

Stress and emotional eating among fasting muslims during Ramadan: Examining the role of life satisfaction as a moderating variable

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ABSTRACT

Ramadan is a blessed time for observant muslims. However, two changes can be clearly observed during Ramadan: stress due to changes in daily activities, and the most obvious is emotional eating during breaking the fast. This study aims to identify the role of life satisfaction as a moderating variable in the influence of stress on emotional eating in fasting Muslims. The quantitative research design chosen was a survey-based study with self-reported responses involving 431 adult Muslims fasting in various regions in Indonesia. The instruments used included the Perceived Stress Scale (PSS), the Emotional Eater Questionnaire (EEQ), and the Satisfaction with Life Scale (SWLS). Analysis using Moderated Regression Analysis showed a β interaction = .012, $t = 2.072$, $p = .038 < .05$, indicating that life satisfaction moderates the influence of stress on emotional eating. These findings emphasize the importance of life satisfaction as an effective strategy to reduce stress and emotional eating in Muslims during fasting. Implication of this study is that life satisfaction, as a positive psychology variable, may serve as protective factor against the adverse effects of stress in a religious context like Ramadan.

INTRODUCTION

The holy month of Ramadan is a period for Muslims to perform fasting by abstaining from all forms of food, drink, and certain activities from dawn until sunset (Anugerah et al., 2025). The condition of fasting naturally presents challenges, both physical and psychological, particularly for Muslims who are not accustomed to it (Auliya et al., 2025). Although fasting offers spiritual and health benefits, not all Muslims experience it under stable psychological conditions. During Ramadan, Muslims inevitably experience significant changes in their daily routines, particularly in relation to eating patterns, sleep schedules, and physical activity (Munaya et al., 2018). These life style adjustments, while spiritually meaningful, can also pose psychological challenges. Two of the most common psychological responses to these changes are stress and emotional eating (Dewi et al., 2024; Munaya et al., 2018).

The phenomenon of emotional eating that occurs during Ramadan among Muslims can be observed in the contrast between physical hunger and emotional hunger, particularly in the early weeks of fasting. This desire is no longer due to the body's needs, but rather as an outlet for emotions accumulated throughout the day. From a social and cultural perspective, Ramadan is also associated with a wide variety of foods that appear only once a year, which may encourage overconsumption or overeating (Shatila et al., 2021). Culture, according to Sze et al. (2021) can



reinforce emotional eating patterns, as the presence of food may prompt someone to continue eating even when not hungry. The moment of iftar is also often used as a release of emotions accumulated throughout the day through excessive eating (Fardian et al., 2025). Such eating patterns demonstrate a clear distinction between hunger driven by physical needs and hunger triggered by emotions. This phenomenon illustrates the practice of emotional eating during Ramadan.

Emotional eating is not only a matter of physical needs but also reflects an individual's inability to regulate emotions (Barcin-Güzeldere & Devrim-Lanpir, 2022). At iftar, many individuals are unaware that they are eating because of emotional pressure accumulated during the day in addition to physical hunger. Low self-awareness often causes fasting Muslims to let emotions influence their eating behavior. Although eating at iftar is part of worship, excessive consumption driven by emotions may reflect a temporary lapse in self-regulation, which, if recurrent, could influence the development of less healthy eating patterns.

Emotional eating is defined as an eating behavior driven by emotions rather than hunger (Ekim & Ocakci, 2021). Food is often used as a way to relieve negative emotions. When negative emotions are not managed healthily, during fasting food may become the easiest and fastest outlet. Individuals who engage in emotional eating tend to consume spicy, sweet, calorie-dense, and fatty foods. These foods serve as an instant solution to reduce discomfort (Permana et al., 2024).

Among Muslims who fast, emotional eating is likely to occur when emotional fluctuations are influenced by the surrounding environment, such as pressures from social media, academic demands, or career challenges (Hasan et al., 2021). The cultural practice of collective iftar also contributes to stronger tendencies toward emotional eating, as shared mealtimes during Ramadan are often imbued with social and emotional significance. The collective setting fosters a sense of belonging and communal reward, which may inadvertently promote increased food intake as a culturally reinforced expression of social bonding and emotional relief following the fasting period. With large amounts of food, especially sweet, fatty, and high-calorie dishes, individuals are more likely to overeat (Ramadani, 2017).

The fasting month often creates stress for those who observe it. Stress arises from changes in sleep patterns, social demands, and restricted eating times, which typically lead to psychological strain (Nurjanah & Cahyono, 2023). Muslims who fail to manage it usually show symptoms such as lack of enthusiasm, difficulty concentrating, and overeating at iftar until feeling uncomfortably full (Tibi et al., 2023). This indicates that fasting, for many people, can be perceived as an additional burden if not accompanied by adequate physical and mental preparation. This is especially true for Muslims in early adulthood, who face pressures from work, academics, and social life, which can lead to high levels of stress and make them more prone to consuming large amounts of food as an outlet. If left unaddressed, this may form a cycle of emotional eating that is difficult to break (Harahap et al., 2025).

Previous studies have shown that stress is a major trigger of emotional eating (Caso et al., 2020; Chao et al., 2016). However, not all individuals who experience stress while fasting cope with it through eating. Other studies have also shown a significant relationship between stress and emotional eating among young adults, as demonstrated in a meta-analysis (Hill et al., 2022). Carpio-Arias et al. (2022) also explained that stress and emotional eating are strongly related among young adults aged 21 to 37 years in Ecuador. However, in other research, the relationship between stress and emotional eating is not always strong and consistent, as shown in the study by Sukianto et al. (2020) who found no relationship between stress levels and emotional eating among employees in an institution in Jakarta. Such inconsistencies suggest that the link between stress and

emotional eating may be contingent upon moderating factors that influence how individual appraise and regulated stress. Factors such as spirituality, social support, satisfaction, and cultural eating practice could shape coping responses, potentially strengthening or weakening the tendency to engage in emotional eating under stress.

One important factor to consider in moderating the relationship between stress and emotional eating is life satisfaction. Life satisfaction is defined as an individual's subjective evaluation of overall life quality (Diener et al., 1985). Individuals who feel satisfied with their lives are generally able to manage stress adaptively. They are also more capable of responding positively to stress and the urge to overeat (Jiang et al., 2019). One study also found that individuals with higher life satisfaction may have better coping strategies, such as channeling stress into positive activities (worship, light exercise, or healthy social interactions), while individuals with lower life satisfaction are more vulnerable to seeking instant relief (Wendt et al., 2019).

In the study of coping with stress, individuals who are able to manage stress effectively exhibit fewer maladaptive behaviors, such as emotional eating (Ertem & Karakaş, 2021). Similarly, the self-determination theory states that individuals whose basic needs are fulfilled will demonstrate adaptive behaviors (Tomaszewski et al., 2025). When these needs are met, individuals gain a stronger sense of meaning and are better able to control their behavior. Good life satisfaction can provide a strong psychological foundation to form coping strategies and resilience in facing life pressures. With a sense of satisfaction in life, individuals are more likely to maintain hope that strengthens their psychological endurance, and life satisfaction has the potential to serve as a protective factor (Gori et al., 2020). From the perspective of positive psychology, life satisfaction reflects the presence of positive emotions. Positive emotions can act as a buffer against psychological stress. Greater positive emotions enable individuals to make appropriate decisions, such as preventing them from engaging in emotional eating (Góngora, 2014).

Several studies have also emphasized the close relationship between life satisfaction and emotional eating. Sze et al. (2021) found that the higher the life satisfaction, the lower the emotional eating among university students in Hong Kong. Among medical personnel, a strong negative relationship between life satisfaction and emotional eating has also been identified (Gürkan et al., 2022). Empirically, these two studies suggest that life satisfaction may reduce the negative effects of emotional eating as well as stress. By analogy in the context of fasting, when individuals have high life satisfaction, the stress and emotional eating they experience can be alleviated through life satisfaction. Fasting also serves as a reflective moment that can increase life satisfaction when practiced with spiritual awareness. Individuals who fast and are able to deeply internalize the meaning of fasting will naturally enhance their sense of life satisfaction.

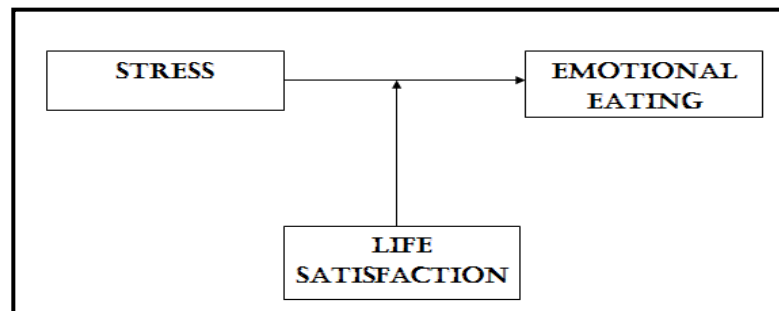
The limited research on emotional eating among fasting Muslims, particularly in Indonesia, makes this study an important topic to be explored further, since most previous studies were conducted on general populations, such as research on emotional eating among young adults in Korea (Bilici et al., 2020), Turkey (Metin et al., 2025), the United States (Barak et al., 2021), and Norway (Bemania et al., 2020) who were not in fasting conditions. The novelty of this study can also be observed in the uniqueness of its data collection period, which was during the month of Ramadan. By identifying life satisfaction as a moderating variable between stress and emotional eating, this research provides a valuable contribution to enrich the literature.

This study aims to determine whether life satisfaction serves as a moderating variable in the influence of stress on emotional eating among Muslims who fast during the month of Ramadan. This study hypothesized that life satisfaction buffers the impact of stress on emotional eating, such

that individuals with higher life satisfaction are less likely to engage in emotional eating in response to stress during Ramadan fasting.

Figure 1

Conceptual Framework



METHODS

This quantitative study employed a cross-sectional research design with self-reported responses, in which all data were collected through surveys and the information obtained reflected the participants' own responses (Creswell & Creswell, 2018). Data collection was conducted from March 12 to March 16, 2024 (the first four days of fasting in the first week of Ramadan 2024) using a digital survey distributed via social media platforms. The present study was approved by the Research and Community Service Institute (LP2M) of UIN Sunan Gunung Djati Bandung, with ethical clearance number: B-765/Un.05/V.2/TL/10/2025.

The participants consisted of 431 observant Muslims who were fasting and came from various regions in Indonesia. They were in the stage of early adulthood, ranging in age of 20 to 40 years (Fidler et al., 2017; Syihab et al., 2021). The required sample size was estimated using Raosoft online sample size calculator, applying a 95% confidence interval (CI) and 5% margin of error to ensure adequate statistical power.

The selection of early adulthood in this study was based on the paradigm that early adulthood is a period full of pressures and challenges, such as achieving independence, building a strong self-identity, taking on new social roles, developing a career, and establishing relationships. Participants were recruited using a non-probability purposive sampling technique. This technique was chosen to ensure that only individuals who met specific inclusion criteria, namely, being Muslim, actively fasting during Ramadan and within the defined early adulthood age range were included in this study.

The Emotional Eater Questionnaire (EEQ-10) is a scale widely used in health practice (Garaulet et al., 2012). The EEQ-10 is very easy to use; all statements in the EEQ-10 have four response options (never, sometimes, usually, and always). Each response is scored on a scale from 0 to 3. The EEQ-10 measures the extent to which certain factors influence an individual's eating behavior. The lower the score, the healthier the individual's eating behavior. The internal consistency reliability of the EEQ-10 in this study was .75. Researchers should therefore interpret EEQ score with caution and clarify whether they are conceptualizing emotional eating as stable individual differences, a situational reaction, or both. In the present study, the EEQ was adapted by the researchers involved translation and back-translation by two experts. Example items included:

“Do you overeat when you feel stressed, angry, or bored?” and “Do you have a hard time stopping yourself from eating sweets?”.

The Perceived Stress Scale (PSS-10) is a popular instrument used to measure perceived stress, specifically the extent to which individuals experience stressful situations in their lives. It was originally developed in 1983 by Cohen et al. (1983). The PSS-10 consists of 10 items with five response options: 0 = never, 1 = almost never, 2 = sometimes, 3 = fairly often, and 4 = very often. The PSS-10 used in this study was the version that had been adapted into Indonesian (Hakim et al., 2024). In its application, the PSS-10 measures stress in a unidimensional manner. The reliability of the PSS-10 in this study was .78. Example items included: *“In the past month, how often have you felt anxious and stressed?”* and *“In the past month, how often have you felt unable to control the important things in your life?”*.

The Satisfaction with Life Scale (SWLS) is a unidimensional instrument introduced by Diener et al. (1985). For this study, the researchers used the SWLS adapted by Novanto & Pali (2019). The SWLS consists of five items with seven response options ranging from strongly disagree to strongly agree. The Cronbach’s Alpha reliability coefficient of this instrument was .82. Example items included: *“Saya merasa puas dengan kehidupan saya”* and *“Kondisi kehidupan saya dalam keadaan yang sangat baik”* (“I am satisfied with my life” and “My living conditions are very good”).

The EEQ-10 primarily captures individuals’ tendencies to engage in emotional eating, representing state-like variable. The PSS-10, on other hand, was conceptualized to measure the perception of stress during fasting month. PSS-10 represent state-like construct, sensitive to contextual changes and daily life event. In contrast, the SWLS was design to assess a person’s global cognitive evaluation, indicating that the scale captures a trait-like sense of subjective well-being rather than short-term mood fluctuation. EEQ-10 and PSS-10 primarily measure state-dependent experience, while SWLS represent a more stable, trait-like evaluation. The inferential statistical technique used was Moderated Regression Analysis (MRA) with the Hayes Macro Process applied in SPSS software version 20. This technique was chosen to examine whether a moderating variable can strengthen or weaken the influence of an independent variable on a dependent variable within a testing model.

RESULTS AND DISCUSSION

All participants in this study were Muslims from various cities in Indonesia. The number of participants was nearly equal in gender, namely 50.1% and 49.9%, with a difference of only one individual in frequency. In terms of numbers, males slightly outnumbered females in this study. The participants’ ages ranged from 21 to 28 years, with a mean age of 21.02 and a standard deviation of 1.31. The majority of participants had completed undergraduate education (S1/D4), accounting for 67.7%. In terms of marital status, most participants were unmarried.

Table 1

Participant Demographics

Demographics	Category	F	%
Gender	Male	216	50.1%
	Female	215	49.9%

Age	20-23 years	407	94.4%
	24-28 years	26	5.6%
Educational Level	Junior High School	2	.5%
	Senior High School	122	28.3%
	Diploma (D3)	12	2.8%
	Bachelor/Diploma IV (S1/D4)	292	67.7%
	Master (S2)	3	.7%
Marital Status	Unmarried	414	96.1%
	Married	14	3.2%
	Divorced	3	.7%

Requirements for Moderated Regression Analysis (MRA)

There are three main requirements that must be met before conducting MRA: (1) the absence of a strong correlation between the independent variable and the moderator variable, (2) the independent variable has a significant effect on the dependent variable, and (3) the moderator variable has a significant effect on the dependent variable (Natanael et al., 2023). Therefore, in this study, the feasibility of these requirements was first tested. The first verification regarding the relationship between stress and life satisfaction was conducted through multicollinearity testing, which yielded a Tolerance value of .727 and a VIF of 1.376 for both the independent and moderator variables. This indicates that there was no high correlation between the independent variable and the moderator. For the second and third requirements, the researchers conducted a Multiple Regression analysis, as presented in Table 2.

Table 2

Multiple Regression

Variable	β	t	Sig.
(Constant)	10.537	4.795	.000
Stress	.329	6.775	.000
Life satisfaction	-.168	-4.037	.000

Note: R^2 MR = .13 or 13%

The results of the multiple regression analysis showed that stress had a positive effect on emotional eating among fasting Muslims ($\beta_I = .329$, $t = 6.775$, $p = .000 < .05$). Likewise, for the moderator variable, it was found that life satisfaction had a negative effect on emotional eating among fasting Muslims ($\beta_{mod} = -.168$, $t = -4.037$, $p = .000 < .05$). These results indicate that all three requirements for conducting MRA—namely the relationship and the effects of the independent variable and the moderator variable on the dependent variable—were met, and the subsequent analysis could be performed.

Moderated Regression Analysis (MRA)

The next step was the MRA test conducted to address the objective of this study, as presented in Table 3 and Figure 2. The MRA results showed that life satisfaction significantly acted

as a moderating variable between stress and emotional eating among fasting Muslims ($\beta_{interaction} = .012, t = 2.072, p = .038 < .05$). The initial value of $\beta_I = .329$ and with the inclusion of the moderating variable, the value became $\beta_{interaction} = .012$ which was significant. This indicates a decrease in the beta value of .317, or a reduction in the effect of stress on emotional eating when moderated by life satisfaction.

Table 3

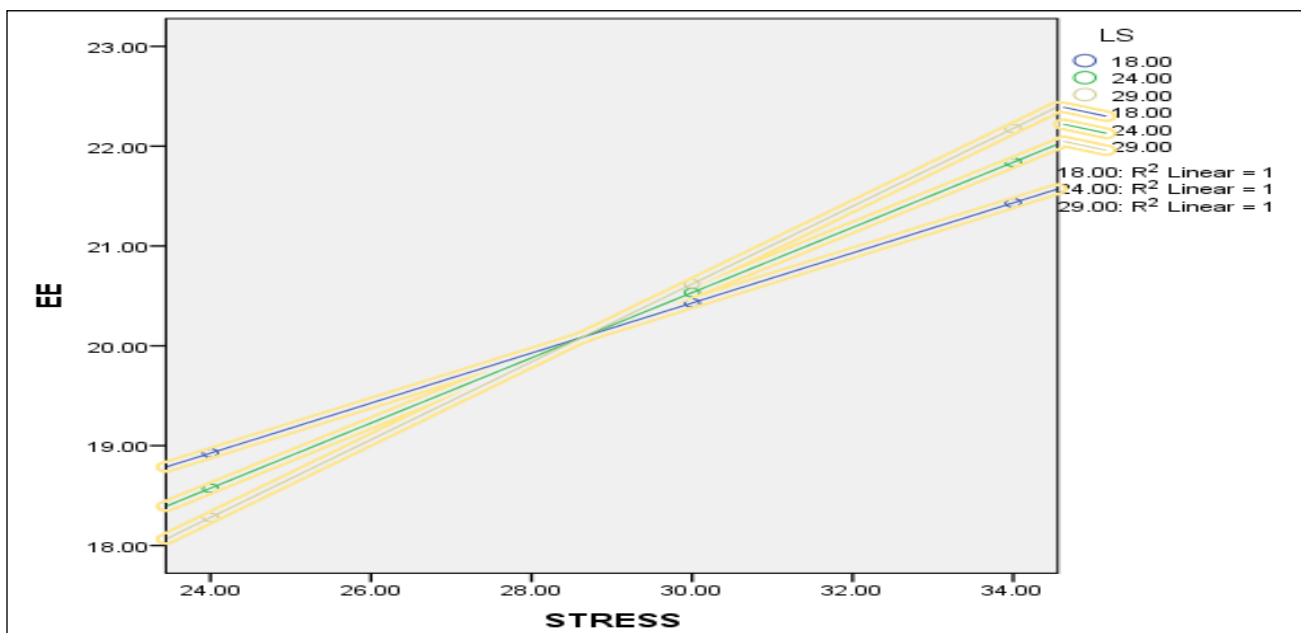
Moderated Regression Analysis

Variable	β	t	Sig.
(Constant)	19.424	4.033	.000
Stress	.023	.148	.881
Life satisfaction	-.362	-2.021	.043
Interaction	.012	2.072	.038

Note: R^2 MRA = .1386 or 13.86%

Figure 2

Interaction Plot Moderation Analysis



Effect Size

After conducting the MRA analysis, Hair et al. (2014) recommended calculating the effect size using the F^2 formula:

$$F^2 = [(R^2 \text{ MRA} - R^2 \text{ MR}) / (1 - R^2 \text{ MRA})]$$

From the calculation formula, it was found that the resulting effect size was .10, which falls into the category of a weak effect. This means that life satisfaction produces only a relatively small change in the effect of stress on emotional eating.

The findings of this study provide several important and interesting points that deserve further discussion. One concerns the significant effect of stress on emotional eating among Muslims

who fast during Ramadan. This has not been identified in previous studies within the Ramadan context. However, these findings are similar to those reported by Caso et al. (2020) & Chao et al. (2016) who stated that stress is a major trigger of emotional eating. This significant effect is likely due to the drastic changes in daily life during Ramadan, including sleep patterns, activities, and food intake, which may trigger stress and ultimately lead individuals to engage in maladaptive behaviors such as emotional eating at iftar.

In the context of Ramadan, Muslims who abstain from food and drink for more than 12 hours are naturally more likely to experience psychological pressure as well as physical fatigue, thereby increasing the tendency to consume food emotionally at iftar (Rad et al., 2023). This positive effect can also be analogized to situations in which individuals experience stress, as the body and mind will automatically seek quick ways to feel comforted. One of the easiest and most accessible ways to achieve this is by channeling it through food.

Another finding that needs to be discussed is that life satisfaction had a negative and significant effect on emotional eating among fasting Muslims. This supports previous studies by Sze et al. (2021) and Gürkan et al. (2022) both of which found that the higher the life satisfaction, the lower the emotional eating, whether among medical personnel or university students. Although the context of this study is quite different from the previous ones, the results are consistent. This indicates that life satisfaction indeed has an impact on individuals' emotional eating.

From a positive psychology perspective, one constructive way to reduce stress and emotions is by experiencing life satisfaction (Kim & Kang, 2022; Sze et al., 2021). Among fasting Muslims, life satisfaction is often associated with gratitude, closeness to Allah, and self-acceptance. Thus, life satisfaction can serve as a protective factor for individuals who fast. Those who are satisfied with their lives will naturally have calmness, a sense of sufficiency, and the ability to regulate their emotions in a stable manner. Satisfied individuals are less likely to seek instant escapes when facing stress, including through food. Ramadan can be analogized as a moment of purification and training in self-control. Muslims with high life satisfaction generally perceive it as an opportunity to draw closer to Allah rather than as a burden (Akbar & Keten, 2024). With greater life satisfaction, the effect obtained is positive, as emotional stability provides individuals with strong support (Azpiazu et al., 2023).

Furthermore, the results of the MRA analysis revealed that life satisfaction moderates the effect of stress on emotional eating. In other words, individuals with high life satisfaction are less likely to express their stress through emotional eating. The moderating effect of life satisfaction buffers the impact of stress on emotional eating. Specifically, individuals with low life satisfaction are more impacted by higher stress levels when they have greater emotional tendencies. Conversely, for those with high life satisfaction, this association becomes weaker or negligible, suggesting that life satisfaction serves as protective psychological buffer that mitigates the impact of stress on maladaptive eating behaviors. This finding is consistent with previous research by Gori et al. (2020) which stated that life satisfaction has the potential to serve as a protective factor that strengthens psychological resilience and functions as a coping strategy to endure life pressures.

This finding also reinforces the study by Stec et al. (2023) regarding the importance of psychological well-being in managing emotional pressures that arise during fasting. A closer look shows that life satisfaction has an effect size categorized as weak (Hair et al., 2014). A weak effect indicates that while life satisfaction does weaken the influence of stress on emotional eating, the impact is not substantial. Life satisfaction is a highly global indicator of an individual's self-evaluation. On the other hand, the strength of life satisfaction as a variable remains limited,

suggesting that other variables may play a more significant role in mitigating the impact of stress on emotional eating.

From a deeper observation, stress and emotional eating appear to be more closely related to emotion regulation or self-regulation. It is possible that emotion regulation or self-regulation could serve as stronger moderating variables. In a spiritual context, mindfulness may also act as a more specific moderating variable. These three suggested variables, based on this observation, may be tested in future studies with similar research interests.

Nevertheless, although the sample was homogenous in age due to the inclusion criteria, it was also relatively limited in diversity of occupational and socioeconomic backgrounds, what may affect the generalizability of the result. Practically, however, these findings contribute to enriching the understanding of the relationship between stress, emotional eating, and life satisfaction, particularly during Ramadan.

CONCLUSION

Based on the findings of this study, it can be concluded that life satisfaction was proven to moderate the effect of stress on emotional eating among fasting Muslims. This suggests that life satisfaction serves as a psychological buffer that helps individuals manage stress more adaptively, thereby reducing the tendency to cope through maladaptive eating behaviors. The implication of this study highlights the importance of positive psychology variables that can serve as protective factors in reducing mental health problems and supporting adaptive behaviors among Muslims during fasting.

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REFERENCES

- Akbar, H. T., & Keten, H. S. (2024). The relationship between religion, spirituality, psychological well-being, psychological resilience, life satisfaction of medical students in the Gaziantep, Turkey. *Journal of Religion and Health*, 63(4), 2847–2859. <https://doi.org/10.1007/s10943-024-02027-2>
- Anugerah, D., Sari, A. P., & Maulidha, W. (2025). Makna dan implementasi nilai-nilai ramadhan dalam kehidupan masyarakat. *Jurnal Dinamika Sosial dan Sains*, 2(1), 439–445. <https://doi.org/10.60145/jdss.v2i1.119>
- Auliya, A. S., Sujatma, N., & Aini, I. N. (2025). Studi kualitatif tentang dampak dimensi psikologis dan spiritual dalam puasa. *Khulasah Islamic Studies Journal*, 7(1), 120–136. <https://doi.org/10.55656/ksij.v7i1.272>
- Azpiazu, L., Antonio-Agirre, I., Fernández-Zabala, A., & Escalante, N. (2023). How does social support and emotional intelligence enhance life satisfaction among adolescents? A

- mediational analysis study. *Psychology Research and Behavior Management*, 16, 2341–2351. <https://doi.org/10.2147/PRBM.S413068>
- Barak, R. E., Shuval, K., Li, Q., Oetjen, R., Drope, J., Yaroch, A. L., Fennis, B. M., & Harding, M. (2021). Emotional eating in adults: The role of sociodemographics, lifestyle behaviors, and self-regulation—Findings from a U.S. National Study. *International Journal of Environmental Research and Public Health*, 18, 1744. <https://doi.org/10.3390/ijerph2004010001>
- Barcin-Güzeldere, H. K., & Devrim-Lanpir, A. (2022). The association between body mass index, emotional eating and perceived stress during COVID-19 partial quarantine in healthy adults. *Public Health Nutrition*, 25(1), 43–50. <https://doi.org/10.1017/S1368980021002974>
- Bemanian, M., Mæland, S., Blomhoff, R., Rabben, Å. K., Arnesen, E. K., Skogen, J. C., & Fadnes, L. T. (2020). Emotional eating in relation to worries and psychological distress amid the COVID-19 pandemic: A population-based survey on adults in Norway. *International Journal of Environmental Research and Public Health*, 18(1), 130. <https://doi.org/10.3390/ijerph18010130>
- Bilici, S., Ayhan, B., Karabudak, E., & Koksall, E. (2020). Factors affecting emotional eating and eating palatable food in adults. *Nutrition Research and Practice*, 14(1), 70–75. <https://doi.org/10.4162/nrp.2020.14.1.70>
- Carpio-Arias, T. V., Solís Manzano, A. M., Sandoval, V., Vinueza-Veloz, A. F., Rodríguez Betancourt, A., Betancourt Ortiz, S. L., & Vinueza-Veloz, M. F. (2022). Relationship between perceived stress and emotional eating: A cross sectional study. *Clinical Nutrition ESPEN*, 49, 314–318. <https://doi.org/10.1016/j.clnesp.2022.03.030>
- Caso, D., Miriam, C., Rosa, F., & Mark, C. (2020). Unhealthy eating and academic stress: The moderating effect of eating style and BMI. *Health Psychology Open*, 7(2), 2055102920975274. <https://doi.org/10.1177/2055102920975274>
- Chao, A., Grey, M., Whittemore, R., Reuning-Scherer, J., Grilo, C. M., & Sinha, R. (2016). Examining the mediating roles of binge eating and emotional eating in the relationships between stress and metabolic abnormalities. *Journal of Behavioral Medicine*, 39(2), 320–332. <https://doi.org/10.1007/s10865-015-9699-1>
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385–396. <https://doi.org/10.2307/2136404>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publication, Inc.
- Dewi, D. K., Priyanti, S. O., Alam, D. R. M., & Darwis, D. (2024). Relevansi antara puasa dengan kesehatan fisik pada remaja. *Turabian: Jurnal Pendidikan Islam*, 2(2), 64–75. <https://doi.org/10.33558/turabian.v2i2.9849>
- Diener, E., Emmons, R. A., Larsen, R. A., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49, 71–75. https://doi.org/10.1207/s15327752jpa4901_13
- Ekim, A., & Ocakci, A. F. (2021). Emotional eating: Really hungry or just angry? *Journal of Child Health Care*, 25(4), 562–572. <https://doi.org/10.1177/1367493520967831>
- Ertem, M. Y., & Karakaş, M. (2021). Relationship between emotional eating and coping with stress of nursing students. *Perspectives in Psychiatric Care*, 57(2), 433–442. <https://doi.org/10.1111/ppc.12599>
- Fardian, N., Debbyousha, M., Maulina, N., Maulina, M., Inayati, R., Putri, B. I., Rizka, A., & Khairunnisa, C. (2025). Edukasi pola hidup sehat dan bugar di bulan suci ramadhan bagi mahasiswa dan anak kos menggunakan panduan gizi seimbang. *Jurnal Pengabdian Kepada Masyarakat*, 3(1), 367–374. <https://doi.org/10.5281/ZENODO.15259326>
- Fidler, M. M., Gupta, S., Soerjomataram, I., Ferlay, J., Steliarova-Foucher, E., & Bray, F. (2017). Cancer incidence and mortality among young adults aged 20–39 years worldwide in 2012:

- A population-based study. *The Lancet Oncology*, 18(12), 1579–1589. [https://doi.org/10.1016/S1470-2045\(17\)30677-0](https://doi.org/10.1016/S1470-2045(17)30677-0)
- Garaulet, M., Canteras, M., Morales, E., López-Guimera, G., & Sánchez-Carracedo, D. (2012). Validation of a questionnaire on emotional eating for use in cases of obesity: The Emotional Eater Questionnaire (EEQ). *Nutricion Hospitalaria*, 27(2), 645–651. <https://doi.org/10.3305/nh.2012.27.2.5659>
- Góngora, V. C. (2014). Satisfaction with life, well-being, and meaning in life as protective factors of eating disorder symptoms and body dissatisfaction in adolescents. *Eating Disorders*, 22(5), 435–449. <https://doi.org/10.1080/10640266.2014.931765>
- Gori, A., Topino, E., & Di Fabio, A. (2020). The protective role of life satisfaction, coping strategies and defense mechanisms on perceived stress due to COVID-19 emergency: A chained mediation model. *PLOS ONE*, 15(11), e0242402. <https://doi.org/10.1371/journal.pone.0242402>
- Gürkan, K. P., Aydoğdu, N. G., Dokuzcan, D. A., & Yalçinkaya, A. (2022). The effects of nurses' perceived stress and life satisfaction on their emotional eating behaviors. *Perspectives in Psychiatric Care*, 58(3), 1048–1054. <https://doi.org/10.1111/ppc.12897>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A primer on partial least squares structural equations modeling (PLS-SEM)*. SAGE.
- Hakim, A. R., Mora, L., Leometa, C. H., & Dimala, C. P. (2024). Psychometric properties of the Perceived Stress Scale (PSS-10) in Indonesian version. *JP3I (Jurnal Pengukuran Psikologi Dan Pendidikan Indonesia)*, 13(2), 117–129. <https://doi.org/10.15408/jp3i.v13i2.35482>
- Harahap, A. P., Nazmi, K., & Yusuf, M. F. (2025). Kontekstualisasi hadis tentang puasa dan relevansinya dalam mencegah pelecehan seksual terhadap perempuan di Indonesia. *Al Qalam: Jurnal Ilmiah Keagamaan dan Kemasyarakatan*, 19(1), 119. <https://doi.org/10.35931/aq.v19i1.4006>
- Hasan, F., Latzer, Y., Diedrichs, P. C., & Lewis-Smith, H. (2021). A qualitative exploration of motivations for fasting and the impact of Ramadan on eating behaviors and body image among young adult Muslim women in the United Kingdom. *Eating Behaviors*, 42, 101545. <https://doi.org/10.1016/j.eatbeh.2021.101545>
- Hassan, H. M. (2016). Investigation of the self-reported aberrant driving behavior of young male Saudi drivers: A survey-based study. *Journal of Transportation Safety & Security*, 8(2), 113–128. <https://doi.org/10.1080/19439962.2015.1017782>
- Hill, D., Conner, M., Clancy, F., Moss, R., Wilding, S., Bristow, M., & O'Connor, D. B. (2022). Stress and eating behaviours in healthy adults: A systematic review and meta-analysis. *Health Psychology Review*, 16(2), 280–304. <https://doi.org/10.1080/17437199.2021.1923406>
- Jiang, X., Fang, L., & Lyons, M. D. (2019). Is life satisfaction an antecedent to coping behaviors for adolescents? *Journal of Youth and Adolescence*, 48(11), 2292–2306. <https://doi.org/10.1007/s10964-019-01136-6>
- Kim, B.-N., & Kang, H. S. (2022). Differential roles of reflection and brooding on the relationship between perceived stress and life satisfaction during the COVID-19 pandemic: A serial mediation study. *Personality and Individual Differences*, 184, 111169. <https://doi.org/10.1016/j.paid.2021.111169>
- Metin, Z. E., Bayrak, N., Mengi Çelik, Ö., & Akkoca, M. (2025). The relationship between emotional eating, mindful eating, and depression in young adults. *Food Science & Nutrition*, 13(1), e4028. <https://doi.org/10.1002/fsn3.4028>
- Munaya, N., Brahmadi, A., & Budi Handoyo Sakti, Y. (2018). Efek stres puasa terhadap ketebalan epitel dan diameter tubulus seminiferus rattus norvegicus. *Mutiara Medika: Jurnal Kedokteran dan Kesehatan*, 18(1), 1–7. <https://doi.org/10.18196/mm.180107>

- Natanael, Y., Fridayanti, Ansori, M. R., Salsabilla, R., & Haq, R. R. (2023). Identifikasi dukungan keluarga sebagai moderator antara intrusi dan stres. *Motiva: Jurnal Psikologi*, 6(2), 132–142. <https://doi.org/10.31293/mv.v6i2.6760>
- Novanto, Y., & Pali, M. (2019). Teacher's life satisfaction in Palopo and Toraja: An analysis study based on demographic factors. *Jurnal Sains Psikologi*, 8(2), 207–217. <https://doi.org/10.17977/um023v8i22019p207>
- Nurjanah, & Cahyono, N. A. S. (2023). Pengaruh puasa terhadap kesehatan tubuh, kesehatan mental dan prestasi belajar. *Journal Islamic Education*, 1(4), 71–83. <https://doi.org/10.71456/jis.v1i2.260>
- Permana, J. C., Maskar, D. H., & Anwar, K. (2024). Hubungan emotional eating terhadap status gizi pada remaja putri di SMAN 26 Jakarta. *Jurnal Ilmu Gizi dan Dietetik*, 3(1), 1–7. <https://doi.org/10.25182/jigd.2024.3.1.1-7>
- Rad, M. S., Ansarinia, M., & Shafir, E. (2023). Temporary self-deprivation can impair cognitive control: Evidence from the ramadan fast. *Personality and Social Psychology Bulletin*, 49(3), 415–428. <https://doi.org/10.1177/014616722111070385>
- Ramadani, A. (2017). *Hubungan jenis, jumlah dan frekuensi makan dengan pola buang air besar dan keluhan pencernaan pada mahasiswa muslim saat puasa ramadhan* [Skripsi, Universitas Airlangga].
- Shatila, H., Baroudi, M., El Sayed Ahmad, R., Chehab, R., Forman, M. R., Abbas, N., Faris, M., & Naja, F. (2021). Impact of ramadan fasting on dietary intakes among healthy adults: A year-round comparative study. *Frontiers in Nutrition*, 8, 689788. <https://doi.org/10.3389/fnut.2021.689788>
- Stec, K., Pilis, K., Pilis, W., Dolibog, P., Letkiewicz, S., & Głębocka, A. (2023). Effects of fasting on the physiological and psychological responses in middle-aged men. *Nutrients*, 15(15), 3444. <https://doi.org/10.3390/nu15153444>
- Sukianto, R. E., Marjan, A. Q., & Fauziyah, A. (2020). Hubungan tingkat stres, emotional eating, aktivitas fisik, dan persen lemak tubuh dengan status gizi pegawai Universitas Pembangunan Nasional Jakarta. *Ilmu Gizi Indonesia*, 3(2), 113–122. <https://doi.org/10.35842/ilgi.v3i2.135>
- Syihab, N., Syihab, A., & Kusumawardhani, S. J. (2021). The analysis of Stenberg's triangle love theory on early adult couples of Ba'lawi Arab descent who experienced arranged marriages. *Psikis : Jurnal Psikologi Islami*, 7(2), 188–195. <https://doi.org/10.19109/psikis.v7i2.5145>
- Sze, K. Y. P., Lee, E. K. P., Chan, R. H. W., & Kim, J. H. (2021). Prevalence of negative emotional eating and its associated psychosocial factors among urban Chinese undergraduates in Hong Kong: A cross-sectional study. *BMC Public Health*, 21(1), 583. <https://doi.org/10.1186/s12889-021-10531-3>
- Tibi, S., Ahmed, S., Nizam, Y., Aldoghmi, M., Moosa, A., Bourenane, K., Yakub, M., & Mohsin, H. (2023). Implications of ramadan fasting in the setting of gastrointestinal disorders. *Cureus*, 15(3), e36972. <https://doi.org/10.7759/cureus.36972>
- Tomaszewski, B., DaWalt, L. S., Hume, K., Rentschler, L., & Steinbrenner, J. (2025). Adaptive behavior, self-determination, and health in autistic young adults. *Remedial and Special Education*, 46(4), 311–322. <https://doi.org/10.1177/07419325251316817>
- Wendt, G. W., Costa, A. B., Poletto, M., Cassepp-Borges, V., Dellaglio, D. D., & Koller, S. H. (2019). Stressful events, life satisfaction, and positive and negative affect in youth at risk. *Children and Youth Services Review*, 102, 34–41. <https://doi.org/10.1016/j.chilyouth.2019.04.028>