

Knowledge, attitude, and practice of prophetic food consumption among students of Universiti Sultan Zainal Abidin, Terengganu

^{1,2*}Rohin, M. A. K., ¹Sagar, H., and ¹Ridzwan, N.

¹Faculty of Health Sciences, Universiti Sultan Zainal Abidin (UniSZA), Gong Badak Campus, 21300 Kuala Nerus, Terengganu, Malaysia

²Centre for Income Generation, Investment and Industrial Linkages, Universiti Sultan Zainal Abidin (UniSZA), Gong Badak Campus, 21300 Kuala Nerus, Terengganu, Malaysia

Article history

Received: 29 October 2019

Received in revised form:

17 June 2020

Accepted:

22 July 2020

Abstract

The present work aimed to investigate the levels of knowledge, attitude, and practice of prophetic food consumption among UniSZA students. The present work was conducted from September 2017 until April 2018 at the UniSZA Gong Badak Campus, Terengganu. In this cross-sectional study, a total of 217 students were recruited by convenience purposive sampling method. A questionnaire was based on the prophetic food consumption details, consisting of four sections, namely; demographic data, knowledge, attitude, and practice of the consumption. Reliability test found that the validity and internal consistency of the questionnaire to be acceptable with a Cronbach Alpha value of 0.752. Data were analysed using Microsoft Excel Spreadsheet 2013 and SPSS version 21.0. The results showed that most of the respondents had good knowledge of prophetic food consumption (45.6%). More than half had a good level of attitude (66.4%), and only a minority of them (38.2%) had a poor practice of prophetic food consumption. Based on Independent *t*-test and One-Way ANOVA statistical test, there was a significant difference in the mean attitude scores between male and female students, mean attitude and practice scores between the three age groups, mean knowledge scores between the three fields of study groups, and mean knowledge, attitude, and practice scores between the four religions. A positive correlation was observed for the three domains, namely between knowledge and attitude ($r = 0.71$), knowledge and practice ($\rho = 0.37$), and attitude and practice ($\rho = 0.43$), based on Spearman or Pearson correlation test. In conclusion, the importance of prophetic food must be highlighted and shared among multi-religious university students for them to be more familiar with the relevant health and sustainability issues. The students may employ effective attitude and behaviour towards the practical implementation of prophetic food if they are provided with more integrated knowledge in the learning environment of the university.

Keywords

prophetic food,
university students,
knowledge,
attitude,
practice

© All Rights Reserved

Introduction

Food choice, lifestyle, belief, culture, environment, and knowledge of a person cast an influence on individual eating habits (Monneuse *et al.*, 1997). In many societies, religion also plays an important role in shaping the food choices of people (Dindyal and Dindyal, 2003). The impact of religion on food consumption depends on the religion itself, and the extent to which the individuals interpret and follow the religious teachings (Sack, 2002). In Islam, Muslims are advised to have *halal* and *tayyib* food, which are also known as prophetic food (*makanan sunnah*) (Rani *et al.*, 2016; Norhaslina *et al.* 2017). Based on Hashman (2011), prophetic food is food that have been recommended and enjoyed by the Prophet Muhammad P.B.U.H., appraised in the Al-Quran and

Hadith, and proven to be beneficial in improving health.

Although the concept of prophetic food is widely embraced by the Muslim population in Malaysia, it remains unclear if the non-Muslims are aware of the inherent benefits of prophetic food products. It is also intriguing to find out their viewpoints on prophetic food from their religious beliefs (Golnaz *et al.*, 2010). This is especially true among multi-racial university students, as they tend to develop new eating habits or follow any new trends in the consumption of healthy food, and carry on with these consumption habits into adulthood post-graduation, resulting in a long-term impact on the food industry (Packaged Facts, 2012).

Furthermore, sociocultural influences are crucial in determining an individual's eating behaviour (Zeeni *et al.*, 2013), while the types of food consumed

*Corresponding author.

Email: mohdadzim@unisza.edu.my

by individuals are mostly determined by their religions (Sheikh and Thomas, 1994). For many Muslims, their religion serves as guidance on the behaviour of food consumption. This might also be true for non-Muslims. In previous studies, Ishak *et al.* (2013) identified the perception of the Sunnah diet among Muslim university students, and Rani *et al.* (2016) determined the knowledge of prophetic food among rural Muslim communities that reflected their sociocultural acceptance. However, to date, no studies on prophetic food consumption have been conducted among multi-religious university students. Therefore, the present work aimed to examine the levels of knowledge, attitude, and practice on the prophetic food consumption among multi-religious UniSZA students.

Materials and methods

Study period and location

The present work was conducted from September 2017 until April 2018 at the Universiti Sultan Zainal Abidin (UniSZA), Terengganu.

Study design

The present work was a cross-sectional study. Data were taken at one point in time using a questionnaire on prophetic food consumption.

Sampling methods

In the present work, convenience purposive sampling was used; in which the sample was taken from a group of university students. Convenience sampling was implemented involving samples being drawn from UniSZA students' population that was close to hand, as the questionnaire were distributed manually at the library, cafeteria, and other places in UniSZA campus from 8 am until 5 pm (weekend and weekdays). Once the questionnaire has been distributed, researcher then explained the matter of the study, and collected the questionnaire once the subject has completed the questionnaire. Purposive sampling was used as the subjects were selected based on characteristics of UniSZA population and the objective of the study. Respondents were chosen with consideration of inclusion and exclusion criteria.

Sample size calculation

The sample size was determined using the Single Mean Formula based on a standard deviation of 13.70 from the pilot study. By taking into account 20% of dropout rate, the final sample size was 217 students.

Inclusion and exclusion criteria

The inclusion criteria of the subjects were both male and female Malaysians who were studying at UniSZA Gong Badak Campus (diploma, Bachelor's degree, Master's degree, or Doctor of Philosophy), and were able to read, speak, and understand Malay and English languages. Non-Malaysian students were excluded.

Ethical consideration

The present work was approved by the UniSZA Human Research Ethics Committee (Ref: UniSZA/UHREC/2018/05).

Reliability test

A self-administered questionnaire was specifically designed for the present work. The validity and internal consistency of the questionnaire were tested in a pilot study involving 30 students. These respondents were not involved in the final survey. The Cronbach Alpha test showed the reliability coefficient to be 0.752. Following that, several items in the questionnaire were modified to improve clarity.

Questionnaire design

The questionnaire was prepared based on prophetic food consumption details (Vroegrijk *et al.*, 2011; Ishak *et al.*, 2013; Rahmani *et al.*, 2014; Rani *et al.*, 2016; Umar *et al.*, 2016). It consisted of four sections, namely demographic data, knowledge, attitude, and practice of prophetic food consumption. Prior to the data collection, a letter of consent was distributed to all participants to obtain their agreement.

Section 1: demographic data

Section 1 of the questionnaire included demographic information such as age, gender, level of study, academic year, field of study, religion, family income, and status.

Section 2: knowledge of prophetic food consumption

This section consisted of 17 questions that tested the general knowledge of the participants about prophetic food. Knowledge is the facts, information, and skills acquired by a person through experience or education, and also the awareness or familiarity gained about the topic. This category consisted of the definition of prophetic food, list of prophetic foods, the availability of prophetic foods, and the benefits of prophetic food consumptions towards the human body. Correct answer carried two marks, while wrong answer carried one mark. Those who answered "not sure" would not receive any marks. The total score ranged from 0 to 34. For negatively-quoted questions, reverse

scoring was used. The total scores in the knowledge domain were then categorised as poor (less than or equal to 50%), fair (51 to 69%), or good (70% and above).

Section 3: attitude of prophetic food consumption

This section consisted of ten questions on attitude towards prophetic food consumption. An attitude question was designed towards a settled awareness or familiarity gained by experience or feeling about the topic, typically one that is reflected in a person's behaviour. A 4-point Likert scale was used in which 'strongly agree' showed the maximum adherence towards prophetic food consumption, and would be assigned the highest score. The total score in this section ranged from 0 to 40. For negatively-quoted questions, reverse scoring was used. The total scores in the attitude domain were then categorised as poor (less than or equal to 50%), fair (51 to 69%), or good (70% and above).

Section 4: practice of prophetic food consumption

This section consisted of seven questions. Subjects were asked regarding their practice on prophetic food consumption. The practice questions were designed based on the actual application or use of an idea, belief, or method regarding the topic as opposed to theories about such application or use. This category consisted of consumption practice at home and university, reasons and influences in choosing prophetic food, and the impact of practising prophetic food consumption towards their lifestyles. The total score in this section ranged from 0 to 40. The total scores in the practice domain were categorised as poor (less than or equal to 50%), fair (51 to 69%), and good (70% and above).

Statistical analysis

The data obtained were computed and analysed by Microsoft Excel Spreadsheet 2013 and Scientific Package for Social Sciences (SPSS) Version 21.0. Descriptive statistics was applied to summarise the frequencies of socio-demographic variables and the levels of knowledge, attitude, and practice of prophetic food consumption. Pearson or Spearman's correlation tests were used to assess the correlation between the KAP variables and the outcomes. Independent *t*-test / Mann Whitney test and One-way ANOVA / Kruskal-Wallis test was used to compare the levels of KAP to the selected test parameters. Statistical significance was taken at $p < 0.05$.

Results and discussion

Demographic characteristics

A total of 217 UniSZA students were involved in the present work. Based on the socio-demographic data (Table 1), majority of the respondents were females ($n = 129$; 59.5%), Muslims ($n = 161$; 74.2%), between the age of 21 to 24 years old ($n = 141$; 65%), from the Science field ($n = 111$; 51%), and pursuing Bachelor's degree ($n = 170$; 78.3%).

Knowledge of prophetic food consumption

Overall, the knowledge of prophetic food consumption among the respondents was good. The study showed that more than half (54.4%) of them had poor and fair knowledge of prophetic food consumption (Table 2). A good knowledge of prophetic food consumption was mostly observed among 45.6% of them, regardless of gender and age.

In addition, the present work also explored the plantation of dates in Malaysia. Most of the respondents (56%) were able to correctly answer the question. They were also aware that the date plantation

Table 1. Socio-demographic data of UniSZA students ($n = 217$).

Socio-demographic profile	Frequency	Percentage (%)
Gender		
Male	88	40.5
Female	129	59.5
Ages group		
17 to 20 years old	48	22
21 to 24 years old	141	65
25 to 28 years old	28	13
Religion		
Islam	161	74.2
Hindu	21	9.7
Buddha	17	7.8
Christian	18	8.3
Current level of study		
Diploma	39	18.0
Bachelor's Degree	170	78.3
Masters' Degree	8	3.7
Doctor of Philosophy	0	0.0
Current academic year		
First year	26	12.0
Second year	57	26.3
Third year	99	45.6
Fourth year	35	16.1
Field of study		
Arts	80	37.0
Sciences	111	51.0
Technical	26	12.0

produced fruits for consumption. This echoed the findings described by Abdul Ghani (2014). However, majority of them (61%) were not aware that dates confer beneficial effects, especially for mothers during labour. In a previous study, Borhany (2004) reported that dates contain substance resembling oxytocin, a hormone that encourages uterine contraction during labour, and reduces bleeding post-natal. These are all valuable health benefits for the mothers.

In a similar study, Rani *et al.* (2016) appraised the knowledge of halal concepts among students. The results showed that only 21.6% of the respondents had good knowledge regarding concepts of prophetic food. Another 58.0% recorded satisfactory knowledge, while 20.4% had inadequate knowledge. By comparison, the present work showed a higher number of respondents with good knowledge about prophetic food consumption, while the proportion of respondents with poor knowledge was almost similar between the two studies. In other words, UniSZA respondents had relatively good knowledge regarding prophetic food consumption.

Attitude towards prophetic food consumption

An attitude is the degree to which a person has favourable or unfavourable evaluation towards a certain behaviour (Ajzen and Fishbein, 1980). For example, when the respondents believe that consuming prophetic food is important and necessary, they will have a more favourable attitude in this aspect. With regard to the attitude towards prophetic food consumption, majority of the respondents in the present work displayed a good attitude (Table 2).

As high as 66.4% of them showed good attitude as compared to 33.7% of respondents who showed fair and poor attitude. Based on the questions, majority of the subject agreed (44%) that they hope they can practice prophetic food consumption every day in the future. Meanwhile, 32% of the subjects strongly agreed, 18% neutral, and 6% disagreed with the statement. The disagreeing subjects might not be aware of the types of prophetic food or their benefits.

Nevertheless, 55 of the respondents (43%) strongly agreed that frequent consumption of prophetic food would improve their health status, followed by 28% who agreed, and 29% neutral. Apart from that, majority of the subjects also agreed (36%) that the prophetic food consumption is easy to comply with. However, this question reported 13% disagreed respondents, who were concern on the cost and availability of prophetic food. In short, higher number of respondents with a good attitude towards

the consumption of prophetic food were recorded as compared to those with a good knowledge regarding prophetic food consumption.

Practice of prophetic food consumption

As for the practice of prophetic food consumption, 47.9% of the respondents showed a good level, followed by 13.8% and 38.2% at fair and poor levels, respectively (Table 2). In a study by Rani *et al.* (2016), only 28.8% of their respondents reported a good practice of prophetic food consumption, whereas more than half (57.4%) of them had a fair level. About one in four respondents had a poor level of practice in terms of prophetic food consumption. By comparison, the present work showed a higher level of good practice in terms of prophetic food consumption, possibly indicating that the present work's respondents were more aware about prophetic food concepts. Furthermore, 25% and 27% of the respondents practiced the consumption of prophetic food at least once in a week, and at least once a month at home, respectively. A similar pattern was observed for the consumption of prophetic food consumption in the university, whereby 22% of the respondents practiced it on a weekly basis, and 24% on a monthly basis.

Table 2. Knowledge, attitude, and practice scores of prophetic food consumption among UniSZA students ($n = 217$).

	Poor	Satisfactory	Good
Knowledge			
Students' Score	0 - 17	18 - 23	24 - 34
Frequency	45	73	99
Percentage (%)	20.8	33.6	45.6
Attitude			
Students' Score	0 - 20	21 - 27	28 - 40
Frequency	37	36	144
Percentage (%)	17.0	16.6	66.4
Practice			
Students' Score	0 - 7	8 - 9	10 - 14
Frequency	83	30	104
Percentage (%)	38.3	13.8	47.9

Meanwhile, it was anticipated that the percentages of prophetic food consumption practice in the university (6%) will be lower as compared to the practice at home during the month of Ramadhan (14%). This might be attributed to the lack of prophetic food in university during the month of

Ramadhan (Khalili *et al.*, 2014). Nevertheless, the percentage of respondents who consumed prophetic food at home during Ramadhan was still rather low, possibly due to their personal preferences and palatability. On the contrary, a survey done by Ishak *et al.* (2013) demonstrated that half of their respondents practiced consumption of dates during the month of Ramadhan at university. The increased practice was attributed to the easy access of dates at the university, and their desire to consume dates.

The present work also demonstrated that the percentages of respondents who had never practiced the consumption of prophetic food in university (22%) was twice of that when they were at home (11%). The postulated reasons included their busy lifestyles in the university, the price, and the availability of the food. Additionally, Rani *et al.* (2016) observed that the common reasons of the inability to consume prophetic food such as dates

included forgetfulness, as it was not a common habit for most of the respondents, low awareness towards the benefits of prophetic food, and low accessibility of prophetic food, especially during the non-fasting period. Some also claimed that the prophetic food was too sweet for their palates, and too expensive for them.

Association between KAP levels and gender, age groups, religions, and fields of study

The difference in the mean scores of KAP was measured between the different groups of gender, age groups, religions, and fields of study (Table 3).

Gender

The results showed fair levels of knowledge and practice, and good level of attitude among both male and female respondents. There was no

Table 3. Mean score on KAP of prophetic food consumption among UniSZA students based on gender, age groups, ethnicity, and field of study ($n = 217$).

Aspect	Knowledge	Attitude	Practice
Gender			
Male ($n = 88$)	22.53 ± 6.01	30.81 ± 10.43	8.02 ± 4.28
Female ($n = 129$)	21.80 ± 6.70	29.57 ± 9.07	7.11 ± 4.60
<i>p</i> -value	0.19	0.04 ^s	0.08
Age group			
17-20 ($n = 49$)	21.83 ± 4.85	31.63 ± 7.41	8.86 ± 4.37
21-24 ($n = 142$)	22.20 ± 7.24	30.15 ± 10.38	7.30 ± 4.32
25-28 ($n = 26$)	22.00 ± 4.01	26.65 ± 8.56	5.88 ± 5.01
<i>p</i> -value	0.47	0.03 [#]	0.01 [#]
Religion			
Islam ($n = 161$)	24.00 ± 4.66	32.64 ± 8.08	8.72 ± 3.98
Hindus ($n = 21$)	21.21 ± 5.68	25.53 ± 8.69	6.63 ± 3.12
Buddhism ($n = 18$)	14.22 ± 4.63	23.43 ± 6.34	1.72 ± 1.89
Christianity ($n = 17$)	11.89 ± 4.90	22.73 ± 6.72	1.08 ± 2.00
<i>p</i> -value	< 0.01 [*]	< 0.01 [#]	< 0.01 [#]
Field of study			
Arts ($n = 80$)	21.86 ± 5.55	29.54 ± 10.56	7.88 ± 4.25
Science ($n = 110$)	23.03 ± 7.08	30.29 ± 9.44	7.51 ± 4.39
Technical ($n = 27$)	19.00 ± 5.05	30.74 ± 7.66	6.19 ± 5.39
<i>p</i> -value	0.01 [#]	0.92	0.52

Values are mean ± standard deviation (SD). ^s = Significant difference between the means ($p < 0.05$) by Mann Whitney U test. ^{*} = Significant difference between the means ($p < 0.05$) by One Way ANOVA test. [#] = Significant difference between the means ($p < 0.05$) by Kruskal Wallis test.

significant difference in the mean knowledge and practice scores between gender ($p > 0.05$). However, there was a significantly higher mean attitude score among males (30.81 ± 10.43) as compared to females (29.57 ± 9.07) ($p < 0.05$). This was in contrast with other studies that showed a better attitude towards the consumption of healthy and nutritious food among females by Ureña *et al.* (2008) and Johannesson *et al.* (2016). However, the result might be caused by firm attitude showed by male university students, as this population may employ an effective attitude that can be integrated during their learning period and the environment with friends in classes and dormitory (van Merriënboer, 1997). Female students in university might be influenced by other environmental factors such as economic and peer pressure that ultimately affected their choices in the consumption of prophetic food in university.

Age

Among the three age groups of respondents, the respondents with a good level of attitude were in the age group of 17 to 20 years old (31.63 ± 7.41) and 21 to 24 years old (30.15 ± 10.38). Meanwhile, those aged 25 to 28 years old showed a poor level of practice with a mean score of 5.88 ± 5.01 , as compared to the younger age groups. In general, age group of 17 to 20 years old and 21 to 24 years old recorded a fair level of KAP level. However, there was a significant difference in the average score of attitude and practice with respect to the different age groups variables ($p < 0.05$). A person usually learns faster at younger age. Furthermore, their actions and practices that were formed at a younger age due to the influence of the environment, culture, and family might be carried on until older age (Ishak *et al.*, 2013). Therefore, the poor practice of prophetic food consumption among the older age group (25 to 28 years old) might be due to the poor exposure on the knowledge during their young age. This was supported by the finding that this group also recorded the lowest knowledge score among all the age groups.

Religion

Religion is a system of beliefs and practices that dictates individual responses and interpretations regarding what is supernatural and sacred (Johnstone, 1975). In the present work, the KAP on prophetic food consumption would be more favourable among Muslim students as they were more aware of the rewards and benefits of prophetic food. As such, they also displayed a better behaviour and practice of prophetic food consumption as

compared to other students of other religions. As expected, the results revealed a good level of knowledge (24.00 ± 4.66) and attitude (32.64 ± 8.08), as well as a fair level of practice (8.72 ± 3.98) among Muslim students. By comparison, Hindu students scored poorly in practice (6.63 ± 3.12). Similarly, Buddhist students also scored poorly in both knowledge (14.22 ± 4.63) and practice (1.72 ± 1.89) of prophetic food consumption. Lastly, Christian students showed poor scores in all the KAP. In short, there was a significant difference between the KAP of the students of the four different religions ($p < 0.05$).

Interestingly, among the non-Muslims, Hindu students showed the highest mean score of KAP levels than Buddhist and Christian students. Quantaniah *et al.* (2013) also observed the same pattern in terms of the mean scores between Malaysian Muslims and non-Muslim student consumers. This might be due to the fact that religious observance along with the dietary regulations and consumption are less strict in Buddhism and Christianity, as compared to some Hindu believers who might share the same food as the prophetic food in their family and culture.

Field of study

The results showed that different levels of KAP with respect to the field of study variables of Arts, Science, and Technical were categorised as good and fair levels. There was a significant difference between the knowledge level with respect to the field of study ($p < 0.05$), but no significant difference for attitude and practice scores ($p > 0.05$). However, differences were noted in which students from the Technical field showed poor level in practice (6.19 ± 5.39) as compared to Arts (7.88 ± 4.25) and Science (7.51 ± 4.39) students who showed fair level.

A study by Ishak *et al.* (2013) argued that Science students might be more attuned to modern food and drink that are beneficial for health in view of the current lifestyle. In the present work, it was predicted that Science students would achieve a higher score in knowledge as they were more exposed to the nutritional-related courses that highlighted the health benefits of prophetic food consumption for human health. However, their attitude and practice scores were lower than the Technical and Arts students. This shows that even if they were well aware of prophetic food consumption, there might be other environmental factors that influenced their attitude and practice.

Association between KAP of prophetic food consumption

The present work involved a KAP survey that measured the changes in human knowledge, attitude, and practice towards prophetic food consumption. The results revealed what the respondents knew about prophetic food consumption, how they felt about the issue, and their behaviour towards prophetic food consumption (Norhaslinda *et al.*, 2016). . Additionally, the survey also reported on social, cultural, and economic factors that might have influenced the prophetic food consumption among the respondents. Such KAP studies are appealing because they have easy design, quantifiable data, concise representation of results, generalisation to a wider population of small sample outcomes, cross-cultural comparison, speed of implementation, and ease of training (Launiala, 2009).

Based on the findings, there was a significant positive correlation between the three domains, namely between knowledge and attitude ($r = 0.71$), knowledge and practice ($\rho = 0.34$), and attitude and practice ($\rho = 0.43$) ($p < 0.05$) among the UniSZA students. This could indicate that the knowledge level of the respondents influenced both the attitude and practice of prophetic food consumption (Norhaslinda *et al.* 2016). Additionally, it also showed that an increased score in attitude was associated with an increased score in knowledge and practice towards prophetic food consumption.

However, Pilling *et al.* (2008) stated that knowledge alone is insufficient to guarantee the desired changes in attitude and practice. Individuals must make necessary efforts to transform the acquired knowledge into desired attitude in order to assure a good practice of prophetic food consumption. In principle, all educational programs have directly or indirectly recognised that attitude and behaviour are interlinked. It is also a widely accepted view that any desired behavioural changes must be preceded by an appropriate attitude based on new knowledge (Sudsawad, 2007). Therefore, it strengthens the argument that knowledge must be in place before changes in the attitude can occur to result in any modified practice (Dai *et al.*, 2012). In other words, knowledge changes attitude, which then changes a person's pattern of practice or behaviour.

In general, practice or behaviour refers to applied skills, techniques, and methods. Therefore, it is an applied attitude (Dai *et al.*, 2012). These are the actual patterns of physical behaviour, activity, or action. In the present work, an action or behaviour that is more or less directly derived from a particular knowledge base and mediated by attitude is also

rooted in this knowledge. In contrast, a person's practice reveals the attitude of the individual, and the attitude of the individual reveals the individual's learning of knowledge (Sudsawad, 2007). This knowledge base can be systematically exposed to pre-selected influencers, and they have beneficial effects on groups of practice. From the present work, it can be concluded that most respondents are aware of the importance of prophetic food consumption. Although they might not be regularly practising prophetic food intake, they were willing to incorporate prophetic food consumption as part of their daily routines.

Conclusion

As a conclusion, the self-administered questionnaire that was developed in the present work appeared to be a valid and reproducible tool in measuring the level of KAP towards prophetic food consumption among university students. Based on the results, Muslim students were more attuned to the prophetic food consumption. In addition, Hindu, Buddhist, and Christian students had also established awareness about the importance and benefits of prophetic food, even though their attitude or practice remained poor. Nevertheless, as this was a single centre study among UniSZA students, the results might not be generalised to all university students. Despite this limitation, the present work provided an important insight into the KAP level of prophetic food consumption among the multi-religious university students. Although the consumption of prophetic food is often dictated by religious obligations, it can also be applied towards health and sustainability issues. Therefore, the responsibility of having good KAP level towards prophetic food consumption lie on the shoulder of each of the students. Peer influence should be central in motivating students to consume prophetic food, and not only be content with their attainment of religious requirement for Sunnah practices. These results suggest that a chain of personal, social, and university (workplace) factors influences the prophetic food consumption, and these factors could be applied for a change in behaviour to take place.

Acknowledgement

The authors would like to acknowledge all UniSZA respondents who provided full cooperation for the completion of the present work. The authors also would like to acknowledge all collaborative researchers who were involved in the present work.

References

- Abdul Ghani, S. 2014. Pokok kurma berbuah di Kelantan. Retrieved in July 2017 from Sinar Harian website: www.sinarharian.com.my/pokok-kurma-berbuah-di-kelantan-1.290155
- Azjen, I. and Fishbein, M. 1980. Understanding attitudes and predicting social behaviour. United States: Prentice Hall.
- Borhany, S. A. 2004. Dates: medicinal food of Al-Quran. Retrieved from New Age Islam website: <http://www.newageislam.com/islamic-society/dates--medicinal-food-of-the-qur%E2%80%99an/d/1238>
- Dai, C.-Y., Chan, W.-F., Yuan, Y.-H. and Yen, C.-H. 2012. A study on modification of knowledge, attitude and practices on vocational high school electronics courses integrated with nanotechnology concept. *International Journal of Thermal and Environmental Engineering* 4(1): 73-79.
- Dindyal, S. and Dindyal, S. 2003. How personal factors, including culture and ethnicity, affect the choices and selection of food we make. *The Internet Journal of Third World Medicine* 1(2): 27-33.
- Golnaz, R., Zainalabidin, M., Mad Nasir, S. and Eddie Chiew, F. C. 2010. Non-Muslims' awareness of Halal principles and related food products in Malaysia. *International Food Research Journal* 17: 667-674.
- Hashman, A. 2011. Mengapa Rasulullah tidak pernah sakit. Malaysia: PTS Millennia.
- Ishak, M. S., Che Shari, N. F., Yahya, S. N. and Mohamed Talmizi, S. N. 2013. Muslim youths' perception on *Sunnah* diet: a survey on IUM students. *Research Journal of Applied Sciences, Engineering and Technology* 6(10): 1805-1812.
- Johannesson, J., Rothenberg, E., Dahlin Ivanoff, S. and Slinde, F. 2016. Gender differences in practice, knowledge and attitudes regarding food habits and meal patterns among community dwelling older adults. *Journal of Aging Research and Clinical Practice* 5(4): 220-228.
- Johnstone, R. L. 1975. Religion and society in interaction: the sociology of religion. United States: Prentice Hall.
- Khalili, M. A. K., Ummu Habibah, A., Norhayati, A. H., Zetty Hulwany, M. Z., Mohd Nasir, M. N., Intan Suhana Munira, M. A. and Venkateshaiah, M. D. 2014. Nutritional status and quality of life during Ramadan among higher institution learning centre staffs with different body weight status. *World Journal of Pharmaceutical Research* 3(6): 1-13.
- Launiala, A. 2009. How much can a KAP survey tell us about people's knowledge, attitudes and practices? Some observations from medical anthropology research on malaria in pregnancy in Malawi. *Anthropology Matters* 11(1): 1-13.
- Monneuse, M. O., Bellisle, F. and Koppert, G. 1997. Eating habits, food and health related attitudes and beliefs reported by French students. *European Journal of Clinical Nutrition* 51(1): 46-53.
- Norhaslinda, R., Norhayati, A. H. and Mohd Adzim Khalili, R. 2016. Knowledge, attitudes and practices (KAP) on good manufacturing practices (GMP) among food handlers in Terengganu hospitals. *International Journal of Pharmacy and Pharmaceutical Sciences* 8(11): 53-59.
- Norhaslinda, R., Adzim, M. K. R. and Norhayati, A. H. 2017. Wonders of Halal and balanced, diet' instructions. *Asian Journal of Medicine and Biomedicine* 1(1): 1-5.
- Packaged Facts. 2012. Collegiate Gen Y eating: culinary trend mapping report. Retrieved from Packaged Facts website: <https://www.packaged-facts.com/Collegiate-Gen-Eating-6576735/>
- Pilling, V. K., Brannon, L. A., Shanklin, C. W., Howells, A. D. and Roberts, K. R. 2008. Identifying specific beliefs to target to improve restaurant employees' intentions for performing three important food safety behaviours. *Journal of the American Dietetic Association* 108(6): 991-997.
- Quantaniah, N. A., Noreina and Syakinah, N. 2013. Selecting Halal food; a comparative study of the Muslim and non-Muslim Malaysian student consumer. In 2nd International Conference on Technology Management, Business and Entrepreneurship, p. 438-453. Melaka, Malaysia: Mahkota Hotel.
- Rahmani, A. H., Aly, S. M., Ali, H., Babiker, A. Y., Srikar, S. and Khan, A. A. 2014. Therapeutic effects of date fruits (*Phoenix dactylifera*) in the prevention of diseases via modulation of anti-inflammatory, anti-oxidant and anti-tumour activity. *International Journal of Clinical and Experimental Medicine* 7(3): 483-491.
- Rani, M. D. M., Umar, N. S., Ramli, S., Rahman, Z. A., Abdullah, M. Y. and Salleh, N. M. 2016. Knowledge of prophetic food consumption in Malaysia: halal, health benefits and practices. In: Ab. Manan, S., Abd Rahman, F. and Sahri, M. (eds). *Contemporary Issues and Development in*

- the Global Halal Industry. Singapore: Springer.
- Sack, D. 2002. Whitebread protestants, food and religion in American culture. New York: Palgrave Macmillan.
- Sheikh, N. and Thomas, J. 1994. Factors influencing food choice among ethnic minority adolescents. *Nutrition and Food Science* 94(4): 18-22.
- Sudsawad, P. 2007. Knowledge translation: introduction to models, strategies, and measures. United States: The National Center for the Dissemination of Disability Research (NCDDR).
- Umar, N. S., Rani, M. D. M., Rahman, Z. A. and Aris, M. S. M. 2016. Practice of *Phoenix dactylifera* (dates) among residents in Kg. Dato' Ahmad Razali, Dengkil, Selangor: a preliminary study. *International Journal of Social Science and Humanity* 6(9): 681-684.
- Ureña, F., Bernabéu, R. and Olmeda, M. 2008. Women, men and organic food; differences in their attitudes and willingness to pay; a Spanish case study. *International Journal of Consumer Studies* 32(1): 18-26.
- van Merriënboer, J. J. G. 1997. Training complex cognitive skills; a four-component instructional design model for technical training. United States: Educational Technology.
- Vroegrijk, I. O., van Diepen, J. A., van den Berg, S., Westbroek, I., Keizer, H., Gambelli, L., ... and Voshol, P. J. 2011. Pomegranate seed oil, a rich source of puniceic acid, prevents diet-induced obesity and insulin resistance in mice. *Food and Chemical Toxicology* 49(6): 1426-1430.
- Zeeni, N., Gharibeh, N. and Katsounari, I. 2013. The influence of sociocultural factors on the eating attitudes of Lebanese and Cypriot students: a cross-cultural study. *Journal of Human Nutrition and Dietetics* 26(Suppl. 1): 45-52.