JOURNAL OF NUTRITION FASTING AND HEALTH

Effect of Fasting on Spiritual Health, Mental Health, and Control of Aggression

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ARTICLEINFO

Article type:
Research Paper

Article History:
Received: 18 May 2020
Accepted: 02 Aug 2020
Published: 01 Sep 2020

Keywords:
Fasting
Spiritual Health
Mental Health
Aggression
Students

ABSTRACT

Introduction: Fasting is one of the religious duties of Muslims; it has many benefits. However, this study aimed to investigate the effect of fasting on students' spiritual and mental health and control of aggression.

Methods: Using a convenience sampling method, 300 students (150 girls and 150 boys) were selected as a sample from Azad University, Khoy branch in 2019. One week before the holy month of Ramadan (pre-test), the subjects completed the GHQ Mental Health Questionnaire, Palutzian-Elison Spiritual Health Questionnaire, and AAI Aggression Control Questionnaire; one week after the end of Ramadan (post-test), they completed the same questionnaires again. One-way analysis of covariance was used to analyze the data.

Results: The results showed that there was a significant difference in students' spiritual health, mental health, and control of aggression post-test scores. The effect of fasting on students' spiritual health, mental health, and aggression control post-test scores were 0.86, 0.89, and 0.88, respectively.

Conclusion: The religious duties, especially fasting, impact on spiritual health, mental health, and aggression control of people in society. Therefore, the youth should be encouraged to perform these religious duties.

► *Please cite this paper as*:
Nasiri M, Lotfi A. Effect of Fasting on Spiritual Health, Mental Health, and Control of Aggression. J Nutrition Fasting Health. 2020; 8(3): 169-175. DOI: 10.22038/jnfh.2020.48854.1266

Introduction

The religious rituals have been studied by many scholars. Durkheim argues that the deeds and rituals exist in all religions; they are the common core of every religion. All human races embody their fundamental religious beliefs in rituals and duties (1, 2).

Spilka et al. (2003) believed that the religious rites and rituals play an important role in religions, root deeply in human history, and have many effects such as self-control and controlling the personal world, especially at stress times (3). The fasting is one of the religious duties of Muslims; it has many benefits (4). However, Islam proposes it as a spiritual tool that tries to promote the mental health and physical health of people. Many studies have investigated the effect of fasting on physical health (5).

The month of Ramadan is spent by Muslims fasting, abstaining from immoral acts, and soul purification. As the most important religious month in Islam, the month of Ramadan has special features, customs, traditions, and duties. A large collection of religious rituals which are considered to be the longest in terms of time and the most extensive rituals in Islam are performed during the month of Ramadan. This month is associated with many extensive changes in individual and social life plans such as changes in eating and dieting habits, time of rest and sleep, leisure time, work hours, commuting, business, social relationships with friends and relatives, etc. During the month of Ramadan, the social climate of all Islamic societies, including Iran, becomes more religious and spiritual (6).

During this holy month, the people perform religious practices and duties, pay more attention to religious affairs, and understand the religious and moral principles. Using standard research tools, however, this study aims to investigate the effect of fasting in the month of Ramadan on spiritual health, mental health, and control of aggression. In the following, the definition of these variables will be provided.

Besides the physical, mental, and social health, spiritual health promotes general health (7) and coordinates other dimensions of health; it improves adaptability (8) and mental function (9). Spiritual health consists of two dimensions: religious health and existential health. Religious health reflects the relationship with God or an infinite power and existential health reflects the

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relationship with other people, the environment, and the inner world (10).

In a qualitative study, Hungelman et al. studied the features of spiritual health. They considered spiritual health as a sense of connection and harmony between self, nature, and transcendent existence which is achieved through a dynamic and coherent growth process and leads to the recognition of ultimate goal and meaning of life (11).

Due to the development of health sciences and the dynamic and complex nature of modern societies, spiritual needs have become more important than material desires and needs. The religious person gains extraordinary spiritual power by faith in God and uses it to confront problems and difficulties. This power prevents from worries, anxiety, and unpleasant attempts such as suicide (12).

There is a clear relationship between religiosity and mental health. The people with strong religious and spiritual attitudes and beliefs, optimal spiritual health, and those who are involved in religious activities report higher life satisfaction level (12).

Mental health is another variable that will be investigated in this study. The general health includes physical, mental, and social well-being; there is a dynamic and interactive relationship among these three dimensions. Mental health is also assessed in investigating the general health of individuals. It is about feeling good and improving self-efficiency, self-reliance, competitive capacity, and self-actualization of potential intellectual, emotional, and other abilities (13).

The high level of mental health helps in the successful conduction of mental functions and constructive activities, communication with other people in the community, adaptability to changes in learning, and boosting self-confidence. The mental health is of interest to everyone because the physical, psychological, and social health are necessary for human growth and prosperity (14).

Mental health means the prevention of mental diseases; in its broadest sense, it means the prevention of factors and conditions that hinder a healthy and normal life (15).

The aggression is the third variable which is investigated in this study. It is a complex concept that is influenced by situational and psychological factors on the one hand and genetic factors on the other hand. The social psychologists consider aggression as a conscious behavior that inflicts physical or mental pains (16).

However, anger is defined in different ways. The American Psychological Association (2009) defines anger as a useful emotion that can be destructive if it is out of control and affects interpersonal relationships. In another definition, anger is considered a pervasive and passionate emotion that is the most passionate and yet the most dangerous emotion that aims to destroy obstacles in the environment. About 10% of anger events lead to an outbreak of aggression (17).

The research has shown that anger is an important internal stressor that is associated with health problems such as heart attacks, arterial occlusion, stress, and obesity (18). The lack of control over aggression causes social, occupational, educational, physical, and mental health problems and predicts factors such as substance and alcohol use, smoking, depression, delinquency, and low compatibility in school (19).

Psychologists have used a variety of methods to treat mental disorders including psychoanalysis, cognitive therapy, behavioral therapy, and cognitive-behavioral therapy (20). However, benefiting from religion in psychotherapy is one of the areas that has come to the fore in the last two decades. The studies on using religion in psychotherapy are expanding around the world. Religion may be effective in promoting social support, adaptability, and health condition (21). Sinha and Gulles (2007) stated that in general, religious behaviors help in reducing adolescents' dangerous behaviors. Of course, the religious adolescents engage in risky behaviors, too; but, they are less likely to engage in such behaviors (22).

Habibi Kalibar et al. (2016) studied the risky behaviors of students considering spiritual health and religious orientation. They concluded that internal religious orientation and spiritual components may predict students' risky behaviors (23).

Khajavi and Mir Aali (2017) concluded that spiritual intelligence helps in reducing anxiety, anger, and aggression (24).

Ranjbar Soodjani, Sharifi, and Khazaei (2016) found that the training of spiritual skills along with drug therapies impact on reducing anxiety

thoughts and improving the mental health of adolescent girls (25). Mohammadi, Kajbaf, and Abedi (2014) concluded that integrated religious treatment significantly reduced participants' aggression levels (26).

The conducted research in Iran also confirms the relationship between fasting and improved mental health. Mohammadi and Larijani (2001) and Moshiri (2000) showed that anxiety and depression decreased at the end of the month of Ramadan (27, 28). Sadeghipour and Rezaei Ghaleh and Yaghoubi Nasrabadi, Asadollahi, and Mohammadi indicated that the rate of suicide attempts reduced after the month of Ramadan (29, 30).

Considering the effect of religion and religious rites on mental health on the one hand and the importance of the month of Ramadan among Muslims and Iranians on the other hand, therefore, this study aims to investigate the effect of fasting on a new population and answer this question: whether fasting during Ramadan may be effective in improving mental and spiritual health and controlling aggression in students?

Material and Methods

The population consisted of students at Islamic Azad University, Khoy Branch in 2019. Using Morgan's table, 300 students (150 boys and 150 girls) were selected as a sample. One week before the month of Ramadan (pre-test), the three questionnaires were completed by subjects. The final sample size was determined to be 294; one week after the month of Ramadan (post-test), they answered that three questionnaires again.

Research tools

A) Palutzian-Elison's Spiritual Health Questionnaire (1982)

Palutzian-Elison's Spiritual Health Questionnaire consists of 20 questions that are answered by a five-point Likert scale: strongly agree, agree, neither agree nor disagree, disagree and strongly disagree; each answer is given a score of 1 to 5. The total score of spiritual health is the sum of scores of cognition, action, and emotion dimensions which is between 20 and 120. In phrases with a positive verb, the (strongly agree) answers are given score 5, and the (strongly disagree) answers are given score 1. In phrases with a negative verb, the (strongly agree) answers are given score 1, and the (strongly disagree) answers are given score 5. Using Cronbach's alpha, the reliability coefficient of this questionnaire was determined to be 0.82. Higher scores indicate better spiritual health conditions (31).

B) Goldberg's General Health Questionnaire (GHQ) (1979)

The 28-item mental health questionnaire was used to assess the mental health of students. This questionnaire consists of 4 scales (physical symptoms, anxiety symptoms, social dysfunction, and depression symptoms), each including 7 questions. The questions are answered based on a four-point Likert scale; each answer is given a score of 0 to 3 (never= 0, sometimes= 1, often= 2, always= 3). Each dimension includes 7 questions, the maximum score of each dimension is 21, and the total score is between 21 to 84. A higher score indicates a bad health condition. Using Cronbach's alpha, the reliability coefficient of this questionnaire was determined to be 0.83 (32).

C) AAI (Ahvaz Aggression Questionnaire)

This is a paper-and-pencil self-report scale that was created by Zahedifar (2000). It includes 30 items which are answered by (never (score= 0), rarely (score= 1), sometimes (score= 2), and always (score= 3)) options. This scale assesses 3 factors: anger and nervousness, aggression and insult, and stubbornness, and resentment. A higher score on this scale indicates a high level of aggression. Using Cronbach's alpha, the reliability coefficient of this questionnaire was determined to be 0.87 (33).

D) Researcher-made questionnaire

This questionnaire consists of two parts. The first part covers demographic characteristics such as age, gender, and education level of subjects and the second part includes one question: how much religious duties you have performed during the month of Ramadan? This question is answered by (I fasted all or most of the days during the month of Ramadan) and (I did not fast at all during the month of Ramadan). This questionnaire was also answered in the post-test, after the completion of spiritual health, mental health, and control of aggression questionnaire.

In this study, the subjects completed the spiritual health, mental health, and control of aggression questionnaires one week before and one week after the month of Ramadan.

One-way analysis of covariance and multivariate analysis of covariance was used to analyze the collected data.

Results

The mean age of studied men and women was 22.88 and 21.71 years old, respectively. To investigate the effect of fasting in the month of Ramadan on spiritual health, mental health, and control of aggression, all subjects completed three questionnaires one week before (pre-test) and one week after (post-test) the month of Ramadan. The findings showed that there was a significant difference between subjects' spiritual health, mental health, and aggression control pre-test and post-test scores. The data were analyzed using a one-way analysis of covariance.

Table 1: Mean and standard deviation of three studied variables in pre-test and post-test of groups 1 and 2

Variable	stage	Group	Mean	SD
Aggression	Pre-test	1	60.23	7.18
		2	58.36	6.95
	Post-test	2	31.25	3.41
		2	57.21	6.23
Mental health	Pre-test	1	38.47	5.47
		2	28.98	5.22
	Post-test	1	20.43	3.63
		2	28.74	5.04
Spiritual health	Pre-test	1	93.36	13.53
		2	94.58	12.62
	Post-test	1	102.62	14.83
		2	95.71	12.21

Table 2: Mean and standard deviation of subscales in pre-test and post-test of groups 1 and 2

Variable		stage	Group	Mean	SD
Aggression	**Anger and nervousness**	Pre-test	1	33.57	3.25
			2	32.59	3.67
		Post-test	2	19.48	2.52
			2	31.67	3.44
	Invasion and insult	Pre-test	1	12.44	3.18
			2	13.43	3.46
		Post-test	1	5.33	2.12
			2	12.41	3.69
	Stubbornness and resentment	Pre-test	1	14.22	3.45
			2	12.34	3.32
		Post-test	1	6.44	2.37
			2	13.13	3.64
Mental Health	**Physical symptoms**	Pre-test	1	6.39	2.52
			2	7.18	2.13
		Post-test	1	5.72	2.21
			2	7.53	2.68
	anxiety Symptoms	Pre-test	1	7.25	2.56
			2	7.68	2.49
		Post-test	1	4.62	1.85
			2	7.15	2.37
	depression Symptoms	Pre-test	1	6.54	2.73
			2	6.87	2.42
		Post-test	1	4.11	2.42
			2	6.94	2.51
	Social disorder	Pre-test	1	8.29	2.61
			2	7.25	2.93
		Post-test	1	5.89	1.57
			2	7.12	2.67

Table 3: Results of post-test (ANCOVA) of groups

Source of change	SS	MS	F (1,291)	P	π2
Spiritual health	85.71	85.71	21.46	0.003	0.37
Group	496.36	496.36	243.68	0.003	0.86
Error	78.52	0.26			
Mental health	325.44	325.44	31.62	0.003	0.43
Group	783.54	783.54	286.71	0.003	0.89
Error	283.73	0.97			
Aggression control	839.84	839.84	38.45	0.003	0.39
Group	4752.42	4752.42	238.64	0.003	0.88
Error	462.83	1.59			

The results showed that the post-test score of first and second groups was significantly different. The difference between the pre-test score and the post-test score of spiritual health variable was 0.86; this means that 86% of the difference in pre-test score and the post-test score of spiritual health is explained by fasting. The difference between the pre-test score and the post-test score of mental health variable was 0.89; this means that 89% of the difference in pre-test score and the post-test score of mental health is explained by fasting. The difference between pre-test score and the post-test score of aggression control variable was 0.88; this means that 88% of the difference in pre-test score and the post-test score of aggression control is explained by fasting.

Discussion

The findings showed that the total score of spiritual health in the first group who fasted was higher than the second group who did not fast at all. This is consistent with the findings of Taliz-Nayak (2003); they examined the effect of religious commitment on elderly people and found that performing religious rituals significantly affected their purposefulness sense. This is also consistent with the findings of Argyle (2000) who argued that religious practices and rituals are effective in reducing anxiety and stress and promoting spiritual health (3).

Troy and Hartokulis (2003) argued that religious experiences are associated with particular therapeutic outcomes such as a reduced feeling of guilt, increased belonging sense, increased control of aggression and hostility, and prevention from a suicide attempt (3). In a longitudinal study, Yerz and Spenning (2003) found that there was a relationship between conducting religious rituals and high life satisfaction level. In this holy month, people establish a relationship with God through fasting and praying and gain religious experience; this experience may have pleasant effects (3).

Islam considers fasting as abstaining from eating and all evils such as slander, absenteeism, lying, and peeping; these in themselves may create peace and confidence in interpersonal relationships and reduce suspicion against others (34). The mental health score in the first group who fasted decreased compared to the second group who did not fast.

However, this holy month has its religious practices and rituals. According to findings, it was inferred that the mental health of subjects who conducted the rituals and deeds of month Ramadan (Sahar, Iftar, and related prayers, Layali al-Qadr, attending in mosques, and paying more attention to religious duties such as fasting) improved after the month of Ramadan. According to Argyle (2000), these religious practices are the behavioral dimension and fundamental form of religious activities and the religion promotes the satisfaction and physical and mental health of its followers (35). This is consistent with the findings of Sadeghi and Mazaheri (2005); they concluded that the fasting impacts on the mental health of people (6).

Spilka et al. (2003) believed that performing rituals may create a sense of security, bring about useful and new meanings, and help to distance from self. In other words, performing the rituals takes one away from his/her emotions, allows him/her to return to the world, and prevents one from being obsessively obsessed with him/herself (3). This is why Reeves and Boersma claimed that the rituals may create a strong positive feeling in a person who feels the affairs are out of control (3). Spilka et al (2003) showed that the control of aggression was lower in students who fast than in students who do not fast. Wolff stated that religious rites are effective in limiting aggression, establishing good relationships, and increasing group affiliation (3). McFadden (1995) also showed that there was a relationship between religion and phenomena such as life satisfaction, anxiety, and meaning in life (36).

Conclusion

It was acknowledged that religion and performing religious rituals are associated with improved spiritual health, improved mental health, and reduced aggression in society. Therefore, young people should be encouraged to participate in these ceremonies and enjoy the benefits of participating in these ceremonies such as the promotion of their spiritual health and mental health. Therefore, the strategies should be developed to better and more passionately propagate religious ceremonies among the youth; both the youth and the society will enjoy the benefits of attending these ceremonies.

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