

The Effect of Perceived Value and Food Safety Concern on Consumers' Intention to Purchase Online Healthy Food

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ABSTRACT

The purpose of this study is to explore the influence of perceived value and food safety concerns on consumers' intention to purchase online healthy food. A quantitative study was conducted among 227 respondents. The results confirm that perceived value and food safety concerns have a positive impact on consumers' intention to purchase online healthy food. This study provides insight and a better understanding of behavioural intention toward online healthy food and adds new momentum to the growing literature.

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1 INTRODUCTION

The COVID-19 pandemic has led to a surging demand for healthy food. Consumers are consuming more nutritious food to boost their immune systems. To prevent the spread of COVID-19, Malaysian consumers prefer to purchase food online rather than dining out. A survey conducted by Rakuten Insight in 2020 reported that 58 percent of Malaysian consumers stated that they ordered food more often on food delivery apps during the pandemic (Statista, 2021). Online food deliveries are becoming a popular option as people want to reduce exposure to the COVID-19 virus.

In Malaysia, online healthy food delivery is becoming increasingly popular. The online healthy food service allows consumers to purchase healthy and well-balanced meals from various local restaurants. The growing need for a healthier diet has driven many restaurants and food service companies to incorporate organic and more nutritional meals into their menus. Although online healthy food is a promising market, the

number of companies pursuing this line of business in Malaysia is limited (Hartini et al., 2020). Healthy food providers are only available in major cities like Kuala Lumpur, Penang, and Johor Bahru.

Perceived value has been recognised as an essential factor influencing customers' purchase decisions. Consumers' perceived value is influenced by a series of elements. Zeithaml (1988) asserts that perceived value comprises not just the product's price but also various psychological aspects that influence consumers' purchasing decisions, such as quality, emotional response, and reputation. Ali, Kapoor and Moorthy (2010) stated that consumers place greater emphasis on convenience, freshness, and quality when purchasing food. Meanwhile, Quevedo-Silva et al. (2015) highlighted that the key factors affecting consumers' decision to buy food are price, food appearance, nutritional quality, convenience, and comfort. Given the growing popularity of online healthy food,

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restaurateurs and food providers need to comprehend customer expectations and purchasing behaviour. Thus, this study intends to explore the effect of perceived value on Malaysian consumers' intention to purchase online healthy food.

Healthy food provides the body with essential nutrition to fight diseases. However, people can fall sick from eating food contaminated with bacteria, viruses, toxins or chemicals. Foodborne illness, also known as food poisoning, results from eating contaminated, spoiled, or toxic food. Many food sellers in Malaysia do not adhere to food safety and hygiene regulations, thus increasing the risk of foodborne illness among customers. In 2019, approximately 16,583 food poisoning cases were reported in Malaysia (Department of Statistic Malaysia, 2021). Food safety has become a major concern due to these incidents. Contamination can happen anywhere, whether the food is served at the restaurant or delivered to customers. Thus, customers need to pay attention to potential risks associated with the food they intend to purchase online. Since foodborne diseases can lead to critical illness or even death, consumers need to have adequate knowledge about food safety.

The main objectives of the study are as follows:

- i. To investigate whether perceived value has a significant positive influence on Malaysian consumers' intention to purchase online healthy food.
- ii. To examine whether food safety concern has a significant positive influence on Malaysian consumers' intention

2 LITERATURE REVIEW

Theory of Planned Behaviour (TPB)

Theory of Planned Behaviour posits that behavioural intentions are determined by attitude, subjective norm, and perceived behavioural control (Ajzen, 1991). Researchers have extensively used the Theory of Planned Behaviour to explain and predict consumer purchasing intentions. There is growing recognition that perceived value plays a crucial role in developing consumers' buying intentions. Perceived value in general, is the worth that a product has in a consumer's mind (Lee & Chen-Yu, 2018). The success of a product or service is primarily based on whether customers believe it can satisfy their wants and needs. Due to the rising standard of living, consumers are more concerned about food safety. Compared to conventional buying, buying food online is riskier because customers cannot examine or touch the food during the buying decision process. Therefore, food safety should be prioritised

by food buyers who buy online. Using the Theory of Planned Behavior to underpin the research framework, the current study examines the effect of perceived value and food safety concerns on Malaysian consumers' intention to purchase online healthy food.

Perceived Value

Perceived value (PV) refers to "consumers' overall assessment of the utility of a product (or service) based on perceptions of what is received and what is given" (Ziethmal, 1988). According to Lee and Chen-Yu (2018), customers base their purchase decisions on perceived value, and their propensity to buy grows as their perception of value increases. Perceived value is relevant in online contexts. Prior studies have acknowledged that perceived value has a significant positive effect on purchase intention in social e-commerce (Gan & Wang, 2017), e-commerce (Hu, 2011), and travel websites (Ponte, Carvajal-Trujillo & Escobar-Rodríguez, 2015). In a nutshell, the literature posits that the greater consumers' perceived value on the online service, the stronger their intention to purchase. Therefore, it is relevant to investigate the impact of perceived value on consumers' intention to buy online healthy food. The first hypothesis of this study is formulated as follow:

H1: Perceived value has a positive influence on consumers' intention to purchase online healthy food.

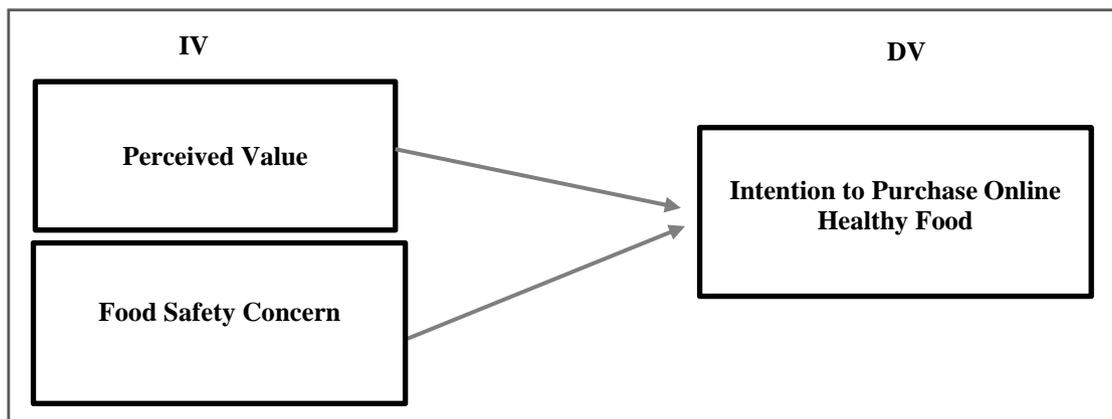
Food Safety Concern

Food safety concern (FSC) refers to the conditions and practices that preserve food quality to avert contamination and foodborne diseases (Mai & Phan, 2016). It reflects the public's concern about residues in food caused by chemical sprays, fertilisers, artificial additions, and preservatives. Therefore, a person with a higher level of food safety concern will avoid consuming high-risk food.

Empirical evidence has proven that food safety concern is a key determinant for consumers to purchase organic food (Zheng et al., 2021; Iqbal et al., 2021; Hsu, Chang & Lin, 2016). Food safety concern is likely to be an important predictor of purchase intentions towards online healthy food; hence we hypothesise:

H2: Food safety concern has a positive influence on consumers' intention to purchase online healthy food.

Figure 1
Research Framework



3 METHODOLOGY

Data Collection

Using convenience sampling, questionnaires were distributed among 400 respondents in Penang, Malaysia. After data screening, 227 questionnaires were usable and taken for further analysis.

Measures

The survey questionnaire for this study comprised three independent variables, namely perceived value (5 items), food safety concern (4 items), and purchase intention (3 items). The variables were assessed by adapting instruments developed by Ling and Ang (2018), Ueasangkomsatea et al. (2016) and Phan and Mai (2016). Respondents rated all measures on a seven-point Likert scale ranging from 1 (Strongly disagree) to 7 (Strongly agree).

4 RESULTS

Sample Profile

Out of 227 respondents, 145 (63.9 percent) were female, while the remaining 82 respondents (36.1 percent) were male. The sample consisted mostly of respondents aged above 56 years old. With regard to employment, 27.3 percent of the respondents were professional workers, and 24.7 percent were administrative workers. In terms of monthly income, 60 respondents (24.7 percent) earned RM 2,000 to RM 2,999, 56 respondents (24.7 percent) earned above RM5,000 monthly whilst 34 respondents (15 percent) earned between RM 3,000 to RM 3,999 monthly. Table 1 depicts the demographic profile of the respondents.

Table 1
Demographic Profiles of the Respondents

Item	Descriptions	Frequency	Percentage (%)
Gender	Male	145	63.9
	Female	82	36.1
Age	25 years or less	26	11.5
	26-35 years old	54	23.8
	36-45 years old	45	19.8
	46-55 years old	44	19.4
	56 years old and above	58	25.6
Occupation	Homemaker	16	7.0
	Student	19	8.4
	Self-employed	15	6.6
	Retired	29	12.8
	Administrative	56	24.7
	Managerial	24	10.6

	Professional	64	28.2
	Others	4	1.8
Monthly income	Below RM 1,000	28	12.3
	RM 1,000 – RM 1,999	21	9.3
	RM 2,000 - RM 2,999	60	26.4
	RM 3,000 - RM 3,999	34	15
	RM 4,000 - RM 4,999	28	12.3
	RM 5,000 and above	56	24.7

Reliability Test

Before testing the hypothesised relationships, we analysed the reliability of the scales by using Cronbach's alpha (α). According to Sekaran (2013), "Cronbach alpha is a reliability coefficient that indicates how well the items are positively correlated to one another". Cronbach's Alpha value higher than 0.7 is an indicator for sufficient scale reliability (Nunnally, 1978).

Table 2
Cronbach's Alpha Test Results

Variables	No. of Items	Cronbach's Alpha
Perceived Value	5	0.846
Food Safety Concern	4	0.862
Purchase Intention	3	0.919

The results of Cronbach's α test showed that all measurements achieve internal consistency ($\alpha > 0.7$).

Hypothesis Testing

Table 3
Hypothesis Testing Results

Hypothesis	Relationship	β	S.E.	T	Sig.	Results
H1	PV \rightarrow PI	0.542	0.075	9.376	0.000*	Supported
H2	FSC \rightarrow PI	0.190	0.067	2.344	0.020*	Supported

(*) Significant at $p < 0.05$, at one-tailed T statistics value of 1.65

PV= Perceived Value, FSC=Food Safety Concern, PI= Purchase Intention

The results reported in Table 3 reveal that perceived value and food safety concerns have a positive effect on intention to purchase online healthy food with a T value of 4.74 and 2.58, respectively. The results thereby support H1 and H2.

5 DISCUSSION

As hypothesised, perceived value showed a significant and positive relationship with consumers' intention to purchase online healthy food. Consumers who are concerned about their health expect to achieve positive results from eating healthy food (Jin, Line & Lee, 2017). Consumers choose online healthy food service because it offers greater comfort and speed; at the same time, they can acquire food that contains healthy ingredients and produced in a sustainable way. The process of buying healthy food can elicit positive emotions, which enhances customers' desire to purchase it.

The current study discovered that food safety concerns correlate positively with consumers' intention to purchase online healthy food. Consumers nowadays are focusing on a healthy diet because they know that natural and organic food is more nutritious and safer than conventional food (Schleenbecker & Hamm, 2013). Food safety assurance is a joint responsibility between the government, food industry, and consumers. Food safety audits and certifications are examples of mechanisms used by the government to guarantee food quality and safety along the entire production chain.

CONCLUSION

The study offers a theoretical model to assess the behavioural intention toward online healthy food in Malaysia. The finding of this study extends and makes contributions to theoretical knowledge in the area of consumer behaviour. In addition, this research has empirically proven that perceived value has the most significant effect on the intention to purchase online healthy food. From a practical perspective, managers who operate online food businesses can formulate effective marketing strategies to attract customers to their sites.

This study has certain limitations that provide avenues for future research. First, using self-report data entails a potential problem of common method bias. Future research could address this problem by using a combination of qualitative and quantitative methods. Second, the current study focused on online healthy food services. It would be interesting to replicate this research across different service categories. Lastly, the study was undertaken in Penang, Malaysia and whether the results of this paper are applicable to other countries remains uncertain. Thus, future research could be expanded to a larger geographical area and bigger sample size.

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