The Effect of Islamic Fasting in Quran on Spiritual Intelligence And Happiness of Fasting Persons

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ABSTRACT

Background: God quotes and words in Quran verses and infallibles hadiths is under consensus of all believers as recognition, knowledge and understanding source, but changing them to applicable concepts for field investigations is the most important point of the present study.

Objectives: the aim of this study is to compare spiritual intelligence and happiness of fasting and non fasting persons.

Materials and Methods: it was a causative comparative study; gathered data was analyzed using one way variance and Scheffe post hoc test.

Results: spiritual intelligence was higher in fasting group compared to non fasting without any excuse or non fasting with an excuse, also spiritual intelligence was higher in non fasting with an excuse than non fasting without any excuse. Moreover happiness in the fasting group after the Holy Ramadan showed a meaningful difference compared to the first of the month, while happiness of the other two groups showed a meaningful decrease.

Conclusion: Islamic fasting with strengthening patience, forgiveness, transcendental consciousness and spiritual experiences is able to increase spiritual intelligence and happiness in fasting persons.

Implication for health policy/practice/research/medical education: Evaluating Islamic fasting in Quran on spiritual intelligence and happiness

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1. Background

Nowadays, investigations about spirituality presence and its role in health and sickness, happiness, better living and growth and self-actualization is a new growing topic, to the extent in which the American Society of Psychology has reported spiritual health as a prosperous field (1). What doubles the importance of research in this

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field is the emphasis of Islamic beliefs about the praying effects, especially practical worships and its role on promoting individuals virtue. Therefore the present study aims to evaluate this concept experimentally by using common humanities methodology. Patience, forgiveness and transcendental consciousness and spiritual experiences have been emphasized in all religious texts widely. Also practical definition of these factors and changing them to measurable tools and quantification of spiritual variables and their roles on different aspects of physical, emotional, moral, social and spiritual health have been paid attention. Therefore attention to spiritual factors in present investigations like Gorji study (2011) which was performed in Monsters University of Germany showed that Islamic fasting has a significant effect in such diseases like Alzheimer, Parkinson and migraine headache. Brain waves change and stimulation of some parts of brain due to fasting and cellular and intercellular neural cells stimulations revealed that Islamic fasting causes brain cortex increased sensitivity and retrofitting neural cells against brain attacks. Ebtekar study (2011) accepted these results, in which intermittent fasting activates different parts of the brain and slow the process of some diseases like Alzheimer or prevent them (2, 3). Although in a study which performed in the United States and Italy it was found that fasting promotes weight loss complications due to chemotherapy in patients with cancer, healthy cells become activated due to calorie limitation and protect themselves, and use all accessible energy during fasting to survive. Consequently cells which are waiting for breakfast enhance their resistance for survival, while cancerous cells experience low activity and protection (4). In other study which performed in 2011 in cardiac center of Intermountain medical center of the United States, it was found that regular intermittent fasting decreases the risk of cardiovascular diseases. Also the result of previous studies shows that Islamic fasting not only increases stress proteins which increase the individuals’ resistance to harmful factors but also modifies blood lipid profile and decreases the harmful factors associated with atherosclerosis, decreased insulin resistance and diabetes recovery (5, 6). In this part we mention some verses and Hadiths (7-12).

God states about the fasting incumbency and its effects; “believers, fasting is decreed for you as it was decreed for those before you; perchance you will be cautious” (13).

Imam Sadeq (AS) states about patience in interpretation of the verse «and seek help in patience and prayer» that patience here means fasting (14, 15).

Also under the interpretation of the verse “who give food, for the love of him to the needy, the orphan, and the captive” (16). Fasting and forgiveness have been emphasized (17).

The holy prophet (S) indicates that; blessing to those who have been hungry and thirsty for god, these are full in the resurrection (15).

The holy prophet states that; there is a door for heaven which is called Riiyyan, no one enters except fasting persons (18).

Holy god states in the verse 184 of Al-Baqarah; “whosoever volunteers good, it is good for him; but to fast is better for you, if you but knew” (19).

Imam Sadeq (A) states that; there are two happiness for the fasting person, first at the time of breakfast and the second the time of encounter with god (8).

Moreover than the presented studies, several many other investigations performed in Iran indicates the role of Islamic fasting on promotion of emotional-psychological state, weight loss, seizure attack control and other physical, psychological, social and spiritual aspects, especially spiritual intelligence and happiness (20-25).

Saqrovani (2009) indicated that spiritual intelligence is a set of abilities for employing religious and spiritual issues and sources. Several investigations have been performed on spiritual intelligence variable in the recent years; some of them are presented below;

Yaqubi et al (2008) in a study entitled evaluating the association between spiritual intelligence and psychological health of Hamedan Buali University students in 2007 found that there is a meaningful association between psychological and spiritual intelligence. The results of Lotfi et al (2008) study, entitled assessing the association between spiritual intelligence and psychological health of individuals older than 15 in Behshahr in 2008 revealed that there is a meaningful association between spiritual intelligence and psychological health (26). Based on performed studies, there is a positive association between spirituality and satisfaction and targeted life, wellbeing and livening better (Rajae, Beyzayi, Habibipur, 2008; Paragament and sanders 2007). Puzjmehrani investigation (2008) with the topic of assessing association between spiritual intelligence and personality disorders indicated that there is an association between spiritual intelligence and psychological health (26). Based on performed studies, there is a positive association between spiritual intelligence and happiness (20-25).

Mighiati investigation entitled evaluating the association between cultural intelligence and spiritual intelligence and personality disorders indicated that there is an association between spiritual intelligence and alcohol dependency (27). Abedifar and Soroki study (1388) indicated positive effect of spiritual intelligence on quality of life and personality characteristics in the population aged 19 to 50 in Sari city in 2009 found that there is a negative meaningful association between spiritual intelligence and personality disorders (28).

Begzadeh investigation entitled assessing the association between spiritual intelligence and neurosis (28). Mighiati investigation entitled evaluating the association between cultural intelligence and spiritual intelligence and personality disorders indicated that there is an association between spiritual intelligence and alcohol dependency (27). Abedifar and Soroki study (1388) indicated positive effect of spiritual intelligence on quality of life and personality characteristics in the population aged 19 to 50 in Sari city in 2009 found that there is a negative meaningful association between spiritual intelligence and personality disorders (28). Mighiati investigation entitled evaluating the association between cultural intelligence and spiritual intelligence and personality disorders indicated that there is an association between spiritual intelligence and alcohol dependency (27). Abedifar and Soroki study (1388) indicated positive effect of spiritual intelligence on quality of life and personality characteristics in the population aged 19 to 50 in Sari city in 2009 found that there is a negative meaningful association between spiritual intelligence and personality disorders (28).
Increased happiness is one of the results of fasting in this world and the other world. Here happiness does not mean gladness only, while gladness and satisfaction are only from reasons of happiness. Happiness means felicity. Fortuity and happiness are not considered as simple ways to reach pleasure, while as an afford to perfection which indicates the achievement of individual potential power (Rif and Singer 2000). Based on valid investigations, happiness is considered as a factor of emotional intelligence which is promoted with cognitive ability and emotional control and establishment of good relationship with others (Baron 2000). Gladness and happiness as positive emotion have been focused in the recent decade studies and investigations (Mayers 1996) (30), Abdolkhaleq (2006) concluded that there is a meaningful positive association between happiness and religion in a sample of 2200 Kuwaiti Muslim students (31), Abdolkhaleq and Nasur (2007) have chosen a sample of Muslim students and concluded that in women there is a positive and meaningful correlation between religion and happiness and a negative correlation between religion and anxiety (32). Maltebi et al (1999) and Francis et al (2000) with the aim of evaluating religious attitude and happiness in youths and by using Oxford happiness criteria reported that there is a meaningful association between happiness and religious attitude. Rohani and Manavipour (2008) concluded in a study entitled the relationship between performing religious believes with happiness and sexual satisfaction that there is a meaningful association between doing religious believes with happiness and sexual satisfaction. Alimohammadi and Jânbozorgi (2008) in a study entitled evaluating the association between happiness and religious orientation and psychological health found that internalized religion is a key factor for psychological health (33). Number of the studies in this field is high and increasing every day, and happiness associated factors encompasses a wide spectrum of variables like individual imagination from themselves, extraversion, neuroticism, flexibility and problem solving ability, in this field Fareham and Change study (2000) can be mentioned. Their results showed that gender and extraversion have relationships with happiness and self imagination, extraversion and neuroticism affect happiness criteria (From Amerizadeh and fatehizadeh 2005) (34). Fergus and Eyzen (1994) concluded from their study that people cooperate together in case of happiness. For example they negotiate in a manner that the highest consequence is resulted for parties. The result of flexible behaviors is better problem solving and situation perception (35).

Due to aforementioned ones and the importance of happiness role and spiritual intelligence on all people individual and social life, researcher in this study has decided to compare spiritual intelligence and happiness in fasting and non fasting persons. In other words we aimed to study the role of Islamic fasting in the holy Ramadan month on happiness variable and spiritual intelligence of fasting and non fasting persons in case of a field research.

2. Objectives
The aim of this study was to compare spiritual intelligence and happiness of fasting and non fasting persons in Ramadan month.

3. Materials and Methods
The present study method is causative comparative and spiritual intelligence and happiness were compared among the study groups. After choosing sample selection site, individuals who wanted to participate in the study which qualified the inclusion criteria were asked to fill in two questionnaires one week before and one week after Ramadan month. With an interview made in post test step from participants, we ensured about each one inclusion criteria. Sample group of the study were prayers of one of the Tehran city mosques and staff of one of the governmental organizations of Tehran city. Sample size was 240 persons (120 men and 120 women) which were categorized into three groups according to the accessibility method. A group which was fasting during Ramadan (80 persons), a group which were non fasting because of a religious excuse (80 persons), and the third group which were non fasting without any religious excuses (80 persons). Groups were matched regarding gender, education and job situation. All the three groups were analyzed two times, pretest (one week before Ramadan) and posttest (one week after Ramadan) after filling inclusion criteria. Inclusion criteria includes tendency to participate in the study, no physical disease or any illnesses, no familial or psychological problem during the study. Also the first group (fasting group) must have been fasting at least for 25 days of Ramadan month and the second group must have had a religious excuse for non fasting. In other words, this group had answered to the question whether they fast in Ramadan month with the item "not able to fast because of religious excuses". And the third group was non fasting due to personal and non religious reasons. In other words, this group had answered to the question whether they fast in Ramadan month with "I do not fast because of personal reasons". These items were assessed in pretest evaluations and were confirmed again in the post test assessments.

Two questionnaires about happiness and spiritual intelligence were used for gathering data and evaluation of participants in pretest and posttest evaluations. Spiritual intelligence questionnaire has been prepared by Naseri (2008). This test contains 97 statements and assesses four factors of transcendental consciousness, spiritual experiences, patience and forgiveness. The test overall stability coefficient has been reported 0.98 and stability coefficient for each of the aforementioned factors 0.96, 0.90,
0.86 and 0.28. This questionnaire has been designed in a cross correlation research project based on the dominant culture of the country, and is based on those intellectual, emotional and behavioral basis which seem to be of the main presentations of spiritual intelligence (36). Oxford happiness was designed by Argyle, Martin and Grosland in 1989 (37). Final questionnaire contains 29 items. Argyle et al performed an Alpha coefficient of 0.98 with 347 subjects, Farnham and Bronig (1990) an Alpha of 0.87 with 101 subjects and Nur (1993) with a shorter form of the Oxford happiness questionnaire found an Alpha of 0.87 with 101 subjects. This questionnaire was reviewed in 2001 (Argyle 2001). Reliability and validity of the scale has been reported in some desirable investigations. As an example validity of the questionnaire has been reported 0.89, 0.90, 0.89 and 0.89 from the investigations conducted in Britain, The United States, Australia and Canada respectively (38).

4. Results
As is shown in Table 1, posttest happiness average and spiritual intelligence in fasting group is higher than the other two groups.

At first Levene’s test was performed in assessing equality calculation of score error variances of spiritual intelligence and happiness among different groups. Because the F meaningful value of levene’s test was higher than 0.05, then variances inequality hypothesis was rejected and no difference was detected among them.

According to the Table 2, it is clear that calculated F for happiness (243.20 in the meaningful level of 0.001) is meaningful and about this variable (happiness) there is a meaningful differences among the three groups, also about the spiritual intelligence variable, calculated F (113.58 in the meaningful level of 0.001) was meaningful, it means that there is a meaningful difference about spiritual intelligence among the three groups of fasting, non fasting with religious excuse and non fasting without any religious excuse. In this stage Scheffe post hoc test was used which is shown in table 3, to compare happiness and spiritual intelligence among the groups.

As is shown in Table 3, spiritual intelligence of the first group (fasting group) is higher than the two other groups. Also spiritual intelligence of non fasting with a religious excuse group is higher than non fasting without any excuse. Although more happiness was seen in the fasting group compared to the other two groups.

5. Discussion
According to the aim of the study, investigation results were evaluated to assess the role of Islamic fasting on spiritual intelligence and happiness of fasting persons compared to spiritual intelligence aspects of the three groups of fasting, non fasting with religious excuse and non fasting without any religious excuse. Results confirmed that likewise what is emphasized on spiritual intelligence components and the effects of fasting on these components, humanities methodology confirm Islamic command regarding fasting, in which tables show a sig-

### Table 1. Average And Standard Deviation of Subjects Spiritual Intelligence And Happiness

<table>
<thead>
<tr>
<th></th>
<th>Spiritual Intelligence</th>
<th></th>
<th>Happiness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
<td>Pre-test</td>
</tr>
<tr>
<td>Fasting</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>286.16</td>
<td>25.88</td>
<td>302.2</td>
</tr>
<tr>
<td>Non Fasting With Excuse</td>
<td>201.3</td>
<td>28.87</td>
<td>200.54</td>
</tr>
<tr>
<td>Non Fasting Without Any Excuse</td>
<td>139.84</td>
<td>18.01</td>
<td>144.87</td>
</tr>
</tbody>
</table>

### Table 2. Happiness and Spiritual Intelligence Average Difference Test in The Three Groups of Fasting, Non Fasting With Religious Excuse And Non Fasting Without Any Religious Excuse With ANOVA

<table>
<thead>
<tr>
<th></th>
<th>Degree of freedom</th>
<th>Total squares</th>
<th>Squares average</th>
<th>F value</th>
<th>Meaningful level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual intelligence</td>
<td>2</td>
<td>1678867.36</td>
<td>559622.45</td>
<td>113.58</td>
<td>0.001</td>
</tr>
<tr>
<td>Happiness</td>
<td>2</td>
<td>88412.06</td>
<td>29470.69</td>
<td>243.20</td>
<td>0.001</td>
</tr>
</tbody>
</table>

### Table 3. Spiritual Intelligence and Happiness Couple Averages Difference Test in Three Groups of Fasting, Non Fasting With Religious Excuse And Non Fasting Without Any Religious Excuse using Scheffe

<table>
<thead>
<tr>
<th></th>
<th>Fasting</th>
<th>Non Fasting With Excuse</th>
<th>Non Fasting Without Any Excuse</th>
<th>Post Experimental Test</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spiritual Intelligence</strong></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td></td>
<td>302.2</td>
<td>28.29</td>
<td>200.54</td>
<td>17.5</td>
</tr>
<tr>
<td><strong>Happiness</strong></td>
<td>51.62</td>
<td>16.41</td>
<td>20.24</td>
<td>16.07</td>
</tr>
</tbody>
</table>
nificant increase of spiritual intelligence of fasting persons. Several domestic and foreign investigations about spiritual intelligence have been resultful and were indicating much positive effect on spiritual intelligence, its association with religion, religious tasks and individuals' spiritual and physical health (39-52).

Mehrabi Taleqani (2008) in a study entitled evaluating association of spiritual intelligence, religion orientation and sadness in students of Islamic Azad University, Science and Research Branch showed that there is a meaningful and negative correlation between spiritual intelligence and religious orientation in students, and students with higher spiritual intelligence have more internal religious orientation (association with virtue) (53). Raqib and Siadat (2009) in an investigation entitled evaluating the role of spiritual intelligence on life meaningfulness concluded that spiritual intelligence is the logical application of spiritual skills to solve daily life complications and the process of reaching humanity lofty goals (believers rationality and religion application and performing religion tasks like fasting to promote relationships and the world complications). They found that spiritual intelligence is the basis of believing, values, tasks and the structure of the meaningful life (54).

Another result was the increase of happiness in the fasting group compared to the two other groups. It means that fasting has lead to an increase in happiness in fasting persons which is consistent with religious sources and performed studies.

Imam Ali (AS) states that;
Believer happiness is in god obey and his or her sadness is due to sin and evil (55).

In other words, with fasting, human not only help to increase the spiritual intelligence (solving worldly problems and better perception of issues), but also reaches happiness and gladness as what the Shia first Imam has stated (56).

Below are some investigations in consistent with the present study;
Mayerz believes that religious faith has many effects on gladness. Mayerz faith is a belief that leads to individuals' social support, being targeted, acceptability and hopefulness. Low et al (1997) concluded in their study that internal control value can predict individuals' gladness. Low and Argyle (from Jafari, 2003), evaluated the hypothesis whether corporation is one of the bracing factors, in a study entitled happiness and corporation. Results showed that individuals who are involved in group activities, show more gladness (57).

Also investigations indicate that happiness has a meaningful effect with positive thinking, introversion and success. One of the issues which is proposed in medical science and immune system function, is the effect of neuropeptides on neural cells. These agents are secreted from the nerve cell and cause gladness and happiness. Studies show that doing spiritual tasks and activities which cause individual satisfaction from themselves, increases the secretion of neuropeptides and neurotransmitters, this leads to happiness sensation (medical health group 2010).

Rahmani, Mirahmadi and Moti’iyan (1998) evaluated the effects of Ramadan fasting on human immune system and concluded that fasting increases the cellular immune system response and promotes body immune system output (causing happiness) (58, 59). In this field, Heydari Rafat and Enayati Novinfar (2009) performed an investigation entitled evaluating the association between religious attitude and happiness among the students of Tarbiat Modarres University; they selected 418 persons as sample size for the study from 7389 using stratified random sampling, and concluded that there is a positive and meaningful association between students' religious attitude and happiness (60). In final conclusion, fasting has a positive role in physical functions, interpersonal relationships and individual spiritual aspects. In this research the investigator tried to provide some objective and empirical evidences for this great spiritual devotion.

The results of the present study indicate that (in consistence with aforementioned investigations of other researchers) there is a positive and meaningful association between fasting and spiritual intelligence and happiness. Persons who have higher religious attitudes and do religious tasks like fasting are happier. According to this it can be suggested that those who experience lower happiness refer to religion and experience more happiness (61). It is also suggested to the country training authorities to have religious and spiritual programs parallel to training ones to educate happier students. This can be performed in other organizations and even the country executive organizations. Also due to a conflicting situation which individuals experience in fasting, clarifying emotional-behavioral and spiritual aspects of it may respond to most of theoretical disagreements and also leads to a high number of new investigations.

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Effects of Islamic Fasting In Quran on Spiritual Intelligence and Happiness

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