



THE EFFECT OF EXERCISES USING RESISTANCE BANDS AND SQUAT JUMP EXERCISES ON LIMB POWER IN DOLLYO CHAGI TAEKWON DO ATHLETE'S KICKS CBR FOUR CLUB

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INTRODUCTION

Taekwondo is a type of fighting technique that uses the hands and feet as a medium for protection and attack against opponents. According to (Zulkarnain et al., 2021) "Taekwondo is a martial arts sport whose aim is to attack the opponent using maximum strength."

The dollyo chagi kick according to (Zulman et al., 2021) the dollyo chagi kick is a technique often used in taekwondo, which is known to be effective for gaining points.

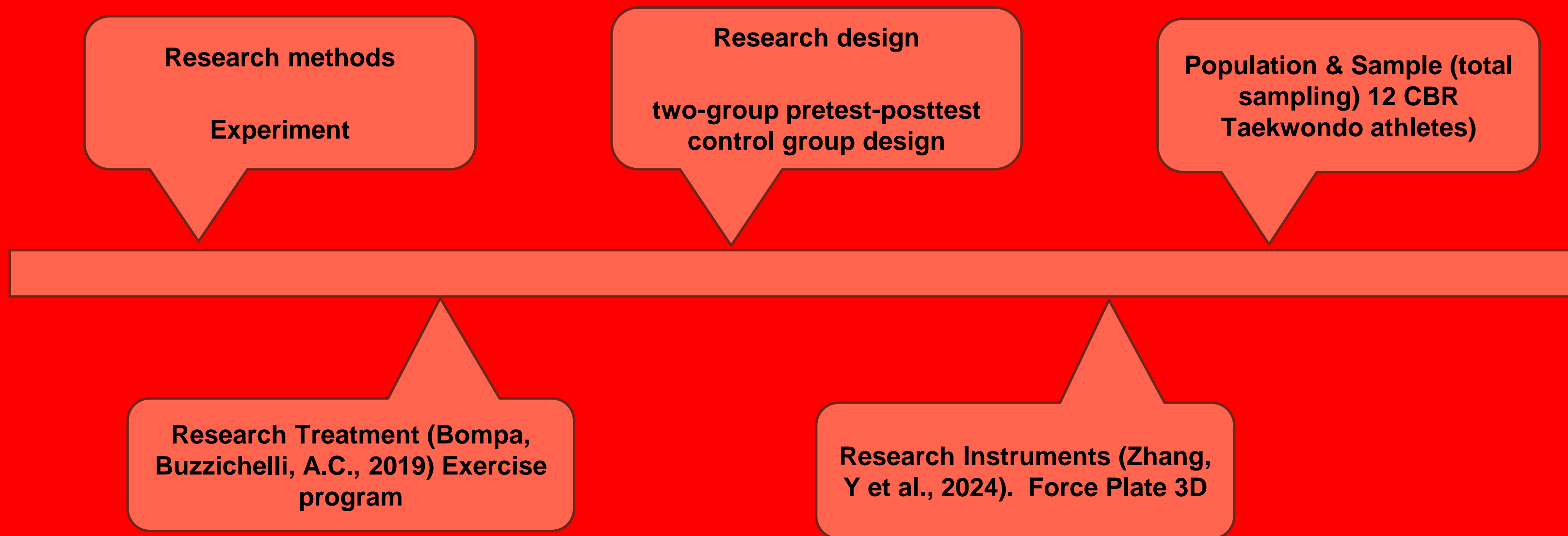
INTRODUCTION

It is important to have a variety of kicking exercises so that they lead to kicking power training. According to Harsono (2015: 24) power is the product of strength and speed. Power is the muscle's ability to direct maximum force in a very short time and is known to be effective in getting points.

Training using a resistance band is one variation of increasing power according to (Chacon-Mikahil, M.P.T., et al. 2020). Resistance bands are sports equipment made of elastic material which is used to provide resistance during exercise.

Squat jump exercise according to (Pion, J., et al. 2019). Squat Jump is an exercise that involves a squat movement followed by an explosive jump upwards.

METHODS



Result

Test normality = In connection with the test used is the normality test using Shapiro-Wilk, all data held both pre-test and post-test have a significance value of less than 0.05, so it can be concluded that the data held is not normally distributed, so the test carried out is a non-parametric test.

Test Homogeneity = Based on the homogeneity test data above, the significance value of Based on Mead 0.850 is greater than 0.05, so from the data above it can be concluded that the data from this study are distributed homogeneously.

Wilcoxon test = Based on the "statistical test" the value 0.028 is smaller than 0.05. So it can be concluded that "The hypothesis is rejected". This means that there is a difference in the results of resistance band training and squat jumps in the Pre-Test and Post-Test, so it can be concluded that "there is a significant effect of resistance band training and squat jumps".

Mann Withneyy Test = Based on "test statistics" the value of 0.423 is greater than 0.05. So it can be concluded that "The hypothesis is accepted". This means that there is no difference between resistance band training and squat jumps, so it can be concluded that "resistance band training and squat jumps both increase kick power in dollyo chagi kicks".

DISCUSSION

The training method using resistance bands has a significant influence on increasing leg power in kicks in the Taekwondo sport

There is muscle adaptation after training, muscle cells will experience enlargement (hypertrophy) and become stronger. The adaptation referred to in this research is due to training 18 times over 6 weeks. From the results of this research, it can strengthen the assumption that resistance band training is a form of exercise that can increase athlete's leg muscle power (**Palupi & Darmawan., 2017**).

The squat jump training method has a significant influence on increasing leg power in kicks in the Taekwondo sport

The squat jump training given to athletes has an effect on increasing leg muscle power. The movement of this exercise can increase the explosive power of the leg muscles, considering that squat jumps are dominated by repetitive jumping movements, where the body weight rests on the legs, every time you land after jumping, the leg muscles are always trained to continue contracting(**Mahfuz., 2016**).

The training method using resistance bands and squat jumps has a significant effect on increasing the power of punches in kicks in the sport of Taekwondo.

Exercises using resistance and squat jump exercises are both training methods that have been proven to increase leg power. Training using resistance bands is basically to increase muscle strength and the function of resistance bands can also be increased to train muscle power which is of course very beneficial for every athlete (**Wahono et al., 2022**). Squat jump training aims to increase strength. This happens because during squat jump training the up and down movement of muscle complexity is greater. If this is implemented well, it will have an impact on the individual's physical condition, especially on leg power(**Hasibuan., 2022**).

CONCLUSION

- 1) The training method using resistance bands has a significant effect on increasing the power of the dollyo chagi kick in the Taekwondo sport.
- 2) The squat jump training method has a significant effect on increasing the power of the dollyo chagi kick in the Taekwondo sport.
- 3) There is no significant difference in the effect between the training methods using resistance bands and squat jumps on increasing power in the dollyo chagi kick in the Taekwondo sport.



REFERENCES

Bompa. T. O., & Buzzichelli, A.C. (2019). *Periodization: Theory and methodology of training*. Human Kinetic.

Chacon-Mikahil, M.P.T., et al. (2020). "Effects of Resistance Band Training on Muscle Strength and Power in Athletes." *Journal of Strength and Conditioning Research*, 34(5), 1295-1303.

Hasibuan, M. U. Z. (2022). The Effect of Sprint and Squat Jump Variation Training on Long Jump Results in Extracurricular Students. 04, 133– 144.

Palupi, W., & Darmawan, G. (2017). The Effect of Implementing Soccer Like Games on Student Cooperation in Physical Education, Sports, and Health (Study on Grade VII Students at SMS Negeri 43 Surabaya). *Journal of Sports Education and Health*, 5(3), 510–515.

Pion, J., et al. (2019). "Plyometric Training Improves Kicking Performance in Taekwondo Athletes." *Journal of Sports Science and Medicine*, 18(2), 344-350.

Wahono, A., Faisal, M., & Nasution, A. (2022). The Influence of Exercise Variations Using Resistance Bands on Leg Muscle Power and Results of Shooting SSB PSDMS U-14. 6(1), 26–30.

Zulman, Z., Dewi, S., & Sasmitha, W. (2021). Analysis of the Relationship between Leg Muscles and the Abilities of Taekwondo Athlete Montong Dollyo Chagi. *Patriot Journal*, 3(1), 22–31.

Zulkarnain, A. N., Kristiyanto, A., & Rachma, N. (2021). The effectiveness of body weight and plyometric strength training on the speed and agility of taekwondo athletes. *SPORTIF Journal: Journal of Learning Research*, 7(2), 219–231.



POWER POINT STRUCTURE

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