic average; m - the average error; No. I repeat. - Number of repetitions effective

Table 2 presents the results averages differences arms kicks specific techniques wushu's juniors 14 - 18 years between tests, the penetrating hits and reportisating between collisions, initial testing and final testing.

Table 2. Results of differences means, techniques specific strikes wushu's arms, juniors 14 - 18 years

Statist. Indic. samples		(t; p)		
		1st half	Round 2	Total
1 (No. Repet.)	T	2,684; <0,05	3,158; <0,05	2,925; <0,05
	S	2,752; <0,05	2,467; <0,05	2,678; <0,05
	T-S initial	0,565; >0,05	0,537; >0,05	0,583; >0,05
	T-S final	0,674; >0,05	0,496; >0,05	0,588; >0,05
2 (No. Repet.)	T	1,964; >0,05	2,875; <0,05	2,497; <0,05
	S	2,073; >0,05	2,033; >0,05	2,084; >0,05
	T-S initial	1,381; >0,05	1,249; >0,05	1,338; >0,05
	T-S final	0,794; >0,05	0,309; >0,05	0,529; >0,05
3 (No. Repet.)	T	3,207; <0,05	2,664; <0,05	4,655; <0,01
	S	6,867; <0,001	5,444; <0,001	6,252; <0,001
	T-S initial	1,366; >0,05	1,907; >0,05	1,721; >0,05
	T-S final	0,784; >0,05	0,922; >0,05	0,846; >0,05
4 (No. Repet.)	T	0,875; >0,05	0,482; >0,05	0,694; >0,05
	S	3,372; <0,05	3,217; <0,05	3,315; <0,01
	T-S initial	2,043; >0,05	2,256; <0,05	2,162; <0,05
	T-S final	1,136; >0,05	1,341; >0,05	1,252; >0,05

Note: No. I repeat. - Number of repetitions effective; T-S - the difference between strokes

Table 3 presents the results of specific techniques kicks wushu's, juniors 14-18 years on average and arithmetic average error of blunt and penetrating in Half reportisating 1, 2 and their total.

Table 3. Results techniques kicks juniors 14 - 18 years

samples Indic. statist		Initial testing (x±m)			Initial testing (x±m)		
		1st half	Round 2	Total	1 st half	Round 2	Total
5 (No. Repet.)	T	4,30; 1,14	5,50; 1,33	9,80; 2,41	7,50; 0,48	6,70; 0,42	14,20; 0,89
	S	1,40; 0,34	1,80; 0,29	3,20; 0,55	6,50; 0,62	6,10; 0,60	12,60; 1,19
6 (No. Repet.)	T	4,70; 0,65	4,40; 0,56	9,10; 1,18	7,40; 0,52	7,20; 0,44	14,60; 0,93
	S	1,80; 0,25	1,70; 0,3	3,50; 0,45	7,00; 0,45	6,60; 0,37	13,60; 0,79
7 (No. Repet.)	T	2,40; 0,81	2,30; 0,77	4,70; 1,57	4,90; 0,53	4,30; 0,45	9,20; 0,96
	S	1,10; 0,69	1,10; 0,69	2,20; 1,38	3,40; 0,45	2,70; 0,42	6,10; 0,85
8 (No. Repet.)	T	2,50; 0,98	2,70; 1,13	5,20; 2,08	4,40; 0,58	3,50; 0,5	7,90; 1,07
	S	0,90; 0,50	0,70; 0,47	1,60; 0,96	3,20; 0,59	3,00; 0,63	6,20; 1,19
9 (No.Repet.)	T	6,70; 1,34	6,50; 1,16	13,20; 2,48	8,00; 0,67	7,50; 0,48	15,40; 1,12
	S	2,10; 0,71	2,50; 0,89	4,60; 1,57	7,00; 0,47	6,70; 0,37	13,70; 0,79
10 (No. Repet.)	T	7,10; 0,84	6,50; 0,78	13,60; 1,58	6,70; 0,33	6,70; 0,42	13,40; 0,70
	S	2,30; 0,78	2,00; 0,83	4,30; 1,58	6,30; 0,54	6,00; 0,49	12,40; 0,97

Note: T – thrust kicks; S – snap kicks; x - arithmetic average; m - the average error; No. I repeat. - Number of repetitions effective

Table 4 presents the results of differences of averages kicks specific techniques Wushu's juniors 14 - 18 years between tests of thrust penetrating kicks and snap flicks between initial testing and final testing.

Table 4. Results of differences of averages kicks techniques to juniors 14 - 18 years

Statist Indic. Samples		(t; p)		
		1st half	Round2	Total
5 (No. Repet.)	T	3,012; <0,05	0,847; >0,05	1,848; >0,05
	S	9,328; <0,001	6,286; <0,001	7,938; <0,001

	T-S $_{initial}$	2,427; <0,05	2,724; <0,05	2,667; <0,05
	T-S $_{final}$	1,279; >0,05	0,814; >0,05	1,073; >0,05
6 (No. Repet.)	T	2,793; <0,05	3,441; <0,01	3,127; <0,05
	S	9,097; <0,001	12,043; <0,001	10,787; <0,001
	T-S $_{initial}$	4,162; <0,001	4,239; <0,001	4,436; <0,001
	T-S $_{final}$	0,583; >0,05	1,039; >0,05	0,817; >0,05
7 (No. Repet.)	T	2,142; >0,05	1,917; >0,05	2,043; >0,05
	S	2,501; <0,05	1,986; >0,05	2,273; <0,05
	T-S $_{initial}$	1,225; >0,05	1,156; >0,05	1,195; >0,05
	T-S $_{final}$	2,162; <0,05	2,596; >0,05	2,413; <0,05
8 (No. Repet.)	T	1,696; >0,05	0,706; >0,05	1,207; >0,05
	R	3,632; <0,01	2,725; <0,05	3,146; <0,05
	T-S $_{initial}$	1,451; >0,05	1,637; >0,05	1,568; >0,05
	T-S $_{final}$	1,446; >0,05	0,629; >0,05	1,062; >0,05
9 (No. Repet.)	T	0,908; >0,05	0,819; >0,05	0,837; >0,05
	S	5,301; <0,001	3,953; <0,01	4,648; <0,01
	T-S $_{initial}$	3,303; <0,01	2,746; <0,05	2,928; <0,05
	T-S $_{final}$	1,225; >0,05	1,329; >0,05	1,242; >0,05
10 (No. Repet.)	T	0,446; >0,05	0,215; >0,05	0,115; >0,05
	S	4,000; <0,01	3,561; <0,01	4,067; <0,01
	T-S $_{initial}$	4,209; <0,001	3,955; <0,001	4,157; <0,001
	T-S $_{final}$	0,631; >0,05	1,076; >0,05	0,829; >0,05

Note: No. I repeat. - Number of repetitions effective

The results of the comparative analysis on the gender specific media coups Wushu's arms juniors 14-18 years highlight significant differences (Table 2): the direct kick with his left hand to the body from the 1st, 2nd and total between tests blows thrust and snap ($p < 0.05$); Direct kick back with your right hand to the body in round 2 and the total penetrating shot ($p < 0.05$); circular kick with his left hand to the body of the half 1, 2 and totally blows penetrating between tests ($p < 0.05$, $p < 0.01$) and snap ($p < 0.001$); circular kick back with your right hand to the body in half 1, 2 and totally snap blows between tests ($p < 0.05$; $p < 0.01$) and between 2 and Half blow to the total ($p < 0.05$). The results of comparative analysis differences of averages kicks specific Wushu's juniors 14-18 years highlight significant differences (Table 4): the direct kick with the left foot in front of the body between tests with blows penetrating the 1st ($p < 0.05$) and hits the Half snap 1, 2 and total ($p < 0.001$); the direct hit to right hind leg in between tests both body blow to 1st, 2nd and total ($p < 0.05$; $p < 0.01$; $p < 0.001$) and between blow to initial testing in Half 1, 2 and total ($p < 0.001$); Side kick with his left foot from the front kick to the body between tests with the Half snap 1 and total ($p < 0.05$); the side kick with the right foot back to kick snap body between tests with the 1st, 2nd and total ($p < 0.05$; $p < 0.01$); the circular kick with the left foot front kick to the body between tests with Half snap at 1, 2 and total ($p < 0.05$; $p < 0.01$) and between blow to initial testing in Half 1, 2 and total ($p < 0.05$, $p < 0.01$); the circular kick with the right foot back to kick snap body between tests with the 1st, 2nd and total ($p < 0.01$) and between blow to initial testing in Half 1, 2 and total ($p < 0.001$).

Conclusion.

The comparative analysis of results of specific arms kicks wushu's highlights increasing the number of effective shots in final testing, 1 Half higher values in both testing and greater number of shots penetrating on both tests.

Comparative analysis techniques specific arms and legs kicks his junior wushu-14 - 18 years highlights the significant differences between them and influence means training on improving the technique of execution.

References

[1]. Deliu, D., [2014], Combat courses for students, Discobol Publishing, Bucharest, pp.68;
[2]. Deliu, D., [2008], Methodology combat disciplines, Bren Publishing, Bucharest, pp.132;.
[3]. Gălan, D., [2014], Martial arts instructor training course, Riso print Publishing, Cluj Napoca, pp.42; .
[4]. Triboi, V., Păcuraru, A., [2013].,Theory and Methodology of Sport Training, PIM Publishing, Iaşi, pp.162; .
[5]. Todiriță, A. B., [2008], Chinese shaolin kung fu, Domino Publishing, Bucharest, pp.14; .
[6]. Dragnea, A. Mate-Teodorescu, S., [2002], Theory of sports, FEST Publishing, Bucharest, pp.155;.
[7]. Ionescu, M. L., [1998], Chinese Sanda Sanshou full contact, Garell Publishing House, Bucharest, pp.63; .
[8]. Bompa, T. O., [2001], Theory and methodology of sports training, Ex Ponto Publishing, Constanța, pp.168;
[9]. Bompa, T. O., [2003], Skills development biomotric, Ex Ponto Publishing, Constanța, pp.74;.
[10]. Epuran, M., [2005], Research methodology bodily activities, FEST Publishing Bucharest, pp.49.