

Benefits of Fasting for Filipino Muslim College Students: A Gender-Based Analysis with Implications for Mental Health Professionals

Khadiguia Ontok-Balah

Associate Professor, Department of Psychology, College of Arts and Social Sciences
University of Southern Mindanao, Kabacan, Cotabato, PHILIPPINES

DOI: <https://doi.org/10.5281/zenodo.10279680>

Published Date: 07-December-2023

Abstract: One of the five pillars of Islam, fasting is observed by Muslims worldwide during the holy month of Ramadan. Fasting is seen as an act of worship in Islam. One hundred Muslim college students who were fasting during the month of Ramadan from various colleges and institutes from the University of Southern Mindanao provided data for the study. Ten participants were chosen at random from among the university's several colleges and institutions for this study using a quota sampling technique constituting a total of 100. A 27-item questionnaire was used in this study to assess the level of awareness among Muslim college students regarding the psychological and physical advantages of fasting. Two factors accounted for 44.2% of the variance, corresponding to both psychological and physical benefits. Cronbach's Alpha was 0.923, indicating that the data had a high level of internal consistency and a normal distribution. There were no significant gender differences in reported awareness of physical benefits, but there were significant variations in perceived awareness of psychological benefits, with females displaying slightly higher perceived awareness. Implications for mental health professionals have been identified.

Keywords: Physical benefits of fasting, psychological benefits of fasting, gender differences, an implication for mental health professionals, and Muslim College Students.

I. INTRODUCTION

Muslims all across the world practice fasting throughout the holy month of Ramadan as one of the five pillars of Islam. Islam considers fasting to be a religious obligation. It must be strictly observed once a year for roughly 30 days based on the Hijrah, the Islamic calendar. Muslims are required to keep a one-month-long fast from sunrise to sunset during this holy month. Muslims are required to abstain from eating or drinking during the day, refrain from having sex with their spouses, engage in misconduct, and refrain from using drugs for addiction treatment or medical grounds (Britannica, 2022).

A healthy adult must fast. Islam, however, exempts a person from fasting if doing so would harm their health or if they have a medical condition that makes them unfit to fast. The Muslims' holy book, the Qur'an, states that "*God intends every convenience for you; He does not wish to put you in problems*" (Meo and Hassan, 2015). The Qur'an commands, "*O you who believe! For you to gain Taqwa (good deeds and God-consciousness), fasting is advised, just as it was advised to those who came before you*" (The Holy Qur'an, Suraat 2, Ayath: 182-183). The primary goals of this one-month practice are to change each person's conduct and way of life to make them more pious. One must develop the ability to suppress the predisposition to hear, say, listen, or think badly about other people to achieve this. It is predicted that the results of this purification technique will last for the remaining months until the process is repeated (Ahmad, Goel, Maroof, Goel, and Arif, 2012).

Those who fast throughout Ramadan have thoroughly examined the psychological effects of the fast. Every verse of the Holy Qur'an is written to improve people, making it a great source of wisdom for everyone. Muslims consider that fasting entails more than just avoiding food and liquids. In addition to refraining from all deception in voice and deed, fasting also entails avoiding foolish and insulting speech as well as quarrelling, fighting, and harboring impious thoughts (Alghafli, Hatch, Rose, Abo-Zena, Marks, and Dollahite, 2019).

Additional information about the effects of fasting on physical and psychological factors has come from recent studies. For instance, Faris et al., (2021) comprehensive review and meta-analysis of studies revealed that fasting during Ramadan significantly improved lipid profiles, inflammatory indicators, and markers of oxidative stress in healthy people. Intermittent fasting was linked to improvements in mood and cognitive performance in overweight and obese people, according to a different study by Hwang et al., (2020).

It has also been investigated whether fasting may be used as a tool for character development and for breaking bad habits. For instance, Witkowski and colleagues' (2016) research shows that intermittent fasting can increase self-control and willpower, which can help people stop engaging in addictive behaviors. Varady and Hellerstein's research from 2007 also demonstrated that alternate-day fasting can increase insulin sensitivity, which may aid in ending the cycle of sugar addiction.

Al-Najim et al., (2021) investigated the effects of fasting on different genders and discovered that, while both male and female medical students lost weight during Ramadan, only female students had significant changes in their blood pressure and lipid profile. Female participants in a different study by Farooq et al., (2021) showed more significant alterations in their lipid profiles and glucose levels after intermittent fasting than male ones. Considering the recent research, it is clear that investigating the gender-based evaluation of the impact of fasting on the mental health of Muslim college students is critical. This comprehensive understanding teaches mental health practitioners in the Muslim community about potential differences in experiences and outcomes, allowing them to effectively customize therapies and support services. This study aims to investigate gender differences in the benefits of fasting for Muslim college students, as well as the implications for mental health professionals working in the Muslim community.

Tavakolizadeh and colleagues' (2020) comprehensive evaluation is one study that supports the notion that both male and female participants perceive psychological benefits from fasting. According to their findings, fasting promotes mental health by improving emotional control, raising mood, and decreasing anxiety and hopelessness. In a 2015 study, Johnstone and colleagues discovered that people who practice intermittent fasting had improved eating management and fewer cravings. Previous research has demonstrated that women frequently have higher levels of spirituality and religion than men, which may explain the gender difference reported in this study of Greeley & Hout, 2006; Hill & Pargament (2003).

While the spiritual and physical benefits of fasting have been widely documented, there is a growing interest in learning more about its impact on mental health, particularly among Muslim college students. College students' mental health has been a source of worry in general, owing to the special strains and challenges they face during this transitional period. However, given the interdependence of gender and religion, it is critical to investigate how gender influences the effects of fasting on the mental health of Muslim college students. Researchers can identify potential disparities and consequences for mental health practitioners working in the Muslim community by doing a gender-based analysis.

Recent research has emphasized the importance of addressing mental health concerns among Muslim college students. According to a survey done by Khan et al. (2022), Muslim students experienced specific difficulties related to their religious identity, such as discrimination, Islamophobia, and cultural issues. These pressures can lead to higher rates of anxiety, despair, and psychological distress among Muslim college students. To ensure adequate support and intervention options, it is crucial to comprehend the impact of fasting on mental health, particularly as it relates to gender. Furthermore, available data suggests that gender variations may play a role in how individuals experience and respond to fasting. Research conducted by Ahmed et al. (2021) studied the subjective experiences of fasting among Muslim individuals and found that gender played a significant effect in the perceived benefits and obstacles connected with fasting.

II. METHODOLOGY

This study employed the descriptive-correlation research design to determine the perceived knowledge of the physical and psychological benefits of fasting as well as the difference in these perceived knowledge across the sex of the participants. The research was conducted at the University of Southern Mindanao Main Campus, Kabacan, Cotabato, Philippines. The study gathered data from 100 Muslim college students from different colleges and institutes in the university that were observing fasting during the month of Ramadhan. This research employed a quota sampling procedure, i.e., 10 participants

from the different colleges and institutes in the university, namely: College of Agriculture, College of Arts and Social Sciences, College of Business Development, Economics Management, College of Engineering and Information Technology, College of Human Ecology and Food Sciences, College of Health Sciences, College of Technology and Industry, College of Veterinary Medicine, Institute of Middle East and Asian Studies, and Institute of Sports Physical Education and Recreation. Out of 100, the majority of the respondents were males, which constituted 60%, while 40 or 40% were their female counterparts. The study utilized a self-made survey questionnaire which was validated by Muslim scholars in terms of the contents. Data were analyzed using weighted means with corresponding verbal descriptions as well as the independent T-test to determine if there is a significant difference between the perceived knowledge of physical and psychological benefits of fasting across the sex of the participants.

III. RESULT AND DISCUSSION

Assessment of Adequacy of Measure

To assess the perceived knowledge of the physical and psychological benefits of fasting, a questionnaire consisting of 27 items was developed especially for this study. To ensure appropriate construct validity, it was important for the chosen elements to have correlation values between 0.3 and 0.9 (Sachitra, Chong, and Khin, 2016). The inter-item correlation for each constructed item fell within the desired range, indicating satisfactory construct validity. Two factors were extracted from the data, representing the physical and psychological benefits of fasting. These factors accounted for 23.6% and 20.7% of the variance, respectively, resulting in a total variation of 44.2% for all the items combined. The suitability of the items was further assessed using Cronbach's Alpha value, which was calculated to be 0.923. This value exceeds the recommended threshold of 0.9, indicating high internal consistency and reliability of the questionnaire. To evaluate the normality of the variables, the Kolmogorov-Smirnov test was conducted, taking into consideration the sample size (more than 50). The test yielded a p-value greater than 0.05, suggesting that the data followed a normal distribution. This normal distribution allows for further analyses to be carried out confidently. Thus, these findings demonstrate that the questionnaire used in the study successfully measured the perceived knowledge of the physical and psychological benefits of fasting. The data collected exhibited satisfactory construct validity, internal consistency, and normal distribution, providing a solid foundation for further analysis and interpretation.

Comparison of Perceived Knowledge of the Physical and Psychological Benefits of Fasting Across Gender

Table 1 displays the test of perceived knowledge of the physical and psychological benefits of fasting by participants' gender. It implies that there is a considerable variation between how girls and males respond to the physical advantages of fasting. For example, both male and female participants reported mean scores of 2.90 and 3.05 on item 1. These results show a reasonable level of acceptance of fasting as a weight-management strategy by both genders. There may have been some fluctuation in the responses, as indicated by the female and male standard deviations of 0.841 and 0.811, respectively. Given that there is no statistically significant difference between male and female replies to this question, the significance value of 0.374 suggests that both sexes typically have comparable attitudes toward adopting fasting to achieve physical benefits, especially in weight management.

On the other hand, the finding for the psychological benefits of fasting implies that there is a substantial variation in how males and females react to the psychological benefits of fasting. A mean score of 3.40 was provided by female participants for item 1, for instance, indicating a rather high level of agreement that when someone fasts, their body cravings become less of a focus. Contrarily, the mean score for male participants was slightly lower at 3.30. There may have been some fluctuation in the responses, as indicated by the standard deviations of 0.545 and 0.671 for males and females, respectively. The significance score of 0.435 indicates that there is no statistically significant difference between the responses from males and females, indicating that both sexes typically share the same views on how fasting affects psychological benefits.

TABLE I: MUSLIM COLLEGE STUDENTS' LEVEL OF PERCEIVED KNOWLEDGE OF THE PHYSICAL AND PSYCHOLOGICAL BENEFITS OF FASTING WITH GENDER

A. Physical Benefits	Female		Male		Sig. Difference
	Mean	SD	Mean	SD	
1. Fasting is used for weight management.	2.90	0.841	3.05	0.811	0.374
2. Calorie intake during a fast is adequate.	2.90	0.778	3.15	0.659	0.087
3. The digestive system is rested during fasting.	3.00	0.641	3.10	0.681	0.463
4. Fasting is a good way to lower cholesterol.	3.15	0.921	3.23	0.851	0.644

5. Fasting lowers blood pressure.	2.98	0.800	3.07	0.778	0.570
6. Fasting would be an ideal recommendation for the treatment of mild to moderate stable non-insulin diabetes.	3.42	0.747	3.45	0.769	0.872
7. All body fluids are absorbed during a fast.	3.65	0.662	3.48	0.676	0.226
8. Every acceptable meal may be consumed in moderation during fasting.	3.05	0.783	3.13	0.747	0.593
9. For the management of hypertension, fasting would be the best option.	3.05	0.552	3.12	0.715	0.619
10. Blood sugar is decreased by fasting.	3.17	0.636	3.32	0.748	0.328
11. Malnutrition is absent during a fast.	3.15	0.662	3.20	0.819	0.748
12. The best advice for treating obesity would be to fast.	3.10	0.632	3.22	0.715	0.405
13. In human life, fasting encourages moderate dehydration and water conservation to increase endurance.	2.95	0.677	3.17	0.642	0.109
14. Self-control is encouraged by a month of fasting.	3.10	0.632	3.07	0.778	0.822
15. Fasting is used for weight management.	3.13	0.607	3.32	0.770	0.189
B. Psychological Benefits	Female		Male		Sig.
	Mean	SD	Mean	SD	Difference
1. When someone fasts, their body cravings become less of a focus.	3.40	0.545	3.30	0.671	0.435
2. Fasting gives the heart and minds the space they need to reflect on deep spiritual issues.	3.50	0.599	3.48	0.624	0.895
3. Fasting encourages mindfulness about one's interactions with other people.	3.88	0.335	3.85	0.404	0.747
4. <i>Fasting makes it possible for one to cultivate a sustained consciousness of Allah (s.w.t.).</i>	3.73	0.452	3.43	0.789	0.037
5. Fasting encourages introspection about one's connection with Allah (s.w.t.).	3.73	0.452	3.57	0.647	0.182
6. <i>A person's overall health and well-being is enhanced by fasting.</i>	3.73	0.452	3.47	0.650	0.031
7. Fasting allows one to reflect, behave, and develop one's better character.	3.67	0.616	3.47	0.676	0.121
8. Fasting is the perfect chance to strengthen one's character.	3.67	0.572	3.53	0.566	0.225
9. A person may experience mental and spiritual renewal after fasting.	3.83	0.385	3.58	0.743	0.061
10. <i>Fasting is a wonderful opportunity to reflect.</i>	3.88	0.335	3.65	0.633	0.042
11. <i>In addition to refraining from food and liquids, fasting also involves refraining from slanderous speech and swearing.</i>	3.83	0.385	3.57	0.767	0.052
12. Fasting is an ideal time to break bad habits.	3.65	0.483	3.52	0.676	0.284

Gender Differences in Muslim College Students' Perceived Knowledge of the

Physical and Psychological Benefits of Fasting

The results of Muslim college students' perceived awareness of the psychological and physical benefits of fasting are shown in Table 2, with a focus on gender disparities. Consistent with the findings on Table 1, the non-significant p-value of 0.347 shows that there is no discernible gender difference in perceived awareness of physical benefits. Although the average perceived knowledge is slightly lower for women, this difference is not statistically significant. The p-value of 0.022 indicates that there is a statistically significant difference in perceived knowledge between genders for psychological benefits. Interestingly, based on Table 2, the confidence interval provides a likely range for the true population mean differences, while females had slightly greater average perceived knowledge. While the alternative hypothesis comment places special emphasis on gender differences, Levene's test's significant result shows that there are differences in how each gender perceives knowledge for psychological reasons. Thus, Table 2 gives a thorough review of the statistical findings,

showing that among Muslim college students, there is no significant difference in perceived knowledge of physical advantages but a substantial difference in psychological benefits between genders.

TABLE II: MUSLIM COLLEGE STUDENTS' OVERALL PERCEIVED KNOWLEDGE OF THE PHYSICAL AND PSYCHOLOGICAL BENEFITS OF FASTING WITH GENDER

	Statistic	df	p	Mean difference	SE difference	95% Confidence Interval	
						Lower	Upper
Physical Benefits	-0.945	98.0	0.347	-0.0911	0.0964	-0.282	0.100
Psychological Benefits	2.330 ^a	98.0	0.022	0.210	0.0899	0.0311	0.388

Note. $H_a \mu_{\text{Female}} \neq \mu_{\text{Male}}$

^a Levene's test is significant ($p < .05$), suggesting a violation of the assumption of equal variances

In terms of the physical benefits, male and female students might not experience fasting differently. For instance, a 2015 study by Johnstone and colleagues indicated that intermittent fasting may be able to improve people's ability to regulate their appetites and curb their desires. Alternate-day fasting has been shown to improve insulin sensitivity, which may help break the cycle of sugar addiction, according to Varady and Hellerstein's 2007 study. These findings suggest that students' views of the physical benefits of fasting may be comparable for both male and female students. The findings demonstrate that Muslim college students' perceptions of the advantages of fasting differ according to gender. Students of both sexes see psychological benefits differently than they do physical ones. There is evidence that students of both sexes are aware of the psychological benefits of fasting, albeit there might be differences in how they perceive these benefits. For instance, Tavakolizadeh and colleagues' study (2020) found that fasting has positive impacts on mental health, including greater emotional regulation, improved mood, and decreased anxiety and despair. But a person's gender may have an impact on how they perceive the connection between fasting and spirituality. The fact that female participants in the current study received a significantly higher mean score on the item "fasting makes it possible for one to cultivate a sustained consciousness of Allah (s.w.t.)" than did male participants suggests that women may be more likely to perceive a link between fasting and spirituality.

IV. CONCLUSION

A questionnaire with 27 items assessed the perceived knowledge of the physical and psychological benefits of fasting. Construct validity was ensured by selecting items with correlation values between 0.3 and 0.9, which showed satisfactory validity. Two factors, representing physical and psychological benefits, explained 44.2% of the variance. Internal consistency was high, with a Cronbach's Alpha value of 0.923. The Kolmogorov-Smirnov test confirmed that the data was normally distributed. The gender differences in perceived awareness among Muslim college students were the focus of this study. There was no significant gender difference in physical benefit knowledge, but there was a substantial difference in psychological benefit knowledge, with females having slightly higher perceived knowledge. Fasting showed to have equal impacts on both genders in terms of physical benefits, such as appetite reduction and enhanced insulin sensitivity. Females were more inclined to identify fasting with spirituality, whereas males were less likely to.

V. IMPLICATIONS FOR MENTAL HEALTH PRACTITIONERS

The study's findings have significant implications for medical professionals who care for Muslims. First, health practitioners such as the medical doctors can use the survey data to educate Muslim male and female college students about the physical benefits of fasting, highlighting its role in hunger control and better insulin sensitivity, which aids in weight management and general health improvement. Second, practitioners like the Muslim psychologists must consider gender differences in how fasting is experienced psychologically. Muslim women, in particular, have a tendency to associate fasting with spirituality, which may assist them psychologically by increasing emotional control, elevating mood, and decreasing worry and despair. Health practitioners may alter their interventions and discussions to emphasize these potential benefits on mental health and well-being. Thirdly, the study emphasizes how crucial it is to educate Muslim college students on the

benefits of fasting. To increase students' awareness of the physical and psychological advantages of fasting, collaboration with educational institutions and student organizations can organize workshops, seminars, or informational sessions. This will improve the population's general health and well-being. Additionally, health practitioners like counsellors and psychologists, interacting with Muslims college students should use culturally sensitive methods that take fasting's spiritual and religious aspects into account. A trusting and respectful relationship between healthcare professionals and their Muslim clients is fostered by acknowledging the spiritual value of fasting and including it in discussions and recommendations. Last but not least, the study's conclusions offer a framework for additional investigation and cooperation. To conduct more thorough research and create focused interventions that support Muslim college students' good health, health practitioners might work with researchers to explore additional factors impacting perceptions of fasting specifically in the context of the study. Health practitioners can significantly enhance health outcomes and quality of life for the Muslim community by supporting their physical and psychological well-being during fasting and beyond by utilizing the findings gathered from this present study.

REFERENCES

- [1] Ahmad, A., Goel, S., Maroof, M., Goel, R.K., & Arif, M. (2012). Ramadan fasting: A review article. *Journal of International Medical Research*, 40(2), 476-481.
- [2] Ahmed, S., Din, S., & Abbas, F. (2021). Subjective experiences of fasting in Muslim individuals: A qualitative study. *Journal of Religion and Health*, 60(5), 2821-2839.
- [3] Al-Najim, W., Karim, A., & Al-Nuaimy, W. (2021). Effect of Fasting in Ramadan on medical students' body mass index and blood pressure. *Journal of Taibah University Medical Sciences*, 16(4), 372-377. doi: 10.1016/j.jtumed.2021.02.011
- [4] Al-Najim, W., Al-Busaidi, M., & Al-Jabri, F. (2021). Effects of Ramadan fasting on medical students: A cohort study. *Sultan Qaboos University Medical Journal*, 21(1), e78-e85.
- [5] Alghafli, S.A., Hatch, J.P., Rose, R.L., Abo-Zena, M.M., Marks, L.D., & Dollahite, D.C. (2019). Observing Ramadan fasts: The impact of health and religion on psychological well-being. *Journal of Religion and Health*, 58(2), 558-574.
- [6] Britannica. (2022). Ramadan. Retrieved from <https://www.britannica.com/topic/Ramadan>
- [7] Faris, M.A., Kacimi, S., Al-Kurd, R.A., Fararjeh, M.A., Bustanji, Y.K., Mohammad, M.K., & Salem, M.L. (2021). Impact of Ramadan intermittent fasting on lipid profile and inflammatory markers in healthy individuals: A systematic review and meta-analysis. *Journal of Diabetes and its Complications*, 35(2), 107869. doi: 10.1016/j.jdiacomp.2020.107869
- [8] Faris, M.A., Kacimi, S., Al-Kurd, R.A., Fararjeh, M.A., Bustanji, Y.K., Mohammad, M.K., & Salem, M.L. (2021). Intermittent fasting during Ramadan attenuates proinflammatory cytokines and immune cells in healthy subjects. *Nutrients*, 13(9), 3109.
- [9] Farooq, M., Hussain, M., Aslam, M., Rizwan, M., Rehman, A., Yaqub, S., ... & Arif, M. (2021). Intermittent fasting for weight loss: A systematic review. *Cureus*, 13(6), e15827. doi: 10.7759/cureus.15827
- [10] Farooq, S., Naz, S., Ahsan, A., Ahmad, M., Mushtaq, G., & Munir, N. (2021). Gender differences in lipid profile and glucose level change with intermittent fasting. *Cureus*, 13(2), e13497. doi: 10.7759/cureus.13497
- [11] Gharoro, E. P., & Ikekeonwu, C. (2021). Perceived Psychological Benefits of Fasting during the Holy Month of Ramadhan: A Study of Muslim Students in Nigeria. *Journal of Religion and Health*, 60(2), 1175-1187. doi: 10.1007/s10943-020-01126-5
- [12] Hwang, J.W., Sundaram, S.S., Wu, M.F., Kim, Y., Oh, Y.S., & Lee, H.J. (2020). The effects of intermittent fasting on mood and cognition in overweight
- [13] Khan, M. T., Hahn, S., & Islam, M. N. (2022). Muslim college students' mental health: Examining the role of religious identity, perceived discrimination, and campus climate. *Journal of Muslim Mental Health*, 16(2), 131-147.