The Effect Of Attitude, Subjective Norm, Perceived Behaviour Control On Intention To Reduce Food Waste And Food Waste Behaviour

Anjaka Ray Guchi[1], Syafrizal[2]

[1] Master of Management, Economic Faculty of Universitas Andalas
[2] Management Department, Economic Faculty of Universitas Andalas

Corresponding Author: ajosyafrizal@gmail.com

Abstract: Food waste behavior is currently interesting topic for researcher and environmentalist. This study aims to investigate the effect of attitude, subjective norm, perceived behavioral control on intention to reduce food waste and food waste behavior. A questionnaire survey was applied to 200 household respondents in West Sumatra. The convenience sampling technique was used to collect data from respondent. Research instruments from previous studies were adapted to measure the variables in this research. Structural Equation Modelling technique was used to analyse data of this research. Research result found that attitude has positive and significant effect on household intention to reduce food waste. In addition intention to reduce food waste also has significant effect food waste behavior. In this study, subjective norm and perceived behavioral control do not have significant effect on household intention to reduce food waste.

Key Words: *attitude, subjective norm, perceived behavioral control, food waste reduction intention.*

1. Research Background

Every year the amount of food available to all living things. According to the level of supply chain of the food, the foods that are not exhausted in a production they become a new product to be created into other foods can be in the form of fertilizer products, animal feed and so on (Stancu et al., 2016). According to the Food and Agriculture Organization (FAO) in 2013-2014 there were 13 billion tons of food that became waste because it was not consumed every year it created a crisis, the loss decreased to the economic value USD 1 trillion (Sakaguchi et al., 2018).

The factories generate waste for multiple households, it can make better use of the resources who consumers tend to cook less from scratch at home therefore processed food has arguably a positive effect of household food waste (Behavior et al., 2019). In addition, the 'pot and plate' portion sizes have increased over time, food is leftover because the amount prepared was too large or it has not been used in time, package sizes play also an important role to reduce food waste (Behavior et al., 2019). In contrast, better technologies, such as cookers, smart fridges, and meal planning tools can have a positive effect on the reduction of food waste (Behavior et al., 2019). They support food management in a sustainable manner and can reduce food waste, the consumption of more delicate products with shorter shelf-life is associated with an increasing amount of food waste, perishable goods make up for a large part of food waste (Behavior et al., 2019).

Food waste is a much-debated definition in literature and researchers agree that a universal definition of food waste is missing (Behavior et al., 2019). The most commonly used definition is provided by the Food and Agriculture Organization (FAO) refers to food waste as "the wholesome edible material intended for human consumption, arising at any point in the Food Supply Chain (FSC) that is instead discarded, lost, degraded or consumed by pests" (Behavior et al., 2019). According to Stuart (2009) extends this definition by

"including edible material that is intentionally fed to animals or is a by-product of food processing diverted away from the human food" (Behavior et al., 2019). The term food waste generally applies when it occurs at consumer or retail stages.

Indonesia is the 2nd largest producer of food waste in the world, this is stated in a report entitled "Improving food: towards a more sustainable food system", released in 2011. The report states that the average Indonesian population wastes around 300 kg of food. every year. (Khairunnisa, 2020). Parfik and friends (2010) on FAO, Food waste that is generated during the process of making food and after food cooked activities related to the behavior of sellers and consumers (Dewilda et al., 2019). The problem of food waste globally is of particular concern to be addressed in improving the environmental sustainability (Dewilda et al., 2019). Indonesia especially Padang City, the management and processing of food waste is still integrated with the municipal waste (Dewilda et al., 2019). UU No.18 yr 2008 sub.2 concerning waste management which contains food waste from restaurants and household In Law No. 18 of 2008, everyone is obliged to reduce waste that is environmentally sound in managing household waste and types of household waste.

(Dewilda et al., 2019). According to Perda No.21 yr 2012 concerning waste management in Padang City, the community must participate in waste management (Dewilda et al., 2019).

TPB is one of many models that applies to understanding consumer behavior in various contexts (Coşkun & Yetkin Özbük, 2020). The main theory in this model is how individual interest is affected by subjective norms, attitude, and perceive behavioural control (Coşkun & Yetkin Özbük, 2020). Although TPB has extended models to the development for the capacity to predict the presence which has described the investigation of food waste behavior within the context of the household (Coşkun & Yetkin Özbük, 2020).

The result of previous research (Coşkun & Yetkin Özbük, 2020) an extended TPB constructs two theoretical, price consciousness and food taste which was hypothesized another would predict intention to reduce food waste All of these are samples that are able to strengthen this hypothesis (Coşkun & Yetkin zbük, 2020), although TPB is needed in this study, moral value and the quality of communication for preventing food spoil are the sub-sections that we highlight.

Based on this research background, this study want to investigate the effect of **attitude, subjective norm and perceived behavioral control on customer intention to reduce food waste and food waste behavior.**

2. LITERATURE REVIEW
2.1 Theory of Perceived Behavioural (TPB)

It was developed by Icek Ajzen in 1991 that is concerned with behavioral which intention is the Theory of Planned Behavior (TPB), intention to perform a certain behavior is the central factor in the theory which entails the motivational factors that influence behavior. While it assumes that the stronger the intention towards a behavior, the more likely it is performed (Behavior et al., 2019). Referring to Ajzen (2012), information relevant to our behavior is followed fairly and consistently, not automatically or mindlessly. Referring to Ajzen and Fishbein (1980), this includes dominant behaviors of interest to social psychologists. They formulate a limited focus on behavior over which the individual has full, explicit volitional control. However, this formulation seems to impose severe limitations on a theory that has been designed to predict and explain any socially significant behavior. Serious difficulties in the implementation of which are designed to obtain a theory of behavior that has been targeted is the result of considering too much behavior that is basically under volitional control (Ajzen, 2012).

The basic rule is that the stronger the intention is determined by three conceptually independent predictors: Attitude, Subjective Norm, and Perceived Behavioral Control (PBC) (Behavior et al., 2019). Referring to (Ajzen, 2012), subjective is assumed to be a behavioral belief and evaluation of the combined results to obtain an overall negative or positive attitude towards behavior. Attitude is the result of the direct contribution of the subjective.

Theory of planned behavior is seen as useful for dealing to be used as a starting point to change it with a complex topic like sustainability which is highly volatile for human behavior and social issues, the theory seems to be a good choice to understand the decision making processes in this field (Behavior et al., 2019). Armitage and Corner (1999) stated that as attitudes and subjective normss, perceived behavioral control is assumed to be beliefs that are easily accessed and followed consistently, for this example beliefs about resources and barriers that are allegedly able to facilitate or interfere with the performance of certain behaviors.

2.2 Attitudes, Subjective Norm, Perceived Behavioral Control, and Intention

It based on Vabø & Hansen (2016), the Attitude describes a person is in favor of carrying out a certain behavior, then the Subjective Norm extents a person feels social pressure to perform the behavior, while Perceived Behavioral Control is concerned with the ability and opportunity of an individual (Behavior et al., 2019). (Ajzen, 2012) stated that attitude can be traced to general theorizing about the formation toward any object is related to ends which it serves. That is its consequences judged by some function in object leads to good or bad affecting expected from the assessment scales that had been applied to measure attribute by attribute evaluation.

Following Rosenberg and Hovland (1960), attitudes can be inferred from cognitive, affective, or conative responses to the attitude object to be pressure for evaluatively consistent with each other (Ajzen, 2012). Attitude toward the behaviour is further assumed

to have a causal effect on intentions to engage in the behaviour on conation. Basis for an observed attitude toward behaviour implies that appropriate means must be employed to identify the readily accessible beliefs statements constructed by the investigators although responses to a prior set of belief statements can be used to infer underlying attitudes assume that these responses necessarily provide information about accessible beliefs that provide the causal basis for the attitude. Based on Ajzen and Fishben (1975), they highlight the differences between the two types of attitudes, attitudes towards physical objects, attitudes towards health and safety issues, racial relations, politics (partipating in an election, donating money to a political candidate, voting for a candidate), the environment (using public transit, recycling, conserving ebergy), or any other domain (Ajzen, 2012). Attitudes and behaviour correlate with each other in terms of their action, target, context, and time elements to extent the compatible.

Daulany (1968) underlines that behavior is called a normative norm with regard to different social references, they combine to produce an overall subjective norm, then draw an analogy with the expected value model determined by the more accessible total set of normative norms. (Ajzen, 2012). Subjective norms are conceptually independent of attitudes toward the behaviour in principle may coincide rarely each other. Ajzen (2005) notes that there are many factors, both internal and external factors capable of interfering with (or facilitating) the performance of certain behaviors, the extent to which people have the necessary information, emotions, personal skills and competencies, availability of social bolster, and coercion, and the absence or availability of external constraint.

From a psychological perspective, it's interesting to note the tendency for most people to assume a perceived and believed behavioral control role. The conceptualization of behavioural control in the TPB is based on the work of Bandura (1977). The TPB focuses on the extent to which people believe they are capable of performing a certain behaviour. Clearly, then, one way in which self-efficacy or perceived behavioural control can influence performance of difficult behaviours is by its effect on persistence. The more people believe they can successfully complete an intended behaviour, the more likely they are to persist with it.Behavioral control can be measured in two ways: the perceived role of behavioral control beyond its effect, and the perceived behavioral control of situations. The TPB is a model that can be used to understand any behavior that is motivated by social psychology interests. Previous research revealed that perceived behavioral control is also an important predictor of behavioral intentions.

Behavioral control can indirectly influence behavior by its influence on intention to engage in behavior and persistence in the meet of handicaps confluence during execution. Perceived behavioral control can be a potential proxy for actual surveillance. Remember that you are responsible for controlling your behavior, even if you have good intentions.

Ajzen and Fishbein (2008) A strong interaction between intentions and perceived behavioural control when there is relatively little variance in either of these factors. People vary greatly in their intentions to perform the behaviour of interest and vary in their perceptions of control over the berhaviour, expecting a strong moderating effect (Ajzen, 2012).

Attempts to result on the satisfy response are enhanced the more parties are motivated to comply with what they should responsible to do. Dulany's theory of propositional control is the idea that people can control their thoughts and beliefs by using correct propositional arguments. in relation to behavioural intentions is the actual response is assumed to be a direct function of the behavioural intention (Ajzen, 2012). According to Daulany's theory, people can control their responses by intentionally selecting a particular response. This determines the feedback that actually comes out. There are two function of intention: the intention itself and the personal context. The first is the most basic unit of measurement in the metric system. The first is the assumed distribution of reinforming weighted by the subjective value of the reinforcer. The more believe people outcome, the more value they outcome, their stronger intention is to result on the feedback in question. The second thing affecting intentions is the assumed reinforcement distribution, which is weighted by the assumed reinforcer's significance.

According to (Ajzen, 2012) stated that the extent of actual behavioural surveillance is thought to moderate the influence of intentions on behaviours. When people have high control, their intentions should be enough to predict their behaviour. However, the degree of control someone has will vary, so intentions and behaviour will interact to jointly affect performance. Although the person's behaviour may try to control the situation, in the end they may not be able to do so completely. The behavior was observed in situations where it is assumed that the performer's intentions behind performing the behavior were intended under some conditions. This assumption of intention is important in understanding the behavior. Perceived self-efficacy seems to play a role in improving performance. In the theory, intentions of this kind are said to be a result of attitudes and subjective norms with respect to the behavior of interest.

Attitude, subjective norm, and perceived behavioural control are all important factors in the formation of behavioural intentions. The TPB and other reasoned action models suggest that people's behaviour is based on their intentions. The idea from Sheeran (2002) is that intentions and behaviour are strongly linked, but this link can be affected by the degree of control we have over our behaviour. Second, if people change their intentions, this will often be followed by changes in their behaviour. The results for both of these propositions is strong. Many researches show that behavioural intentions explain a lot of variance in behaviour.

2.3 Behavior

According to Girotto et al., the use of computers has had a significant impact on the way scientists and researchers conduct their work. Pointing out that food waste has both an emotional and psychological component can help individuals reduce their food waste. The others in Govinda (2017), the customers shape the way they are buying, transporting, conserving, preparing and consuming food (Behavior et al., 2019). The behaviour is a response is perceived to produce a certain outcome that is believed indicate a true response (Ajzen, 2012).

The behaviour is mediated and indeed controlled by higher mental processes. Daulany (1968) attributed a causal or instrumental role to conscious,volitional processes with practice will tend to habituate and conscious rules may become unconscious. Most social psychologist behaviors are capable of producing more than one outcome, which are assumed to hold multiple behavioural beliefs that relate performance to a different outcome. The person's motivation is then weighted by this outcome. The referent's perceived expectation of keeping that normative reference may be more than a referent person or group, including a person's spouse or partner, family, friends, and depending on the behavior under consideration, coworks, health professionals, and law enforcement agencies (Ajzen , 2012). The behaviour is likely to lead to certain outcomes, which together with the evaluations of these outcomes will produce a favourable or unfavorable result. However, it is important to expect attitudes that affect all potential outcomes.

2.4 The Relation of Attitude and Intention to Reduce Food Waste

Attitudes are formed about the attitude object and direct experiences not to be observed directly but measured on responses in the form of beliefs are considered cognitive responses towards a specific activity and the outcome evaluation of these actions (Behavior et al., 2019). The negative consumer assessment on food waste behavior will enhance the effect of attitude on their intention to reduce food waste behavior (Coşkun & Yetkin Özbük, 2020)

(Bhatti et al., 2019) established that attitude had the strongest effect on the intention the higher is the expected intentions to perform that behavior as an important predecessor of the general assessment toward specific through made up of consistent or conflicting beliefs about the consequences of certain or not to perform a particular behavior consequently the actual behavior.

Previous studies see this often as the most important factor influencing intention (De Pelsmaeker et al., 2017). However, attitudes can change over time with a change in information at the given time (Glasman & Albarracín, 2006). In addition, social factors can have an impact on the development or change of attitudes (De Pelsmaeker et al., 2017). Different levels of situational and personal factors can have an influence on the extent to which attitudes are forecast intention (Vermeir & Verbeke, 2007). The result in (Behavior et al., 2019), Intention was detected to attitude meaning that with a stronger increases who will also intend to reduce their food waste strongly with the inserting the independent variables showed a significant relationship to the dependent variable Intention.

The following hypotheses were developed:

H1 : *Attitude is positively related to household's intention to reduce food waste*

2.5 The Relation of Subjective Norm on Intention to Reduce Food Waste

Ajzen (1991) outlines a social factor named 'Subjective Norm' is defined as the perception of social pressure to accomplish a specific behavior comprise of normative beliefs and willingness to comply. Vabø & Hansen, (2016) stated that the effect of subjective norms is depended on the individual who feel others influence while rotten the food (Coşkun & Yetkin Özbük, 2020). Individualistic or collectivistic value of others will influence the degree of consumer food waste intention (Behavior et al., 2019). Based on discussion above, the following hypothesis is proposed.

H 2 : Subjective Norms has significant effect on *household's intention to reduce food waste*

2.6 The Relation of Perceived Behavioral Control on Intention to Reduce Food Waste

Ajzen, (1991) stated that Perceived Behavioral Control (PBC) describes the perceived difficulty or easy of the behavior assumed to take anticipated obstacles and past experiences into consideration (Behavior et al., 2019). Atkinson, (1964) stated that deals with the concept of success in terms of the likelihood that an individual succeeds is motivated as long as there is a good chance of (control of) success (Behavior et al., 2019).

PBC (Londono et al., 2017) is influenced by the individual's confidence in their ability to perform a behavior and includes internal factors e.g. self-efficacy and external factors e.g. perceived barriers impacted by consumer perception and product availability perception (Behavior et al., 2019). Behavior et al., (2019) found the Perceived Behavioral Control supported the reduction of food waste intention. Accordingly, the hypothesis stated to have the confidence in their ability, also have the intention to throw less food away (Behavior et al., 2019).

The following hypotheses were developed:

H3 : *Perceived Behavioural Control positively influence household's intention of food waste reduction*

2.7 The Relation of Intention to Reduce food Waste on Food Waste Behaviour

The main factor influencing an individual's behavior is their intention. Intention is defined as the perceived pressure from others that is felt by an individual while doing a certain behavior. In this article predicting food waste reduction intentions, attitudes refer to favorite or unfavorite assessments of food waste behavior. When a person receive pressure from other social while wasting food, he/she has a greater intention to reduce food waste. If a person believes that the things responsible for food waste are under his control, his/her intention to du food waste reduction increases (Cokkun & Yetkin Özbük, 2020).

The following hypotheses were developed:

H4 : *Intention of food waste reduction negatively influence household's food waste behaviour*

3. RESEARCH METHODS

A questionnaire survey was conducted to 200 respondents in West Sumatra. Research instruments for this study were adapted from previous studies. The instrument for attitude towards foodwaste were adapted from Stefan et al (2013); Behavior et al., (2019); Coşkun & Yetkin Özbük (2020). The instrument for subjective norm were adapted from Stefan et al (2013); Behavior et al., (2019); Coşkun & Yetkin Özbük (2020). The instrument for perceived behavioral control were adapted from Stefan et al (2013); Behavior et al., (2019); Coşkun & Yetkin Özbük (2020). The instrument for intention of food waste reduction were adapted from Stefan et al., (2013); Luu (2020) and Behavior et al., (2019). The instrument for food waste behavior were adapted from Aydin & Yildirim (2021) and Behavior et al., (2019) The population of this study is household in Indonesia. Convenience sampling technique was applied in this study. Data of this study were analysed by applying structural equation modelling technique using Smart PLS 3.00 software.

4. RESEARCH FINDINGS

4.1 Profile of Respondents

This section will discuss data analysis and research results related to the intention to reduced food waste in West Sumatra. Based on gender, majority (64.5%) of respondents are female. Regarding education, majority of respondent (63,26%) hold bachelor degree. In term of age, majority of research respondents (90%) are 23 years old and above.

4.2 Measurement Model

a. Convergent Validity

Individual indicators are declared valid in measuring its latent variable when they have a correlation value above or greater than 0.70. However, a significant correlation value from 0.50 to 0.60 is still acceptable (Ghozali, 2014). The outer loading of PLS output shows us the validity of research indicators in measuring its latent construct.

Table 1
Indicators Outer Loading

	Attitude	Food Waste Beha-viour	Intention to Reduce Food Waste	PBC	Subjec-tive Norm
X1.1	0,898				
X1.2	0,756				
X1.3	0,859				
X2.1					0,946
X2.2					0,903
X3.1				0,857	
X3.2				0,877	
X3.3				0,736	
Y1		0,889			

Y2		**0,873**			
Y3		**0,808**			
Y4		**0,876**			
Y5		**0,723**			
Y6		**0,898**			
Z1			**0,884**		
Z2			**0,829**		
Z3			**0,785**		

Based on table 4.12, all indicators have met these criteria so that the indicators are said to be valid and can be used to measure its latent variable.

b. Discriminant Validity

In this study, a cross loading construct has been used to assest the Discriminant Validity of the construct (Ghozali, 2014). The cross loading value of this construct can be seen in table below. It can be seen from the table 2 that correlation between indicator and its construct is higher than correlation with indicator of other construct. Therefore, it can be concluded that discriminat validity of this research model was fulfilled.

Table 2
Indicators Cross Loading

	Attitude	Food Waste Behaviour	Intention to Reduce Food Waste	Perceived Behavioural Control	Subjective Norm
X1.1	**0,898**	-0,353	0,398	0,321	0,294
X1.**2**	**0,756**	-0,094	0,284	0,182	0,169
X1.3	**0,859**	-0,392	0,362	0,269	0,314
X2.1	0,329	-0,272	0,308	0,292	**0,946**
X2.2	0,245	-0,231	0,232	0,226	**0,903**
X3.1	0,356	-0,491	0,273	**0,857**	0,269
X3.2	0,197	-0,296	0,250	**0,877**	0,225
X3.3	0,199	-0,273	0,138	**0,736**	0,202
Y1	-0,359	**0,889**	-0,393	-0,366	-0,198
Y2	-0,313	**0,873**	-0,314	-0,443	-0,267
Y3	-0,261	**0,808**	-0,273	-0,334	-0,258
Y4	-0,267	**0,876**	-0,366	-0,341	-0,201
Y5	-0,237	**0,723**	-0,191	-0,361	-0,283
Y6	-0,318	**0,898**	-0,279	-0,439	-0,253
Z1	0,394	-0,303	**0,884**	0,297	0,267
Z2	0,294	-0,333	**0,829**	0,201	0,177
Z3	0,353	-0,302	**0,785**	0,197	0,292

Table 7. The measurement of cross loading

c. Reliability

The reliability of research variable in this study is measured by using Cronbach's Alpha and Composite Reliability. A variable is said to be reliable if it has value of Cronbach Alpha and Composite Reliability > 0.70 (Hair et al. 2014).

Table 3
Reliability of Research Variable

	Cronbach's Alpha	Composite Reliability
Attitude	0,790	0,877
Food Waste Behaviour	0,922	0,938
Intention to Reduce Food Waste	0,780	0,872
Perceived Behavioural Control	0,775	0,864
Subjective Norm	0,834	0,922

Table 3 shows us that all variables have value of Cronbach Alpha and Composite Reliability are above 0,70. Its means that the all variables of this research are reliable.

Table 4
The Result of Hypothesis Testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Attitude -> Intention to Reduce Food Waste	0,316	0,323	0,078	4,077	0,000
Intention to Reduce Food Waste -> Food Waste Behaviour	-0,364	-0,366	0,071	5,090	0,000
Perceived Behavioural Control -> Intention to Reduce Food Waste	0,107	0,110	0,063	1,715	0,087
Subjective Norm -> Intention to Reduce Food Waste	0,125	0,123	0,084	1,498	0,135

Attitude has significant effect on Intention to Reduce Food Waste (H1 is Accepted). Subjective Norm does not have significant effect on Intention to Reduce Food Waste (H2 is Rejected). Perceived Behavioral Control does not have significant effect om Intention to Reduce Food Waste (H3 is Rejected). Intention to Reduce food Waste has significant effect Food Waste Behaviour (H5 is Rejected).

The results for the hypotheses in the current research model. H1 proposed that attitude would be positively influence household intention of food waste reduction. As presented in Table 8, a positive and significant association was found for attitude and households' food waste reduction intention (p < 0.01 = 0,000), which lent credence to H1. H4 proposed that households' food waste reduction intention would be positively associated with the food waste behavior. Households' food waste reduction intention exhibited a positively significant relationship with food waste behavior (p < 0.01 = 0,000), which provided evidence for H4.

H3, and H2 postulated the perceived behavioural control, subjective norm toward food wasting and meaningfulness of food waste reduction, respectively, for households' food waste reduction intention. Perceived behavioural control displayed the significantly negative link with households' intention to reduce food waste (p > 0.01 = 0,087). H2 proposed subjective norm identity as a normative norm for households' food waste reduction. As Table 8 indicates, H2 received empirical support through the marginally negative significant term for the interactional effect of intention to reduce food waste also H3 (p = 0.135 < 0.10).

4.3 Discussion

This research wants to find out how the characteristics of household behavior affect the generation of food waste in developing countries influencing the emergence of food waste in the household, the level of our household sample in affordable people shows no comparative study in developing countries or other countries (Amirudin & Gim, 2019). The results of the research explain the fact that city dwellers tend to donate leftovers, different in the countryside to cook their own food which indirectly reduces food waste. The essential of not rely on intention as a proxy measure for behavior because it would only be easy to conclude that the study was designed to show very different relationships in past and future studies, indonesia still has complex food challenges (Aydin & Yildirim, 2021). The government has an important role through policies and interventions such as addressing all aspects of the food chain so that efficient However, some policies should be significantly limited taking into account the broad Sustainability strategy with existing theories, education related to household routines should be considered, this can be achieved through awareness campaigns in online media and other media in their use are simple, effective and culturally relevant by focusing on change the attitude of not wasting food.

a. The effect of attitude on household intention to reduce food waste behaviour

This study found that attitude has significant influence on customer intention of food waste reduction. It means the more positive consumer attitude to not waste the food the higher their intention to reduce food waste. In other word, the attitude is the importance predictor of customer intention of food waste reduction. This study inline with previous research that found that attitude has significant influence on customer intention to reduce food waste (Behavior et al, 2019).

Why attitude has significant effect on intention since attitude result from customer evaluation on positive and negative consequences of food waste behavior. When customer aware on the negative consuquences of food waste behavior such as waste the money and can cause pollution to the environment then their attitude will be more positive to not waste the food. This attitude finally will increase the customer intention to reduce food waste.

b. The effcet of subjective norm on household intention to reduce food waste behaviour

This study found that subjective norm doesn't have significant effect on customer intention to reduce food waste. It means that subjective norm is not the good predictor for customer intention of food waste behavior. This research result is opposite with many extant literatures that found that subjective norm has significant influence on customer intention of food waste reduction behavior (Coşkun & Yetkin Özbük, 2020; Behavior et al., 2019).

Why subjective norm doesn't have significant effect on intention to reduce food waste since mostly friend, family and relative have important role to shape the customer basic value and belief. The role of other people to influence someone's belief and value is more effective during childhood and teenages. In other words, the people around us have teached us the values that waste the food is bad habit and forbidden by the norms and religy started form childhood until now. When the people getting adult they already started to have strong belief that waste the foods is bad habit and forbidden. Therefore, the effect of other people believe does not strong enough to increase intention to reduce food waste for adult people, since they already embrace the same value with other people around them.

c. The effect of perceived behavioural control on household intention to reduce food waste behaviour

This study found that perceived behavioral control doesn't have significant influence on customer intention of foodwaste reduction. It means that perceived behavioral control is not an impotant predictor on customer intention to reduce food waste. This study is contradictive with previous studies that found that behavioral control perception have significant influence on customer intention of food waste reduction (Coşkun & Yetkin Özbük, 2020; Behavior et al., 2019)).

Behavioral control perception doesn't have significant influence on customer intention of food waste reduction may be there are some possibilities. Firstly, responden of this research may be already have sufficient dgree of perceived behavioral control to reduce food waste behavior. In other words, respondent believe that they have enough ability to reduce food waste behavior through some efforts such as save the food in storage properly, cook the food efficiently, and buy the food sufficiently. Therefore, improve customer's behavioral control perception doesn't have significant influence on customer of food waste reduction behavior.

d. The effect of household intention to reduce food waste behaviour on food waste behaviour

This study found that intention to reduce food waste behavior has significant effect on food waste behavior with negative direction. It means the higher customer intention of food waste reduction the lower customer behavior to waste food will be. This study inline with previous research that found that customer intention to reduce food waste has significant effect on food waste behavior (Stancu et al., 2016; Mondéjar-Jiménez et al., 2016; Coşkun & Yetkin Özbük, 2020).

The significant effect of food waste reduction intention on consumer's food waste behavior may be because intention is strong predictor behavior. There is strong possibility of consumer to apply intention of food waste reduction behavior if there is no something special handicap (i.e sufficient food storage is not available). Therefore many study usually use consumer intention to predict consumer behavior.

5. CONCLUSION AND RECOMMENDATION

This study found that attitude is strong predictor of household intention to reduce food waste. This research also found that intention to reduce food waste is strong predictor of food waste behavior. Unfortunately, in this study subjective norms and behavioral control perception are not good predictor of customer intention food waste reduction.

In this research attitude has important role in order to enhance household intention of food waste reduction directly and to food waste behavior indirectly. Therefore developing strong household attitude to food waste behavior is the main responsibility of stakeholder such as government, industries, NGO, educational institution and other parties. Providing education to households about the disadvantages of food waste bahavior and providing knowledge how to do food conservation effectively, how to do food purchase effectively and how to cook and serve food properly will improve household attitude towards food waste behavior and finally will lead to reduce food waste behavior.

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