Weight Loss in Pencak Silat Art Performance Category

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Abstract: The purpose of this study was intended to obtain the weight loss after *Pencak Silat* Art Performance category by using quasi experimental methods with group pretest-posttest design in a final stage of *Pencak Silat* Student Championship. Data were collected before and after the Art Performance activity, then processed and analyzed using SPSS. The result of t-test showed that; (1) there is significant weight loss after *Pencak Silat* Art Performance Activity.

1 INTRODUCTION

Pencak silat is one of indigenous culture of Indonesia, where *pencak silat* was used as a provision of self-defense from enemy attack and then *pencak silat* movements are more developed. One form that is gaining international recognition is martial arts, or simply *silat*. *Silat* is one of the sports included in the South-east Asian Games (Shapie et al. 2008) and other region-wide competitions (Anuar 1993). *Pencak silat* is a form of martial arts indigenous to the Malay derived ethnic groups that populate mainland and island Southeast Asia (Wilson, I.D., 2003). This art of self-defense is indigenous to the ethnic Malays and has its origins in South East Asia, dating as far back as the 13th century (Ku Ahmad and Wong, 1978). People with high self-esteem are not confusing to take risks, they are more confident of self-abilities, generally happy and positive about themselves. According to Elavsky (2010).

In its development, *Pencak Silat* now has a lot of devotees from all circles of society, ranging from children to elders. *Pencak silat* has grown rapidly in urban areas as well as in remote areas. Various kinds of *Pencak Silat* school have emerged in Indonesia. Along with the development of the era, *Pencak Silat* has been calculated as a sport of achievement and has been included in the matches at the level of students, college students and general and international level.

The schools are now beginning to be occupied by *Pencak Silat* schools to recruit members as an effort to preserve the Indonesian culture. Starting from elementary school, junior high schools, even private or state high school now already have their own Indonesian schools. A lot of research shows that self-esteem is related to anxiety and low performance (Alesi, Rappo, Pepi 2014; Khaledian 2013; Bhatta 2012; Harris 2009).

In general, every *Pencak Silat* school has a program to add activities, develop the personality and potential of each member. Achievement guidance should be started early to emerge the outstanding athletes, therefore they can be professionally guided. One of the efforts to develop and hone the ability of an athlete is to follow the championships between students, adolescents and adults and other championships.

Silat competition rules state that an exponent is allowed up to four consecutive punches and / or kicks to the opponent during a single attack, upon which the referee immediately breaks off the confrontation (International Pencak Silat Federation, 1999). *Pencak Silat* match consists of two categories namely fighter category and art category. The fighter category is based on weight, and the art category consists of several numbers namely single, double, team.

Identifying the range of motives given by different martial art participants will help sports psychologists provide adequate and variety of sport programmes to maintain interest among those martial sport. Focusing and development on those particular motives can encourage more people to involve in those sports (Vincent, P., Nizan, M.S.M. and Julinamary, P., 2015).

A single category is a category that displays a fighter demonstrating his skills in a single standard stance correctly, precisely, and steadily and full of animation with his bare hands and arms. The double category is a category featuring 2 folks from the same team by demonstrating the skills and richness of the

technique of the *Pencak Silat* attack. And the team category is a category that shows 3 folks from the same camp by demonstrating their skill in the standard stance of the team correctly, precisely, steadily, full of inspiration and unified with bare hands.

A three-minute single category is included into the level of medium intensity zone. In this intensity zone, the supported energy supply in the body is 40% anaerobic and 60% aerobic. In doing a single movement continuously in *Pencak Silat* someone can sweat. Sweat is one form of releasing of combustion substances in the human body in the form of fluids. Body fluids are the most important factors and supporting factors in doing the sport to give maximum appearance and in the combustion of energy and also the body temperature regulator.

Height and body mass were measured with an electronic scale (708 Seca, Hamburg, Germany). Percentage body fat was calculated from skinfolds: subscapular, biceps, triceps and suprailiac (Durnin and Womersley, 1974) with a Harpenden caliper (Quinton Instrument, Seattle, USA).

The present investigation describes the physiological attributes of exponents and match responses during actual competitive duels of an emerging martial art sport, *pencak silat*.

The problem in this study is the low speed of the crescent kick of PPLP Dispora Riau Pencak Silat athletes caused by lack of repetitions. The data analysis also gives the conclusion that an increase in 15.13% of the comparison results of the initial test and final test. Based on the above results, it can be concluded that the proposed hypothesis is proven that there is a significant influence of the Repetition Exercise Method in improving Crescent Kick Speed of PPLP Dispora Riau Pencak Silat athletes (Nugroho, G., 2017).

2 METHODS

Research Method. The method that will be used for this research is the experimental method, and the experimental research design is One Group "Pre Test and Post Test Design", ie pretest before treatment and posttest after treatment. According to Sugiyono, experimental research method is a research method used to find the effect of certain treatment against others in controlled conditions. Thus the treatment results can be obtained more accurately, because it can compare with the situation before treatment.

Sampling Technique. In this research, the technique used in sampling is purposive sampling,

that is sample determination technique with certain consideration. Out of 35 people of the population and based on the criteria determined, then the sample used in this study amounted to 25 people.

Data Collection Technique. In this study the data were taken by performing a body fluid test of the testers using a digital weight scales.

Data Analysis Technique. The analyzed data are the samples that have followed the initial test and the final test. To process the results obtained from the sample following the initial test and the final test, this study uses T-Test statistic.

3 RESULTS AND DISCUSSION

Table 1: Description of Research Data on Body Fluid Loss in Single Art.

Variabel	Body Fluid Loss (ml)
Highest Score	400
Lowest Score	200
Mean	264
Standard Deviation	56
Standard *Error*	11,45

Source: Result of Data Analysis

3.1 Data Test Result of Body Fluid Loss on Single Art

The data of body fluid loss result in single art, showed the highest score of 400 ml and the lowest score of 200 ml with mean of 264 ml of fluid loss, standard deviation (SD) equal to 56, standard error mean (SEm) equal to 11,45 (see attachment). This can be seen in the following frequency distributions and histograms:

Tabel 2: Frequency Distribution of Body Fluid Loss in Single Art.

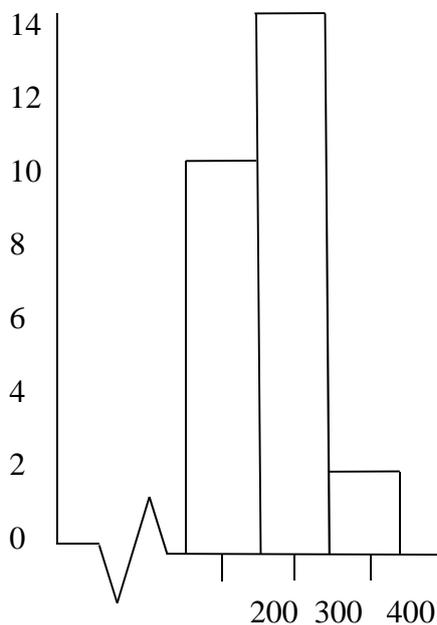| no	Fluid Loss	Absolute Frequency	Relative Frequency
1	200 ml	10	40%
2	300 ml	14	56%
3	400 ml	1	4%
	Total	25	100%

Source: Result of Data Analysis

3.2 Frequency

Figure 1: Histogram Graph of Fluid Loss in Single Art.

Based on the tables and graphs, it can be concluded that the largest data frequency in the interval class is 274 - 310 with percentage score of 56%, and the smallest data frequency in interval class 237 - 273 with percentage score of 0%.

Result of Research Analysis. Presented about the mean score (x) of the results obtained at the initial test of 47.77 kg and at the final test of 47.50 kg from the average data on the initial test and the final test on body weight showed a decrease in the results obtained. From result of data analysis obtained difference of mean (MD) 0,26 with standard deviation difference (SDD) 0,1 standard error difference mean (SEMD) 0,02. In the next calculation, the t-count score is 13 and the t-table score with degrees of freedom (n-1) and 5% significant level is 2.06 which means t-count = 13 is bigger than t-table = 2.06 . This shows that the null hypothesis (H0) is rejected and the working hypothesis (H1) is accepted, meaning that there is an effect of decreasing body fluid on athletes when performing a single art movement. From these calculations it is stated that a 3-minute single art movement affects the athletes' body fluid loss in Open UN V championship with an average of 264 ml of fluid loss.

4 CONCLUSIONS

The conclusion that can be drawn from this research is that doing a single art movement in *pencak silat* can lose weight which in this case is fluid. The calculation

results stated that a 3-minute single art movement affects the athletes' body fluid loss in UNJ Open V championship with an average fluid loss of 264 ml.

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