

## DEVELOPING SPEED AND STRENGTH QUALITIES IN 12–14-YEAR-OLD BOYS THROUGH TAEKWONDO TRAINING

Umurkulova Dilrabo Abdisamatovna

O'zbekiston Milliy Universiteti o'qituvchisi.

[umudilrabo40@gmail.com](mailto:umudilrabo40@gmail.com)

Pulatov Begzod Kosimbek o'g'li

O'zbekiston Milliy Universiteti talabasi.

tel: (97) 902-37-37

<https://doi.org/10.5281/zenodo.15555945>

**Abstract.** This article explores methods for developing physical qualities, particularly speed and strength, in 12-14-year-old boys through Taekwondo training. Based on scientific research and practical experience, it presents specialized exercises and recommended training programs for this age group, aimed at enhancing athletic performance.

**Keywords:** Taekwondo, Speed development, Strength development, Physical qualities, Agility training, Plyometric exercises, Bodyweight exercises, 12-14-year-old boys, Youth training programs, Performance evaluation, Reaction time, Coordination, Motor skills, Neuromuscular connections.

**Annotasiya.** Ushbu maqolada 12-14 yoshli o'smir o'g'il bolalarda jismoniy sifatlar, xususan, tezlik va kuchni rivojlantirish usullari taqvondo mashg'ulotlari misolida tadqiq etiladi. Ilmiy tadqiqotlar va amaliy tajribalar asosida ushbu yosh guruhiga mos maxsus mashqlar va tavsia etilgan mashg'ulot dasturlari taqdim etiladi.

**Kalit so'zlar:** taekvondo, tezlikni rivojlantirish, kuchni rivojlantirish, jismoniy sifatlar, chala harakat mashqlari, pliometrik mashqlar, tananing og'irligi bilan mashqlar, 12-14 yoshli o'g'il bolalar, yoshlarga oid mashg'ulot dasturlari, mashg'ulot samaradorligini baholash, reaksiya vaqti, muvofiqlashtirish, neyromotor ko'nikmalar.

### Introduction

Taekwondo is a sport that requires physical development, quick reflexes, and muscular strength. The ages of 12 to 14 represent a crucial developmental stage in children's physical growth, during which targeted training can effectively improve speed and strength qualities that are essential for Taekwondo performance.

### Main Body

#### 1. Understanding Speed and Strength

**Speed:** The ability to perform movements in a short amount of time. This ability is connected to the central nervous system's activity, muscle preparedness, and movement control.

**Strength:** The capacity of muscles to overcome resistance or maintain tension. This quality depends on muscle mass, neuromuscular connections, and overall physical condition.

#### 2. Physical Development in 12-14-Year-Olds

At this age, the following characteristics are observed in children's physical development:

Rapid muscle tissue growth and strengthening.

Active formation of neuromotor connections.

Improvement in coordination and movement control.

As a result, specially selected exercises can effectively develop speed and strength during this period.

### 3. Specialized Taekwondo Exercises for Speed and Strength

Exercises for Speed Development:

Reaction drills (responding to the coach's signals).

Quick direction changes and jumps.

High-speed kicking exercises.

Exercises for Strength Development:

Static holds (e.g., plank position).

Plyometric exercises (e.g., jumping).

Bodyweight exercises (e.g., push-ups, squats, etc.).

### 4. Sample Weekly Training Plan

Monday: Speed drills (reaction time, agility) – 45 minutes.

Tuesday: Strength exercises (plyometric, static) – 45 minutes.

Wednesday: Taekwondo technique training + light practice – 60 minutes.

Thursday: Combined speed and strength training – 60 minutes.

Friday: Performance review, running drills – 40 minutes.

### 5. Performance Evaluation Methods

Measuring 10-meter sprint time to assess speed.

Kick speed and power using training equipment.

Monitoring body composition and overall physical condition.

### Conclusion

A well-structured and scientifically grounded training program can effectively develop speed and strength qualities in 12-14-year-old boys. These improvements will directly enhance their technical and tactical performance in Taekwondo.

### Recommendations

Training should be personalized based on the child's age, physical condition, and individual characteristics. Exercises should be safe, properly supervised, and conducted in a controlled environment. Coaches should also consider the psychological aspects of training youth athletes.

### REFERENCES

1. Bompa, T.O., & Haff, G.G. (2009). *Periodization: Theory and Methodology of Training*. Human Kinetics.
2. Zatsiorsky, V.M., & Kraemer, W.J. (2006). *Science and Practice of Strength Training*. Human Kinetics.
3. Lee, K., & Kim, Y. (2015). The Effects of Taekwondo Training on Physical Fitness in Youth: A Review. *Journal of Physical Education and Sport*, 15(3), 512–518.
4. Bompa, T.O. (1999). *Youth Training: Conditioning Young Athletes for Optimal Performance*. Human Kinetics.
5. Ганкин, Г.Г. (2012). *Возрастные особенности физического развития подростков*. Москва: Физкультура и спорт.

6. Нурматов, А.Р. (2020). Жисмоний тарбия назарияси ва методикаси. Тошкент: Ўзбекистон Миллий Энциклопедияси.
7. Платонов, В.Н. (2010). Система подготовки спортсменов в олимпийском спорте. Киев: Олимпийская литература.
8. Kordi, R., Maffulli, N., Wroble, R.R., & Wallace, W.A. (2010). Combat Sports Medicine. Springer.
9. Смирнов, А.Н. (2018). Особенности развития скоростно-силовых качеств у подростков. Наука и спорт: современные тенденции, 6(24), 42–47.
10. Kukol, M. (2014). Taekwondo: Skills, Techniques, and Tactics. Crowood Press.
11. Umurkulova D. A. TA'LIM JARAYONINI AXBOROTLASHTIRISHDA MASOFAVIY TA'LIM TIZIMINING AFZALLIKLARI //Oriental renaissance: Innovative, educational, natural and social sciences. – 2022. – Т. 2. – №. 5-2. – С. 314-318.
12. Umurkulova D. A. Dynamics of physical training of table tennis people in primary preparatory groups //current research journal of pedagogics. – 2021. – Т. 2. – №. 11. – С. 168-177.