

MODERATING EFFECT OF EXPERIENCE ON THE INTENTION-BEHAVIORAL RELATIONSHIP TOWARDS SUSTAINABLE FOOD CONSUMPTION

Hayatul Safrah Salleh^{1,*}, Nik Hazimah Nik Mat²,
Wan Norhayati Mohamed³, Ameer Farhan Mohd Arzaman⁴,
Nurul Syamimi Samsuddin⁵, Nur Khairunnisa Ahnual⁶

Abstract

As public interest in sustainability consumption increases, consumers may develop a positive intention to change their consumption patterns. However, behavioral patterns are not consistent with intentions. The purpose of this study was to examine the moderating effect of experience within the Theory of Planned Behavior and how it influences the relationship between intentions and behavior towards functional food consumption, as well as developing a measurement for the construct of experience from the perspective of healthy food consumption. A survey was conducted using a self-administered questionnaire, collecting data from a sample of 452 adult consumers. The experience construct was examined through both intrinsic and extrinsic experience approaches. The results showed that only intrinsic experience

¹ *Dr. Hayatul Safrah Salleh (corresponding author) is currently working as an Associate Professor of Marketing at the Faculty of Business, Economics and Social Development, Universiti Malaysia Terengganu, Terengganu, Malaysia. She obtains a Doctor of Business Administration from Universiti Utara Malaysia, Malaysia. Email: hayatul@umt.edu.my

² Dr. Nik Hazimah Nik Mat is currently working as an Associate Professor of Management at the Faculty of Business, Economics and Social Development, Universiti Malaysia Terengganu, Terengganu, Malaysia. She obtains a Ph.D. in Human Resource Management from Edith Cowan University, Australia.

³ Dr. Wan Norhayati Mohamed is currently working as a senior lecturer at the Faculty of Business, Economics and Social Development, Universiti Malaysia Terengganu, Terengganu, Malaysia. She obtains a Ph.D. in Management from Universiti Malaysia Terengganu, Malaysia.

⁴ Ameer Farhan Mohd Arzaman is a Ph.D. student at the Faculty of Business, Economics and Social Development, Universiti Malaysia Terengganu, Terengganu, Malaysia. He obtains a Master of Science in Aquaculture from Universiti Malaysia Terengganu, Malaysia.

⁵ Nurul Syamimi Samsuddin is a Ph.D. student at the Faculty of Business, Economics and Social Development, Universiti Malaysia Terengganu, Terengganu, Malaysia. She obtains a Master of Business Administration from Universiti Malaysia Terengganu, Malaysia.

⁶ Nur Khairunnisa Ahnual is a Master of Science (Marketing) student at the Faculty of Business, Economics and Social Development, Universiti Malaysia Terengganu, Terengganu, Malaysia. She obtains a Bachelor of Management (Marketing) from Universiti Malaysia Terengganu, Malaysia.

moderates the relationship between intentions and behavior regarding functional food consumption. This indicates that the intrinsic experience (such as feeling happy, confident, and healthy) is important in motivating consumers to initiate the desired healthy eating behavior. Thus, healthy food producers and marketers must communicate these notions in their strategies. This study makes a methodological contribution to the literature by developing a modified scale for measuring experience, focusing on healthy food consumption, which could be a useful scale for future research in different contexts and settings.

Keywords: Experience, Moderator, Intention, Functional Food, Sustainable Food Consumption.

1. INTRODUCTION

Many studies have supported the applicability of the Theory of Reasoned Action and the Theory of Planned Behavior (TPB) in explaining consumer intentions and behavior (Shah Alam & Mohamed Sayuti, 2011; Liao & Fang, 2019; Shukla, 2019; Zhang *et al.* 2019). Nevertheless, there is a need to investigate the influence of a moderator on the relationship between consumer intentions and behavior, which has not been addressed in previous research on functional food consumption behavior in Malaysia (Stanton *et al.*, 2011; Rezai *et al.*, 2012). Public interest in sustainable consumption is increasing, such that consumers may develop a positive intention to change their healthy food consumption patterns. However, behavioral patterns are not consistent with these intentions. This is known as the intention - behavior gap in consumer psychology literature, with this study applying these insights to the sustainable food consumption perspective. Intentions are a good

predictor of behavior (Sheeran & Abraham, 2003; Akbar, Anderson & Gallegos, 2015). However, there is often a substantial gap between an individual's intentions and their subsequent behavior (Lu, Cheng & Chen, 2013).

Previous studies have demonstrated that the variable of experience fits into the TPB model as a moderating factor for the relationship between intentions and behavior (Cooke & Sheeran, 2004; Pomery *et al.*, 2007). This study concerns the analysis of behavioral intentions to consume more functional food, sustainable food that comes with health claims promoting its benefits. Thus, the decision-making process towards such foods involves risk and safety choices. Experience offers decision-making support that requires risk-taking and safety choices towards healthy consumption, whereby, as consumers become more experienced with the health benefits and positive experiences that they receive from using these functional foods, they consume such food more often to achieve the goal of being in better

health as well as preventing diseases (Urala & Lahteenmaki, 2007). Experience influences future behavior, as familiarity increases with repeated experience, especially regarding food consumption behavior (Pomery *et al.*, 2009).

As reported by previous studies, even though intentions have been shown to be a predictor of behavior, a gap exists between these two variables. Therefore, the moderating factor of experience may strengthen the relationship between behavioral intentions and consumption behavior in the model, as well as increase the predictive power of intentions towards food consumption behavior. Hence, further investigation is needed. Sommer (2011) suggested that the influence of experience must be tested over a set of different behaviors and contexts in order to reveal the path of the exact effects of experience in the TPB model. Few studies have focused on experience as a moderator in the relationship between behavioral intentions and actual consumption behavior regarding functional food. Moreover, specific scales to measure experience, focusing on behavior regarding functional food consumption, have not yet been developed. Therefore, the objective of this study was to examine the effect of experience as a moderator in the relationship between intentions and behavior regarding functional food consumption and to develop a measurement scale for the construct of experience from the perspective of functional food consumption.

2. LITERATURE REVIEW

2.1 Intention and Consumption Behavior Relationship

Previous literature has established a compelling positive association between intentions and behavior and has meticulously anticipated a mixture of responses. From a healthy consumption perspective, one of the utmost essential behavioral measures is the intention to eat specific types of sustainable food. Fishbein and Ajzen (2010) reported that behavior is influenced by an individual's intention to perform a particular behavior or not. Therefore, the actual precedent of behavior is the individual's intention. Armitage and Conner (2001) mentioned that an individual's intentions affect their behavior, demonstrating their willingness to act and the level of attempt they would give to execute the behaviour. Akbar, Anderson, and Gallegos (2015) conducted a systematic analysis on the relationship between intentions and behavior among populations with or at risk of diabetes, reporting that intention was the most predictive factor for diabetes-related behavior.

Based on a meta-analytic analysis of 185 studies, Armitage and Conner (2001) also reported that intentions were an excellent predictor of upcoming behavior. Thus, past studies indicated that intentions represent 18% to 76% of the variance in health-related behaviors (Armitage & Conner, 2001; Conner & Sparks,

2005; Akbar, Abdullah, et al., 2015; Anderson & Gallegos, 2015). Moreover, they show that intentions influence the various behavioral propensities in numerous dissimilar contexts and settings, confirming that intentions are an immediate antecedent of behavior.

Consumption behavior refers to the behavior of individuals and households when they make decisions to continuously consume a product using their available resources (Lee, 2009), while Abdullah *et al.* (2015) mention that increased consumption was influenced greatly by affordability, accessibility, and availability of the product. Consumers choose to include certain healthy foods in their diet to gain both health and physical rewards as they know that consuming healthy food can help them to maintain wellness without the use of medicine. Thus, the benefits of maintaining good health and well-being from consuming functional food have increased consumers intentions to consume such food. Intentions have been demonstrated to have a significant positive relationship with behavior and can be used to accurately predict a variety of action tendencies (Fishbein & Ajzen, 2010). Past studies stated that intentions were the best predictor of future behavior (Armitage & Conner, 2001; Lu, Cheng & Chen, 2013; Akbar, Anderson & Gallegos, 2015, Shah Alam & Mohamed Sayuti, 2011). This concept is also supported by Follows and Jobber (2000) and Shukla (2019), who added that the relationship between consumer

intentions and environmentally responsible purchasing behaviour is significant and positive. Verbeke (2005), Tuu et al. (2008), Liao and Fang (2019), and Zhang *et al.* (2019) also affirmed that behavioral intentions have a significant effect on behavioral frequency. Therefore, this study hypothesized the following:

Hypothesis 1: Behavioral intentions positively influence consumer behavior toward functional food.

2.2 Experience

Even though intentions are a good predictor of behavior, there is a considerable gap between a behavioral intention and the performance of the associated behavior. For example, 47% of consumers with high intentions failed to execute their intended behavior (Sheeran, 2002). Ting *et al.* (2019) argued that an individual's prior experience and involvement in selecting the food significantly influenced the decisions of that individual in their general discrimination behavior towards food. Sheeran and Abraham (2003) found a gap between intentions and behavior in their study at two universities in the United Kingdom, which was caused by respondents that intended to do a workout but failed to execute this action. The gap between intentions and behavior has confirmed that other variables may affect the path and the power of the correlation between the two variables. Thus, there are other variables known as moderators.

This study concerns the analysis

of consumers' intentions and their behavior in consuming functional food, food that comes with health claims promoting its benefits. Thus, the decision-making process towards such foods involves risk and safety choices. Therefore, experience offers decision-making support in situations that require risk-taking and safety choices towards healthy consumption; as consumers become more experienced with the health benefits of functional foods, they will purchase and consume such food more often. To understand the gap between behavioral intentions and consumption behavior involves examining the moderator of experience which might increase the predictive power of the intention - behavior relationship regarding functional food. Prior research has reported that experience plays a significant role as a moderator (Russell-Bennett, Hartel & McColl-Kennedy, 2005; Pomery *et al.*, 2009; Sommer 2011; Miguel, Dolores-Maria & Jose, 2013; Rajaratnam *et al.*, 2014; Lili Qian *et al.*, 2017).

Direct experience improves predictions of future behavior and moderates the relationships between both intentions and behavior, and attitude and behavior. However, it does not moderate the relationship between perceived behavioral control and behavior (Cooke & Sheeran, 2004). Sommer (2011) stated that experience increases the explained variance of the intention - behavior relationship, while intentions based

on greater experience predict behavior better than intentions based on less experience. As people gain experience their familiarity with a particular behavior increases, while there is also an increased contemplation regarding the behavior and its consequences. Positive experiences with the consumption of functional foods will influence customers' behavioral intentions to consume functional food in the future. Past studies have found that experience creates a strong link between intentions and future behavior (Sommer, 2011; Taylor & Todd, 1995).

In another study, experience increased the variance of the relationship between intentions and smoking behavior among adolescents (Pomery *et al.*, 2009). Experience played a moderating role on tourists' on-site experiences and behavioral intentions in a post-earthquake site in China (Lili Qian *et al.*, 2017). Experience moderates the relationship between intentions and behavior, where an intention based on greater experience is a better predictor of behavior than an intention based on less experience (Pomery *et al.*, 2009; Sommer, 2011). Rajaratnam *et al.* (2014) examined the effect of tourists' perceptions towards service quality on their levels of satisfaction, as well as the moderating effect of experience. The result showed that experience moderates the relationship between service quality and satisfaction. Thus, a relationship between experience,

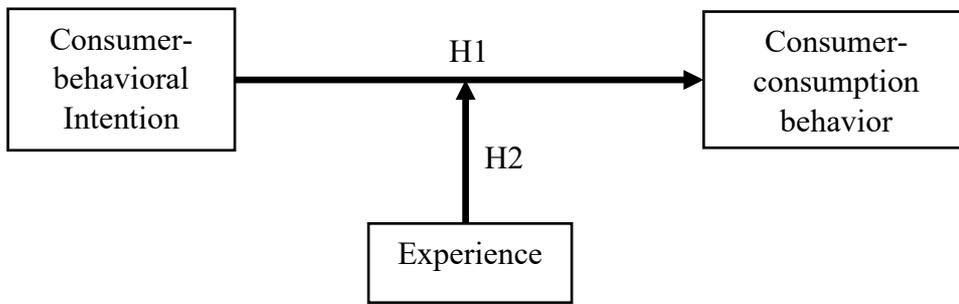


Figure 1 Conceptual Framework

intentions, and consumer behavior, was hypothesized as follows:

Hypothesis 2: Experience moderates the relationship between behavioral intentions and consumption behavior towards functional food.

2.3 Conceptual Framework

The study intends to fill a gap in the research regarding the intention-behavior relationship by examining the moderating effect of experience on the relationship between consumers' behavioral intentions and consumers' consumption behavior. The proposed conceptual framework for this study is as shown in Figure 1.

3. METHODOLOGY

The population of the study was comprised of adult Malaysian consumers living in Peninsular Malaysia, who undertook grocery shopping at various shopping malls in the Klang Valley. The study involved adult Malaysian consumers who bought their groceries at twelve selected supermarkets in Klang

Valley. The consumers in Klang Valley have greater exposure to information on healthy foods, including functional foods, while a wide variety of functional food types are also available in most of the shopping mall outlets in Klang Valley when compared to other states. Therefore, Klang Valley was selected as the location for this study.

Since the total amount of the population (consumers aged 18 and above) is over one million, and it was difficult to establish a full list, a convenience sampling technique was employed. When the population exceeds 250 thousand, the appropriate sample size will be stable at 384 respondents (Krejcie & Morgan, 1970). A cluster sampling technique was used, with the sample being divided into clusters of consumers shopping for groceries at twelve selected shopping malls in the Klang Valley area. A random selection was carried out by approaching every tenth customer that entered the supermarket for grocery shopping, asking them to be a respondent.

Using a mall intercept survey, a self-administered survey form was

disseminated to the respondents in person. Out of 800 questionnaires delivered to consumers, 452 were deemed usable for subsequent analysis. A five-point Likert scale with a scale from 1=Strongly disagree to 5=Strongly agree, was used to assess the constructs of consumption behavior, behavioral intentions, and experience. The statements of the items used in the study were rephrased to suit the products under study (functional food), the sample, and the local context. The Statistical Package for the Social Sciences (SPSS version 23) was used to analyze the data.

Regression analysis was used in this study as it is a reliable method to examine the prediction ability of one or a set of independent variables on a dependent variable (Pallant, 2011). The analysis can determine which variables are important, which variables can be disregarded, and how these variables influence each other. Linear regression was also used to examine the amount of variance in the consumption behaviour predicted by behavioural intentions. Moreover, a factor analysis and hierarchical regression analysis were employed to examine the moderating effect of experience on the relationship between intentions and the behavior towards functional food consumption (Baron & Kenny, 1986).

3.1 Measurement

In this study, consumption behavior (CB) refers to the behavior of an individual when they

continuously make decisions to consume functional food. Seven items were constructed for this variable, based on Lee's (2009) study, which measured consumption behavior in general. The operationalization of behavioral intentions (BI) in this study was the willingness and enthusiasm of a person to continue consuming functional food. It was also identified as a continuance intention to remain using healthy food (Schmitt, 1999). Behavioral intentions were measured using four items developed by Verbeke (2005).

Operationalization of experience (Ex) in this study encompassed both internal and external factors, such as the excitement and reward felt by the respondents owing to the consumption of functional food, that motivated them and led to their re-purchasing behavior regarding such food. The construct of experience was measured using the notion of experiential marketing developed by Schmitt (1999). Fifteen recent experience items were developed from the perspective of healthy food (such as functional food) consumption in general, focusing specifically on the healthy food consumption context. Table 1 shows the items for each construct.

4. RESULTS

Table 2 presents the demographic profile of the 452 respondents in the sample. Of these 318 respondents (70.4%) were female, while the remaining 134 respondents (29.6%)

Table 1 Measurement Items and Constructs

Construct	Code	Item
Consumer Behavior (CB)	CB 1	I eat functional food products frequently
	CB 2	I usually eat food that can make me healthy and indorse good well-being
	CB 3	I will buy functional food products that are safe to consume
	CB 4	I will buy products that have healthy and safe ingredients
	CB 5	I will consume functional food products that have healthy components (e.g., probiotics, high fiber, omega-3, and low fat)
	CB 6	I usually eat nutritious products
	CB 7	I will eat products that can protect me from illnesses
Behavioral Intention (BI)	BI 1	I am determined to consume functional food to be healthier
	BI 2	I am intent on consuming functional food to protect me from illnesses
	BI 3	I insist on consuming functional food if it has healthy components
	BI 4	I expect to consume more functional food in the future
Experience (Ex)	Ex 1	I like eating/drinking functional foods
	Ex 2	Eating/drinking functional foods makes me feel happy
	Ex 3	I eat/drink functional foods regularly because I am satisfied with such food
	Ex 4	Eating/drinking functional foods makes me feel healthy
	Ex 5	Eating/drinking functional foods gives me more energy
	Ex 6	Functional foods are likely to have a beneficial impact on my health
	Ex 7	I feel that consuming functional food is part of having a natural way of living
	Ex 8	I like the taste of functional foods
	Ex 9	I feel that functional foods are fresh and delicious
	Ex 10	The prices of functional foods are mostly comparable to conventional products
	Ex 11	Functional foods are produced naturally and are available in many shops
	Ex 12	My positive experience with functional food consumption influences me to eat more of such foods
	Ex 13	My experience with functional food consumption influences me to try other types of such foods
	Ex 14	Eating/drinking functional foods makes me want to change my lifestyle to be healthier
	Ex 15	I will share my functional food experience with others

were male. The majority (337) of the respondents were aged between 18 and 40 years, representing 74.6% of the total sample. Regarding religion, the highest proportion of respondents (76.8%) was Muslim, which also conforms to the highest ethnicity group of the respondents, namely Malays (75.7%). Regarding marital status, 68.4% of the respondents were married, while the remainder were either single or divorced. Regarding

the level of education, the results indicated that master's/doctorate holders, bachelor's degree, certificate/diploma holders, and primary/secondary school were 19.3%, 42.0%, 18.8%, and 19.9% respectively. Regarding the monthly household income, more than half (62.1%) of the respondents had incomes between RM3001 and RM5000, while the lowest percentage (10.2%) of respondents had incomes

Table 2 Profile of the Respondents (N = 452)

Variable	Categories	N	%
Gender	Male	134	29.6
	Female	318	70.4
Age	18 – 30 years	169	37.4
	31 – 40 years	168	37.2
	41 – 50 years	101	22.3
	> 50 years	14	3.1
Religion	Islam/Muslim	347	76.8
	Buddhism	73	16.2
	Hinduism	21	4.6
	Christian	11	2.4
Ethnicity	Malay	342	75.7
	Chinese	82	18.1
	Indian	23	5.1
	Others	5	1.1
Marital status	Single	138	30.5
	Married	309	68.4
	Divorced/widow(er)	5	1.1
Level of education	Primary/secondary school	90	19.9
	Certificate/diploma	85	18.8
	Bachelor's Degree	190	42.0
	Master's/doctorate	87	19.3
Monthly income (RM)	< 3000	106	23.4
	3001 – 5000	175	38.7
	5001 - 7000	75	16.6
	7001 - 9000	50	11.1
	> 9001	46	10.2

Table 3 Factor Loadings for Experience

Items	Factor 1	Factor 2
Ex 4	0.835	
Ex 5	0.831	
Ex 6	0.826	
Ex 7	0.703	
Ex 3	0.700	
Ex 14	0.696	
Ex 2	0.691	
Ex 1	0.664	
Ex 15	0.617	
Ex 10		0.804
Ex 11		0.801
Ex 13		0.575

of RM9001 and above.

Table 3 presents the results of the factor analysis completed on the 15 experience items. The overall value of the Kaiser-Mayer-Olkin (KMO) was .95, while the Bartlett test was highly significant ($p = 0.00$, $p < 0.05$). Both values supported the factorability of the correlation matrix. The result of the factor analysis on the experience constructs produced two factors, which explained 61.27% of the total variance of the items. Three items (8, 9, and 12) were deleted to improve the scale reliability and to reduce unstable correlations among the factors (Hair *et al.*, 2010). Factor 1 consisted of nine items (with factor loadings ranging from 0.62 to 0.84), while Factor 2 comprised 3 items (with factor loadings of 0.58, 0.80 and 0.80). The first factor, named the Feeling of Using Functional Food (FUFF), covered questions relating to respondents' emotional gains due to the consumption of functional foods.

The second factor, named the Functional Food Environment (FFE), contains questions relating to the external attributes of functional foods, such as availability and price. In Table 4, the reliability analysis conducted on Factor 1 and 2 shows Cronbach's alpha values of 0.92 and 0.72, respectively, indicating high reliability. Therefore, hypothesis 2 was re-stated based on the new dimensions of the experience construct:

Hypothesis 2a: The Feeling of Using Functional Food moderates the relationship between behavioral intentions and consumption behavior.

Hypothesis 2b: The Functional Food Environment moderates the relationship between behavioral intentions and consumption behavior.

Table 4 shows the results of the reliability test for all variables. All reliability values were greater than the lower acceptable limit ($\alpha > 0.60$)

Table 4 Reliability Coefficients for All Variables

Variables	Items	Reliability (Cronbach's alpha)
Consumption behaviour (CB)	7	0.88
Behavioral intention (BI)	4	0.84
Feeling of Using Functional Food (FUFF)	9	0.92
Functional Food Environment (FFE)	3	0.72

Table 5: The Influence of Behavioral Intentions on Consumption Behavior

Independent variable	B	SEB	β
Behavioral intentions	0.66	0.04	0.65**

Notes: $R^2 = 0.42$; $F = 322.442$; Sig. $F = 0.00$; ** $p < 0.01$

recommended by Sekaran and Bougie (2016), indicating that the measurements of all variables are highly reliable.

Table 5 presents the regression analysis on the influence of behavioral intentions on consumption behavior. This explains that consumption behavior was influenced significantly by behavioral intentions ($F = 322.442$; $p = 0.00$). The R^2 result reveals that behavioral intentions account for 42% of the variation in consumption behavior. Furthermore, it is noted that behavioral intentions positively influence consumption behavior ($\beta = 0.65$). Therefore, hypothesis 1 is accepted.

Tables 6 and 7 show the results for the experience dimensions of Feeling of Using Functional Food (FUFF) and Functional Food Environment (FFE). Table 5 reports the results of the hierarchical regression analyses on the FUFF as a moderator. In Model 1, behavioral intentions emerged as a predictor of

consumer behavior, explaining 37.8 % of the variance. After including the FUFF in step 2, Model 2 showed an improvement, with a significant increase in R^2 by 45.5%. Model 3 shows a substantial change in the value of R^2 (0.464), along with a substantial difference in the value of R^2 change (0.009). This specifies that the FUFF explained an increase of 0.9% of the variance in consumption behavior after controlling for behavioral intentions. The results show that the FUFF was statistically significant ($\beta = 1.082$, $p < 0.01$) and moderates the relationship between behavioral intentions and consumption behavior. Therefore, hypothesis 2a is accepted.

Table 7 reports the results for the Functional Food Environment (FFE) as a moderator. In Model 3, the R^2 value increased very slightly from 0.432 to 0.433, but with no significant change in the F value (R^2 change = 0.001, $p > 0.01$). This shows that the FFE does not explain any additional

Table 6 Hierarchical Regression using the Feeling of Using Functional Food (FUFF) as a Moderator

Independent variable	Model 1	Model 2	Model 3
	β	β	β
Intention	0.615**	0.436**	- 0.112
Moderating variable			
FUFF		0.331**	- 0.347
Interaction terms			
FUFF x Intention			1.082**
R ²	0.378	0.455	0.464
Adj R ²	0.377	0.453	0.461
R ² change	0.378	0.077	0.009
Sig. F change	0.000	0.000	0.007

**p < 0.01

Table 7 Hierarchical Regression using the Functional Food Environment (FFE) as a Moderator

Independent variable	Model 1	Model 2	Model 3
	β	β	β
Intention	0.615**	0.540**	0.388
Moderating variable			
FFE		0.243**	- 0.008
Interaction terms			
FFE x Intention			0.333
R ²	0.378	0.432	0.433
Adj R ²	0.377	0.429	0.429
R ² change	0.378	0.053	0.001
Sig. F change	0.000	0.000	0.395

**p < 0.01

increase in the variance in consumption behavior after controlling for behavioral intentions. Thus, it is concluded that the FFE was statistically non-significant ($\beta = 0.333$, $p < 0.395$) and does not moderate the relationship between behavioral intentions and consumption behavior. Therefore, hypothesis 2b is rejected.

5. DISCUSSION

Even though consumers may initially intend to engage in healthy consumption, many fail in achieving this goal continuously. Experience is a useful element for repetitive conduct (Schmitt, 1999; Cooke & Sheeran, 2004; Pomery et al., 2009). Consequently, this study explored the

intention-behavior gap by analyzing the feeling of using functional food (FUFF) as an intrinsic experience approach, and the functional food environment (FFE) as an extrinsic experience approach. The results demonstrated that behavioral intentions (BI) explain only 42% of the difference in consumption behaviour (CB), regarding the average influence of behavioral intentions towards the consumption behavior of a consumer. This shows that additional constructs such as experience and self-efficacy may also influence consumption behaviour, which may reflect the disparity between what consumers say they plan to do and what they actually do (Fishbein & Ajzen, 2010).

The data demonstrated a small disparity in behavioural intentions among consumers. Thus, the small changes in behavioral intentions among Malaysian consumers prevents the differentiation of consumer intentions and consumption behavior; nevertheless, behavioral intentions do affect consumption behavior. This is consistent with past studies on health-related behavior (Armitage & Conner, 2001; Conner & Sparks, 2005; Shah Alam & Mohamed Sayuti, 2011; Akbar, Anderson & Gallegos, 2015; Shukla, 2019), which described that the explanation power of intentions was between 20% and 76%.

The positive effect of behavioral intentions towards consumption behavior shows that consumers perceive functional food as safe, and that functional foods are valuable for their health and sustainable

livelihood. This is congruent with a study on the acceptance of consumers towards functional food among young Malaysians, which reported that benefits from the practical aspects of food was the most influential contributor (Rezai *et al.*, 2012). Additionally, Stanton *et al.* (2011) revealed that Malaysians intend to consume less processed food products and generally prefer the healthier version of a product. They are usually unaware that they are purchasing functional food, as it is not labelled 'functional food' *per se*.

As mentioned earlier, behavioral intentions explained 42% of the variation in consumption behavior among Malaysian consumers. The result of the hierarchical regression on the moderator of the feeling of using functional food (FUFF) showed a significant increase in R^2 (46.4%). This explains that the effect of a moderating variable is present. Thus, the feeling of using functional food (FUFF) moderates the intention - behavior gap. This result indicates that an intrinsic experience occurs when an individual feels the rewards and benefits of using functional food. Thus, the chances of them consuming more functional food increases. The rewards and benefits that consumers receive, and feel, could be feeling happy, feeling that the food is tasty and healthy, and feeling energetic. Therefore, the predictive power of behavioral intentions towards functional food consumption also increases.

The moderator of the functional food environment (FFE) does not

strengthen the relationship between behavioral intentions and functional food consumption behavior among Malaysian consumers. This demonstrates that the extrinsic experience of the functional food environment (FFE) does not have any effect on the intention - behavior relationship. Accordingly, the functional food environment (FFE), such as price and food availability, seems to function separately. Moreover, this study concludes that the feeling of using functional food (FUFF) (such as feeling happy and healthy) is essential in motivating Malaysian consumers to initiate the desired healthy eating behavior. Although the concept of experiential marketing proposed by Schmitt (1999) has gained acceptance in research measuring experience behavior, it has raised the issue of cultural bias towards the Asian vision of experience, as well as the different meanings associated with the concept of 'experience' and 'consumption experience' in various scientific disciplines and behavior settings.

This study has proposed two dimensions of experience focusing on healthy food consumption, namely, the Feeling of Using Functional Food (FUFF) and the Functional Food Environment (FFE). Consequently, this study contributes to methodological aspects of the literature by developing a modified scale for measuring experience, specifically related to functional food consumption (i.e., the example of healthy food) in an Asian setting, also demonstrating the validity and

reliability of this scale. This study verifies that the use of significantly modified items for measuring experience in distinct contexts and settings is acceptable, which could be useful for future research.

5.1 Limitations and Study Forward

There are some limitations to this study. First, the sample is limited only to the Klang Valley area. Thus, the results may not be representative of the entire Malaysian population. Consequently, future research should focus on other states. The replication of samples from different locations will allow generalization and expansion of the results to provide in-depth information on various factors that can contribute to the satisfaction of consumers in sustainable food consumption. Second, the study focused only on respondents aged 18 and above, and does not represent the Malaysian population in general. Investigation on other segments, such as University students and adolescents might produce different findings. Finally, consumers are expected to evaluate different combinations of ingredients in functional food with varying degrees of favorability. Therefore, future research would benefit from targeting specific types of functional food products.

6. CONCLUSION

Unhealthy eating behavior leading to obesity, a major contributor to the risk of many

chronic diseases known as non-communicable diseases, is an essential issue that has received continuous attention; the prevalence of obesity is increasing at an alarming rate and has become a global issue, including in Malaysia. Following this trend, functional food, which is food that consists of ingredients that have positive effects on human health and well-being, was introduced to the market with aims to reduce the rates of obesity and chronic diseases. Previous studies have indicated that the antecedents of consumer intentions and behavior may not be consistent across different cultures and environments and therefore require further empirical research, particularly regarding healthy consumption behavior, where an individual may act independently or semi-autonomously. Thus, the relationship between consumer intentions and consumption behavior depends on the motivation to obtain benefits in terms of good health and well-being as well as the intrinsic and extrinsic factors of experience towards functional food consumption.

This study aimed to investigate the effect of experience as a moderator on the intention - behavior relationship towards functional food consumption behavior in the Malaysian context. The analysis undertaken indicated that behavioral intentions significantly affect consumption behavior regarding functional food among Malaysian consumers. This result is consistent with previous studies. The moderator

of the feeling of using functional food (FUFF) was also seen to improve the association between behavioral intentions and the consumption behavior of Malaysians. It shows that intrinsic factors of experience, such as feeling recompensed by using functional food, are relevant in enhancing the consumption of functional food. In other words, the moderator of the feeling of using functional food (FUFF) has helped to bridge the gap between intentions and behavior, in the construct used in this study. This study has also produced two dimensions of experience with newly developed measurement scales, which focus specifically on functional food consumption behavior.

REFERENCES

- Abdullah, N. N., Mokhtar, M. M., Bakar, M. H. A., & Al-Kubaisy, W. (2015). Trend on Fast Food Consumption in Relation to Obesity among Selangor Urban Community. *Procedia - Social and Behavioral Sciences*, 202, 505–513.
<https://doi.org/10.1016/j.sbspro.2015.08.189>
- Akbar, H., Anderson, D., & Gallegos, D. (2015). Predicting intention and behaviors in populations with or at-risk of diabetes: A systematic review. *Preventive Medicine Reports*, 2(2015), 270-282.
<https://doi.org/10.1016/j.pmedr.2015.04.006>
- Armitage, C. J., & Conner, M. (2001).

- Efficacy of the theory of planned behavior: a meta-analytic review. *The British Journal of Social Psychology*, 40(4), 471-499. <https://doi.org/10.1348/014466601164939>
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of Personal Social Psychology*, 51(6), 1173-1182.
- Conner, M., & Sparks, P. (2005). Theory of Planned Behavior and Health Behavior. In M. Conner & P. Sparks, (Eds.), *Predicting health behavior: Research and practice with social cognition models* (2nd ed., pp. 170-222). Mainhead: Open University Press.
- Cooke, R., & Sheeran, P. (2004). Moderation of cognition-intention and cognition-behavior relations: A meta-analysis of properties of variables from the theory of planned behavior. *British Journal of Social Psychology*, 43, 159-186. <https://doi.org/10.1348/0144666041501688>
- Fishbein, M., & Ajzen, I. (2010). *Predicting and Changing Behavior*. New York: Psychology Press. <https://doi.org/10.4324/9780203838020>
- Follows, S. B., & Jobber, D. (2000). Environmentally responsible purchase behavior: A test of a consumer model. *European Journal of Marketing*, 34, 723-746. <https://doi.org/10.1108/0309056010322009>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis*. New Jersey: Prentice-Hall Inc.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30, 607-610. <https://doi.org/10.1177/001316447003000308>
- Lee, K. (2009). Gender differences in Hong Kong adolescent consumers' green purchasing behavior. *Journal of Consumer Marketing*, 26(2), 87-96. <https://doi.org/10.1108/07363760910940456>
- Liao, W.-L., & Fang, C.-Y. (2019). Applying an Extended Theory of Planned Behavior for Sustaining a Landscape Restaurant. *Sustainability*, 11(18), 1-13. <https://doi.org/10.3390/su11185100>
- Lili Qian, Jie Zhang, Honglei Zhang, & Chunhui Zheng. (2017). Hit close to home: the moderating effects of past experiences on tourists' on-site experiences and behavioral intention in post-earthquake site. *Asia Pacific Journal of Tourism Research*, 22(9), 936-950. <https://doi.org/10.1080/10941665.2017.1362019>
- Lu, W. C., Cheng, C.-F., & Chen, L. H. (2013). Predicting Game-Attending Behavior in Amateur Athletes: The Moderating Role of Intention Stability. *Psychological*

- Reports*, 113(2), 420–434.
<https://doi.org/10.2466/14.05.PR.0.113x25z4>
- Miguel Ángel Rodríguez Molina, Dolores-María Frías-Jamilena & Jose Alberto Castañeda-García (2013). The moderating role of past experience in the formation of a tourist destination's image and in tourists' behavioral intentions. *Current Issues in Tourism*, 16(2), 107-127.
<https://doi.org/10.1080/13683500.2012.665045>
- Pallant, J. (2011). *SPSS Survival Manual: Step by step guide to data analysis using SPSS*, 4th edition. Allen & Unwin, Australia (ISBN 978174237 3928)
- Pomery, E. A., Gibbons, F. X., Reis-Bergan, M., & Gerrard, M. (2009). From willingness to intention: experience moderates the shift from reactive to reasoned behavior. *Personality & social psychology bulletin*, 35(7), 894–908.
<https://doi.org/10.1177/01461672.09335166>
- Rajaratnam, S.D., Munikrishnan, U.T., Sharifb, S.P., & Naira, V. (2014). Service quality and previous experience as a moderator in determining tourists' satisfaction with rural tourism destinations in Malaysia: A partial least squares approach. *Procedia - Social and Behavioral Sciences*, 144, 203-211.
<https://doi.org/10.1016/j.sbspro.2014.07.288>
- Rezai, G., Teng, P. K., Mohamed, Z., & Shamsudin, M. (2012). Functional Food Knowledge and Perceptions among Young Consumers in Malaysia. *World Academy of Science, Engineering and Technology, International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering*, 6, 307-312.
- Russell-Bennett, R., Hartel, C., & McColl-Kennedy, J.R. (2005). Experience as a moderator of involvement and satisfaction on brand loyalty in a business-to-business setting. *Industrial Marketing Management*, 34(1), 97-107.
<https://doi.org/10.1016/j.indmarm.2004.08.003>
- Schmitt, B. H. (1999). *Experiential Marketing: How to Get Customers to Sense, Feel, Think, Act, Relate to Your Company and Brands*. New York: The Free Press.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: a skill-building approach (7th ed.)*. Haddington: John Wiley & Sons.
- Shah Alam, S., & Mohamed Sayuti, N. (2011). Applying the Theory of Planned Behavior (TPB) in halal food purchasing. *International Journal of Commerce and Management*, 21(1), 8-20.
<https://doi.org/10.1108/1056921111111676>
- Sheeran, P. (2002). Intention-behavior relations: A conceptual and empirical review. In W. Stroebe & M. Hewstone (Eds.), *European Review of Social Psychology* (pp. 1-36). Chichester, UK: Wiley.

- <https://doi.org/10.1002/0470013478.ch1>
- Sheeran, P., & Abraham, C. (2003). Mediator of moderator: temporal stability of intention and the intention-behavior relation. *Personal Social Psychology Bulletin*, 29(2), 205-215. <https://doi.org/10.1177/0146167202239046>
- Shukla, Sadhna (2019). A Study on Millennial Purchase Intention of Green Products in India: Applying Extended Theory of Planned Behavior Model. *Journal of Asia-Pacific Business*, 20 (4), 322-350. <https://doi.org/10.1080/10599231.2019.1684171>
- Sommer, L. (2011). The Theory of Planned Behavior and the impact of past behavior. *International Business & Economics Research Journal*, 10(1), 91-110. <https://doi.org/10.19030/iber.v10i1.930>
- Stanton, Emms, & Sia. (2011). *Malaysia's Market for Functional Foods, Nutraceuticals and Organic Foods. An Introduction for Canadian Producers and Exporters*. Counsellor and Regional Agri-Food Trade Commissioner, South East Asia.
- Taylor, S., & Todd, P. (1995). Assessing IT usage: The Role of Prior Experience. *MIS Quarterly*, 19(4), 561-70. <https://doi.org/10.2307/249633>
- Ting, H., Fam, K., Hwa, J.C., Richard, J., & Xing, N. (2019). Ethnic Food Consumption Intention at the touring destination: The National and Regional perspectives using multi-group analysis. *Tourism Management*, 71, 518-529. <https://doi.org/10.1016/j.tourman.2018.11.001>
- Tuu, H. H., Olsen, S. O., Thao. D. T., & Anh, N. T. (2008). The role of norms in explaining attitudes, intention and consumption of a common food (fish) in Vietnam. *Appetite*, 51, 546-551. <https://doi.org/10.1016/j.appet.2008.04.007>
- Urala, N., & Lahteenmaki, L. (2007). Consumers' changing attitudes towards functional foods. *Food Quality and Preference*, 18, 1-12. <https://doi.org/10.1016/j.foodqual.2005.06.007>
- Verbeke, W. (2005). Consumer acceptance of functional foods: socio-demographic, cognitive & attitudinal determinants. *Food Quality & Preference*, 16(1), 45-57. <https://doi.org/10.1016/j.foodqual.2004.01.001>
- Zhang, L., Fan, Y., Zhang, W., & Zhang, S. (2019). Extending the Theory of Planned Behavior to Explain the Effects of Cognitive Factors across Different Kinds of Green Products. *Sustainability*, 11(15), 1-17. <https://doi.org/10.3390/su11154222>