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The effectiveness of the burjiu model to support hajj and umrah worship in the new normal era

Luqmanul Hakim[1df], Muhammad Muhyi[2ae], Moh. Hanafi[3cd], Brahmana Rangga Prasetya[4bc], Gatot Margisal Utomo[5bd]

[1,2,3,4,5]Physical Education Study Program, Faculty of Pedagogy and Psychology, Universitas PGRI Adi Buana Surabaya, Indonesia

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Abstract

Fitness is very important for prospective Pilgrims and Pilgrims because fitness can do all activities on Hajj and Umrah, which is famously very heavy. Currently, there is no form of exercise that can improve the fitness of prospective Pilgrims and Umrah pilgrims. The purpose of the study was to determine the effectiveness of the Burjiu program (Bugar Jamaah Hajj and Umrah or Bugarkan Jasmanimu) to support improving physical fitness through movement activities designed to help pilgrims who will perform Hajj and Umrah from a physical perspective. The research method is quasi-experimental research using a pre-test, post-test randomized group design, namely a pre-test of physical fitness level, then carrying out the Burjiu program, which is practiced twice a week and followed by a post-test of fitness level using MFT. The sample of this study was as many as 22 men with an age range varying between 28 to 57 years. Data collection techniques use practice tests, and data analysis techniques use t-test. The results showed that through implementing the Burjiu program, there was no effect on increasing physical fitness in participants, with test results of 0.055 <0.05. The research concludes that the Bujiu program developed and tested in preparing physical conditions has not provided significant changes, so further studies are needed in this study.

Keywords: pilgrims, hajj, umrah, physical fitness

INTRODUCTION

At this time, we are faced with the COVID-19 pandemic situation, which is in Indonesia and all countries worldwide. Maintaining health and fitness is a must during this pandemic. As a result of the pandemic, health issues have become an essential part, especially keeping the body healthy and fit, doing activities with a limited time by complying with strict health protocols, including wearing masks, washing hands, maintaining distance, and exercising. In sports, health is needed to maintain health

Correspondence author: Muhammad Muhyi, Universitas PGRI Adi Buana Surabaya, Indonesia.
Email: muhyi@unipasby.ac.id

and fitness every day. Being healthy is the basis for achieving the welfare of human life (Von Heimburg & Ness, 2021).

The COVID-19 pandemic has impacted every aspect of life, from education, religious activities, economy, society and culture, and health. This study focuses more on two fundamental elements in the spotlight, namely health and religious activities. The pilgrimage and Umrah are religious activities that require health support and excellent physical condition. Hajj and Umrah are heavy worship, require substantial physical, significant costs, and need patience and fortitude in all temptations and obstacles (Meutia et al., 2022). Specifically, this study focuses on providing support and strengthening the physical condition of people who will perform the Hajj and Umrah pilgrimages in the hope of providing support in the Hajj and Umrah pilgrimages. It has become a general discussion that Hajj and Umrah are forms of worship that require total and thorough readiness, both at high costs, mentally strong, and in good physical condition support, including other readiness. Hajj is obligatory for every Muslim who is capable, capable of being interpreted physically and materially and can be ready to be a guest of Allah SWT (Himawanti et al., 2021), including forming healthy lifestyle habits so that it is easy to perform Hajj and Umrah (Ministry Of Health, 2017). For this reason, the study of this article focuses on the design of physical activity designs which are expected to help the physical readiness of the pilgrims who are going for the Hajj and Umrah pilgrimages, starting to prepare for the departure of pilgrims for Hajj and Umrah, considering the long journey from Indonesia to Saudi Arabia.

Readiness for differences in weather and climate (temperature), the length of time for the implementation of the pilgrimage (Alyami et al., 2020), so that physical endurance is one of the essential assets. Another problem that needs attention is that generally, in Indonesia, the number of prospective pilgrims is large, the age of prospective pilgrims for Hajj and Umrah is the elderly (Rahmadhanitya & Jatmika, 2021), in general, and the duration of time is quite long. For this reason, research is carried out

that focuses on the design of physical activities that are specifically designed to increase physical fitness to support prospective Hajj and Umrah pilgrims to carry out worship in a healthy and fit physical condition. According to (Lutfi et al., 2020) fitness is very important for every individual who has high activity. Pilgrims and Umrah pilgrims must have good fitness. This is based on (Puri-Mirza, 2019) activities on Hajj and Umrah require good physical ability because the activity at the worship is very draining energy that the pilgrims must have fitness. Seeing the importance of fitness in Hajj and Umrah Pilgrims (Pelechano et al., 2015) stated that currently, many Pilgrims are not able to perform worship activities properly, many experience pain or fatigue. (Lutfi et al., 2020) the preparation period before the departure of Hajj and Umrah is less useful for pilgrims to improve their fitness. Currently, both the bureau and Jemaah itself are very lacking literacy and knowledge about the fitness of the body owned, so fitness is not prepared while waiting for departure. In this study, researchers tried to take a gap by utilizing the Burjiu program as an exercise that can improve fitness. This Burjiu model can answer various problems that are currently the complaints of Pilgrims and Umrah Pilgrims.

METHOD

This research used a quasi-experimental type of research, where the research design is pre-test, post-test randomized group design. The Subjek of this research is the congregation of Yasin Tahlil Mosholla Al Hidayah in Palem Watu in Gresik with a subject of 22 people. The instrument uses the Multi Fitness Test (MFT). The data analysis technique uses the t-test with a significance level of 0.5, which goes through two prerequisites: normality and homogeneity tests. The instrument used in this study was a test and measurement of VO2Max using the Multistage Fitness Test (MFT) (Albertus, Fenanlampir., 2015). The Multi-stage fitness test aims to monitor the progress of an athlete's maximal oxygen uptake (VO2max) (Widiaastuti, 2015). The data analysis technique uses the t-test with a significance level of 0.5, which goes through two prerequisites: normality and homogeneity tests.

Figure 1. 20 Meter Test Multy Stage Fitness

RESULT

Physical test carried out by the Yasin Tahlil Mosholla Al Hidayah Jamaat, Swan Housing Menganti Park, Menganti Gresik District, 22 people with an average age of 47 years, the duration of exercise in a day is 30 minutes, and the frequency of exercise activities in a month four times can have a value.

Table 1. Results of the Implementation of the Burjiu Model on 22 People Yasin and Tahlil Congregation

NO	NAME	AGE	MFT		VO2MAX	
			Pre-test	Post-Test	Pre-test	Post-Test
1	DW	45	5/6	6/2	31.9	33.6
2	DS	32	4/2	5/5	27.4	31.6
3	MF	31	6/3	7/7	33.9	38.6
4	RP	29	4/3	5/5	27.8	31.6
5	HS	36	□	4/9	24.6	29.8
6	YW	31	3/2	4/2	24.6	28.8
7	AAT	44	5/2	5/2	30.5	30.5
8	ESR	33	5/4	5/7	31.2	32.2
9	DH	43	5/7	6/6	32.7	34.9
10	MA	38	6/5	6/9	34.6	36
11	LA	28	5/1	5/9	30.2	32.9
12	MH	34	4/2	4/7	27.4	291
13	DP	45	7/3	7/7	37.3	39.9
14	MH	48	3/3	4/5	24.9	28.4
15	RH	57	2/1	2/5	21.1	22.8
16	FR	63	2/4	3/7	22.4	26.3
17	RiZ	43	2/5	4/3	22.8	27.8
18	HA	33	□	4/4	25.6	28.1
19	AS	48	□	4/7	25.6	29.1
20	HR	46	3/3	5/6	24.9	31.9
21	HB	46	3/6	4/3	26	27.8
22	HN	52	3/5	4/6	25.6	28.8
	AVERAGE	**47.0667**			29.6	43.2

Table 3 explains the pre-test and post-test, including the number of research subjects involving 22 people indicating whether there is a difference in treatment using the MFT instrument by also looking at VO2Max with the Burjiu model design that has been prepared, showing the results that can be described in tables 4, 5 and 6, description of the analysis, then normality test and homogeneity test of data and ended with t-test.

Table 2. Description of Statistics

Descriptive Statistics

	N	Minimum	Maximum	mean	Std. Deviation
Pre_test_VO2max	22	24.60	256.00	96.5909	100.81933
Post_test_VO2max	22	22.80	291.00	42.8364	55.56990
Valid N (listwise)	22				

From the data results above, there is an average pre-test as extensive as 96.5909 while post-test 42.8364 after being given treatment.

Table 3. Normality test

Tests of Normality

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistics	df	Sig.	Statistics	df	Sig.
Pre_test_VO2max	.404	22	.000	.647	22	.000
Post_test_VO2max	.476	22	.000	.281	22	.000

Based on the data in the table above, it can be concluded that the normality test results on the research data obtained that all significant values were greater than the p-value of 0.05. The data is typically distributed pre-test and post-test of each variable**.**

Table 4. Data Homogeneity Test

Test of Homogeneity of Variances

	Levene Statistics	df1	df2	Sig.
Pre_test_VO2max	1,705	1	20	.206
Post_test_VO2max	4.055	1	20	.058

Based on the data in the table above, it can be concluded that the results of the homogeneity test are obtained all significant values are

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greater than p-value 0.05, then the data is homogeneously distributed. This shows the conditions for the t-test can be continued.

Table 5. t-test results

Paired Samples Test

		Paired Differences					T	df	Sig. (2-tailed)
		mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pairs 1	Pre_test_VO2max - Post_test_VO2max	53.75455	123.98401	26.43348	-1.21689	108.72598	2.034	21	.055

The table above shows that the data from the pre and post-test experimental groups have a significance of 0.055, which means there is no difference or no significant effect between the data for each variable.

DISCUSSION

The results showed that through implementing the Burjiu program, there was no effect on increasing physical fitness in participants, with test results of 0.055 <0.05. The research concludes that the Bujiu program developed and tested in preparing physical conditions has not provided significant changes, so further studies are needed in this study. Schumann & Rønnestad (2019) explain the limits for the elderly: middle age 45-59 years, elderly age 60-70 years and old age 75-90 years, and ancient age 90 years and over. The test participants were divided into various ages based on these limitations, namely middle age and the elderly. Age differences will undoubtedly affect the level of physical fitness caused by the age factor itself or lifestyle and other factors. It is important to have fitness in each individual to do all his activities that come out. When doing work in need of great energy, they do these activities (Sugito et al., 2020). Achieving good physical fitness cannot be separated from doing good and adequate exercise according to physical activity rules. It was explained that the amount of exercise was closely related to intensity, repetition, frequency, and duration (Phillips & Kennedy, 2012). The amount of

exercise or physical activity made is an essential key to carrying out the Burjiu program.

Various factors affect a person's physical fitness, including food, exercise, age, living habits, and the environment. The more often people exercise, their physical fitness will increase. Besides, exercise can increase muscle strength, muscle mass, muscle perfusion, & the speed of nerve conduction to muscles. VO2max is a person's maximum ability to consume oxygen when his body is in intense activity, for example, during exercise. VO2max is determined by genetic factors that play a role in heart-lung capacity, hemoglobin, and erythrocytes. In addition, VO2max can also be influenced by body composition and physical activity (Yu et al., 2011). The value of Vo2 max depends on cardiovascular, respiratory, hematology, and exercise ability. The results showed no effect of exercise results on VO2 max, so the exercise program must be designed better. Based on this study, the results obtained an at-count significance of 2.034, while the mean decreased from 96.5909 to 42.8364. Decreased cardiovascular capacity will cause a decrease in VO2max. It will affect the development of other body systems. Likewise, in the Burjiu program, the design can be increased or decreased at repetitions or frequencies adjusted for age to affect or impact the Burjiu program.

Considering the presence of elderly participants when participating in the Burjiu program, the discussion was also directed at the elderly. In the elderly, there is a decrease in physical activity. This occurs because of a physiological reduction in the workability of cells, tissues, organs, and systems in the body, causing a reduction in physical activity. Sport is closely related to physical fitness. Many benefits are obtained by the elderly in participating in physical activities, including improving cardiovascular function, reducing hypertension, and increasing work capacity (Oktriani et al., 2020). People in good fitness have a higher VO2max value and can perform more muscular activities than those in good condition (Lokhande et al., 2015) found that the low maximum oxygen volume (VO2max) causes an increased risk of developing

depressive symptoms. The aging process shows physiological, cognitive, and psychological changes in the human body. Decreased fitness components, such as muscle strength, balance, and the cardiorespiratory system, affect the development of disability (Mason et al., 2016). Lifestyle needs to be regulated to live life so that humans stay in shape.

For this reason, the Burjiu program that was developed is involved, and it is necessary to pay attention to the lifestyle while participating in the Burjiu program Tolmunen et al. (2006), who found that low maximum oxygen volume (VO2max) causes an increased risk of depressive symptoms. The aging process shows physiological, cognitive, and psychological changes in the human body. For this reason, the Burjiu program that was developed is involved, and it is necessary to pay attention to the lifestyle while participating in the Burjiu program.

Physical exercise is the process of developing the ability of physical movement activities that are systematically and progressively improved to maintain or increase the degree of physical fitness to achieve optimal physical work abilities. For this reason, people who have started to enter the elderly need proper and appropriate exercise support so that physical fitness is maintained. This is very appropriate because physical activity is closely related to the physical well-being of the elderly (Netz et al., 2005). Hajj and Umrah activities are carried out with many people of various ages, including the elderly. Furthermore, the pilgrimage is mandatory for those who are able (one of which is physically and psychologically capable), where the physical and psychological abilities of the elderly tend to decrease (Kholilurrahman, 2017).

Trained people have lower resting heart rates than untrained people. A lower heart rate results in a higher VO2max value in trained people. Heart rate can decrease after doing physical exercise for a particular time. This is the body's compensation for physical activity. The research results of Chatterjee et al., (2012) research using paired t-test. VO2 max value before treatment 31.30 after treatment 50.30. VO2 Max value has increased. The mechanism underlying the increase in VO2max due to

healthy aerobic exercise intensity is multifactorial and allows for improvements in the adaptation mechanisms at the central and peripheral levels to exercise.

Muscle oxidative stress (Villareal et al., 2017), and decreased cardiorespiratory fitness in the elderly are due to several factors, such as biological aging processes, lifestyle changes, development of chronic diseases, drug use, or a combination of these reasons. The specific differences due to the aging process are an increase in maximum heart rate (maximal heart rate), maximum stroke volume (maximal stroke volume), and maximum cardiac output (maximal cardiac output), as well as a decrease in body mass, an increase in fat mass, and possible changes in capacity. Through the Bujiu program, the decline in fitness for Hajj and Umrah pilgrims can be minimized. It needs to be guarded appropriately and managed so that there is a good increase in physical readiness.

The weakness of this study is the use of research subjects of various ages, not in a specific age range, and the number of samples is not large enough. Thus, it still needs to be developed again whose participants are based on the age range determined by WHO to provide the correct physical exercise pattern. To support physical fitness achievement to prepare for the Hajj and Umrah pilgrimage.

CONCLUSION

From the research results, after going through the results and discussion, it can be concluded that the Burjiu program that has been developed has not provided significant changes to the achievement of reasonable and adequate physical fitness. Hence, a more in-depth study of the causes of the failure through the Buriju program, including the addition of other factors studied to support the achievement of fitness, is needed.

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