

SELECT EXERCISES TO DEVELOPE MOTOR COORDINATION FOR MALE KARATE DO ATHLETES AGED 13-14 IN HANOI

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Abstract:

Using the common scientific research methods, the study has selected 23 exercises to develop motor coordination skill for male Karate athletes at the age of 13-14 in Ha Noi. Initial application of the selected exercises in practice has shown practical effect.

Key words: Exercises, motor coordination skill, male athletes, Karate do, aged 13-14, Ha Noi.

INTRODUCTION

In Karate do training and competition, the capacity of motor coordination is especially important. It is shown by the ability of balance in movement, determination of direction in attack and defense, quick respond to the enemy's attack, determination of the amount of force, respond to arising situations in competition and coordination of attacks and the combination of postures, kick, body shifting and power of eyes to create effective attacks or defense. However, in practice, the training of motor coordination skill for Karate do athletes in general and male Karate do athletes at the age of 13-14 in Hanoi in particular which is not paid attention in research.

RESEARCH METHODS

In this study, we have used the following research methods: Analysis and synthesis of references, interview, pedagogical observation, pedagogical examination, pedagogical experiment and mathematical statistics.

We have carried out the study on 35 male Karate do at the age of 13-14 in Ha Noi, at the initial stage of specialization, training for 2-3 years.

The process of assessment and evaluation has used 5 tests to assess the motor coordination. They are punch at 4 target pads at 1m-distance

cross position for 20 seconds (times), side snap kick at 2 opposite target pads at 3m-distance for 20 seconds (times), front stance, combining front kick and round kick for 15 seconds (times), front stance, front leg round kick and reverse punch for 15 seconds (times) and front stance, punch at 3 target pads in fan-shaped position for 15 seconds (times).

RESULTS AND DISCUSSION

1. Selecting exercises to develop motor coordination skill for male Karate do athletes aged 13-14 in Ha Noi

The selection of the exercise follows the principles: Principle of direction, principle of feasibility, principle of appropriateness, principle of effectiveness and principles of diversity.

We have selected the exercises to improve motor coordination skill for male Karate do athletes at the age of 13-14 in Ha Noi through studying relevant documents, observing the physical strength training of the Karate do teams in Hanoi and other neighboring provinces having strong Karate do movement, interviewing directly with Karate do coaches on exercises applied in motor coordination training for research subjects.

The research has conducted interview on large scale by questionnaires.

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As a result, we have selected 23 exercises to improve motor coordination skill for male Karate do athletes at the age of 13-14 in Ha Noi. They are Group of exercises without tools (7 exercises), Group of exercises with target pads and punch mitts (Lamper) (5 exercises), Group of exercises with friends (7 exercises) and Group of exercises by games and competition (5 exercises).

1. Straddle stances, punch at low, middle and high level for 15 seconds x 3 groups, 45-second break between each group, 90-95% intensity

2. Front stance, lunge reverse punch for 15 seconds x 3 groups, 45-second break between each group, 90-95% intensity

3. Combination of lunge reverse punch and jab punch for 15 seconds x 3 groups, 60-second break between each group, 90-95% intensity

4. Combination of lunge punch and jab punch for 15 seconds x 3 groups, 60-second break between each group, 90-95% intensity

5. Combination of front kick and round kick for 15 seconds x 3 groups, 60-second break between each group, 90-95% intensity

6. Combination of alternate continuous round kick by 2 legs for 10 seconds, 15 seconds x 3 groups, 60-second break between each group, 90-95% intensity.

7. 15m shadow punch in for 15 seconds x 3 groups, 60-second break between each group, 90-95% intensity

8. Punch at 3 target pads in fan-shaped position for 15 seconds x 3 groups, 60-second break between each group, 90-95% intensity

9. Punch at 4 target pads at 1m-distance cross position for 15 seconds x 3 groups, 60-second break between each group, 90-95% intensity

10. Reverse punch and front leg round kick attack at target pad for 15 seconds x 3 groups, 60-second break between each group, 90-95% intensity

11. 2- round kick combination attack at target pad for 15 seconds x 3 groups, 60-second break between each group, 90-95% intensity

12. Combination of continuous round kick by 2 legs for 15 seconds x 3 groups, 60-second break between each group, 90-95% intensity

13. Chase opponent around mat for 30 seconds x 3 groups, 60-second break between

each group, 90-95% intensity

14. Escape from corners x 3 times 3 groups, 60-second break between each group, 90-95% intensity

15. Reflection sparring for 15 seconds x 3 groups, 60-second break between each group, 90-95% intensity

16. Reverse punch defense and reverse punch counter for 1 minute x 3 groups, 120-second break between each group, 80-85% intensity

17. Lunge punch defense and round kick counter for 1 minute x 3 groups, 120-second break between each group, 80-85% intensity

18. Front leg round kick defense and reverse punch counter for 1 minute x 3 groups, 120-second break between each group, 80-85% intensity

19. Front leg round kick defense and back leg round kick counter for 1 minute x 3 groups, 120-second break between each group, 80-85% intensity

20. Competition with only combined kicking attacks for 1 minute x 3 groups, 120-second break between each group, 80-85% intensity

21. Competition with only combined punch attacks for 1 minute x 3 groups, 120-second break between each group, 80-85% intensity

22. Freestyle sparring for 30 seconds x 3 groups, 60-second break between each group, 90-95% intensity

23. Competition by current Karate do law for 2 matches, 5- minute break

2. Applying and evaluating effectiveness of selected exercises

2.1. Organization of experiment

The study has conducted the experiment by the method of parallel comparative experiment.

Experimental time is 6 months, based on training program 2015 of Karate do team in Hanoi, from February to July 2015.

We have conducted the experiment on 35 male Karat athletes at the age of 13-14 in Hanoi at the initial stage of specialization, training for 2-3 years. We have divided the athletes into two groups in the form of random draws:

- Experimental group: 18 male athletes have practiced the same program with the control group. As for motor coordination training, the

athletes have practiced the selected exercises and process of the study.

- The control group: 17 male athletes have practiced the general training program of Hanoi Karate do club.

Assessments: Use 5 tests of assessing motor coordination skill to examine before and after the experiment.

Training time: 3 sessions per week, 120 minutes per session, with 15-20 minutes for motor coordination training.

2.2. Evaluation of experimental results

Before experiment, the study has used 05 selected tests to examine and compare the motor coordination of the control and experimental groups. The results show that, at before

experiment the motor coordination skill of the two groups has no statistically significant difference, indicating the division of athletes is objective.

After 6 month experiment, the study continues to use 5 selected tests to examine and compare the motor coordination of the control and experimental group. The results show that the motor coordination skill in the control group and has statistically significant difference in all 5 tests with $t_{\text{calculation}} > t_{\text{table}}$ at the probability level $P < 0.05$.

In order to understand this difference, we have measured the growth rate of the test results of the experimental group and the control group after 6-month experiment. The results are in Table 1.

Table 1. Comparison of motor coordination growth rate by control and experimental groups after 6- month experiment

No.	Test	Statistic parameter	$W_{\text{control}} (\%)$	$W_{\text{experiment}} (\%)$	Difference
1	Punch at 4 target pads at 1m-distance cross position for 20 seconds (times)		2.04	3.14	1.11
2	Side snap kick at 2 opposite target pads at 3m-distance for 20 seconds (times)		2.64	3.66	1.02
3	Front stance, combining front kick and round kick for 15 seconds (times),		2.74	3.77	1.03
4	Front stance, front leg round kick and reverse punch for 15 seconds (times)		2.14	2.97	0.83
5	Front stance, punch at 3 target pads in fan-shaped position for 15 seconds (times)		2.47	3.37	0.91

Table 1 shows that after 6 months of experiment, both 2 groups have a good growth rate. However, the experimental group gains a higher growth rate than the control group from 0.83 to 1.11%.

Thus, after 6 months of experiment, the result of motor coordination examination of experimental group is much better than the control group. This proves that the selected exercises had a good effect on improving the motor coordination skill for male Karate do athletes at the age of 13 – 14 in Ha Noi.

CONCLUSION

The study has selected 23 exercises to develop motor coordination skill for male Karate do athletes at the age of 13-14 in Ha Noi. Initial application of selected exercises and process built in practice has shown practical effect.

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