

The Relations Between Monday and Thursday Fasting Toward Spiritual Intelligence (SI): A Preliminary Report

Sayid Ridho¹, Akbar Maulana AK², Annisa Futihandayani²

¹Department of Internal Medicine, Medical Faculty

Syarif Hidayatullah State Islamic University, Jakarta, Indonesia

²Medical Faculty, Syarif Hidayatullah State Islamic University, Jakarta, Indonesia

E-mail: ¹<ridhoasirry@yahoo.co.id>, ¹<sayid.ridho@uinjkt.ac.id>,

²<akbarmaulanaazharikotta9398@gmail.com>, ²<futihandannisa@gmail.com>(fk.uinjkt.ac.id)

KEYWORDSMonday and Thursday Fasting, Spiritual Intelligence, Preclinic Medical Students

ABSTRACTThis study aimed to know the relationship between Monday and Thursday fasting and the level of spiritual intelligence (SI) of preclinic medical students of the UIN Syarif Hidayatullah Jakarta. The design of this study was an analytic observational study with cross-sectional comparison design. Samples amounted to 50 with 25 respondents in the Monday and Thursday fasting group and 25 respondents in the fasting group. Simple random sampling was used to selected the subject and data collected by the SI questionnaire. Data analysis was used by the chi-square test at p-value 0.05. We Obtained 35 subjects with high SI level (70.0%), 8 with medium SI level (16.0%), 4 with very high (8%), and 3 subjects with low SI level (8%). There was a significant difference in the level of SI between the Monday and Thursday fasting group and the non-fasting group (P-value 0.001).

INTRODUCTION

In Indonesia, one of the most professed religions is Islam. As a religion, Islam governs the lives of its adherents about the relationship of individuals with their Lord, fellow individuals, and individuals with the environment. These methods are carried out with provisions that have been regulated on the basis of Islamic religious law, the Holy Qur'an and As-Sunnah, such as worship and live in a society (Faiqah, 2018)

Fasting is worship performed by Muslims. In Islamic belief, fasting means to refrain from fulfilling biological needs with the aim of getting closer to Allah SWT(Latunopo, 2017). Different routines that occur in adherents of Islam is when Muslims once a year will carry out fasting for one full month in Ramadan, based on calculations calendar Hijriyah, and the law is obligatory to carry it out based on religious beliefs. The obligatory fasting (Ramadan Fast) has been arranged in the Al-Quran, surah Al-Baqarah Verse 183(Syam, 2017).

"O you who believe, are required of you to fast as required of those before you so that you are devout" (Qur'an 2: 183)

In As-sunnah, fasting is worship that has health benefits, including Rasulullah SAW., said which means "Fight, surely you get the benefit (ghanimah). Fast, surely you will be healthy."(HR Thabrani). As a form of worship that regulates the emotional and eating patterns of the adherents who carry it out, many of the benefits of fasting for health include lowering blood pressure and hematological levels, as well as therapy for disease control(Dewanti et al., 2006). Also, the application of fasting, especially Ramadan fasting, affects the improvement of mental health and prevention of psychiatric disorders(Khan et al., 2016). Psychiatric disorders are one of the global pandemics where almost everyone is very vulnerable to experience them(WHO, 2019). Other studies also show that the implementation of Ramadan fasting affects the improvement of feelings/the emotions of volunteers at work(Erdem, 2018).

Prevention of psychiatric disorders with fasting is explained through increased individual SI(Zohar & Marshall, 2001). To get closer to Allah SWT, Muslims perform worship that affects SI. Religious activities such as fasting, performing night prayers, reading the Quran, getting used to

wudhu can lead to increase SI in students which improves learning achievement (Kusuma, 2019). SI is the meaning of worship carried out to change the mindset of people completely and give birth to monotheism with the principle "only because of Allah"(Susetya, 2015). Fasting activity trains a Muslim to refrain from further the temptations of lust and is more inclined to religious values themselves with Allah SWT. This is what leads to an awareness of the state of SI(Qulub, 2018). Previous research also shows that there is a difference in SI between groups who are fasting and other groups who are not fasting(Sari, 2015).

The application of fasting for Muslims is not only during Ramadan fasting, many as-sunnah propositions regarding the implementation of fasting sunnah, including fasting Monday and Thursday as the Prophet Muhammad. Usually, put fasting choices on Monday and Thursday (Hadith narrated by An Nasai no, 2362 and Ibn Majah No. 1739)(Al-Bugho, 2010). Other hadiths also show that Monday and Thursday fasting is a practice (sunnah) favored by the Prophet Muhammad (HR. Tirmidhi no. 747)(al-Qothoni, 2007). Fasting on Monday and Thursday is beneficial for health as reported by Dian Putranto (2019) to effectively reduce cholesterol levels in patients with type 2 diabetes mellitus. This also provides exploration opportunities for various types of sunnah fasting to the impact on health. This study wanted to investigate how the effect of Monday and Thursday fasting on the SI of preclinic medical students of UIN Syarif Hidayatullah Jakarta.

Research by neuropsychologist Michael Persinger in the early 1990s and a more recent study in 1997 by neurologist V.S Ramachandra and his team at the University of California found a "God Spot" in the human brain. This spiritual center is located between the neural connections in the temporal lobes of the brain. The "God point" does not prove the existence of God, but shows that the brain has developed to ask basic questions, to possess and use a sense of a wider range of meanings and values. Wolf Singer's 1990 Austrian neurological study of the "binding problem" proved that there are neural processes in the brain that is devoted to attaching and meaning to our experiences the sort of neural processes that bind our experiences. The development of Singer's research, namely Radolf Llinas' mid-1990s research on wakefulness and sleep awareness and the association of cognitive events in the brain has been enhanced by new MEG (magneto-encephalographic) technology which allows comprehensive research into these fields oscillating brain electricity and the magnetic fields associated with it.

There was a recent result by Harvard's Terrence Deacon that studied on the origin of the human language. Deacon proved that the human language is unique to humans and is fundamentally symbolic and meaning-centered, which develops together with more rapid development in the frontal lobes of the brain (Zohar & Marshall, 2001).

Several studies on the effect of fasting on SI have proven that fasting has a very good effect on SI. In the research conducted by Syifaul Qulub on the effect of fasting on SI, it was concluded that fasting can increase SI, fasting will have the following effects: increasing humility, cleansing the soul, increasing patience, increasing gratitude, tawakkal, and improving morals. Therefore, research conducted by Novia Handayani entitled Development of the Values of SI in the Islamic Perspective of Fasting also explains that fasting is one of the right methods to educate humans to be spiritually intelligent (Qulub, 2018). Therefore, researchers are interested in finding out more about the influence of fasting against the Monday and Thursday fasting on the level of SI.

METHODOLOGY

The study was approved by the ethical committee of Faculty of Medicine UIN Syarif Hidayatullah Jakarta (The number ethical clearance B-008/F12/KEPK/TL.00/2/2020). The analytical research design with a cross-sectional approach was used in this study. The sample was obtained by using a random sampling method, with 50 respondents in total. The sample population was preclinic medical students of Syarif Hidayatullah, Jakarta. Fifty subjects were chosen randomly and divided into a fasting group (25 subjects) and a non-fasting group (25 subjects).

Retrieval of data using the interview method with an SI questionnaire instrument that has been revalidated beforehand. The data taken includes the gender, fasting status, and SI level. The status of fasting seen in the last 3 months. The SI level was divided into 5 categories: very high, high, medium,

low, and very low. Categorization was based on the total value interval on the questionnaire(Sari, 2015).

Data were analyzed by using IBM SPSS statistical software for window version 22 (Armonk, NY: IBM Corp). data was taken in the form of categorical and numerical data. The data obtained was later analyzed using an Independent T-test that starts with the normal test. If data was not normally distributed, then the data analysis would be replaced by the Chi-square test. Proportion distribution values were obtained from the results of univariate analysis while bivariate analysis was performed by using the chi-square test at α 0.05, 95% confidence level (CI) to obtain P-value and Odds Ratio (OR) (Dahlan, 2014).

RESULTS

The results of the validity test were conducted to update the questionnaire and were obtained by the results of the validity value greater than R table so that the questionnaire was said to be valid. As for the reliability test, the Cronbach’s Alpha value of 0.955 means that the questionnaire was very reliable.

Table 1. Frequency distribution of respondent characteristics

Variable	n	%
Sex		
Male	17	34
Female	33	66
Fasting status*		
fasting	25	50
not fasting	25	50
SI Level		
Low	3	6
medium	8	16
High	35	70
very high	4	8
Total	50	100

*conditioned by researchers

Table 1 showed majority of the subjects were female (66%). Measurement results showed 70% of respondents have a high level of SI and only 6% have a low level of SI. In Table 2, the majority of respondents who had done Monday and Thursday fasting in the last three months had a high level of SI (80.0%) than among respondents who have never done the fasting.

Table 2. Results of Analysis of the characteristics of Respondents with a level of SI

Variables	Spiritual Intelligence level											Total		p-value	
	Very High			High			Medium			Low					
	n	%	OR	n	%	OR	n	%	OR	n	%	OR	n		%
Fasting status															
fasting	4	16	>1000 ^a	20	80	>1000 ^a	1	4	>1000 ^a	0	0	Ref	25	100	0.001*

not fasting	0	0	ref	15	60	ref	7	28	ref	3	12		25	100	
Total	4	8		35	70		8	16		3	6		50	100	

*at value α 0.05, P-value shows the result of a significant relationship

^athe Odds Ratio (OR) indicate that the value is too large

DISCUSSION

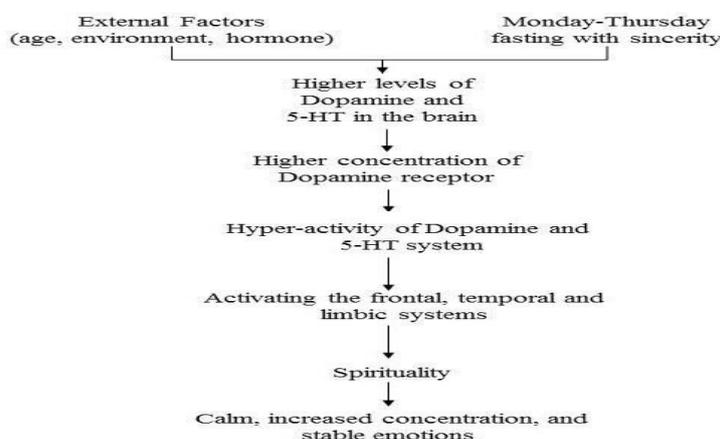
The findings of this present study were relevant to previous studies in which aspects of SI such as the ability to be flexible and responsive, have high self-awareness, be able, to be honest, patient, generous, compassionate, love peace, simple, and have empathy related to the activities of fasting sunnah (Masitoh, 2014). Other studies on Ramadan fasting also showed an increase in SI for fasting groups (Abadi et al., 2012). Other studies in groups of students in Islamic boarding schools showed different results where there was no significant correlation between the routine of Monday and Thursday fasting on the value of SI (Rosyadi, 2019).

The difference in the results of this present study can occur due to differences in the characteristics and environment of the research respondents living were in previous studies (Rosyadi, 2019). Respondents were religious students and lived in boarding schools. In this case, the difference occurs because of other factors that influence SI such as dhikr, prayer (obligatory and sunnah), as well as other worship activities, including the worship of ghairu mahdhah (Bensaid et al., 2014)

Also, differences in measurement on Monday and Thursday fasting variables can also be the thing that distinguishes the results of this study. Rosyadi's (2019) research measured the habits of Monday and Thursday fasting on students for a long period while our research findings referred to the experience of whether students have done Monday and Thursday fasting in the last 3 months. This will cause differences in the level of SI between groups who have fasting habits routinely and those who fast not routinely (within a certain period) (Abadi et al., 2012). However, the second group (who fasts not routinely for a certain period) remained to have different levels of SI with groups who did not fast (Abadi et al., 2012).

Related to the operational definition of our study which recalled fasting experiences in the past three months, previous research showed the relevance of the quality of refraining from destructive actions (as the concept of taqwa in Islam) with the consistency of fasting on Monday and Thursday (Masthiyah, 2016). SI will remain to affect the spiritual value in the person is directly proportional to the SI they have and the spiritual intensity that is done (Bensaid et al., 2014). This study relevant to our findings where there is indeed a significant difference in the level of SI between groups who have never fasted Monday and Thursday with groups who have fasted Monday and Thursday.

Figure 1. Serotonergic and dopaminergic systems in spirituality and Monday and Thursday fasting practices.



Moreover, at the biochemical level, the neurotransmitter processes that occur in spirituality involve dopamine and serotonin (5-HT). High levels of dopamine and 5-HT in the brain increase the concentration of both neurotransmitter receptors causing hyperactivity of the DA and 5-HT systems as seen in figure 1. Hyperactivity of this system will increase spirituality. When a person Monday-Thursday fasting with sincerity, the activity of 5-HT and dopamine increases significantly so that high spirituality forms. Environmental factors also influence the increase in dopamine and 5-HT receptors such as hormone levels, ethnicity, age, and parental care. Besides, these two neurotransmitters will increase the activity of the DA and 5-HT systems in the frontal lobe, temporal lobe, and limbic system thus causing a sense of calm, increased concentration, and stable emotions.(Huguelet & Koenig, 2009)

Based on research conducted around 1990 by neuropsychologist Persinger of Ontario's Laurentia University and neurologist Ramachandran University of California stated that there is a complex relationship between spirituality and the brain. They found an area called the God module or God spot in the human brain that gives a feeling about the existence of God. Scans conducted with positron emission tomography show that the area functions very actively when we think about spiritual-religious. Prof. Andrew, a University of Pennsylvania radiologist, observed the brain and found that when a person worships, there is an increase in activity in the frontal area and decreased activity in the orientation area in the brain. The condition also occurs when someone prays(Selman et al., 2005).

Spiritual related imaging studies reveal processes that require high concentration to activating the prefrontal cortex (PFC) bilaterally but more widely in the right hemispheres and cingulate gyrus. The thought process will activate the area associated with the desire or intention to clear the mind or focus on certain objects. The medial area of the prefrontal cortex is also needed to maintain the agreed religious activities and regulations on religion. Therefore, the medial area of the prefrontal cortex found in error detection and participation is related to social norms. The prefrontal region of the medial cortex along with the posterior cingulate is involved in self-reflection and self-perception in its involvement as divine involvement. Based on further research also found medial PFC hypofunction which causes a decrease in religiosity that will have an impact on changes that are not appropriate (Selman et al., 2005).

Fasting is the right momentum to build character. People who are accustomed to fasting will have strength in holding principles, abstinence, sincerity, patience, and a high sense of solidarity. Philanthropists say that Fasting is effectively influential in shaping character, humanitarian values, and wisdom. (Dermawan, 2018). Besides, Monday and Thursday fasting is also effective at lowering aggression behavior. (Mu'arifah & Martaniah, 2004)

Fasting is done by refraining from sin and something that is forbidden will lead to a controlling attitude of the soul and good behavior. People who often carry out fasting can control themselves from negative passions so that their SI will increase. This increases the number of subjects who have high SI levels in the fasting group compared to those who did not fasting.

The high level of SI in a group of students who did Monday and Thursday fasting in the last three months proved that fasting Monday and Thursday was beneficial for students in increasing SI. These results support other studies that report the effectiveness of SI in increasing the sense of responsibility for the resilience of high school students in Baghmalek (Javadi Nejad et al., 2019). Religious activities at several educational institutions are reported to be significantly beneficial in increasing the SI of students(Abidin, 2019; Qoni'ah, 2019). Therefore, Monday and Thursday fasting can increase the SI of students who can form good character in academic activities.

Monday and Thursday fasting is considered to have the most ideal frequency when compared with other Sunnah fasting because Monday and Thursday fasting is done twice a week. In this case, often the frequency of fasting can be used as a medium in refraining from negative passions and inclinations towards commendable acts (Masthiyah, 2016). Fasting Monday and Thursday also reports a relationship related to its intensity with increasing patient morals due to the control of lust (Muna, 2019). Religious activities such as worship and fasting, both compulsory fasting in the month of Ramadan or fasting on Monday and Thursday essentially have the essence to build self-worth and noble characteristics by with the religion of Islam (takhallaqu bi-akhlaq Allah) (Bensaid et al., 2014).

The better the quality and quantity of worship of a Muslim will be faster and better the nature of self and piety (including increased SI) that he obtained (Khan et al., 2016).

CONCLUSION

Thirty-five subjects with high SI level (70.0%), 8 with medium SI level (16.0%), 4 with very high (8%), and 3 subjects with low SI level (8%). Finally, as a conclusion, there was a significant relationship between Monday and Thursday fasting and the level of SI (P-value 0.001).

LIMITATION AND STUDY FORWARD

Our study was unable to measure other factors that influence the level of SI and can be confounding factors such as religious activities and psychological personality. Besides, the absence of intensity and frequency data in conducting Monday and Thursday fasting activities can be a presumption of variation in the level of SI in groups that have fasted Monday and Thursday even though it does not interfere with statistical results with groups that do not fast. The close association of spiritual experience with SI causes our findings to only be able to describe correlations in populations with similar characteristics. The findings might be different if applied to populations with a higher tendency for spiritual activities such as students from Islamic boarding schools.

ACKNOWLEDGEMENT

Special gratitude goes to the Faculty of Medicine, UIN Syarif Hidayatullah Jakarta, especially the Department of Internal Medicine who has facilitated the implementation of this research.

REFERENCES

- Abadi, M. Z. B., Farid, A. A. A., Bahari, F., & Chami, M. (2012). The Effect of Islamic Fasting in Quran on Spiritual Intelligence And Happiness of Fasting Persons. *Quran and Medicine*, 1(3), 66–70. <https://doi.org/10.5812/quranmed.8030>
- Abidin, A. M. (2019). Pengaruh Penerapan Kegiatan Keagamaan di Lembaga Pendidikan Formal Terhadap Peningkatan Kecerdasan Spiritual Anak. *AN-NISA*. <https://doi.org/10.30863/annisa.v12i1.452>
- Al-Bugho, M., & Etc. (2010). *Al-Fiqhu Al Manhaji'ala Madzhabil Imam Asy Syafi'i* (10th ed.). Darul Qolam.
- Al-qohthoni, A. S. bin W. bin. (2007). *Ash Shiyam Fil Islam Fii Dhouil Kitab Was Sunnah* (1st ed.). Maktabah Al Malik Fahd.
- Bensaid, B., Machouche, S. B. T., & Grine, F. (2014). A Qur'anic framework for spiritual intelligence. *Religions*, 5(1), 179–198. <https://doi.org/10.3390/rel5010179>
- Dahlan, M. S. (2014). *Statistik Untuk Kedokteran Dan Kesehatan Deskriptif, Bivariat dan Multivariat. Dilengkapi Alikasi Menggunakan SPSS*. 6th ed. Jatinagor: Alqaprint; 2014. In Salemba Medika.
- Dermawan, O. (2018). BUILD STUDENTS' CHARACTER THROUGH FASTING AT MUSLIM SCHOOL. QUALITY. <https://doi.org/10.21043/quality.v5i1.3165>
- Dewanti, L., Watanabe, C., Sulistiawati, & Ohtsuka, R. (2006). Unexpected changes in blood pressure and hematological parameters among fasting and nonfasting workers during Ramadan in Indonesia. *European Journal of Clinical Nutrition*. <https://doi.org/10.1038/sj.ejcn.1602393>
- Erdem, Ö. (2018). The investigation of the effects of Ramadan fasting on the mood state of healthy volunteer persons. *Aile Hekimliği ve Palyatif Bakım*. <https://doi.org/10.22391/fppc.398323>
- Faiqah, N., & Pransiska, T. (2018). Radikalisme Islam Vs Moderasi Islam: Upaya Membangun Wajah

Islam Indonesia Yang Damai. Al-Fikra : Jurnal Ilmiah Keislaman.
<https://doi.org/10.24014/af.v17i1.5212>

Huguelet, P., & Koenig, H. G. (2009). Religion and spirituality in psychiatry. In Religion and Spirituality in Psychiatry. Cambridge University Press.
<https://doi.org/10.1017/CBO9780511576843>

Javadi Nejad, A., Heidari, A., Naderi, F., Bakhtiyar Pour, S., & Haffezi, F. (2019). Effectiveness of Spiritual Intelligence in Resilience and Responsibility of Students. International Journal of School Health. <https://doi.org/10.5812/intjsh.86677>

Khan, M. M. A., Nor, N. M., Mamat, N. M., Mohd-Shukri, N. A., & Abu Bakar, W. A. M. (2016). Fasting in Islam: A combination of spiritual elevation and prevention of diseases. International Medical Journal Malaysia.

Kusuma, W. H. (2019). Upaya Meningkatkan Prestasi Belajar Melalui Peningkatan Kecerdasan Spiritual Santri Pondok Pesantren. Journal of Education and Instruction (JOEAI). <https://doi.org/10.31539/joeai.v2i2.896>

Latunopo, B., & La Ode, A. (2017). Buku Ajar Hukum Islam. Deepublish.

Masitoh, U. (2014). Peranan Puasa Sunnah Senin Kamis Dalam Meningkatkan Kecerdasan Spiritual (SQ) Siswa Kelas XI Madrasah Aliyah Nurul Ummah Yogyakarta. 2014(August), 1–43. <http://dx.doi.org/10.1016/j.scitotenv.2014.10.007>

Masthiyah, C. Q. (2016). The consistency of Monday and Thursday fasting on adolescent sexual behavior-Thesis. Psikologi Universitas Muhammadiyah Malang.

Mu'arifah, A., & Martaniah, S. M. (2004). Hubungan Keteraturan Menjalankan Sholat dan Puasa Senin Kamis dengan Agresivitas. Humanitas: Indonesia Psychological Journal.

Muna, N. (2019). Pengaruh Intensitas Puasa Senin Kamis Terhadap Akhlak Sabar Santri Darul Falah Be-Songo Semarang.

Putranto, D., & Primanda, Y. (2019). Effects of Fasting on Every Monday and Thursday to Cholesterol Levels of Patients with Type 2 Diabetes Mellitus. 15(IcoSIHSN), 246–250. <https://doi.org/10.2991/icosihsn-19.2019.53>

Qoni'ah, S. (2019). Pengembangan Kecerdasan Spiritual pada Peserta Didik melalui Aktivitas Keagamaan. MODELING: Jurnal Program Studi PGMI. <https://doi.org/10.36835/modeling.v6i2.469>

Qulub, A. S. (2018). Pengaruh Puasa Terhadap Kecerdasan Spiritual. Sereal Untuk, 51(1), 51.

Rosyadi, M. (2019). Pengaruh Puasa Senin Kamis Terhadap Emotional Spiritual Quotion Santri Pondok Pesantren Manbba'ul Hikam Putat Tanggulangin Sidoarjo (Vol. 22). UIN Sunan Ampel Surabaya.

Sari, P. N. (2015). Pengaruh Kecerdasan Emosional Dan Kecerdasan Spiritual Terhadap Pemahaman Akuntansi Siswa Kelas XII IPS MA Al Asror Tahun Pelajaran 2014/2015.

Selman, V., Selman, R. C., Selman, J., Era, Q.-, Selman, E., & Consultant, S. (2005). Spiritual-Intelligence/-Quotient. 1(3), 23–31.

Susetya, W. (2015). Keajaiban Puasa Senin Kamis. Bhuna Ilmu Populer.

Syam, Y. hanis. (2017). Materi Puasa Ramadhan. Elmatara Publisher. <https://books.google.co.id/books?id=2dFNDwAAQBAJ&printsec=frontcover&dq=puasa&hl=id&sa=X&ved=0ahUKEwjuna-aei8nnAhUGyZgGHWZRBBeAQ6AEILzAB#v=onepage&q=puasa&f=false>

World Health Organization. (2019). Depression. 2019. <https://www.who.int/news-room/fact-sheets/detail/depression>

Zohar, D., & Marshall, I. (2001). SQ, Memanfaatkan Kecerdasan Spiritual Dalam Berpikir Integralistik dan Holistik untuk Memaknai Kehidupan. In Jurnal Pendidikan BPK PENABUR.