Religion, Culture and Food Waste Behavior among Muslim Consumers in Selangor

Mohd Faisal Abdul Wahab[1], Hasiful Fata Talhah[4][2]*, Nuryn Nazura Zamry[3],

[1]*Department of Tourism Management, Universiti Teknologi MARA Cawangan Pulau Pinang, Malaysia*
[2, 3] *Department of Culinary Arts and Gastronomy, Faculty of Hotel and Tourism Management, Universiti Teknologi MARA Cawangan Pulau Pinang, Malaysia*
*corresponding author: hasiful_fata@uitm.edu.my

ABSTRACT

Food waste has been considered as a worldwide problem since the factors contributing to a rise in food waste have received insufficient attention. Moreover, consumer behavior towards food waste is commonly ignored, this detrimental habit has become the norm in society. Therefore, this study investigates the factors that influence food waste among Muslim consumers in Selangor, Malaysia. A sample of 384 participants was selected to engage in an online survey administered using Google Forms. It is acknowledged that religion and culture positively impact the food waste behavior of Muslim consumers. The research on the influence of religion and culture on food waste behavior can be utilized to generate initiatives for change and improvement can be implemented to break the habitual practice of wasting. Thus, to effectively reduce food waste, it is necessary to gain a deeper understanding of Muslim consumers' food waste behavior and the factors that influence them. This study is without its limitations. Further research is required to better understand other potential significant determinants of food waste.

1. INTRODUCTION

The food service industry is responsible for 26% of the world's total food waste problem (FW). Food waste is food intended for human consumption that is discarded either because it was held over its expiration date or because it was allowed to perish (UNEP,2021). Despite the fact that food waste has been considered a perpetual global dilemma, more must be done to solve this significant issue. On a smaller scale, Future Directions International (FDI) research indicated that both South and Southeast Asia produce 25 % of the world's food waste, with food waste accounting for more than half of Southeast Asia's trash (Fortier, 2021). Furthermore, according to data given by the Solid Waste Management and Public Cleaning Corporation (SWCorp) in 2021, Malaysia produced 17,007 tonnes of food waste daily. Also, 24 % of the waste, or around 4,089 tonnes, is digestible, and three million people could theoretically be fed three meals per day with this quantity of waste (Yuen, 2022; Bernama, 2022).

Malaysia is renowned for the diversity of its ethnic groups, cultures, and religions, which can have a substantial impact on consumers' behavior toward food waste. According to Mathras et al. (2016), a critical socio-demographic factor as well as a crucial psychographic characteristic of consumer communities in terms of their beliefs is religion. Moreover, Arli and Tjiptono (2014) stated religion affects consumer values, opinions, and attitudes in addition to lifestyle choices. As the majority of Malaysians are Muslims comprising 63.7 % of the total population, there is a high probability that they are the major contributor to food waste generation. This can be discerned since Muslims celebrate Ramadan, and according to Solid Waste Management and Public Cleansing Corporation, during the celebrations, the amount of food waste has surged by 15 to 20 % (Basyir, 2022). Muslims often prepare and purchase an excessive amount of food which simply leads to the disposal of food that is not eaten or perishes (Saifuddeen, 2019). Thus, referring to the literature, there are numerous factors that have been identified to contribute to food waste; the majority of these factors are influenced by religion (Elhoushy & Jang, 2021), individual attitudes (Abdelradi, 2018), and culture (Thyberg & Tonjes, 2016).

In order to gain a better comprehension of Muslim consumers' food waste behaviors and the factors influencing them, this study will concentrate on Muslim consumers in Malaysia. Despite the apparent and stringent prohibitions against waste that are expressed in the Quran, the practice of purchasing and preparing excessive food has become the standard and is difficult to terminate. As stated in verses 26 and 27 of Surah al-Isra, which read, "And pay to the kindred their full rights, as (also) to those in need, and to the wayfarer; but squander not in the manner of a spendthrift, for spendthrifts are in reality Satan's brothers, and Satan is ungrateful to his Lord," serve as a clear example of how detested in Islam being wasteful is (Saifuddeen, 2019). However, even though it has come to awareness, it is nevertheless overlooked by Muslims.

The amount of food waste in Malaysia has reached alarming levels, it is essential to comprehend the factors that lead Muslims to waste food. Thus, initiatives for change and improvement can be implemented to break the habitual practice of wasting. Other than that, Malaysia is blessed with an abundance of resources that provide consumers with tons of delicious meals. The nation's cultural identity as a melting pot of world cultures has been greatly influenced by food. However, this does not allow society to tolerate actions that promote food waste. In lieu, it is important for them to appreciate and not take the blessing of having access to an abundance of food for granted (Saifuddeen, 2019).

The relationship between religion and consumer food waste behavior has been the subject of extensive research. As stated by Yetkin Zbük et al. (2022), religion can be a major indicator of wasteful consumer behavior. Most religions consider food to be a gift from God and condemn wasting it (Elhoushy & Jang, 2021). A few studies (Abdelradi, 2018; Aleshaiwi & Harries, 2021; Revilla & Salet, 2018) addressed food intake in homes and focused on the role of religion in the generation and prevention of food waste. However, instead of concentrating on the context of the Islamic perspective, there is just an identification of the impact of religion generally on the behavior of food waste. There are many religions that can be identified from all around the world such as Islam, Christianity, Buddhism, and Hinduism, and each of them possesses a distinct belief, practice, and knowledge. In Malaysia, there are also several religions practiced, yet the study focuses on food waste behavior from an Islamic perspective as most the nation's population consists of Muslims.

In large Islamic nations including Iran (Filimonau et al., 2022), Indonesia (Kasri et al., 2021), and Lebanon (Filimonau et al., 2021), substantial research on food waste behavior has been accomplished (Chammas & Yehya, 2020). Similar studies have also been carried out in Malaysia, but they only examined general food waste knowledge and household food waste. A well-developed Muslim country like Malaysia also struggles with the problem of rising food waste per annum. However, there is still a small number of further research that highlights the causes of wasteful consumer behavior among Muslims in Malaysia. Moreover, particularly in Selangor, based on the Environment Statistics 2020, the state had the highest amount of waste amounting to 1,019.9 thousand tonnes in 2019 which affects the environment (DOSM, 2021). This study's goal is to ascertain how culture and religion affect people's attitudes regarding food waste.

2. LITERATURE REVIEW

2.1 Overview of food Waste Behavior among Muslim in Malaysia

In Malaysia, food waste generation has been a persistent problem as per reported to latest data, the amount of food waste generated daily has reached 17,007 tonnes in 2021. In comparison to last year, there are slightly fewer than 17,041 tonnes of food wasted every day (Yuen, 2022). Thus, these statistics demonstrate that the overall amount of food waste produced by Malaysians each year keeps rising to alarming proportions that only have detrimental effects on the nation, people, and environment. However, many people, including eateries and customers, display a lack of concern and attention to this issue. The majority of the nation's daily food waste, with a total of 16,650 tonnes, is generated by homes, according to Azrina Sobian, a Fellow at the Institute of Islamic Understanding Malaysia (IKIM). The second contributor to food waste is wet markets with a %age of 24 %, followed by restaurants with a contribution of 23%, and hotels with 7 % (Bernama, 2019). Yet, there is no improvement recorded to reduce food waste production.

From the Islamic standpoint, wasting food is unacceptable because Allah SWT prohibits Muslims from engaging in wastage in any circumstance (The Quran, Al-A'raf, 7:31). Edible food cannot be discarded with the trash. By doing so, one is seen to have disregarded Allah's bounties and have disobeyed His commands (Altaher & Fahim, 2016). In Islam, it is detested to waste anything. It is equally crucial to highlight that Islam places a strong emphasis on the requirement of exercising restraint and the importance of not wasting food (Saifuddeen, 2019). Despite the clear and strict prohibitions of wastage stated in the Quran, the practice of excessive food purchasing, and preparation has become a standard that is hard to be ceased.

Numerous studies have been carried out to examine this issue, yet consumer efforts to prevent food waste are still insufficient. Akintola (2021) stated that Islam has offered several straightforward solutions for preventing food waste, including making it an abominable crime, discouraging excess, engaging in charitable acts, and realizing that gluttony is a type of waste that can increase the risk of chronic illnesses like obesity and diabetes. Moreover, Allah stated in the Quran that he does not enjoy extravagance and that we should eat from the products of the soil, give to the needy from our harvest, and prevent waste (Quran, 7:31).

The website's quality has become critical to the tourist and hospitality industries' performance, and research into assessing the service quality of websites has exploded in recent years. With the growing necessity to track all aspects of a customer's website engagement, several studies have attempted to uncover critical website variables in the tourist and hospitality industries (Jiménez-Barreto & Campo-Martínez, 2018; Vila *et al*., 2021). For example, in Bastida and Huan's (2014) study, the more attractive and useful an official destination website is, the more likely it is to turn a potential tourist into an actual tourist. Moreover, in Chung et al. (2015) study, researchers mentioned that the destination website's quality information would significantly affect confirmation and intention to continue website use.

2.2 Factors Influencing Food Waste Behavior

2.2.1 Religion

Religion is one of the significant factors in determining social behavior and has an impact on society and consumers both directly and indirectly (Mokhlis, 2009). Religiosity has been discovered as a significant element that influences consumers' purchase decisions (Forghani et al., 2019). Religious beliefs have an impact on consumers' decisions to utilize or reject particular products or services (Al Ansari, 2012; Rehman & Shahbaz, 2010). Abdelradi (2018) stated that in the context of food waste, there is a strong correlation between religious convictions and environmental consciousness, which adversely impacts people's intentions toward food waste.

The majority of religions place a great priority on food as a means of satisfying hunger and remembering important occasions (Awan et al., 2015). Food also serves as a symbol of religious beliefs that prohibit the consumption of specific meals at specific times (Aktas et al., 2018). Halal food, for instance, signifies Islam. The holy month of Ramadhan also has a distinct pattern for food consumption that differentiates Muslims apart from non-Muslims (Trepanowski & Bloomer, 2010). Throughout Ramadan, it is important to make sure that not only is food consumed moderately, but the meals for breaking fast (*iftar*), preparing for the fast (*sahur*), and food cooked after the witr and taraweeh prayers (*moreh*) also must not be overly prepared. The founder of Islam, Prophet Muhammad SAW presented several examples through his sunnah that highlighted principles like healthy and modest eating and avoiding excesses that result in waste (Saifuddeen, 2019).

Religions have established specific beliefs forbidding excess, food waste, and food loss, as well as stringent instructions to prioritize necessities (Elshaer et al., 2021). One could claim that religion influences how consumers perceive food waste since a person's level of religiosity, which reflects their commitment to adhering to god's commandments, will influence their perception of food waste (Mcdaniel & Burnett, 1990). It makes sense that persons who believe in God will be aware of the restrictions on food waste as eliminating food waste may be considered an obligation from God. However, this kind of strategy does not indicate that individuals will blindly follow it without taking the implications into account. In other words,

a person's level of religiosity will influence their values which influence their thinking process andactions simultaneously (Elshaer et al., 2021).

2.2.2 Culture

According to Baig et al. (2019), culture is recognized to be another important factor in determining food waste. An ethnic, religious, or social group's conventional beliefs, social structures, and material characteristics are referred to as its culture which are the distinctive aspects of daily life that individuals in a certain location or period share (Shavitt & Barnes, 2020; Triandis, 2012). Additionally, Shavitt and Barnes (2020) also highlighted how culture affects people's minds, which are stimulated by their surroundings. This might prompt memories of many cultural concepts, which eventually will influence their perception, judgment, and attitude. It is apparent that people commonly use food to sustain their cultural identities, which vary depending on their cultural background and history (Sibal, 2018).

In Malaysia, due to the diversity of ethnicity and religion, there are numerous cultures that can be recognized. In fact, religion can also influence how various cultures prepare their food. Sibal (2018) underlined that food plays the most crucial part in religious ceremonies and festivities. Since many of these religions enforce religious restrictions, religious societies prepare meals in a variety of ways to demonstrate respect within their communities. Given that Muslims make up the majority of the population, the culture is particularly prominent. Most cultural activities and customs can be identified by their celebrations and festivities, such as weddings, events, and celebratory rituals. Regarding the traditions and customs that revolve around food, Muslims are known to have a culture of giving. The main reason for food waste in Malaysia is the custom of placing excessive orders when holding an event (Yap, 2022). The founder of What a Waste Group, Angela Tan, claimed that Malaysians routinely serve more food than is required when entertaining visitors. For instance, the hosts of large events, such as weddings, are concerned that there will not ever be enough food.

This type of culture and practices results in food waste, particularly during Eid celebrations, weddings, and parties, which can take place at home or in restaurants and entail extravagant banquets with a lot of fresh and ample food (Vitell, 2018). People have been accustomed to this culture for many years, resulting in a nonchalant attitude towards food waste (Elshaer et al., 2021). In addition, Solid Waste Management and Public Cleaning Company asserts that there is a 15 to 20 % increase in food waste during the month of Ramadan (Basyir, 2022). This wasteful culture must therefore be addressed.
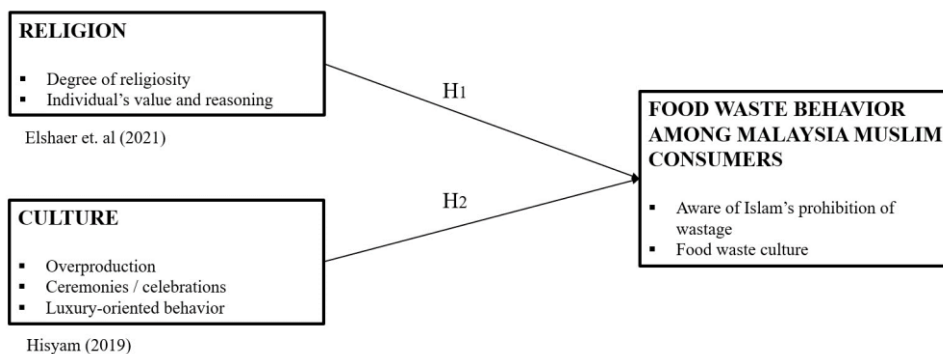
2.3 Research Framework

Figure 1: Adapted Research Framework (Hisyam, 2019, Elshaer et. Al, 2021)

2.3.1 Research Hypotheses

H₁: There is a relationship between religion and food waste behavior among Muslim consumers in Malaysia.

H₂: There is a relationship between culture and food waste behavior among Muslim consumers in Malaysia.

3. METHODOLOGY

3.1 Population and Sample

The research will be conducted within the state of Selangor, Malaysia. The selection of this particular state as the research site is based on the reported population size of 6.56 million persons as of the second quarter of 2021, as documented by Hirschmann (2021) which made Selangor as the largest population in Malaysia. Besides, Selangor is also Malaysia's largest economy which contributes a big part to Malaysia's overall GDP per capita (Statista, 2022). Furthermore, due to its advantageous geographical position, well-developed infrastructure, and inclusion of two federal territories, Selangor will continue to exert a magnetic pull-on individual seeking employment opportunities and travel experiences. Consequently, it is poised to play a pivotal role in bolstering Malaysia's overall economy.

The research sample for this study would primarily consist of Muslim customers who are residents of Selangor. Based on the findings of Jarjusey and Chamhuri (2017), it is evident that the Muslim community is the largest demographic group within Selangor, comprising 55.7 % of the overall population in the region. This study aims to provide the necessary contextual background, considering that the state has the largest population in Malaysia, with more than half of its residents identifying as Muslims. Moreover, the main aim of this study is to actively involve a wider Muslim demography and encompass a substantial section of the Selangor population, so guaranteeing the achievement of rigorous and reliable research results. In determining the sample size, social science and behavioural researchers widely use the Krejcie and Morgan Table (Md Mizanur, 2023). The table stated a sample size of 384 is enough for population over 1 million people. With that, the same figure will be used as the sample size.

3.2 Questionnaire Design

The study is based on quantitative research. The data were collected through an online questionnaire or specifically, Google Forms which required the respondents to answer the questions provided. By utilizing Google Forms, it can make the process of data collection more convenient due to its survey-friendly features. The objective is to collect adequate quantitative information regarding respondents' food waste knowledge, their demographic background, and any other potentially important variables that may affect Muslims' food waste behavior. In addition, to ensure that all respondents can access and understand the questionnaires, the questionnaire were constructed in English and then translated into Malay. The questionnaire was distributed via social media platforms such as WhatsApp, Instagram, Twitter, and Facebook.

3.3 Research Instrumentation

To address each of the research objectives and research questions, the questionnaire was divided into five sections. The questions generated for each section were adapted from past research. A five-point Likert scale with responses ranging from 1: 'strongly disagree' to 5: 'strongly agree'

was used for the respondents to respond to questions related to each variable while the demographic section used a nominal scale. Table 1 shows the research instrument used in this study.

Table 1: Sections, Items and Adaptation of Questionnaire Instrumentation

Sections	Items	Adaptation of instrumentation
Section A	Demographic information	Gender, ages, occupation, level of education, living area
Section B	Knowledge of food waste	Adapted from Jarjusey & Chamhuri (2017)
Section C	Consumers behavior towards food waste	Adapted from Russell et al. (2017)
Section D	Religious belief towards food waste behavior	Adapted from Elshaer et al. (2021) & Filimonau et al. (2022)
Section E	Culture towards food waste behavior	Adapted from Elshaer et al. (2021) & Filimonau et al. (2022)

4. FINDINGS

4.1 Demographic Profile

The demographic background data of the respondents is essential to determine whether the respondents in each study are a representative sample of the target population (Lee & Schuele, 2010). Thus, the overall results of respondents' gender, age, educational background, employment status, and living area are illustrated in a table which consist of variables, frequencies, percentages of respondents. The results of the demographic profile are as shown in Table 2.

Most of the respondents were female Muslim consumers with a percentage of 56.3% (n=216) compared to 43.8% (n=168) of male Muslim consumers. Most of the respondents aged between 21 to 23 years and 24 to 26 years (n=140) with 36.5% simultaneously. Respondents in the age group of 27 years and above have recorded 23.4% (n=90) and followed by the remaining 3.6% (n=14) in the age group of 18 to 20 years. Proceeding to educational background, more than half with the percentage of 56.8% (n=218) of the respondents have a degree background. Besides, respondents that have graduated with a master and degree accounted for 25.3% (n=97) and 13.8% (n=53) respectively. The remaining percentage consists of 3.6% (n=14) of respondents that have an SPM and followed by Ph.D. and other educational backgrounds with a percentage of 0.3% (n=1) simultaneously.

Most of the respondents in Selangor are employed with the highest percentage of 53.9% (n=207) and closely followed by students with 43.8% (n=168). The lowest percentage with a total of 2.3% (n=9) is recorded by the unemployed respondents. In terms of the living area of 384 respondents in Selangor, most of the respondents lived in other districts aside from the options stated in the questionnaire. It can be assumed that these respondents lived in Gombak, Damansara, Rawang, or other districts in Selangor. The second highest percentage with 34.6% (n=133) of respondents are from Shah Alam. The respondents from Ampang and Petaling Jaya had a total of 14.6% (n=56) and 12.0% (n=46) respectively.

Table 2: Demographic Profile of Respondents

Variables	Frequency	Percentage (%)
Gender		
Male	155	40.4
Female	229	59.6
Age		
18 - 20 years	14	3.6
21 - 23 years	140	36.5
24 - 26 years	140	36.5
Above 27 years	90	23.4
Education Background		
SPM	14	3.6
Diploma	53	13.8
Degree	218	56.8
Master	97	25.3
Ph.D.	1	0.3
Others	1	0.3
Employment Status		
Employed	207	53.9
Unemployed	9	2.3
Student	168	43.8
Living Area		
Petaling Jaya	46	12.0
Shah Alam	133	34.6
Ampang	56	14.6
Others	149	38.8

Thus, it can be concluded that the majority of the respondents for this study consist of females with the percentage of 56.3% ageing from 21 to 26 years old. Other than that, most of the respondents owned a degree and were employed. As for the living area, most of the respondents lived in other districts aside from the options stated in the questionnaire. It can be assumed that these respondents lived in Gombak, Damansara, Rawang or other districts in Selangor.

4.2 Reliability Analysis

Referring to the reliability coefficient Table 3, the highest value of coefficient numbering to .825 is recorded for Section B: Knowledge of Food Waste. Then followed by Section C: Consumer's Behavior towards Food Waste with a slightly lower value which is .751. Other than that, Section D: Religion towards Food Waste and Section E: Culture towards Food Waste have a slight difference of values between both sections with the value of .624 and .615 respectively. According to Koo and Li (2016), reliability can be referred to as the rule of thumb of Cronbach's Alpha test. The rules stated that a value less than 0.5 is considered poor, between 0.5 and 0.75 is moderate, between 0.75 and 0.9 is good, and greater than 0.90 indicates excellent reliability.

Table 3: Reliability Coefficient for Each Section in the Questionnaire

Questionnaire	No of Items	Cronbach's Alpha
Section B: Knowledge of Food Waste	5	.825
Section C: Consumer's Behavior towards Food Waste	7	.751
Section D: Religion towards FoodWaste	6	.624
Section E: Culture towards FoodWaste	6	.615

4.3 Overall Mean Score

From the mean scores listed in Table 4, the values for three sections are ranging between 3.6 until 4.1 which indicates that the tendency leaning towards agree. In addition, the remaining sections recorded the value between 4.3 and 4.5 which signify that the respondents are inclining towards strongly agree.

Table 4: Overall Mean Score of Knowledge of Food Waste, Consumer's Behavior, Religion, Culture and Consumerism towards Food Waste

	N	Minimum	Maximum	Mean	Std. Deviation
Knowledge of Food Waste	384	1.00	5.00	4.5094	.49384
Consumer's Behavior towards Food Waste	384	1.57	5.00	4.0379	.51796
Religion towards Food Waste	384	1.00	5.00	4.3038	.39156
Culture towards Food Waste	384	1.00	5.00	4.1146	.46023
Valid N (listwise)	384				

Note: The items were measured using a five-point Likert scale ranging from 1 (stronglydisagree) to 5 (strongly agree).

4.4 Inferential Statistics

In the final part, the inferential statistics which consists of Pearson's Coefficient test was presented to demonstrate the relationship between both variables, independent and dependent, which simultaneously verify the hypotheses of the study. To measure the strength and direction of the linear relationship between the variables, the Pearson's Coefficient test was conducted between two quantitative variables. Other than that, this test also summarizes the features of a dataset that has been collected from the questionnaire (Turney, 2022). Table 5 shows the correlation, strength, and direction of the variables.

Table 5: The Linear Correlation of Pearson's Correlation Coefficient (r)

Pearson's Correlation Coefficient (r)	Correlation	Direction
Between 0 and 1	Positive correlation	The variables change insame direction
0	No correlation	No relationship betweenvariables
Between 0 and -1	Negative correlation	The variables change inopposite directions

4.4.1 Religious Belief on Consumers' Food Waste Behavior

Table 7: Pearson Correlation result of Religious Belief on Consumer's Food Waste Behavior

	Pearson Correlation	Sig. (2-tailed)	N
Food Waste Behavior	1	< .001	384
Religion	.400**		384

Note: **Correlation is significant at the 0.01 level (2-tailed).

The relationship between religion and food waste behavior among Muslim consumers (r =.400**, p <.001), signifies that the correlation between these variables is weak.

4.4.2 Culture on Consumers' Food Waste Behavior

Table 8: Pearson Correlation result of Culture on Consumer's Food Waste Behavior

	Pearson Correlation	Sig. (2-tailed)	N
Food Waste Behavior	1	< .001	384
Culture	.620**		384

Note: **Correlation is significant at the 0.01 level (2-tailed).

The relationship between culture and food waste behavior among Muslim consumers (r =.620**, p <.001), indicates that the correlation between these variables is strong and positive.

5. DISCUSSION

The discussion section reviewed the research hypotheses developed. Thus, the discussion proceeded in detail by recapitulating the research hypotheses below:

H₁: *There is a relationship between religion and food waste behavior among Muslim consumers in Malaysia.*

This study showed that religion is weakly correlated with food waste behavior in Malaysia. This indicates that albeit religion and food waste behavior tend toincrease in response to one another, the relationship is not very strong. The weak correlation can be interpreted as the more religious the individuals are, the more the tendency of the individuals' behavior and intentions to reduce food waste. As mentioned by Abdelradi (2018), consumer attitudes, advocacy, and individual and subjective standards to reduce food wastage are all positively correlated with religiosity. This means that if the practice of minimizing food waste has become a habitor standard in their daily lives which is aligned with their religious belief, the lesser their intentions to waste food.

However, even religious individuals cannot avoid wasting food, with or without intentions. Hassan et al. (2022) elaborated that Islam forbids waste in all facets of life, including time, energy, and others. Nevertheless, the likelihood of food waste was higher among Muslims than among Christians, despite the fact that Muslims' beliefs forbid it. This could be attributed to the fact that religious affiliation is only considered as a status or social identity and does not necessarily reflect a person's level of interest in a particular religion. Even while some people identify as Muslims, this does not mean that they fully practice Islam. As questioned in the survey, *"I am aware of the wastage prohibition in Islam but I am not fully abiding by the rules.",* majority of the respondents (51.8%) agree with the statement which portrays that most Muslims are well aware of the waste prohibitions, but they do not take this obligation seriously eventhough it is clearly highlighted in the Quran which stated that:

> *It is he who has brought into being gardens, the cultivated and the wild, and date palms, and fields with the produce of all kinds, and olives and pomegranates, similar (in-kind) and variegated. Eat their fruit in season but give (the poor) their due on harvest day. And do not waste, for God does not love the wasteful. [quran 6:14].*

Thus, it can be said that religion can influence food waste behavior based on an individual's level of religiosity. Religious beliefs may have an indirect impact on behavior toward food (Abdelradi, 2018) since they act as the foundation for perception and behavior (Mattar et al., 2018). Yet, it is believed that greater moral obligations andactivity to decrease food waste may go in tandem with higher levels of religion, which in turn affects food waste reduction expectations and intentions (Pakpour et al., 2014; Graham-Rowe et al., 2014; Siyavooshi et al., 2019; Elhoushy and Jang, 2020).

H₂: *There is a relationship between culture and food waste behavior among Muslim consumers in Malaysia.*

This study verifies that culture is strongly and positively correlated with food waste behavior in Malaysia. This shows that culture and food waste behavior tend to increase in collateral. Moreover, Malaysia is known for its diversity of food which has become the nation's main asset yet the food culture has influenced a severe waste culture. As stated by Cummins (2018), consumers' values and beliefs, which are molded by their cultures, have an impact on their behavior. The teachings of these cultures have a significant influence on the continuous rise in food waste; for instance, because of cultural considerations, a lot of food is wasted at weddings and events due to excessive food preparation to cater to the guests (Phasha et al., 2018).

Considering all these excessive preparations of food alone, it has the potential to cause food waste. As stated in the questionnaire, 57.3 % of respondents agree with the statement, *"I serve more food than can be eaten at events and celebrations."*, the reason for this behavior can be seen through the other statement mentioned, *"It is my culture to provide food during events and celebrations to express my hospitality."* Which is supported by 66.1 % of the respondents.

Therefore, culture was recognized to have influences on food waste behavior. Muslims are recognized for having a culture of generosity when it comes to the customs and traditions that center around food. They tend to prepare and serve an excessive amount of food as an act of welcoming guests. In addition, guests are also prioritized and frequently served an abundance of food, even if their families may not have much food to spare (Baig et al., 2019).

6. CONCLUSION

Food waste has been regarded as a perennial global paradox, and there is still more that needs to be done to address this serious problem. There is an urgent need to comprehend the behaviors impacting food waste generation in order to address the issue of food waste. By concentrating on Muslim consumers in Malaysia, this study can identify and analyze the contributors to food waste behavior even among omniscient individuals regarding their religion's prohibitions. The research on the influence of religion, culture, and consumerism on food waste behavior can be utilized to generate initiatives for change and improvement can be implemented to break the habitual practice of wasting. Other than that, by gaining a better comprehension of Muslim consumers' food waste behaviors and the factors influencing them, extensive awareness can be implied by conveying messages about food waste.

Past research related to this issue is only limited to quantitative research. For future research, there is a room to approach this issue through qualitative research which is conducted via interviews, e-mails, consumer feedback, and others. For the purpose of developing proposed intervention strategies and evaluating their impact on reducing food waste generation, further research is still required to better understand the determinants of food waste. The research can focus on the hospitality, household, and retail levels among Muslims and non-Muslims in Malaysia. As more comprehension and attention gain regarding this issue, food waste can be contained progressively.

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AUTHOR CONTRIBUTION

The introduction to the document was finished by MFAW. The abstract and data collecting was assisted by MFAW, HFT and NNZ. The data analysis was conducted and analyzed by MFAW, HFT and NNZ. MFAW, HFT and NNZ prepared the conclusion and discussion. All the authors read and approved the final manuscript.

CONFLICT OF INTEREST

None declared.

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