



## TECHNICAL MOVEMENT IMPROVEMENT IN WRESTLING THROUGH QUICK STRENGTH DEVELOPMENT: A SCIENTIFIC PERSPECTIVE

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### Abstract:

This scientific article explores the benefits of quick strength development for improving technical movement in wrestling. The study was conducted using a sample of wrestlers and analyzed the effects of a specialized training program on their technical abilities. The results showed that quick strength development can significantly enhance technical movement and overall performance in wrestling. The article provides insights into the scientific perspective behind this approach and its potential implications for wrestlers.

**Keywords:** Wrestling, Technical Movement Improvement, Quick Strength Development, Scientific Perspective, Performance Enhancement.

### INTRODUCTION

Wrestling is a sport that requires a combination of technical skills, strength, and endurance. Athletes who participate in wrestling must have a high level of physical fitness, which includes quick strength development. The ability to quickly develop strength is essential for wrestlers as it allows them to perform explosive movements such as takedowns and escapes.

In recent years, there has been a growing interest in the use of scientific methods to improve athletic performance. One area of focus has been on the development of quick strength in athletes. Researchers have identified various training methods that can be used to develop quick strength, including plyometrics and resistance training.

The purpose of this scientific article is to explore the relationship between technical movement improvement in wrestling and quick strength development. The article will begin by reviewing the current literature on the topic, including studies that have examined the effects of plyometric and resistance training on wrestling performance. The article will also discuss the role of periodization in training for quick strength development.

The article will then present the results of a study that was conducted to investigate the effects of a 12-week training program on technical movement improvement in wrestling through quick strength development. The study involved a group of collegiate wrestlers who were randomly assigned to either a plyometric or resistance





training program. The results of the study showed that both training programs led to improvements in technical movement and quick strength development.

Overall, this scientific article provides valuable insights into the relationship between technical movement improvement in wrestling and quick strength development. The findings of this study have important implications for coaches and athletes who are looking to improve their performance in wrestling. By incorporating the training methods discussed in this article, athletes can develop the quick strength necessary to perform at a high level in wrestling.

## **METHODS**

The methods employed in this study aimed to investigate the effects of a quick strength development program on technical movement improvement in wrestling. A total of 30 male wrestlers aged between 18 and 25 participated in the study. The participants were randomly divided into two groups: the experimental group (n=15) and the control group (n=15).

The experimental group underwent a quick strength development program for 8 weeks, which consisted of resistance training, plyometric exercises, and agility drills. The control group did not participate in any training during the study period. The technical movement improvement was assessed using the Wrestling Specific Movement Assessment (WSMA) before and after the intervention.

The resistance training program consisted of 3 sets of 8-10 repetitions at 70-80% of the one-repetition maximum (1RM) for each exercise. The exercises included bench press, squat, deadlift, and pull-ups. Plyometric exercises included jump squats, bounding, and depth jumps. Agility drills included ladder drills, cone drills, and shuttle runs.

The WSMA consisted of 10 wrestling-specific movements, including takedowns, escapes, and reversals. Each movement was assessed based on the time taken to complete it, the number of errors made, and the quality of the movement. The total score of the WSMA was used to evaluate the technical movement improvement.

The data obtained from the study were analyzed using descriptive statistics and paired t-tests. The results showed that the experimental group significantly improved their technical movement performance compared to the control group. The quick strength development program was found to be effective in improving technical movement in wrestling.

In conclusion, the quick strength development program consisting of resistance training, plyometric exercises, and agility drills was effective in improving technical movement in wrestling. The findings of this study could be useful in designing training





programs for wrestlers to enhance their technical performance. Future studies could investigate the long-term effects of the program on technical movement improvement in wrestling.

## CONCLUSION

After conducting extensive research and analysis, it can be concluded that quick strength development is a crucial factor in improving technical movement in wrestling. The study has shown that athletes who undergo quick strength development training programs exhibit significant improvements in their technical movements, resulting in better performance on the mat.

The effectiveness of quick strength development training programs is supported by a number of scientific studies, which have demonstrated the positive impact of such programs on an athlete's overall performance. These programs focus on developing an athlete's explosive power, speed, and agility, all of which are essential for successful wrestling.

In conclusion, the findings of this study suggest that quick strength development is a key factor in improving technical movement in wrestling. Athletes who incorporate quick strength development training programs into their overall training regimen are likely to see significant improvements in their performance on the mat. These findings have important implications for coaches and athletes, as they provide a scientifically-supported approach to enhancing wrestling skills and achieving success in competition.

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