The Effect of Front Cone Hops Exercise Method on the Power of Limb Muscle Athlete Pencak Silat Sport Education of University Riau

Slamet[1], Aref Vai[2],Agus Prima[3] Suci Mariati[4]
Email: aref.vai@lecture.unri.ac.id

Abstract: The purpose of this research was conducted to find out if there is the effect of front cone hops exercise method on limb muscle power on athlete pencak silat Sport Eduction University Riau. Type of research used is experiment and using one grup preetest-posttest design. Population this research is boy teen athlete pencak silat Walet Puti Pekanbaru is the entire populations of 10 peoples. While the sample technique used is total sampling (saturated sample) where all the population is sampled. The sample in this amounted to 10 peoples of boy teenathlete pencak silat Walet Puti Pekanbaru. The instrument used standing broad jump. After that, the data is processed with statistics, normality test with liliefors test at significance level α (0.05). The hypothesis is The Effect Of Front Cone Hops Exercise Method on the power of limb Muscle on athlete pencak silat Sport Eduction University Riau. Based on the analysis of statistical data, there are an average pre-test 207,3 and an average post-test 216,6. Based on t test analysis produces t_{hitung} = 5,32 > t_{tabel} = 1,83. Meaning t_{hitung} > t_{tabel}. Thus, there is the effect of front cone hops exercise method on limb muscle power of limb Muscle on athlete pencak silat Sport Eduction University Riau

Keywords: Front Cone Hops, Limb Muscle Power

1. Introduction

According to Mulyana (1995: 62) sport is basically a competition, and all competitions depend on fair play. Competition is seen as the opposite of special cooperation. In a competition, there are two or more competitors working together to challenge each other members that allow them to show their best performance. One of the sports competitors is pencak silat. Suwirman (1999: 8-9) said that pencak silat is the cultural heritage of Indonesia's ancestors.

In general, the components of physical conditions include endurance, stamina, flexibility, strength, power, speed, coordination and balance (Harsono, 1988: 153-226). Whereas specifically for the martial arts sport according to Joko Subroto (1996: 22) coaching or martial arts sports include the following elements: 1) endurance training; 2) Muscle strength training; 3) Speed training; 4) Exercise explosive power / muscle explosive power; 5) Agility training; 6) Flexibility training; 7) Balance exercise.

Based on field observations during the game, researchers found a problem in leg muscle power that was seen when the teen-athlete applied one of the techniques, namely kicks. This coordination is done imperfectly coordinated, has no power so that the kick is easily read by opponents, easily deflected, dodged and captured. The absence of leg muscle power also causes losses to them when competing because judges often do not record the value of their kicks because their kicks are less powerful and steady.

The authors suspect the lack of exercise that leads to increased power, in this case is leg muscle power. The lack of leg muscle power is seen in the results of the long jump without the prefix given by the

author. Where can the authors conclude the results of the long jump without the prefix of the teenage athletes are 8 people in the "less" category, 1 person in the "very less" category, and only 1 person in the "medium" category.

Therefore, the authors provide training for young male athletes in Pencak Silat Puti Pekanbaru, which refers to an increase in leg muscle power through the plyometric method, and one form of the plyometric method is front cone hops. The reason the author chose the form of front cone hops exercises because in the form of front cone hops exercises is the basis for developing the strength found in the legs and hips, this exercise is done in a series of rapid explosive jumps. Each branch of sport demands to require power, which is a combination or a combination of maximum speed and strength, and is no exception in the martial arts sport.

2. Methodlogy

This type of research is a weak experiment where only uses one experimental group. The design in this study was a one-group pretest-posttest design.

The population in this study were 10 athletes of Pncak Silat Sports Education in Riau University. Since the number of samples is only 10 people, the researchers took all the samples in this study with a total sampling technique.

3. Result and Discussion

3.1 Pre-test results Skip Away without the Prefix

Based on the analysis of the results of the Pre-Test Remote Skip without Prefix above, it can be concluded as follows: the highest score is 220, the lowest score is 208 with an average of 213.4, the standard deviation is 4.38, and the variance is 19.07. The frequency distribution can be seen in the table as follows:

Table 5. Frequency Distribution of Pre-Test Remote Skip Data without Prefix

Data *Pre-test*	(Fa)	(Fr)
208-210	2	20%
211-213	2	20%
214-216	2	20%
217-219	3	30%
220-222	1	10%
Jumlah	**10**	**100%**

Based on the percentage frequency distribution data from 10 samples above it turns out that as many as 2 samples (20%) have the results of the long jump without the prefix with 208-210 interval classes with very less and less categories, then as many as 2 samples (20%) with interval classes 211-213 with less categories, then as many as 2 people (20%) with class intervals 214-216 with less categories, then as many as 3 people (30%) with class intervals 217-219 with less categories, and as many as 1 person (10%) with 220-222 interval classes in the medium category.
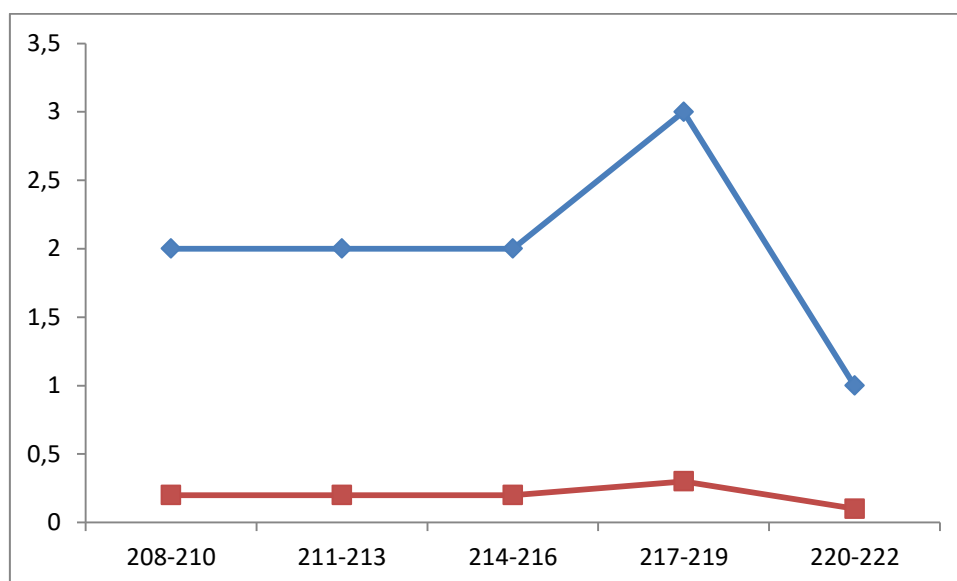
Figure 3.1 Line Results of Pre-test Remote Skip Without Prefix

3.2 Post-test results Skip Away without the Prefix
Based on the analysis of the results of the Post-Test Remote Skip without Prefix above it can be concluded as follows: the highest score is 234, the lowest score is 214 with an average of 221.9, standard deviation of 6.58, and variance of 44.83. The frequency distribution can be seen in the table as follows:

Tabel 7. Frequency Distribution of Post-Test Remote Skip Data without Prefix

Data Post-test (Kelas Interval)	Frekuensi Absolut (Fa)	Frekuensi Relatif (Fr)
214-218	3	30%
219-223	3	30%
224-228	2	20%
229-233	1	10%
234-238	1	10%
Jumlah	10	100%

Based on the percentage frequency distribution data from 10 samples above it turns out that as many as 3 samples (30%) have the results of the long jump without the prefix with class interval 214-218 with less categories, then as many as 3 samples (30%) with interval classes 219-223 with less and medium categories, then as many as 2 samples (20%) with interval classes 224-228 with medium categories, then as many as 1 sample (10%) with interval classes 229-233 with good categories, then as many as 1 sample (10%) with interval classes 234-289 in either category.
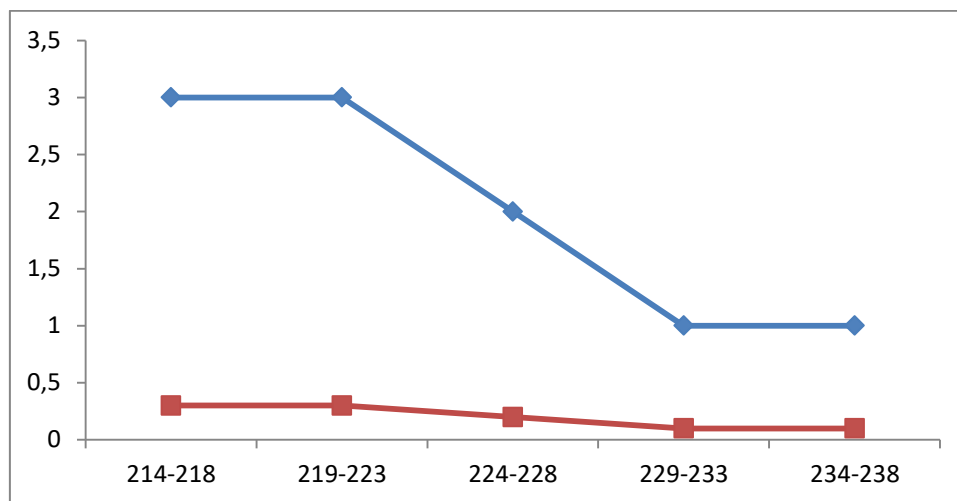
Figure 3.2 Line Results of Post-test Remote Skip Without Prefix

3.3 Discussion

After conducting research that begins from the initial data retrieval (Pre-test), the calculation results in a Lhitung of 0.1123 and a 0.258 Ltabel, it can be concluded that the pre-test results data are normally distributed and from the final data collection (Post-test) a calculation is performed produce Lhitung of 0.1517 and Ltable of 0.258, it can be concluded that the post-test results data are normally distributed. Then based on the analysis of t test results obtained tcount of 5.32 and ttable of 1.83. Means tcount> t table, then H0 is rejected and H1 is accepted.

From the results of hypothesis testing which shows there is an influence on the front cone hops training method on leg muscle power that is needed to support the athlete's technique when doing training and when participating in martial arts competition. Thus the success or failure of the objectives to be achieved will be influenced by the application of the training principles needed in making an exercise program.

4. Conclusion

Influence on the front cone hops training method on leg muscle power needed to support the athlete's technique both during training and during martial arts competitions. Thus the success or failure of the objectives to be achieved will be influenced by the application of the training principles needed in making an exercise program. One type of training is Front Cone Hops. Thus, there is the effect of front cone hops exercise method on limb muscle power of limb Muscle on athlete pencak silat Sport Eduction University Riau

References

Arikunto, Suharsimi. 2006. Prosedur Penelitian Suatu Pendekatan Praktik(Edisi Revisi VI). Jakarta: PT. Rineka Cipta.

A. Chu, Donald. (1992). *Jumping Into Plyometrics.California. Printer: United Graphics.*

Harsono. (1988). *Coaching* dan Aspek-aspek Psikologi Dalam *Coaching*. Jakarta: CV. Tambak Kusuma.

Irawadi, Hendri. 2014. Kondisi Fisik dan Pengukurannya. UNP PRESS: Sukabina.

Kosashi, Engkos. 1992. Olahraga Teknik dan Program Latihan. Jakarta: Akademika Presindo

Lesmana, Ferry. 2012. Panduan Pencak Silat (Kategori Pencak Silat Tanding). Yogyakarta: Nusa Media.

Lubis, Johansyah. (2014). Pencak Silat Edisi Kedua. Jakarta: PT. Raja Grafindo Persada.

Lumintuarso, Ria. (2013). Teori Kepelatihan Olahraga. Jakarta: Lembaga Akreditasi Nasional Keolahragaan. Jakarta: LANKOR.

Mulyana.2013. Pendidikan Pencak Silat Membangun Jati Diri dan Karakter Bangsa. Bandung. PT. Remaja Rosdakarya.

Ritonga, Zulfan. 2007. Statistik Untuk Ilmu-Ilmu Sosial. Cendekia Insani: Pekanbaru.

Sajoto. 1988. Peningkatan & Pembinaan Kekuatan Kondisi Fisik Dalam Olahraga. Semarang. Dahara Prize.

Subroto, Joko. 1996. Pembinaan Pencak Silat Fisik, Teknik, Taktik dan Mental. Solo: CV. Aneka.

Sugiyono. 2014. Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta.

Suwirman. 1999. Pencak Silat Dasar. DIP Proyek Universitas Negeri Padang.

Undang-Undang Republik Indonesia Nomor 3 Tahun 2005 Tentang Sistem Keolahragaan Nasional, Jakarta.