

RESEARCH IN JUDO LEARNING LEVEL OF 4 TO 7 YEAR OLD CHILDREN

(Preliminary communication)

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Abstract

Acquiring new motor skills and knowledge is linked to the ability to manage diverse information and training but also depends on the individual abilities of children, the duration of training, methodology, tools and training intensity. The article presents data from the study of the capability of 4 to 7 year-old kids to master the educational content in teaching situations aiming to create tailored training program and build lasting habits and skills in judo. The study was conducted in Sofia kindergarten within the period of two school years with 34 children aged 4 to 7, practicing judo. The study was focused on the utilization of exercises with general impact and specific motor skills in judo. The survey found a very good rate of success among the children, and the total score was 88.3%. The children have achieved highest score with the techniques of Ne waza (ground floor) – 98.0% and basic judo techniques (Kihon waza), as well as with the exercises with a general impact – 87.5%. The average success rate of Tachi waza techniques (techniques of throwing from a standing position) is also high – 73.9%, and the highest score is for feet techniques (Ashi waza) – De Ashi Harai (100%), O Soto Gari (94.1%) and O Uchi Gari (85.3%). These results strongly define the means and methods of training in judo for children at this age as very successful when distributed according to the didactic principles of training and priority work to develop the general physical qualities – flexibility and agility, building sustainable habits in the basic techniques of judo – Kihon waza techniques and from the ground – Ne waza, not forgetting the techniques of throwing using a leg (Ashi waza). The research proves the fact that the purposeful pedagogical work on mastering the basic motor skills in the age group between 4 and 7 is most active regarding the acquisition of motor skills and habits which turn automatic and become a component of a complete motor behavior of the individual and contributes to the physical education of children.

Keywords: *motor skills, motor habits, success, motor flexibility, motor agility, boys, girls, optimal dosing of the load and volume of educational content, training program in judo, De Ashi Harai, O Soto Gari, O Uchi Gari, sports experiment, motor tests*

INTRODUCTION

Physical education is a part of the curriculum in pre-school education and an unconditional prerequisite for improving health, prevention of violence, meeting the needs of the children of physical movement and the education of the individual. The training is based on the efficiency and quality of the means, methods and forms of organization, which are meant to assist the improvement of the physical and technical capacities, to carry out the educational goals and to provoke the interest of students, who should be properly and adequately motivated.

Psychological and biological development of children in preschool age between 4 and 7 allows sports activities in compliance with the age peculiarities and optimal dosing of the load and volume of educational content. Sports and judo in particular contribute to the improvement of the children's health status and mastering of useful and durable motor life habits.

Glushkova (Глушкова, 2004) explores the manual dexterity, the formation and its basic importance for the child's overall development in preschool age and recommends that motor teachability be stimulated through a complex development of motor abilities, using a variety of pedagogical models aimed at the development of coordination and conditioning abilities of children of both sexes.

Pedagogical interactions determine the results of the training and upbringing of children, the possibilities for improvement through physical exercise, and manifest in the phased mastering of the motor habits.

Each stage of the children's development is characterised by its typical features of the physical and mental capacity. Physical education and sport are the most active agents for positive impact on children's body, during the time of the widest opportunities for quality changes, such as the age between 4 and 7. But

despite these impacts, opportunities for educational content at the time of pedagogical interaction must be consistent with the age characteristics (Gurov (Гуров), 2002; Popova (Попова), 1987; Gregorc, J. & Meshko (Meško), 2016).

Taking into consideration the age characteristics of children, their capabilities and preferences, the teacher should distribute different types of activities that do not exceed the capabilities of the child. It is necessary to place tough but achievable tasks to develop the child to enable him or her to consciously direct their behaviour, to build skills in order to achieve the aim (Lenert & Lachman (Ленерт & Лахман), 1981).

The degree of mastering of motor skills and habits is determined by the cognitive abilities of children associated with visual, kinaesthetic and auditory sensomotors, with the perceptive processes (memory, attention, and thinking) and by their personality traits, such as motivation, character, emotional expression, attitude to the material taught, group or teacher.

The main objective of teaching at this age, in addition to the overall objective of physical education and sports for the biological, psychological and social development, is the accumulation of lasting and right skills, as well as motivation for practising judo (Prokopov (Прокопов), 2004, 2005)

To solve these tasks, it is necessary to explore and experiment with the possibilities of using means and methods, and forms to organize training in judo for children in pre-school age (McGinnis, 2012; Sternberg, 2001)

It is necessary to lay down certain regularities, which are the basis for building the optimum methodology for training in judo and in particular for children aged between 4 and 7 in the conditions of the kindergarten.

For full disclosure of the technical, physical, and mental sides of the theoretical preparation of the children, subject to the research, as well as of the dynamics of development of the various indicators, we have experimented and approbated a battery of tests (Sallis, & Hovell, 1997; Toskić, D. & Toskić, L., 2016) Some of them have dropped out due to inconsistency of purpose or low informational value. For the selection of tests we have also observed the requirements of reliability, validity and objectivity, as well as opportunities for periodic evaluation. Before “testing” the children, we have to explain to them what the requirements are. Unfortunately, as the data from the studied literature and the pedagogical observations show, too little time is dedicated to this explanation in school curricula (Ronen, 1994) This requires very broad theoretical knowledge and practical skills from the teacher. In addition, it is associated with large outlay of time.

The aim of the present study was to establish the extent of assimilation of the curriculum in the pedagogical situation of judo in order to build lasting habits and skills. For this purpose, a two year experiment has been

conducted with 34 children, distributed by identical indicators for age, physical and motor capabilities, tested at the beginning of each period for the respective group. The data from primary research (entry) have a normal distribution and are identical, which defines the use of parametric statistical methods for processing of the empirical material.

In the current study the following tasks have been assigned:

1. Study of the degree of mastery of the exercises with total impact.
2. Study of the extent of the specific motor skills in judo.

RESULTS AND DISCUSSION

The technique in judo, as well as the additional exercises that are included in the training process are mainly complex in coordination and conditioning respect and represent a set of simple movements, linked in a certain sequence or performed simultaneously (synchronously).

Degree of mastery of exercises with total impact

Having in mind the specific physical characteristics of children and not yet well developed physical characteristics, their motor habits and skills are judged on criteria that comply with the necessity for safe and correct memorization the curriculum (Table 1).

The most challenging exercises, side wheel and exercises with a partner like squeezing through and jumping over, are mastered by just over half of the children, as it is noticeable that boys cope a bit better. As regards the exercises with a partner like jumping jacks, the girls do better than boys, which is attributed to the fact that they are more diligent, more focused and disciplined.

From the analysis of the data it is evident that the degree of mastery of exercises by children varies. That is, the abilities for the respective age to master the exercises with general impact are individual and are not identical for all the children, but as a whole it is evident that children successfully master the educational content.

The percentage of success rate is larger with the exercise Forward and Backward Roll over Shoulder. The exercises “cart” and “Moving forward whilst jumping” are very interesting for the children, because these exercises are seen as a race, and at the same time they build quality and an emotional impact is achieved when used in relay-races.

The analysis of the results shows that all exercises with general impact, included in the program of pedagogical interaction, are mastered by children with a very high rate of success (over 87%).

Degree of mastery of the specific motor skills in judo (waza)

The techniques (waza) in judo can be roughly

Table 1. Degree of mastering of exercise with general impact (in percentages)

№	Exercise	Ability	Boys	Girls	Success rate	
1	Moving forward whilst jumping	Can	100	100	100	
2	Cart*	Can	100	100	100	
3	Forward Roll over Shoulder	Can	100	100	100	
4	Backward Roll over Shoulder	Can	83,3	82,9	83,2	
		Partially Can	8,5	10,0	9,2	
		Can not	8,2	7,1	7,6	
5	Side wheel	Can	65,0	62,3	63,6	
		Partially Can	10,0	16,3	13,2	
		Can not	25,0	21,4	23,2	
6	Exercises with a partner	Squeezing through and jumping over	Can	65,0	59,6	62,3
		Partially Can	20,0	33,3	26,6	
		Can not	15,0	7,1	11,1	
7	Jumping jacks	Can	90,0	92,9	91,2	
		Can not	10,0	7,1	8,8	
8	Flexibility	Can	100	100	100	
Total success rate		Can	87,9	87,2	87,5	

*The so-called "cart" exercise is performed by two people. The body of the performer is in a push-up position on the ground, while their legs are held by a partner. The performer of the exercise moves on their hands in various directions, most often

Table 2. Degree of mastering of kihon waza (in percentages)

Kihon waza	Ability	Boys	Girls	Success rate
Ushiro ukemi	Can	100	100	100
Yoko ukemi	Can	100	100	100
Mae mawari ukemi	Can	80,0	85,7	82,4
	Can not	20,0	14,3	17,6
Shisei	Can	95,0	100	97,1
	Can not	5,0	0	2,9
Shintai	Can	95,0	100	97,1
	Can not	5,0	0	2,9
Kuzushi	Can	85,0	85,7	85,3
	Can not	15,0	14,3	14,7
Total Success rate		92,5	95,2	93,7

Table 3. Degree of mastering of the techniques in ne waza (ground floor position) (in percentages)

He waza	Ability	Boys	Girls	Success rate
Hon kesagatame	Can	100	100	100
Yoko shiho gatame	Can	100	100	100
Tate shiho gatame	Can	95,0	92,9	94,1
	Can not	5,0	7,1	5,9
Total Success rate	Can	98,3	97,6	98

Table 4. The degree of mastering of judo skills in Tachi waza (techniques at standing position) (in percentages)

Tachi waza	Ability	Boys	Girls	Success rate
De ashi xapaй	Can	100	100	100
O soto gari	Can	90,0	100	94,1
	Can not	10,0	0	5,9
O uchi gari	Can	85,0	85,7	85,3
	Can not	15,0	14,3	14,7
Ko uchi gari	Can	70,0	85,7	76,5
	Can not	30,0	14,3	23,5
O goshi	Can	45,0	57,1	50,0
	Can not	55,0	42,9	50,0
Ippon seoi nage	Can	40,0	28,6	35,3
	Can not	60,0	71,4	64,7
Total Success rate	Can	71,7	76,2	73,9

subdivided into basic and special. Kihon waza – the main (basic) techniques are all movements and standing positions in upright and low position of the body, which are a prerequisite for the realization of the special techniques in every martial art. Kihon waza is the main technique in judo, which children need to master before they begin training the special techniques (Table 2).

Kihon waza (basic techniques in judo) are the techniques by which the beginner is introduced in judo. These are the techniques of standing (Shisei), moving (Shintai) clamps (Kumi kata), falling (ukemi) and pulling off balance (Kuzushi). „*With the kihon-waza you can't win but it's part of the way to perfection.*” (Prokopov (Прокопов), 2004)

Proper mastery of these techniques helps for the correct mastery of the techniques coming next on the difficulty scale, namely the special judo techniques- Tachi waza (techniques of standing position – throwing down), ne waza (techniques of controlling at ground floor position – constrictions, keys, detentions) and atemi waza (striking techniques). Children are not taught some of these techniques, such atemi waza, and keys and constrictions in ne waza and self-sacrifice techniques in tachi waza.

The process of teaching the kihon waza is boring for young children. This makes it necessary to use many and varied means and methods, and the most commonly used method is the game.

Special techniques in Kodokan judo are „all rational actions or their combinations, referred to as the techniques or their combinations, in accordance with the principle of the most efficient use of power and leading directly to winning over one or more opponents. (Prokopov (Прокопов), 2005) Special techniques are subdivided into techniques at a standing position (tachi waza) and ground floor position techniques (ne waza).

The ne waza techniques are mastered very well by children and are suitable for loading – emotional and physical and for improvement in yaku soku geiko. Table 3 shows the success rate and the relationship between the techniques Hon kesagatame, Yoko shiho gatame and Tate shiho gatame.

Table 3 shows that the success rate in the waza techniques not included in the program of study is very good – 98%, with only 5% and 7% in boys with the girls cannot learn the art Tate shiho gatame.

During the first year of training the kids continue mastering the techniques from a stand in a static position. A crucial difficulty is the assimilation of the techniques on the fly, but in the second year it becomes a fact. The improvement of the indicators of children, especially after the first year, is also the result of the accumulation of self-confidence for dealing with different situations and specific terminology, as well as the acquired degree in judo.

From table 4 you can trace the degree of success of the techniques in Tachiwaza.

Children learn relatively easy the techniques De ashi haray O soto gari, and O uchi gari. All children

have mastered the technique De ashi haray, only two have failed to learn successfully O soto gari. The success rate for O uchi gari is also great (85,3%), which confirms the correct inclusion of these three techniques in the curriculum for the studied age group. All the three techniques are from the Group of ashi waza (techniques with legs), which, in our view, are more easily absorbed by small children. The control during the implementation of the technique is applied easier, and last but not least, these techniques are performed without lifting (i.e. without the partner being lifted from the ground).

Only 11 children (32%) of the trainees have mastered the technique Ippon seoi nage, 17 children (50%) have mastered O goshi and 26 (76.5%) Ko uchi gari, which proves our opinion that these techniques should be included in a later stage of teaching this age group (Table 4).

With these techniques the following results are observed – the girls master the technique better. O goshi (big pelvic throwing), the technique is executed with a solid pelvic contact with uke's body and less effort in the arms (57.1%). Boys master the technique Ippon seoi nage (shoulder throwing with one hand) better. During the performance of this technique uke is raised (up) on the back with the help of hands. With Ippon seoi nage work with your hands and the low squatting have priority, which requires a good physical preparation, which is why we have included it in a later stage in the preparation of the small judo trainees.

These studies are of great importance in the preparation of the methodology. The fact observed in this study, that some techniques in judo are mastered harder or not mastered at all by the the majority of children, has led us to the conclusion that the inclusion of these techniques can and should be done at a later stage. The techniques Ippon seoi nage for example, Ko uchi gari and O goshi have not been mastered by 68% – and that is the reason not to include them in the early stages of VI kyu. These techniques have been included in the curriculum of the last two grades of VI kyu – white belt with a blue and brown ribbon. In fact, there's no reason for kids not to be acquainted with these techniques at an earlier stage, but mastering them should not be required as a result.

In conclusion, it can be said that children master with a high degree of success the exercises and techniques during the pedagogical process of judo in the conditions of the kindergarten (Fig. 1)

The overall success rate, as well as the success rate for exercises with general impact is over 88%, while the success rate in the techniques of uadza and kihon uadza is over 93%.

These results clearly confirm the correctness of the means and methods of training in judo for children at this age. They comply both with the age features of children and with the didactic principles of training. The training is targeted to the development of the general physical qualities, primarily for the development of the qualities of flexibility and agility, to absorb permanent skills and

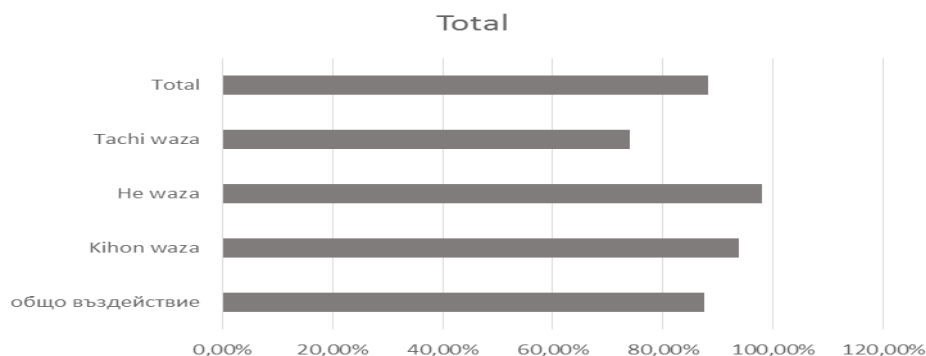


Figure 1. Degree of mastery of motor skills and habits in the pedagogical process of judo

habits in the specific techniques of judo – kihon waza (basic techniques), ne waza (ground techniques), as well as throwing techniques (tachi waza), and mostly on the techniques of throwing using a leg (ashi waza).

CONCLUSION

The research proves the fact that the purposeful pedagogical work on mastering the basic motor skills in the age group between 4 and 7 is most active regarding the acquisition of motor skills and habits which turn automatic and become a component of a complete motor behavior of the individual and contributes to the physical education of children.

REFERENCES

- Cicović, B., Pržulj, D., Stojiljković, D., & Kocić, J. (2011). The influence of basic preparations on the development of the motor and functional abilities of judoists. *Activities in Physical Education and Sport*, 1(1), 117-122.
- Глушкова, М. (2004) *Двигателна обучаемост на децата от предучилищна възраст* [Level of training in mobility activities of preschool children. In Bulgarian.] Благоевград: УИ "Н. Рилски".
- Гюров, Д. (2002) *Педагогика на взаимодействието "детесреда"* [Pedagogy on the interaction „of children with medium“. In Bulgarian.] София: Веда-Словена ЖГ.
- Gregorc, J., & Meško, M. (2016). The Concept "Play – Physical Activity – Development" As A Response To The Contemporary Teaching Methods In Preschool Education. *Research in Kinesiology*, 44(1), 19-25.
- Ленерт, Г., & Лахман, И. (1981) *Спорт и игри за най-малките* [Sports and games for the kids . In Bulgarian.] София: Медицина и физкултура.
- McGinnis, E. (2012). *Skillstreaming the Elementary School Child: A Guide for Teaching Prosocial Skills*. Champaign, Illinois: Research Press.
- Попова, Е. (1987) *Физическо възпитание в детските градини* [Physical education in kindergartens. In Bulgarian.] София: УИ „Св. Кл. Охридски“.
- Прокопов, Е. (2004) *Кихон-уадза – базови техники в джудо* [Kihon-waza - basic techniques in judo. In Bulgarian.] *Джудо*, 24(3), 18-20.
- Прокопов, Е. (2005) *Джудо. Философия, история, структура, същност*. [Judo. Philosophy, history, structure, nature. In Bulgarian.] София: УИ "Св. Кл. Охридски".
- Ronen, T. (1994). Imparting self-control skills in the school setting. *Child and Family Behavior Therapy*, 16(1), 1-20.
- Sallis, J., McKenzie, Th., Alcaraz, J., Kolody, B., Faucette, N., & Hovell, M. (1997). The Effects of a 2-Year Physical Education Program (SPARK) on Physical Activity and Fitness in Elementary School Students. *American Journal of Public Health*, 87(8), 1328-1334.
- Sternberg, R.J. (2001) 'Measuring the intelligence of an idea: How intelligent is the idea of emotional intelligence?' In J. Ciarrochi, J. Forgas, J. Mayer (Eds.), *Emotional Intelligence in Everyday Life*. (pp. 187-194). London: The Psychology Press, Taylor and Francis.
- Stevanović, V. (2013). Relationship between anthropometric characteristics and motor abilities of young judoists. *Research in Kinesiology*, 41(1), 76-82.

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