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## Consumer Food Waste Intention in Klang Valley: A Review and Analysis

### Ainnin Sofea Azeman<sup>1</sup>, Sara Nabila Ismail<sup>1</sup>, Mohamad Amiruddin Mohamad<sup>1</sup>, Norhaya Hanum Mohamad<sup>1</sup>, Nur Shuhadah Mohd<sup>2</sup>

<sup>1</sup>Universiti Teknologi MARA, Terengganu Branch, Malaysia, <sup>2</sup>International Islamic University Malaysia, Pagoh Edu Hub, Johor, Malaysia Email: ainnin@uitm.edu.my

#### Abstract

For several decades, food waste has been a worldwide concern, but this problem has arisen extensively within the Malaysian context, seen in the alarming amount of food waste reported. This study aims to examine the relationship between attitudes towards behaviour, subjective norm, and perceived behavioural control towards behavioural intention not to waste. The problems occur when the wastage caused by behavioural has become uncontrollable. Also, food waste is caused by mismanagement and disposal issue. With insight concerning this matter, this study aims to extract the household's intention not to waste food in the scope of Klang Valley. Since this study emphasises seeking behavioural intention in the depth of households in relation to food waste, convenience sampling methods were conducted to gain data from reputable 394 respondents. This study was conducted using questionnaires through a self-administered technique in Klang Valley. The Google form platform for online survey and physical questionnaires were distributed sufficiently. Theoretically, this study uses the Theory of Planned Behaviour (TPB). Based on the reliability and descriptive analysis, the hypothesis on the respective variables was accepted. The process mentioned in this study and the results have shown that the model used was successfully asserted. This study aims to contribute to the practical foundation in which the results will be helpful to identify factors that contribute to consumer behavioural intention towards food waste. One of the limitations of this research has been the biggest problem for the researcher. This study only focuses on Klang Valley. For future studies, this study suggested widening the research area, including all top cities in Malaysia.

**Keywords:** Attitude towards Behaviour, Subjective Norm, Perceived Behavioural Control, Behavioural Intention not to Waste, Theory of Planned Behaviour

#### Introduction

Waste management is becoming more critical in many aspects of tasks for a board of an association. Waste management is not just an issue concerning administrative organisations and neighbourhood specialists. Teller et al (2018) stated that many foods were cooked but not consumed, contributing to food waste. Nevertheless, some meat is

mismanaged and poisoned through the food chain and eaten (Martin-Rios et al., 2018). Food waste is a worldwide and complex issue that affects each of the three pillars of sustainable development: environment, economic, and social (Food and Agriculture Organization, 2013). According to Sarpong-Anane (2015), as one of the developing countries, Malaysia is confronting an increase of waste and its accompanying issues about its disposal. Malaysia produces around 18,000 tons of homegrown waste day by day (Farid, 2012). Five states in Malaysia (Kuala Lumpur, Selangor, Pahang, Terengganu and Kelantan) represent 70% of the total amount of food waste in each state (Khazanah Research Institute, 2018).

According to Ajzen (1991), the Theory of Planned Behaviour (TPB) claims that behavioural intention is the primary precedent for behaviour. Therefore, there is a reason to think that their food waste actions can be motivated by intentional practices as consumers are typically aversive about waste. This study examines the relationship between attitudes towards behaviour, subjective norm, and perceived behavioural control towards intention not to waste. In fact, according to the Theory of Planned Behaviour, behavioural intention is dictated by consumer attitudes towards behaviour. Therefore, it is expected that behavioural attitudes can turn more favourable behavioural attitudes into better behavioural intentions and typically a favourable or unfavourable behaviour in influencing the behavioural intention consumer in food waste. The research questions were formulated to quantify research goals attributed to the main purpose of the study. The research question identifies the relationship between attitude towards behaviour, subjective norm, and perceived behavioural towards intention not to waste.

#### **Literature Review**

#### Food Waste

In referring to Kadir et al (2016), food that has been squandered cannot be characterised through any single behaviour. However, combining the various behaviours prevent or decrease the probability of food being wasted. Although it is hard to trace a single behaviour of wasted food, the probability of food waste can be reduced by combining various behaviours traced. To squander, we have to comprehend the elements related to nourishment squander conduct. Furthermore, consumers who make scheduling habits such as inventory checks lower their product spoilage rate because it prevents them from understating the stock and buying items they have had at home (Chandon & Wansink, 2006), and it helps their intention of not wasting food. Thus, their intention towards wasting food can be avoided starts from home.

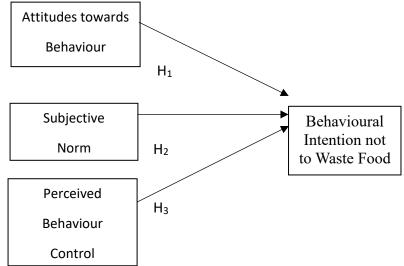
Nonetheless, research into consumer food waste behaviour determinants could provide the foundation for efforts to improve household-level food waste mitigation. While food waste has serious effects on the environment, according to Brook (2007), consumers tend to be concerned by food waste as they see it as a waste of money rather than having negative environmental impacts. With this approach, the predictor of their lifestyle can be the aggregate factor that affects consumers ' intention to reduce food waste.

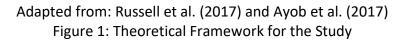
#### Behavioural Intention not to Waste Food

Injunctive standards define intention not to waste food and food waste attitude, while ethical norms and perceived behavioural control did not contribute significantly. Additionally, the more consumers think they must not throw away food, the stronger their intention is not to waste food. In addition, in describing the amount of food waste, expectations not to waste food, scheduling and shopping habits may be necessary factors to consider. In fact, according to the Theory of Planned Behaviour, behavioural intention is dictated by consumer attitudes towards behaviour. Therefore, it is expected that behavioural attitudes can turn more favourable behavioural attitudes into better behavioural intentions and typically a favourable or unfavourable behavioural assessment (Ajzen, 1991). Furthermore, dimensions of attitude towards behaviour, subjective norm and perceived behavioural control may lead to forming behavioural intentions. While, the greater these attentions, the greater it is likely that people will act in accordance with these expectations. In addition, behavioural intention is assessed based on the TPB by the attitude of the user towards the behaviour, their subjective norm and their perceived control of behaviour. This was because behavioural attitude is the usually favourable or unfavourable measure of behaviour success that is supposed to develop into greater behavioural intentions (Ajzen, 1991). As stated by Ayob et al (2017), it is suggested that changing their behaviour will yield positive results in waste management by recognising the form of determinants of behaviour as human behaviour can alter. Thus, with the right key motivators of human behaviour, the administration can arrange specific programs and approaches that can change or enhance human behaviour in handling food waste at home, saving environmental problems by minimising food waste (Razali & Wai, 2019).

#### Theory of Planned Behaviour (TPB)

Theory of Planned Behaviour (TPB) is seen as a paradigm of analysing a person's behaviour and action from an individual's perspective, decision-making variables, and the environment (Russell et al., 2017). Ajzen (1991) notes that the conceptual model of the TPB is reasonable for evaluating the customer's actions. Individuals shall possess a positive attitude to behaviour if only they perceive the importance of others to expect them to engage in a particular behaviour and sufficient level of control in relation to behaviour anticipated (Ayob et al., 2017). According to the TPB, when individuals have a positive attitude to behaviour, they think it is important for others to expect them to engage in a particular behaviour. In addition, they perceive that they have an adequate level of control to be able to engage in the intended behaviour, intentions to engage in a specific behaviour are increased. Therefore, this research uses the TPB model to analyse the actions of consumers in terms of their intention to reduce food waste.





#### Relationship between Attitudes towards Behaviour and Behavioural Intention not to Waste

Attitude is the degree to which a person perceives certain behaviour either in favour or not (Ajzen, 1991). The researcher has identified attitude as a reliable food waste predictor (Ayob et al., 2017). Researchers say attitude is a psychological assessment that prevents the reduction of food waste, and if any of the consumers have a positive attitude, there may be a desire to reduce food waste. The positive relationship from attitudes indicates that if one person feels bad when unfinished food is thrown away, there will be a greater intention to decrease food waste. According to the Theory of Planned Behaviour, behavioural intention is dictated by consumer attitudes towards behaviour. In fact, it is expected that behavioural attitudes can turn more favourable behavioural attitudes into better behavioural intentions and typically a favourable or unfavourable behavioural assessment. As defined by the researcher (Ayob et al., 2017), attitude is a great indicator of food waste.

Injunctive standards define intention not to waste food and food waste attitude, while ethical norms and perceived behavioural control did not contribute significantly. Additionally, the more consumers think they must not throw away food, the stronger their intention not to waste food. In addition, attitudes towards food waste contributed positively to outlining the anticipated intention not to waste food. In addition, scheduling and shopping habits may be necessary in describing the amount of food waste, expectations not to waste food. On top of that, this paper will assess the consumer's intention to reduce food waste by analysing their behaviours. Thus, attitude towards behaviour is hypothesised as a relationship between the behavioural intention of not wasting.

Therefore, the following hypothesis was formulated:

 $H_1$ : There is a positive relationship between attitudes towards behaviour and behavioural intention not to waste.

#### Relationship between Subjective Norm and Behavioural Intention not to Waste

As O'Neal (2007) has stated, subjective norms relate to perceived moral forces or influences to indulge or not engage in a particular behaviour. Subjective norms expose people's beliefs about how their comparison groups will perceive them if they practice those behaviours. There seems to be an important causal direction between social norms and behavioural behaviour, according to Hernández (2010). To explain, the subjective norm is assumed to include both the more commonly calculated injunctive element about whether or not someone thinks their social network requires them to practice the behaviour (Ajzen, 2000). The predictor social factor termed subjective norm is the perceived social pressure to comply with expectations about engaging in the intended behaviour, which should influence the individual's intention to perform or not to the behaviour. Indeed, if social expectations are that people should perform in the behaviour in question, then the individual should be less likely to do so. According to Ajzen (1991), the subjective norm is the validation by important people that could affect a person's view of responding to a scenario. Thus, the subjective norm is hypothesised as a relationship between the behavioural intention of not wasting.

Therefore, the following hypothesis was formulated:

H<sub>2</sub>: There is a positive relationship between subjective norm and behavioural intention not to waste.

#### Relationship between Perceived Behavioural Control and Behavioural Intention not to Waste

In this case, according to (Ajzen, 1991), perceived behavioural control (PBC) applies to one's understanding of attaining or not attaining a certain behaviour. A person assumes that incentives and resources influence behaviour. A claim that perceived behavioural control and self-efficacy are related, according to Ajzen (1991). However, people plan to behave in behaviours they think are being achieved. In addition, as Ayob et al. (2017) and Siguroardottir (2017) have noted, perceived behavioural control is also essential for behavioural control. When food waste specifically measures its impact on intentions rather than waste, perceived behavioural influence played a significant role. Based on the results of this research, perceived behavioural control has a significant relationship with the behavioural intention not to waste and food waste activity identical to that of Ayob et al. (2017), as a summary of perceived behavioural control linked to the conduct of food waste.

Thus, the perceived behavioural control is speculated as a link between perceived control of behaviour and non-disaster purpose. Visschers et al. (2015) support this theory as they analysed the predictors of food waste behaviour, and the result was perceived behavioural control linked to the behaviour of wastage. Thus, perceived behavioural control is hypothesised as a relationship between the behavioural intention of not wasting.

Therefore, the following hypothesis was formulated:

**H**<sub>3</sub>: There is a positive relationship between perceived behavioural control and behavioural intention not to waste.

#### Methodology

This research is a cross-sectional study that collects data just once over a period of time to address research questions (Sekaran & Bougie, 2016). The population and sample derived for this study are households in Klang Valley. Selangor had the largest number of households, with 1.6 million households. Petaling, Selangor had the highest number of households (Khazanah Research Institute, 2018), as reported in a statistic reported by Khazanah Research Institute recorded at 535,400 households. Hence, this study managed to collect 394 respondents. The calculated sample size (N=394) is closed to Krejcie and Morgan (1970) sample size table if the population is above 1,000,000. Nonetheless, it is not practical for the researcher to meet all of them across the state, given a large number of households in Malaysia. Hence, few contextual settings have been chosen for the collection of data. Kuala Lumpur, Bangsar, Petaling Jaya, Damansara, and Subang and their vicinities were selected because these locations are considered as Malaysia's fastest-growing districts.

This research selected convenience sampling as the sampling development process. It applies to collecting data from easily available subjects at a chosen place (Sekaran & Bougie, 2016). This study was conducted using questionnaires through a self-administered technique and an online survey in Klang Valley. This research employs a six-point Likert scale. They indicated the degree of agreement of each stimulus according to their response. The questionnaires were adapted from various previous studies (Prendergast et al., 2010). In addition, this research adopts an online and self-administered questionnaire to obtain primary data. The self-administered questionnaire is the most effective way of collecting data and collect data that can be used without the intervention of qualified interviewees (Hair et al., 2007). Self-

administered surveys were collected by approaching the consumers in two shopping malls in Klang Valley: Empire Shopping Gallery and Central i-City. The data was collected by using the online form through Google Forms. To answer the survey, the researcher provided the respondents with a paper-based questionnaire. This method allowed a total of 394 respondents to complete the overall questionnaires.

#### **Result and Analysis**

#### **Descriptive Analysis**

The research item in every dimension was measured using descriptive analysis, which consists of means and standard deviation based on a six-point Likert scale which is 1- Strongly Disagree, 2- Disagree, 3- Slightly Disagree, 4- Slightly Agree, 5- Agree and 6- Strongly Agree. Table 2 reports the descriptive analysis results.

Code	Items	Ν	Mean	Std. Deviation
ATB1	I feel bad when uneaten food is thrown	394	5.38	.91
	away.			
ATB2	Food waste separation at home Should be promoted in Malaysia.	394	5.45	.84
ATB3	I think that wasting food is a waste of money.	394	5.51	.90
ATB4	In my opinion, to separate my food waste at home is needed.	394	5.33	.92
	Total for Intention not to Waste		21.67	3.57

Table 1: Mean Score and Standard Deviations for Attitude towards Behaviour

Based on the descriptive analysis as per Table 1, the mean score for attitude towards behaviour is 21.67 with standard deviation of 3.57. ATB3 earns the highest mean among all items based on the table above (M = 5.51, S.D = .90). Surely, most of the respondents agreed that attitudes towards behaviour influences in food wastage happened. In fact, the attitude was a great indicator of food waste, as defined by the researcher (Ayob et al., 2017). However, researchers say attitude is a psychological assessment that prevents the reduction of food waste and if any of the consumers have a positive attitude, there may be a desire to reduce food waste.

Code Ν Std. Items Mean Deviation SN1 People who are important to me 394 5.35 .82 should participate in reduce the amount of food waste at home. SN2 I have been raised to believe 394 5.42 .95 that food should not be wasted and I still live according to this principle. SN3 I believe that I can do 394 4.90 1.06 something about the food waste. SN4 I do not waste food whenever I go 394 4.93 1.19 out with family or friends. Total for subjective Norm 20.6 4.02

Table 2: Mean Score and Standard Deviation for Subjective Norm

Based on the descriptive analysis as per Table 2, the mean score for the subjective norm is 20.6, with a standard deviation is 4.03. According to the table above, SN2 scores the highest mean among all items (M = 5.42, S.D = .95) since most respondents claimed that food should never be wasted. However, most other studies have indicated that subjective norm has been one of the key components of actions in deciding food waste reduction (Bharucha, 2017). When a person believes that one should or should not behave in a certain way, a subjective norm has been established (Aktas et al., 2018).

Table 3: Mean Score and Standard Deviation for Perceived Behavioural Control

Code	Items	Ν	Mean	Std.	
				Deviation	
PBC1	I feel bad when uneaten	394	4.09	1.40	
	food is thrown away.				
PBC2	Food waste separation at home should be	394	3.34	1.53	
	promoted in Malaysia.				
PBC4	I think that wasting food is a	394	4.66	1.25	
	waste of money.				
PBC5	In my opinion, to separate	394	3.95	1.51	
	my food waste at home is needed.				
	Total for Perceived Behavioural control		6.04	5.69	

The table above (Table 3) shows the results of the respondent's perception of perceived behavioural control related to food waste. The mean score for the perceived behavioural control is 16.04, with a standard deviation of 5.69. Based on the table above, PBC 4 scores the highest mean among all the items (M = 4.66, S.D = 1.25), whereas wasting food is

a waste of money. Indeed, the perceived control of behaviour is speculated as a link between perceived control of behaviour and non-disaster purpose. Visschers et al. (2015) support this theory as they analysed the predictors of food waste behaviour, and the result was perceived behavioural control linked to the behaviour of wastage.

Table 4: Mean Score and Standard Deviations for Behavioural Intention not to Waste

Code	Items	Ν	Mean	Std. Deviation
BINTW1	Intend to generate as little food waste as possible.	394	5.26	.89
BINTW2	I try my best to avoid from food waste at home waste at home.	394	5.31	.84
BINTW3	I will make an effort to separate my food waste.	394	5.04	.93
BINTW4	I intend to separate my food waste at home.	394	5.01	.93
	Total for Behavioural Intention not to Waste		20.62	3.59

Mean score for intention not to waste is 20.62 with standard deviation of 3.59. Based on the table above, INTW2 scores the highest mean among all items (M = 5.31, S.D = .84), as the majority of the respondents believed that they try their best to avoid from food waste at home. In this case, as quoted by Bell et al. (2011) who said several scheduling practices such as preparing grocery lists or preparing meals in advance may also help consumers to minimize accidental purchases and may restrict their household food waste.

#### **Reliability Analysis**

Table 5: Reliability Analysis Results

No.	Variables	Number of Items	Cronbach's Alpha
1	Attitude Towards Behaviour	4	.84
2	Subjective Norm	4	.74
3	Perceived Behavioural Control	4	.62
4	Behavioural Intention no to Waste	4	.87

Reliability analysis was measured through Cronbach's Coefficients Alpha, ranging from the highest value of Cronbach's Alpha, which is 0.87 for behavioural intention not to waste then followed by attitudes towards behaviour with 0.84, the subjective norm with 0.74 and the lowest value was 0.74 for the perceived behavioural control. According to the rule of thumb for Cronbach Alpha, value that more >.9 = excellent, 8<.9 = very good, .7<.8 = good, 6<.7 = moderate <.6 = weak (Hair et al., 2007). As per the table above, all reflected value is acceptable.

#### Results of Hypothesis Testing and Regression Analysis

Table 6: Results of Regression Analysis between Attitude towards Behaviour and Behavioural Intention not to Waste

Predictor	R²	Adj R²	F- Change	Sig	Unstandardized Coefficients (β)	Std Coefficients (β)	t
Attitude towards Behaviour	.30	.30	169.95	.000	.57	.55***	13.04

The first hypothesis proposed that attitude towards behaviour (ATB) positively influences behavioural intention not to waste (BINTW). The regression analysis shows that the beta coefficients ( $\beta$  .55\*\*\*) confirm that attitudes towards behaviour affect behavioural intention not to waste. Thus, attitude towards behaviour was able to explain 30 per cent (R<sup>2</sup> = .30, F-Change = 169.95, p < .001) of the variation in behavioural intention not to waste. Hence, hypothesis H1 was accepted.

Table 7: Results of Regression Analysis between Subjective Norm and Behavioural Intention not to Waste

Predictor	R²	Adj R²	F- Change	Sig	Unstandardized Coefficients (β)	Std Coefficients (β)	t
Subjective Norm	.30	.30	165.15	.000	.55	.54***	12.85

Thus, the second hypothesis, subjective norm (SN), positively influences behavioural intention not to waste (BINTW). Based on the regression analysis, the beta coefficients ( $\beta$  .54\*\*\*) confirms that subjective norm affects behavioural intention not to waste. Based on the results, the subjective norm was able to explain 30 per cent (R<sup>2</sup> = 0.30, F-Change = 165.15, p < .001) of the variation in behavioural intention not to waste. Hence, hypothesis H2 was accepted.

Table 8: Results of Linear Regression Analysis between Perceived Behavioural Control and Behavioural Intention not to Waste

Predictor	R²	Adj R²	F- Change	Sig	Unstandardized Coefficients (β)	Std Coefficients (β)	t
Perceived Behavioural Control	.10	.10	23.94	.000	.22	.24***	4.89

Based on the coefficients results, perceived behavioural control (PBC) ( $\beta$  = .22, p < .05) were found to be a significant predictor of variance in behavioural intention not to waste (BINTW). Based on the regression analysis, the beta coefficients ( $\beta$  .22\*\*\*) confirm that perceived behavioural control affects behavioural intention not to waste. Based on the result, perceived behavioural control explained 10 percent (R<sup>2</sup> = 0.10, F-Change = 23.94, p < .001) of the variation in behavioural intention not to waste. Hence, hypothesis H3 was accepted.

#### Conclusion

This research study aimed to determine whether attitude towards behaviour, subjective norm, and perceived behavioural control can affect the behavioural intention not

to waste. Behavioural intention not to waste is important for the households to ensure that food waste is kept in their minds and prevent consumers from wasting their food easily. The discoveries in this research establish that the consumer's behavioural intention not to waste food among Klang Valley households is an important tool for organisations to comprehend public opinions on the food waste issue. The TPB model used was useful to identify the main factors influencing the household's intention not to waste their food at the house. However, the findings showed that attitude towards behaviour, subjective norm and perceived behavioural control significantly affect behavioural intention not to waste.

This research only examined three independent variables affecting the dependent variable, which is the behavioural intention not to waste. By all means, there might be other factors that influenced the consumer's behavioural intention not to waste. Besides that, one of the limitations of this research was researcher only focus on the Klang Valley location. For future studies, it was suggested to be done in a different location and compare how the specific location deals with their food waste at their house and find the new reasons that influence their intention not to waste at their residents. Hence, from there, we will identify new reasons for what makes their intention not to waste food. Followed with that, further analysis will help to see the impact on household intention into food waste. Consequently, further studies need to be conducted in different populations and regions to get more accurate results in measuring the factors affecting behavioural intention not to waste.

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#### **Corresponding Author**

Mohamad Amiruddin Mohamad. Universiti Teknologi MARA Cawangan Terengganu Kampus Dungun, Malaysia Email: amiruddinmohamad@uitm.edu.my

#### References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision* processes, 50(2), 179-211.
- Ajzen, I. (2000). *Construction of a standard questionnaire for the theory of planned behavior.* Unpublished manual for construction of questionnaire.
- Aktas, E., Sahin, H., Topaloglu, Z., Oledinma, A., Huda, A. K. S., Irani, Z., ... Kamrava, M. (2018).
  A consumer behavioural approach to food waste. *Journal of Enterprise Information Management*, *31*(5), 658–673.
- Ayob, S. F., Sheau-Ting, L., Abdul Jalil, R., & Chin, H. C. (2017). Key determinants of waste separation intention: empirical application TPB. *Facilities*, *35*(11/12), 696-708.
- Bell, D. R., Corsten, D., & Knox, G. (2011). From point of purchase to path to purchase: How preshopping factors drive unplanned buying. *Journal of Marketing*, *75*(1), 31-45.
- Bharucha, J. (2017). Tackling the challenges of reducing and managing food waste in Mumbai restaurants. *British Food Journal*, 120(3), 639-649. http://doi.org/10.1108/BFJ-06-2017-0324
- Brook, L. (2007). Food behaviour consumer research findings from the quantitative survey (Briefing Paper UK: WRAP)

- Chandon, P., & Wansink, B. (2006). How biased household inventory estimates distort shopping and storage decisions. *Journal of Marketing*, *70*(4), 118-135.
- Food and Agriculture Organization. (2013). Food Wastage Footprint. Full-cost accounting Final report. Rome. http://www.fao.org/docrep/018/i3347e/i3347e.pdf
- Hair, J. F., Money, A. H., Samouel, P., & Page, M. (2007). *Research Methods for Business*. England: John Wiley & Sons Ltd.
- Hernández, M. I. J. (2010). A cross-cultural study of motivational factors and values influencing purchase of organic food in Germany and Mexico (Doctoral dissertation, Niedersächsische Staats-und Universitätsbibliothek Göttingen).
- Kadir, A. A., Ismail, S. N. M., & Jamaludin, S. N. (2016, July). Food Waste Composting Study from Makanan Ringan Mas. In IOP Conference Series: *Materials Science and Engineering*, 136(1), 012057). IOP Publishing.
- Khazanah Research Institute. (2018). *The State of Households 2018: Different Realities*, 3rd Edition. Perpustakaan Negara Malaysia, Cataloguing in Publication Data.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, *30*(3), 607-610.
- Martin-Rios, C., Demen-Meier, C., Gössling, S., & Cornuz, C. (2018). Food waste management innovations in the foodservice industry. *Waste Management*, *79*, 196-206.
- Farid, M. N. (2012). 22,000 tan sampah setiap hari. Berita Harian; pp. 20. Available from http://aplikasi.kpkt.gov.my/akhbar.nsf/8521d968204e8b
- O'Neal, P. W. (Ed.) (2007), Motivation of Health Behavior. Nova Publishers, New York, NY
- Prendergast, G., Ko, D., & Siu Yin, V. Y. (2010). Online word of mouth and consumer purchase intentions. *International Journal of Advertising*, *29*(5), 687-708.
- Razali, F., & Wai, C. W. (2019). A Review of Malaysia Solid Waste Management Policies to Improve Recycling Practice and Waste Separation Among Households. *International Journal of Built Environment and Sustainability*, 6(1-2), 39-45.
- Russell, S. V., Young, C. W., Unsworth, K. L., & Robinson, C. (2017). Bringing habits and emotions into food waste behaviour. *Resources, Conservation and Recycling, 125*, 107-114.
- Sarpong-Anane, A. B. (2015). *Public Perceptions, Attitudes and Challenges towards Solid Waste Management in Ghana*: The Case of Mamobi Community (Doctoral dissertation, University of Ghana).
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Siguroardottir, S. (2017). Predicting Household Food Waste Reduction. Department of Environmental and Natural Resources Health. Retrieved from https://pdfs.semanticscholar.org/8d6a/03ac5aebcee32408d1cb7dab678fd5ed4fe.pdf.
- Teller, C., Holweg, C., Reiner, G., & Kotzab, H. (2018). Retail store operations and food waste. *Journal of Cleaner Production, 185*, 981-997.
- Visschers, V. H. M., Wickli, N., & Siegrist, M. (2015). Sorting out food waste behaviour: A survey on the motivators and barriers of self-reported amounts of food waste in households. *Journal of Environmental Psychology, 45*(November), 66-78. https://doi.org/10.1016/j.jenvp.2015.11.007