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By Astri Cindy Lestari

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Teacher's Efforts in Improving Kihondachi Basic Techniques through Static Balance Training in Kata Number

Astri Cindy Lestari[1]*,Asep Angga Permadi[2],Azhar Ramadhana Sonjaya[3]

[1,2,3]Physical Education Program, Faculty of Islamic Education And Teacher Training, Universitas Garut. Indonesia

*Corresponding Author: Astri Cindy Lestari, E-mail: lestaricindy432@gmail.com

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Abstract

Study purpose. Balance has an influence in the world of sports because balance is one of the factors of physical fitness. Research conducted previously stated that basic techniques in martial arts required balance and many were in the sufficient category. So there needs to be a teacher's effort to improve the balance. In the world of karate martial arts, the basic technique of kihon dachi requires good balance, so this study aimed to improve the basic technique of kihondachi in kata numbers.

Materials and Methods. The method used in this study was the experimental method because this study aimed to compare events caused by certain treatments and also to determine Static Balance in playing karate number kata. The research design used a pretest posttest. The population of this study were extracurricular athletes at SMAN 3 GARUT with a total of 30 people and a sample of 15 people. The research instrument used in this study was the Kihon Dachi Test for Static Balance.

Results. It was found that the sig (2-tailed) value was 0.000 <0.05, so it can be concluded that there was a significant difference in the results of static balance training on pretest and post-test data. The results of the data above can be concluded that there was a significant effect of the Static Balance exercise programme on the number of Kata. With average pre and post-test scores for kihondachi (52.89-75.56), and kata (48.64-69.28). Thus, this training program was an attempt to improve the basic technique of kihondachi kata numbers that are suitable for such improvement.

Conclusion. Based on the results of the data calculation, it can be concluded that this training program is an attempt to improve the basic kihondachi technique in kata and is suitable for improving the training.

Keywords: Static Balance, Kihon Dachi, Kata, Karate Martial Arts
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Introduction

Sport is an inseparable part of human life because it is an activity that is beneficial for physical and spiritual health. Many sports activities are of interest to various groups ranging from children to adults to improve body fitness. Sport is defined as all systematic activities to foster, encourage, and develop physical, spiritual, and social potential (Samsudin et al., 2023). Sport is a very effective means of character building and is ready to live in the era of globalization. In further development, sport is not only a means to maintain health but also as a competition that can bring the good name of a group or country. Therefore, the development of sports achievements has received great attention from various groups (Salahuddin, Haluti, & Nurhikmah, 2021). Sport is a physical activity that can improve the quality of individual health make the body healthier and fitter and can prevent various diseases (Rubiyatno et al, 2023).

Of the many sports in the world, there are various types of sports that are competed, taking the example of martial arts which is very much in demand by the community because martial arts is a branch that involves all limbs with basic techniques of kicks, punches, locks, and throws which have a very large risk of injury (Aziz et al., 2023). One sport that is in great demand by young people is the martial sport of karate, a martial art from Japan developed in China, It is a form of exercise that involves learning the science to defend or protect oneself using bare hands and without tools or weapons. "Karate is a self-defense technique with bare hands or without weapons" (Yudhistira et al., 2023), Karate means empty-handed martial arts used to develop character through training so that a karateka not only learns physical strength, but also learns mental, spiritual, and personality strength (Koropanovski et al., 2011). From sports to the martial arts branch of karate, which is in great demand among teenagers because a child will be considered more able to control and protect himself if he can participate in extracurricular karate, and also someone will be seen for his martial arts skills, especially when an athlete can make achievements in that field. In this sport, there are many activities in karate that an athlete can participate in, and are also held at national and international levels (S. S. Iermakov, 2016). Long before competing and making achievements, an athlete is required to be able to master the techniques in karate, with the main techniques in karate divided into three, which are: kihon (basic techniques), kata (moves), and kumite (fighting). However, the most basic technique that must be mastered by karate athletes is the basic kihon technique or basic movement. Karate training with good mastery of basic techniques (kihon) is one of the important factors that must be mastered by every karate athlete in order to master the kumite technique. Kihon is a basic karate martial arts technique where a series of kihon becomes a kata or pattern or forms a combination of several kihon movements so that it displays movements with a beautiful rhythm (Hamdan, 2020). The kihon dachi consists of several main movements where an athlete must be able to master the basic movements consisting of zenkutsu dachi (front stance), kokutsu dachi (back stance), kiba dachi (middle/lower stance). These basic movements are intended to produce karate techniques that are fast, precise, strong, and timely. The stance must be firm and strong and stable, not stiff or flexible so that it is ready to react in all situations, both for defense and attack. Therefore, the role of the stance is important, so athletes must be trained seriously and correctly. The use of stance must be able to show the balance of the body because it supports the effectiveness of movement and regulates the use of energy during movement. Therefore, to support good movement and improve athlete performance when playing kata, improving the basic movements of kihon dachi to support athlete skills and can regulate energy use by doing static balance movement training (Reisberg, Riso, & Jürimäe, 2021).

There are two types of balance, namely Static Balance, in static balance, the space for movement is usually very small, for example standing on a narrow base or balance beam. Dynamic Balance is the ability of people to move from one point to another while maintaining balance, for example, dancing, stance training, or parallel bars (Prabowo, Hariono, Irianto, Sukamti, & Hartanto, 2022). Static balance is the ability to maintain a fixed position and attitude in place, usually with very little space for movement, for example standing on a narrow base, standing on a block, or standing on a balance board with one foot and eyes closed, and maintaining balance. (Perkins, 2020) In kihondachi training it is

very important for us to be able to balance the movement in order to maximize the movement by maintaining or training balance with static balance training, therefore in the process, we not only train the basic kihondachi movements but also have to create static balance training movements.

The above statement is based on the scientific need to examine whether static balance training can improve the basic techniques of Kihon Dachi in kata numbers, and is interpreted as an athlete's need to gain knowledge and skills from the coach, and also the coach's obligation to provide knowledge, experience, and expertise to athletes to achieve maximum results. Extracurriculars at SMAN 3 GARUT is one of the extracurricular activities that are still actively organized and carrying out training activities, but many athletes are concerned with mastering higher techniques in learning kata, without realising that the techniques that must be mastered are basic techniques that cannot maintain balance in movement. When playing with kata, you can also regulate the use of energy when performing movements. This is because coaches are too fixated or do monotonous training or only train and provide techniques without any physical exercise used for one movement. As a result, many athletes are easily bored because they only do the usual techniques and exercises are not serious and have no responsibility when doing training. In the extracurricular activities at SMAN 3 GARUT, there were still many athletes who were not good at performing Kata movements optimally, where athletes must be able to maintain the balance of movement and regulate the use of energy. This was due to the coach only focusing on providing techniques and not prioritizing the athlete's performance while playing.

This study aimed to determine whether there was an effect of static balance training on improving basic kihondachi techniques in kata numbers.

Materials and Methods

Study participants.

The population is a generalization area consisting of objects/subjects that have certain quantities and characteristics set by researchers to study and then draw conclusions (Sugiyono, 2018). The population in this study were karate athletes who participated in karate extracurricular activities at SMA Negeri 3 Garut. Using nonprobability sampling techniques (nonrandom sampling) because this technique does not provide equal opportunities or opportunities for each element or member of the population to be selected as a sample (Sugiyono, 2018). With the nonprobability sampling technique, the sample in this study was 15 karate athletes who participated in karate extracurricular activities at SMA Negeri 3 Garut.

Instruments.

Research instruments are a series of structured and measured studies to carry out research so that it runs smoothly and well. The instrument used in this study was a pre-test and post-test and then given static balance treatment "A research instrument is a tool used to measure observed natural and social phenomena" (Sugiyono, 2018). So instruments are needed to collect data from samples. To obtain data that would later be processed and analyzed, the instrument needed for this research was the basic technique, namely static balance in the Kihondachi technique.

Study organization.

The study used an experimental research method (Endang Sepdainus, 2019). The experimental research method is a research method used to look for the effect of certain treatments (Kurniawan, Mikkey, & Suganda, 2021).The design used was pre-experimental Design with the form of design used was a one-group pretest-posttest design. In this way, the results of the treatment can be known more accurately because they can be compared with the situation before treatment (Sugiyono, 2018)

This research was conducted with participants doing a pretest, and then given static balance training treatment, after being given treatment to determine the effect of the treatment, a posttest was carried out, and the data collected was then analyzed.

Statistical analysis.

The instruments used in this study were (1) Basic Technique Instrument with Kihon Dachi Test, with the following norm table:

Table 1. *Kihondachi norms*

Category	Predicate	Category
81 - 100	A	Very good
61 – 80	B	Good
41 – 60	C	Enough
21 – 40	D	Not enough
0 – 20	E	Very less

Source: (Zebua and Siahaan 2021) .

Data was obtained and collected by: (1) Pre-test, (2) Treatment, (3) Post-test, and (4) Documentation. After the data was obtained and collected, the data was analyzed using analytical techniques: a) Normality Test, b) Homogeneity Test, and c) Hypothesis Test using t-test.

Results

This research was conducted in the field of SMAN 3 GARUT, Cibatu District, Garut Regency. The research data were collected from 20 January to 9 February. Data Analysis. The normality test was conducted before the hypothesis test was conducted. Where the normality test itself aims to determine or test the assumption that the data obtained is normally distributed. The normality test was carried out using Shapiro Wilk, because of the small sample size of 15 people.

In this study, the analysis was used to determine how much effort was made to improve the basic techniques of Kihondachi through static balance training in kata numbers. The results of the data description are as follows:

Table 2. Statistical Description Test Results

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Pretes	fifteen	33	67	52.89	9,247
Poles	fifteen	67	93	75.56	8,607
Valid N (listwise)	fifteen				

From the results of descriptive statistical tests, there was a significant effect of the static balance training program on improving basic kodachi techniques. The pretest and post-test results had an average pretest score of 52.89 and a post-test score of 75.56. Then the data was tested for normality with the following results:

Table 3. Normality Test Results

Tests of Normality

		Shapiro-Wilk		
	Experimental Class	Statistics	df	Sig.
Experiment Results	Pretest	,944	15	,440
	Posttest	,881	15	,049

Based on the results of the normality test above, the normality result was 0.049. This shows that the significance value was> 0.05. So it can be concluded that the data was normally distributed because it was more than the normality limit of 0.05. From the normality test results above, then the data was tested using the homogeneity test with the aim of whether the data

could be said to be homogeneous. The homogeneity test results are shown in the table below.

Table 4. Homogeneity Test Results

Test of Homogeneity of Variance

		Levene Statistics	df1	df2	Sig.
Experimental Results	Based on Mean	.024	1	28	,879
	Based on Median	,000	1	28	1,000
	Based on the Median and with adjusted df	,000	1	27,770	1,000
	Based on trimmed mean	.024	1	28	,879

Based on the homogeneity test results above, it is known that the significance value obtained was 0.425, therefore the data studied was homogeneous because it was > 0.05 (5%). After the data was tested for normality and homogeneity, the researcher then tested the hypothesis using the t-test. The t-test results of this study are as follows:

Table 5. Hasil *Paired Sampel t-test*

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	Pre Eksperimen - Post Eksperimen	-22.667	7.888	2.037	-27.035	-18.298	-11.129	14	.000

It is known that the sig (2-tailed) value was 0.000 <0.05, so it can be concluded that there was a significant difference from the results of static balance training on pretest and posttest data.

DISCUSSION

This study was conducted with the aim of improving the ability to play players when competing by using the training program that has been made. The training program provided was a juggling training program with 14 meetings using a varied or different training program at each meeting. The training process was carried out 7 times a week. At each training meeting, players were required to always follow each training material provided with the aim of maximizing the results of the training material made and getting the maximum expected results.

Karate is one of the sports that is favored by many young people in Indonesia. Karate is a martial arts sport that is very beneficial for a person because it involves active movements, including hand and foot movements that can improve body fitness (Kutseryb, Vovkanych, Hrynkiv, Majevska, & Muzyka, 2017). Karate is also a Japanese martial art developed in China, which is a form of exercise that studies the science of defending or protecting oneself using bare hands and without tools or weapons. "Karate is a self-defense technique with bare hands or without weapons" (Milazzo, 2016), Karate means empty-handed martial arts used to develop character through training so that a karateka not only learns physical strength, but also learns mental, spiritual, and personality strength (S. Iermakov, 2016).

This sport is a competitive sport, one of which is the art of movement class. This class is

one of the most popular extracurricular activities at SMAN 3 Garut. However, when making observations, there were still many movements that were less precise or wrong. Such as the basic kihondachi technique that was contested in this movement arts category. Kihon is the basic/beginning/root which means the standardized forms that become the basic reference of all techniques/movements that can be done in kata or kumite" (Hopkins, 2007). Some of the basic techniques that must be mastered in karate are punches, kicks, parries, and parries. Kihon is one form of basic technical training that must be done by students both beginners and advanced, because kihon contains technical exercises that can support a kata athlete or kumite athlete. Many things play an important role in doing kihon, such as strength, speed, agility, accuracy, breathing rhythm, and hip movement. Correct form, proper balance, and relaxation. Proper concentration and relaxation. Contributive and efficient breathing. The role of the hips is as optimal as possible. The prerequisites for correct form are good balance, a high degree of stability, and the naturalness of each movement, as changes in movement must be made quickly and in a short time. The power of kime in the basic techniques of karate arises from the full concentration of force at the moment of impact and is highly dependent on the speed of the punch or stance. Maximum power is achieved by concentrating the energy of all parts of the body on a specific target, so it is not just strength and limbs that are used. It is equally important to reduce unnecessary energy, so you can increase your energy when needed. Just understanding the theory and principles without being equipped with strong, well-trained, and flexible muscles will be of no use. The (correct timing) of various techniques cannot always be expressed musically, but this does not detract from their importance. The explosive power at the end of the stroke comes from the lower abdomen, especially the rotation of the hips, increasing the strength of the upper body.

Based on the results of the study which started from January 20 to February 9, data analysis using descriptive statistical tests with pretest and posttest results having an average pretest value of 52.89 and posttest 75.56. Then based on the results of the normality test it is known that the normality test results were 0.049. This shows that the significance value is> 0.05. So it can be concluded that the data was normally distributed because it was more than the normality limit of 0.05, and the homogeneity test results were 0.425, the homogeneity value> 0.05, so the data was said to be homogeneous. After the data had obtained the results of normality and homogeneity, then the data was tested using the t-test with a significance value of 0.00 and <0.05, it can be concluded that there was a significant difference from the results of static balance training on the pretest and posttest data. The results of this study are supported by research that static balance can affect basic techniques in martial arts (Amani and Priambodo 2019).

CONCLUSION

Based on the results of the analysis conducted, the researcher must include questions from the problem formulation mentioned in Chapter 1, answers to the problem formulation, and also the conclusion of the research on "Efforts to Improve Basic Kihondachi Techniques Through Static Balance Training in Number Kata Games". Based on the results of the t-test, it shows that there was an effective and significant influence between the static balance training program on the players' basic kihondachi technique. This shows that the static balance training program was effective in improving kihondachi technique.

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Conflict of interest

No conflicts of interest to declare.

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Information about the authors:

Astri Cindy Lestari: lestaricindy432@gmail.com, Department of Physical Education Program, Faculty Islamic and Teacher Training, Garut University, Indonesia

Dr. Asep Angga Permadi., M.Pd: angga15@uniga.ac.id, https://orcid.org/0000-0001-5714-4310, Department of Physical Education Program, Faculty Islamic and Teacher Training, Garut University, Indonesia

Azhar Ramadhana Sonjaya., M.Pd: a.sonjaya.pjkr@uniga.ac.id, https://orcid.org/0000-0003-1375-8868, Department of Physical Education Program, Faculty Islamic and Teacher Training, Garut University, Indonesia

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