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The Mediating Role of Attitude in the Relationship Between the Extrinsic and Intrinsic Attributes of Japanese Frozen Foods and Consumers' Intention to Purchase Them: Evidence from Malaysia

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The Mediating Role of Attitude in the Relationship Between the Extrinsic and Intrinsic Attributes of Japanese Frozen Foods and Consumers' Intention to Purchase Them: Evidence from Malaysia

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Abstract

Research Aims: To examine the intrinsic and extrinsic factors affecting consumers' attitudes toward Japanese-made frozen foods and, hence, consumers' purchasing behaviour.

Design/Methodology/Approach: Consumers who were aware of Japanese-made frozen foods were the sample chosen. Convenience sampling plus a cross-sectional, self-administered online survey questionnaire collected data from 307 participants.

Research Findings: Findings showed that brand reputation, halal label, convenience, and food quality were positively related to attitude towards Japanese frozen food, whereas health consciousness was negatively associated with attitude. Attitudes toward Japanese frozen foods were found to mediate relationships between brand reputation and purchase intention, halal label and purchase intention, and food quality and purchase intention of the foods.

Theoretical Contribution/Originality: Given the fierce competition and growth within the frozen food industry, this study advanced the knowledge of Malaysian consumer purchasing behaviour in the context of Japanese frozen foods.

Managerial Implication in the South East Asian Context: The mediating role of attitude toward Japanese frozen foods in the relationship between extrinsic and intrinsic product factors and purchase intention among consumers in Malaysia provided valuable insights on foods exported from a predominantly non-Muslim country to a predominantly Muslim country in South East Asia.

Research Limitation & Implications: The scope of this study was limited to Malaysians who were aware of Japanese frozen foods. Examining the extrinsic and intrinsic attributes of the foods was crucial because the awareness of and preference for Japanese frozen foods is still low in Malaysia, and there is limited knowledge about the products.

Keywords: Extrinsic Factors, Intrinsic Factors, Attitude, Purchase Intention, Japanese Frozen Foods, Malaysia

INTRODUCTION

The frozen food industry in Japan has been expanding over the past decade, and in 2019, the estimated production value of frozen foods stood at 713 billion Japanese yen (Diep, 2022). Japan has been increasing the varieties of frozen foods produced to include different types of bread and fruit products by using advanced technology. It can produce products that can be stored for over three years while retaining their quality, texture, and taste (Henmi, 2020). This could enhance the prospects for exporting Japanese frozen food goods to other nations. In Malaysia, the frozen food market is expected to grow at a CAGR of more than 7% and reach a market size of USD 800 million by 2023 (MIDA, 2021). The increase in consumers' preferences for frozen food products is mainly due to the minimal preparation and cooking time they require, plus the longer time they can be stored, which avoids food wastage (Chianardi & Permatasari, 2020). Since the pandemic, the demand for frozen foods has soared even faster as more individuals have preferred to eat at home. According to reports, the increase in sales of frozen foods, such as meats, poultry, fish, fruits, and vegetables, will likely surpass increases in fresh foods in 2021 (Roerink, 2021). The pandemic heightened the demand for frozen food products in Malaysia as in other parts of the world (MIDA, 2021; Whitehead, 2021), with many Malaysians stockpiling frozen meats and vegetables (Hirschmann, 2020).

Because Malaysia is an Islamic country and the majority of its consumers are Muslim (Malaysian Bar, 2021), the halal label on food packaging is important (YazdiZadeh, 2018). The popularity of international foods, including Japanese foods, among Muslims and non-Muslims is growing in Malaysia, developing a community of Japanese cuisine appreciators (The Star, 2021a). Japanese frozen food companies have viewed these consumers as a lucrative target for expanding their market (Ikegawa & Tokunaga, 2018). In addition, Malaysia's close proximity to Japan increases its residents' access to a foreign market, and this can mutually benefit the growth of the frozen food industry in both countries. However, over the last two decades, exports from Japan to Malaysia have dropped at an annual rate of 1.13%, from USD 17.1 billion in 1995 to USD 13 billion in 2019 (OEC, 2021). Although Japan is one of the seven countries approved for exporting frozen beef to Malaysia, other countries export far more. India, Australia, New Zealand, and Brazil are the main exporters of frozen bovine meat to Malaysia, while Japan's exports account for less

than 1% of the total (MyCC, 2019). In 2019, the frozen bovine meat exported to Malaysia from Japan was valued at only USD 2.06 million (OEC, 2021).

Product attributes play a vital role in making foods attractive to consumers and also affect the positioning of foods so they can be easily purchased (Tarasenko, 2022). Marketers may be able to incorporate attributes into their products that can influence buyers' choices if they learn about consumer preferences and how consumers make decisions about what to buy. Pleasing attributes are essential from the perspectives of both the customer and the marketer and can be used as benchmarks to differentiate one company's brands from competitors' brands (Erkmen & Hancer, 2019). Wu et al. (1988) showed that product attributes were measurable at both the quantitative and objective levels. A number of important attributes could be used as benchmarks, including the brand name and the product quality, style, utility, and value. Although many areas of debate about product attributes have been extensively investigated, the link between product attributes and customer purchasing behaviour of Japanese frozen foods in Malaysia has not been explored.

Past studies have shown that there are intrinsic factors (e.g., the taste of a food and the time saved when preparing it) and extrinsic factors (e.g., the brand and advertising of a food) that affect consumers' attitude towards frozen foods and, hence, purchasing behaviour (Dabadi & Gurung, 2020; Sen et al., 2021). The extrinsic characteristics are those that allow differentiation from competing goods, such as brands, pricing, labels, designs, product information, authenticity, and cultural implications (Erickson et al., 1984). Interestingly, some researchers viewed extrinsic attributes more broadly than a product's physical features and included the effects of consumption on consumers (Bukhari et al., 2021). A product's intrinsic qualities serve as the basis for evaluations of the benefits it provides to customers, and they also serve to differentiate a product from its competitors (Erickson et al., 1984; Malekpour et al., 2022). Benefits such as the convenience and time-savingness of frozen foods have motivated many parents and working women to purchase them (Horning et al., 2017). According to Sen et al. (2021), the increasing demand for frozen foods is due to women's involvement in the workforce, urbanisation, and rising household incomes. Full-time workers are likely to choose products that can save them time, such as frozen foods (Dabadi & Gurung, 2020).

Besides time-savingness, several other product attributes are also considered by customers when buying frozen foods. Past studies showed that the nutritional content, purity, advertising, packaging, branding, and quality of products were important (Dabadi & Gurung, 2020; Hawa et al., 2014; Sen et al., 2021). Taste and texture were also factors that consumers were attracted to when purchasing frozen foods (Islam et al., 2018; Patel & Rathod, 2017). Malaysia is a multiracial

country in which Malay, Chinese, and Indian ethnic groups live, and despite the strong adherence of these groups to their respective cultures, their choices of foods and food-related habits have changed because of urbanisation (Omar et al., 2014). Hectic lifestyles have caused individuals to resort to convenience foods such as frozen foods (Chianardi & Permatasari, 2020). The availability of a wide range of local and international cuisines, including Japanese cuisine, as well as the thriving of Japanese food businesses, has been a strong indicator of how welcoming Malaysia has been in its embracing of international foods (The Japan Times, 2017). In addition, non-halal Japanese foods targeted at non-Muslims have gained much popularity in Malaysia (The Japan Times, 2017). Similarly, Japanese foods prepared in compliance with Islamic Law and halal certification attract Muslim consumers in Malaysia (The Japan Times, 2017). Labels on halal food products must assure consumers that the food is clean and free from contaminants and that it does not violate the principles of Islamic dietary law. Because halal food items are subject to strict guidelines regarding their production and safety for human consumption, they are growing in popularity among non-Muslim consumers (Chong et al., 2021).

Previous studies on Japanese frozen foods investigated food science, chemistry, and technology (Men et al., 2020; Hagiwara, 2013), industrial relations (Endo et al., 2017), employees' work cultures (Kamal et al., 2020), and the economy (Ikegawa, 2016; Ikegawa et al., 2014). Furthermore, the current literature has addressed the traceability systems of frozen foods (Kimura, 2003). Few empirical studies exist that encompass both intrinsic and extrinsic factors and could provide a holistic understanding of consumer behaviour toward Japanese frozen foods that might assist manufacturers in forming their marketing strategies. Most of the existing studies focus on halal food (Nurfajri, 2017), the image of Japanese food (Cahyanti et al., 2014), Muslim-friendly Japanese street food (Maknu et al., 2021), and the influence of subjective knowledge on purchasing food (Adityo & Hati, 2019). Past studies have ignored the relevance of consumer attitude in determining purchase intentions. Likewise, the intrinsic and extrinsic factors that influence attitudes toward and purchase intentions of Japanese frozen foods among Malaysian consumers are yet to be investigated. Recently, researchers have recognised the vital role of attitude in relation to product attributes and consumers' intentions to purchase food (Qi & Ploeger, 2021; Sen et al., 2021). These studies confirmed that attitude was a critical element that was influenced by both internal and extrinsic product features and, as a result, that it promoted the purchase intention of frozen food products. However, there are many viewpoints on the impact of product attributes on customer attitude. Several scholars, for example, contended that product attributes influenced consumer satisfaction and repurchase intentions in various ways (Mirza et al., 2021). Notably, Mittal et al. (1988) discovered that the quality of a product attribute could influence repurchase

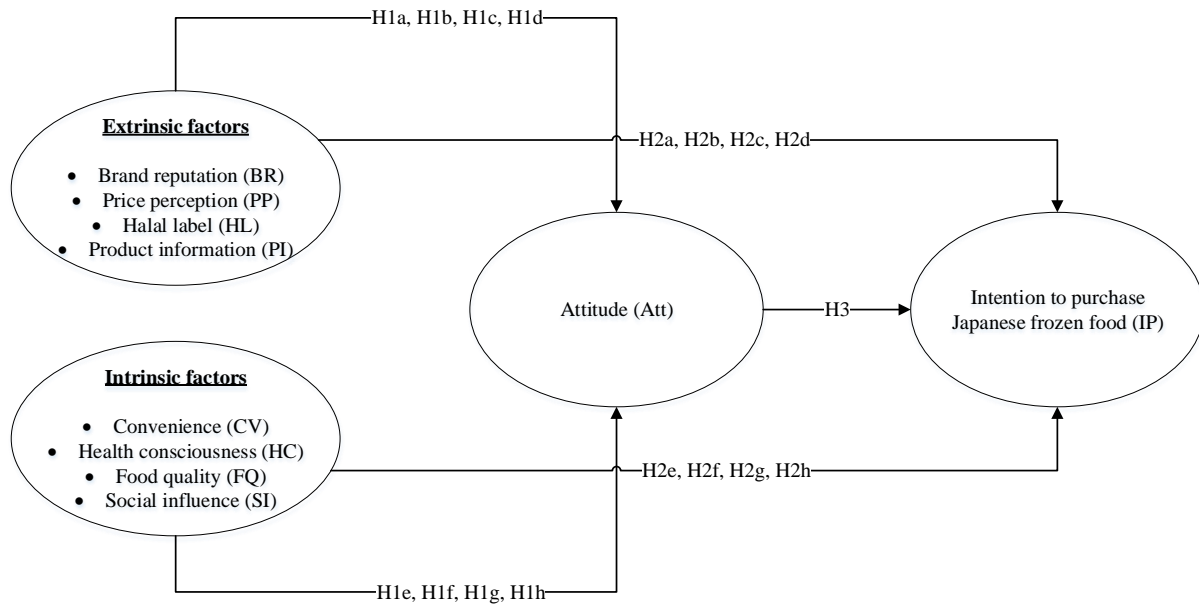
intentions but not satisfaction. Brechan (2006) and Espejel et al. (2007) demonstrated that core product qualities (i.e., intrinsic features) had a better impact on customer satisfaction than non-core product attributes (i.e., extrinsic features). However, Butcher et al. (2003) proposed that non-core product features would be more important than core product attributes.

The contradictory findings invite further investigation into the mediating role of attitude and factors that influence consumer attitudes and intentions to purchase Japanese frozen foods, particularly among Malaysian consumers. The current study differs from past studies because the context of this study is Japanese frozen foods. When it comes to food, the Japanese are known for their high standards of quality. However, there are people reluctant to eat frozen foods because they believe they are not fresh and are too expensive (Singh, 2022). Based on these research gaps, this study specifically examined the effects of intrinsic and extrinsic variables on attitudes toward Japanese frozen foods among consumers in Malaysia and their subsequent purchase intentions. Further, this study investigated the mediating role of consumer attitudes toward Japanese frozen foods in the relationship between extrinsic and intrinsic factors and the purchase intentions toward frozen foods.

LITERATURE REVIEW

This study's grand theory is focused on consumer behaviour, utilising a cognitive approach to provide a theoretical perspective. To be more specific, a prescriptive model, the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), was employed to structure and organise consumer behaviour in a systematic manner (Moital, 2007). The model outlines a specific sequence in which elements such as attitude should be presented to the consumer. The model suggests that attitude and subjective norms (or social influences in this study) should be presented first, followed by the intention to perform a behaviour. The strength of attitude and subjective norms (social influence) are considered as causal factors that influence the strength of the intention to perform a behaviour. According to the model, the stronger the attitude and subjective norms (i.e., social influence), the higher the intention to perform a behaviour. The intrinsic features (i.e., characteristics that are inherent to the product, such as convenience and product quality) and extrinsic features (i.e., characteristics that are external to the product, such as brand and price) of Japanese frozen foods can influence how people form attitudes toward purchasing these foods (Sen et al., 2021). The attitude developed and the social influence determined the intention to purchase Japanese frozen foods (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975; Hati et al., 2021). Past studies have supported the finding that intrinsic and extrinsic product characteristics form attitudes and ultimately influence purchase intentions (Dabadi & Gurung, 2020; Sen et al., 2021). Based on

this knowledge, a proposed research model (Figure 1.) indicating the hypotheses has been developed.



Mediation:

H4a: BR-Att-IP

H4b: PP-Att-IP

H4c: HL-Att-IP

H4d: PI-Att-IP

H4e: CV-Att-IP

H4f: HC-Att-IP

H4g: FQ-Att-IP

H4h: SI-Att-IP

Figure 1. Research Model

Extrinsic Factors That Influenced Attitude and Intention to Purchase Japanese Frozen Foods

Brand Reputation

Consumers' perceptions of a brand's reputation can reflect the perceived quality of a product and shape their attitude toward it (Hwang et al., 2021; Sen et al., 2021). A positive brand reputation can give consumers feelings of security, confidence, and credibility, making it convenient for them to recognise and choose a product (Jeng, 2016). Conversely, a negative perception of a brand can reflect poorly on the quality of the product (Cinelli et al., 2020). Previous research has indicated that brand reputation strongly influences consumers' purchasing decisions for frozen food products (Dabadi & Gurung, 2020; Sen et al., 2021). Additionally, consumers' prior knowledge of and experience with a product impacted their purchasing behaviour (Karimi et al., 2015). Therefore, it is hypothesised:

H1a: Brand reputation is related to attitude.

H2a: Brand reputation is related to intention to purchase Japanese frozen foods.

Price Perception

The impact of price on consumer attitude is significant, particularly when it comes to frozen food products (Hati et al., 2021). Customer purchase intentions are also affected by perceptions of price (Islam et al., 2018). While some consumers are price sensitive, others associate price with quality and are willing to pay a premium for good-quality food products (Cranfield & Magnusson, 2003; Zhong et al., 2020). Consumers with lower purchasing power generally preferred lower prices (Font-i-Furnol & Guerrero, 2014). Sen et al. (2021) found that consumers were willing to pay a premium price for frozen foods if they were confident in the safety and quality of the foods. However, a low price was also argued to be a driving factor for purchasing frozen foods (Mohan Kathuria & Gill, 2013). Thus, it is hypothesised:

H1b: Price perception is related to attitude.

H2b: Price perception is related to intention to purchase Japanese frozen foods.

Halal Label

Halal, meaning “permissible” or “lawful” in Arabic, is a crucial concept among Muslims that influences their daily activities, such as consuming food and conducting business transactions (Yunus et al., 2014; Zakaria et al., 2017). The attractive appeal of halal products for Muslim consumers has led to their increasing prevalence in the non-Muslim food industry (Amart et al., 2014). The Malaysian government and several companies have adopted halal standards as a benchmark for quality, hygiene, and safety (Ngumbang, 2018). Additionally, international cuisines, such as Japanese cuisine, prepared in compliance with Islamic Law and halal certification have attracted Muslim consumers in Malaysia (Choi & Jeong, 2020). The halal label has become a symbol of good quality and standard regulations for both Muslim and non-Muslim consumers, and it has increased the demand for halal-certified food products (Birruntha, 2021; YazdiZadeh, 2018). Hence, it is hypothesised:

H1c: Halal label is related to attitude.

H2c: Halal label is related to intention to purchase Japanese frozen foods.

Product Information

Certification systems and food labelling that convey product information are important tools that help consumers to make informed decisions about the products they purchase and consume. Certification systems provide third-party verification that a product, process, or service meets certain standards, and they can therefore help consumers feel confident in their purchases (Nagy et al., 2022). Specific certifications such as “country of origin” for imported “Made in Japan” products contribute to positive attitude and, hence, an increased willingness to buy (Cantillo et

al., 2020). Similarly, food labelling is crucial in informing consumers about the contents of the food they are buying, including the ingredients, nutritional information, and potential allergens (Pomeranz et al., 2022). The labelling must be clear and easy to understand so that consumers can make informed choices about what they eat (Meijer et al., 2022). Good product information makes consumers feel confident, and this gives them a favourable attitude toward the product and leads to increased satisfaction and purchasing (Elliott & Speck, 2005). Therefore, it is hypothesised that:

H1d: Product information is related to attitude.

H2d: Product information is related to intention to purchase Japanese frozen foods.

Intrinsic Factors That Influenced Attitude and Intention to Purchase Japanese Frozen Foods Convenience

The time-saving element has attracted and influenced the working population to purchase frozen foods because it helps busy people spend less time on food preparation (Ahmed et al., 2020). There is a growing trend among younger urban consumers to prioritise convenience when it comes to food choices, including frozen food options (Cusa et al., 2021). Past research had shown that consumers often associated convenience with frozen foods, such as boneless fish, that were easy and quick to prepare and that consumers who prioritised convenience when it came to frozen foods may not have been as sensitive to price as those who prioritised other factors (Heide & Olsen, 2017). Therefore, the minimal time taken for food preparation created a favourable attitude and, in turn, led to purchase intentions for Japanese frozen food products. Thus, it is hypothesised that:

H1e: Convenience is related to attitude.

H2e: Convenience is related to the intention to purchase Japanese frozen foods.

Health Consciousness

Health consciousness is a key factor that influences consumers' attitude toward food products and predicts their purchase intentions. Health-conscious consumers are more aware of the health benefits of the foods they consume and are more likely to seek out products that are perceived to be safe and healthy (Nagaraj, 2021). In Malaysia, there has been growing concern about the rising levels of obesity, diabetes, high blood pressure, and heart disease among both young people and adults (Passport, 2016). As a result, consumers are becoming increasingly health conscious and are adopting healthier diets in order to prevent or manage these health conditions (Choi & Jeong, 2020). Past researchers have found that the nutritional content or

health benefits of frozen foods improved attitudes and influenced purchase decisions. Hence, it is hypothesised that:

H1f: Health consciousness is related to attitude.

H2f: Health consciousness is related to the intention to purchase Japanese frozen foods.

Food Quality

Product quality indicates value for money (Basha et al., 2015). Consumers form better attitudes and, hence, are driven toward purchases when the value for money or product quality is high (Konuk, 2018). Consumers who prefer higher quality are willing to pay a premium price for their food products (Thong et al., 2015). Certifications such as “country of origin” help in determining the quality of food products and impact consumer purchase decisions (Saidi et al., 2023). Sen et al. (2021) reported that consumers found frozen foods of high quality to be reasonably priced and that this motivated them to purchase frozen foods. Therefore, it is hypothesised that:

H1g: Food quality is related to attitude.

H2g: Food quality is related to the intention to purchase Japanese frozen foods.

Social Influence

Social influence is changes in thoughts and behaviours made in response to the society in which a person lives or to the people surrounding an individual (Turner, 1991). It can be a significant determinant of attitude and purchase intentions (Varshneya et al., 2017). Although choosing foods to be consumed is ultimately a decision made by individuals, social factors still have a significant impact on eating habits, particularly in Asian cultures, which tend to prioritize collective values over individualism (Qi et al., 2020). Individuals generally make decisions with respect to their social context (Lee et al., 2006). Social influences from various sources, including family, friends, peers, and the media, can strongly shape food consumption patterns, with individuals often preferring to purchase food products recommended by people in their social networks (Bai et al., 2019). Hence, it is hypothesised that:

H1h: Social influence is related to attitude.

H2h: Social influence is related to the intention to purchase Japanese frozen foods.

Attitude and Intention to Purchase Japanese Frozen Foods

The word *attitude* has been defined as the favourable or unfavourable consumer evaluation of a given subject (Ajzen, 1991). In terms of Japanese frozen foods, attitude is a person’s positive or negative view of these foods. Previous studies have found a significant association between

consumer attitude and purchase intentions (Ajzen & Fishbein, 1980). Hasan and Suciarto (2020) and Hati et al. (2021) studied attitude as an evaluation of a product, either positive or negative, that affected the purchase intention toward food products. Attitude serves as an important predictor of an individual's intention to perform the behaviour. Specifically, the more favourable a person's attitude is toward a product, the stronger will be his or her intention to purchase it (Hoque et al., 2018). Further, the attitude toward Japanese frozen foods determined by extrinsic factors (i.e., brand reputation, price perception, halal label, and product information) and intrinsic factors (i.e., convenience, health consciousness, food quality, and social influence) will translate into the purchase intention toward these foods. Thus, it is hypothesised that:

H3: Attitude is related to the intention to purchase Japanese frozen foods.

H4a: Attitude mediates the relationship between brand reputation and intention to purchase Japanese frozen foods.

H4b: Attitude mediates the relationship between price perception and intention to purchase Japanese frozen foods.

H4c: Attitude mediates the relationship between halal label and intention to purchase Japanese frozen foods.

H4d: Attitude mediates the relationship between product information and intention to purchase Japanese frozen foods.

H4e: Attitude mediates the relationship between convenience and intention to purchase Japanese frozen foods.

H4f: Attitude mediates the relationship between health consciousness and intention to purchase Japanese frozen foods.

H4g: Attitude mediates the relationship between food quality and intention to purchase Japanese frozen foods.

H4h: Attitude mediates the relationship between social influence and intention to purchase Japanese frozen foods.

RESEARCH METHOD

Research Design and Sampling

This study sought to examine the relationship between extrinsic attributes (i.e., brand reputation, price, halal label, and product information), intrinsic attributes (i.e., convenience, health consciousness, food quality, and social influence), attitude, and purchase intention toward Japanese-made frozen foods in Malaysia. To filter eligible respondents for the research,

screening questions were developed in which participants were asked if they were aware of Japanese-made frozen foods. Frozen foods are pre-packaged, ready-made foods that have usually been partially cooked before being frozen and that only need to be heated before being eaten (Sen et al., 2021). Consumers who were aware of Japanese-made frozen foods were chosen as the target population for this study. As there were no available data on the exact numbers of the target population, this study applied convenience sampling coupled with a cross-sectional, self-administered online survey questionnaire to collect data from the respondents in October 2021. Using Google Forms, a link to an invitation to participate was sent to the targeted population through several media platforms, such as Messenger, WhatsApp, and Facebook (Gosling et al., 2004).

The data collection approach had the advantage of reaching a large number of respondents and covering areas with a high population density in Kuala Lumpur and Selangor (DOSM, 2021). A structured, closed-ended questionnaire was applied so that respondents could easily and quickly answer the questionnaire and were not demotivated to participate in the study. A cover letter that explained the objective of the study and promised to maintain the respondents' anonymity was included with the questionnaire. The respondents were asked to fill in an anonymous online questionnaire that would take about 15 minutes. The participants were reminded about the voluntary nature of the research and told that they could exit the survey at any time. A total of 500 participants were approached to participate in this study. Only 307 participants agreed to be involved, representing a response rate of 61.4%.

Measures

This study used an established measurement scale adapted from previous studies with slight modifications for this research context. Prior to proceeding with data collection, it was vital for the questionnaire to be pretested (Saunders et al., 2009). Convenience sampling was used to select 30 respondents, and a link on Google Forms was shared through email, WhatsApp, and Viber requesting that respondents fill out the pretest survey questionnaire (Perneger et al., 2015). Respondents were asked to provide their comments on the clarity of the phrasing of questions, the instructions provided, the time needed, the difficulty experienced when filling out the questionnaire, and ways that the survey could be improved.

The questionnaire on brand reputation, price perception, halal label, and product information (extrinsic attributes) were adopted from Veloutsou and Moutinho (2009), Ainscough (2005), Nasution and Rossanty (2018), Ballantine and Fortin (2009), and Kripesh et al. (2020). Scales developed by Gupta and Kim (2007), Gould (1988), Han et al. (2015), and Venkatesh et al.

(2003) were used to measure convenience, health consciousness, food quality, and social influence (intrinsic attributes). The measures for attitude and purchase intention were adapted from Hoque et al. (2018), and Steadman and Rutter (2004) (refer to Appendix). A five-point Likert scale, ranging from “1 equals strongly disagree” to “5 equals strongly agree,” was used in this research to measure the constructs. All of the constructs of this study were designed and operationalized as reflective constructs. The questionnaire was administered in both English and Bahasa Malaysian; the original English had to be translated into Malay, which is the national language of Malaysians. After the data were obtained, the next step was to analyse the measurement model and structural model and test the hypotheses. The data analysis used both descriptive and inferential statistical analyses. For the descriptive statistical analysis, the Statistical Package for Social Sciences (SPSS version 26) was used. To conduct the inferential statistical analysis, Structural Equation Modelling (SEM) using Partial Least Square (Smart PLS 4.0) was employed. SEM has become a standard in marketing, behavioural science, strategic management, and organisation research owing to its ability to evaluate latent variables at the observational level (outer or measurement model) and assess correlations between latent variables at the theoretical level (inner or structural model) (Elkaseh et al., 2016; Wong, 2013). PLS-SEM was selected over its alternative, covariance-based SEM (CB-SEM) because it estimates complex models with several constructs, indicator variables, and structural paths without requiring the making of distributional assumptions about the data (Hair et al., 2019).

RESULTS AND DISCUSSION

Demographic Profile

Three hundred and seven respondents participated in the survey. Of them 65.2% were women (Table 1.). The sample was primarily composed of Malays (64.1%), followed by Chinese (29.7%), Indians (5%), and others (1.2%), reflecting the composition of Malaysia’s main ethnic groups (DOSM, 2021). The majority of the respondents were 26 to 40 years old (56.2%), and 44.7% were single. Most respondents (39.1%) had an average income of RM2,000 to RM3,999. Table 1 shows that the majority of the respondents had a Bachelor’s degree (55.4%). In terms of frozen food purchases, 36.6% of the respondents indicated that they purchased frozen foods more than twice a month. Many (31.8%) reported spending RM50 to RM100 on frozen foods per month, and 21.6% reported spending RM101 to RM200 monthly on these foods.

Table 1. Demographic Profile of the Respondents (n=307)

Respondent	Number of respondents	Percentage (%)
Gender		
Male	107	34.8
Female	200	65.2
Ethnicity		
Malay	197	64.1
Chinese	91	29.7
Indian	15	5.0
Others	4	1.2
Age		
18 – 25 years old	84	27.3
26 – 40 years old	173	56.2
41 – 55 years old	35	11.5
56 years old and above	15	5.0
Marital Status		
Single	137	44.7
Married and others	170	55.3
Personal Income		
Less than RM 1000	32	10.3
RM 1,000 – RM 1,999	63	20.6
RM 2,000 – RM3,999	120	39.1
RM 4,000 – RM5,999	56	18.3
RM 6,000 – RM 7,999	20	6.4
RM 10,000 and above	16	5.3
Education		
Primary school	8	2.5
High school	10	3.2
Certificate/ Diploma	87	28.2
Bachelors' Degree	170	55.4
Postgraduate Degree	32	10.7

Measurement Model

To confirm the reliability and validity of the constructs, the measurement model was assessed using SmartPLS 4.0. The reliability, discriminant validity, and convergent validity of the constructs were checked using factor loadings, the Cronbach's alpha (CA), the composite reliability (CR), the average variance extracted (AVE), and the heterotrait–monotrait (HTMT) ratio (Hair et al., 2019; Hair et al., 2017). To address common method bias, procedural remedies during the research design process and full collinearity test were performed to determine whether any constructs reflect the variance inflation factor (VIF) (Podsakoff et al., 2003; Knok & Lynn, 2012). To mitigate frequent technique bias, procedural remedies during the research design phase and a comprehensive collinearity test were undertaken to establish whether any constructs represent the variance inflation factor (VIF). (Podsakoff et al., 2003; Knok & Lynn, 2012). The VIF results for all constructs vary between 1.965 to 6.417, which is under 10, suggesting that CMV was not of significant concern in the study (Hair et al., 2019).

To evaluate the measurement model results, this study observed the outer model, which showed the relationship between a construct and its indicators. The results showed that all scores for

the outer loading were above the cut-off value of 0.50. The results in Tables 2 and 3 show that all criteria were satisfactory and above the cut-off value (Hair et al., 2019; Henseler et al., 2015).

Therefore, the predicted model and observed data fit together reasonably well, and the measurement model as a whole passed the validity test.

Table 2. Results of Convergent Validity

Construct	Indicator	Loadings	CA	CR	AVE
Attitude	ATT1	0.786	0.784	0.861	0.611
	ATT2	0.873			
	ATT3	0.796			
	ATT4	0.656			
Brand Reputation	BRAND1	0.839	0.847	0.908	0.766
	BRAND2	0.904			
	BRAND3	0.882			
Convenience	COV 1	0.912	0.892	0.931	0.818
	COV2	0.906			
	COV3	0.896			
Halal Label	HA1	0.843	0.741	0.851	0.656
	HA2	0.852			
	HA3	0.728			
Food Quality	FQ1	0.843	0.649	0.808	0.586
	FQ2	0.666			
	FQ3	0.777			
Health Consciousness	HC1	0.907	0.847	0.902	0.755
	HC2	0.828			
	HC3	0.87			
Intention	INTENT1	0.804	0.774	0.869	0.689
	INTENT2	0.85			
	INTENT3	0.836			
Price	PC1	0.878	0.806	0.886	0.722
	PC2	0.872			
	PC3	0.796			
Product Information	PINFO1	0.74	0.818	0.878	0.643
	PINFO2	0.806			
	PINFO3	0.840			
	PINFO4	0.819			
Social Influence	SPRO1	0.846	0.855	0.912	0.776
	SPRO2	0.903			
	SPRO3	0.892			

Table 3. Results of Discriminant Validity (HTMT criterion)

	1	2	3	4	5	6	7	8	9	10
1. Attitude										
2. Brand reputation	0.445									
3. Convenience	0.387	0.538								
4. Food Quality	0.714	0.384	0.424							
5. Halal label	0.627	0.217	0.194	0.434						
6. Health Conscious	0.170	0.539	0.376	0.214	0.227					
7. Intention	0.539	0.271	0.175	0.433	0.482	0.133				
8. Price	0.369	0.369	0.326	0.456	0.494	0.327	0.295			
9. Product Info	0.286	0.320	0.371	0.549	0.169	0.389	0.182	0.243		
10. Social Influence	0.309	0.337	0.196	0.365	0.375	0.314	0.264	0.71	0.233	

Structural Model

To test the hypotheses, a bias-corrected bootstrapping method with 5000 resamples was run. It examined the significance of the path coefficients (Hair et al., 2019). First, the direct relationships were tested. The R^2 values for the endogenous variables indicated that the proposed theoretical model explained 44% of the variance in attitude and 23% of the variance in intention to purchase, and this was a satisfactory level of model predictability. The results for the path coefficients, standard errors, t -values, p -values, bias-corrected intervals, and effect size (f^2) are shown in Table 4. The effect size (f^2) was evaluated based on Cohen's (1988) criteria, according to which f^2 values of 0.02, 0.15, and 0.35 of the predictive variables are considered small, medium, and large, respectively, in terms of effect size. The results revealed a small effect size for all the relationships between the extrinsic factors, intrinsic factors, and attitude. The relationships between purchase intention (with the exception of the halal label) and attitude, as well as between food quality and attitude, showed a medium effect size.

This study found that among the four extrinsic factors, only brand reputation and halal label were positively related to attitudes ($\beta = 0.226, p < .001$; $\beta = 0.360, p < .001$, respectively). Thus, H1a, and H1c were supported. While in the case of the intrinsic factors, it was found that convenience, health consciousness, and food quality were significant predictors of attitude ($\beta = 0.096, p < .05$; $\beta = -0.131, p < .05$; $\beta = 0.337, p < .001$, respectively). Thus, H1e, H1f, and H1g were supported. On the other hand, this study found no relationship between price, product information, or social influence and attitude. Hence, H1b, H1d, and H1h were not supported. Among all the factors, only the halal label ($\beta = 0.204, p < .05$) and attitude ($\beta = 0.237, p < .05$) were found to be significantly related to the intention to purchase Japanese frozen foods. Therefore, H2c and H3 were supported, but H2a, H2b, H2d, H2e, H2f, H2g, and H2g were not supported (Figure 2.).

Table 4. Results From Direct Hypotheses

	Description	Std. Beta	Std. error	t-value	p-value	BCI (LL)	BCI (UL)	Effect Size (f2)	Decision
H1a	Brand → Attitude	0.226	0.071	3.191	0.001	0.111	0.346	0.059	Supported
H2a	Brand → Intention	0.095	0.078	1.224	0.110	-0.026	0.23	0.007	Not supported
H1b	Price → Attitude	-0.042	0.07	0.602	0.274	-0.156	0.073	0.002	Not supported
H2b	Price → Intention	0.024	0.087	0.273	0.393	-0.124	0.162	0.000	Not supported
H1c	Halal Label → Attitude	0.360	0.055	6.492	0.000	0.266	0.447	0.190	Supported
H2c	Halal Label → Intention	0.204	0.071	2.879	0.002	0.083	0.317	0.037	Supported
H1d	Product Info → Attitude	0.014	0.053	0.268	0.394	-0.073	0.101	0.000	Not supported
H2d	Product Info → Intention	0.024	0.070	0.338	0.368	-0.088	0.138	0.001	Not supported
H1e	Convenience → Attitude	0.096	0.046	2.078	0.019	0.025	0.177	0.012	Supported
H2e	Convenience → Intention	-0.070	0.067	1.049	0.147	-0.185	0.033	0.005	Not supported
H1f	Health Conscious → Attitude	-0.131	0.076	1.722	0.043	-0.266	-0.029	0.022	Supported
H2f	Health Conscious → Intention	-0.019	0.07	0.277	0.391	-0.158	0.076	0.000	Not supported
H1g	Food Quality → Attitude	0.337	0.054	6.25	0.000	0.246	0.423	0.149	Supported
H2g	Food Quality → Intention	0.108	0.074	1.456	0.073	-0.015	0.228	0.010	Not supported
H1h	Social → Attitude	0.041	0.064	0.645	0.259	-0.067	0.142	0.002	Not supported
H2h	Social → Intention	0.038	0.071	0.532	0.297	-0.081	0.154	0.001	Not supported
H3	Attitude → Intention	0.237	0.088	2.686	0.004	0.083	0.376	0.041	Supported

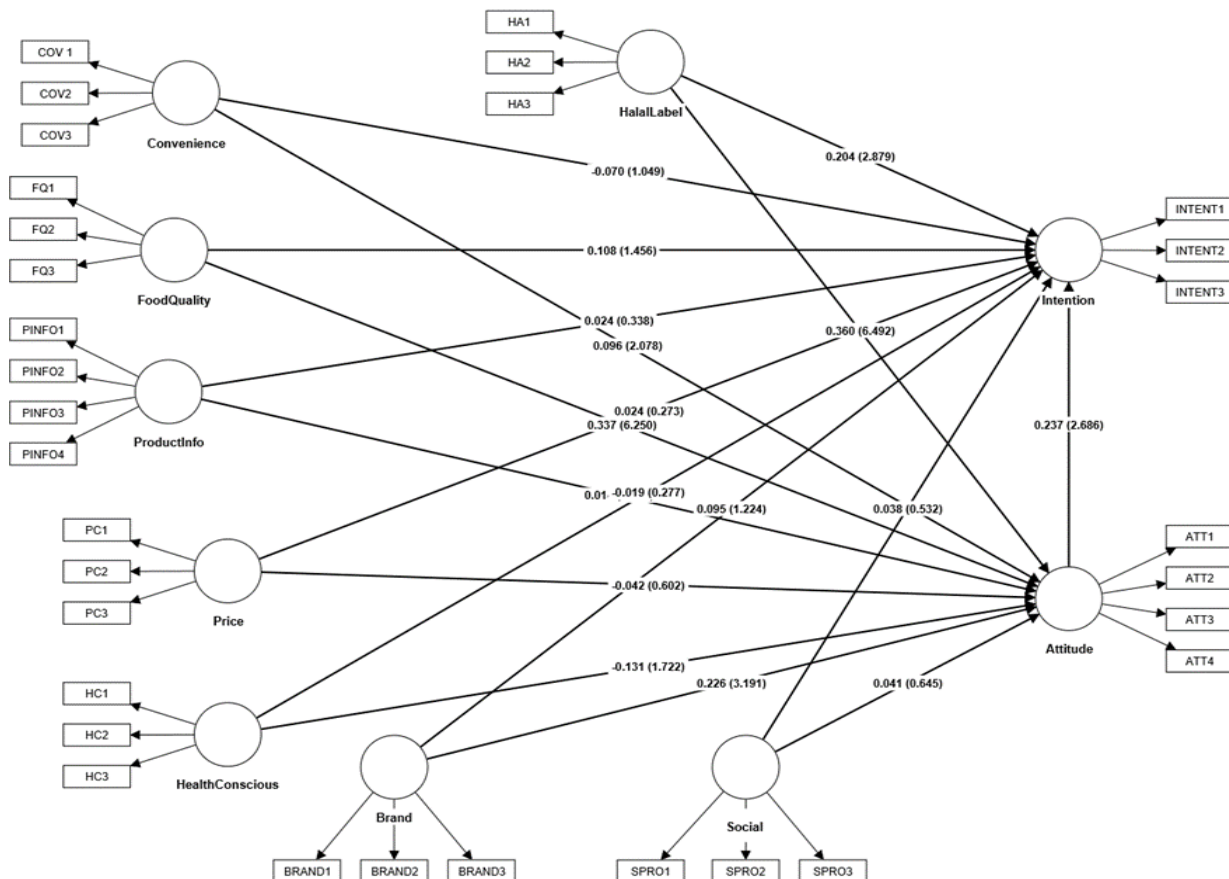


Figure 2. Results of Hypothesis Testing on Structural Model

Indirect Hypothesis Testing

This study tested eight indirect hypotheses (mediating relationships), H4a to H4h. To test the mediation effects, the bootstrapping method (Preacher & Hayes, 2008; Hair et al., 2019) for the indirect effect of attitude was applied to the relationships between brand and intention (H4a), price and intention (H4b), halal label and intention (H4c), product information and intention (H4d), convenience and intention (H4e), health consciousness and intention (H4f), food quality and intention (H4g), and social influence and intention (H4h). To test the mediating hypothesis, this study used the bootstrapping procedure (n=307, sample=5000) for the full model. It estimated the structural path coefficients and statistical significance for indirect relationships. The bootstrapping procedure was set to a significance level of 0.05 as a two-tailed test.

The results of the mediation effects are shown in Table 5. The results indicated that attitude mediated the relationship between brand reputation and intention ($\beta = 0.054, p < .05$), halal label and intention ($\beta = 0.085, p < .05$), and food quality and intention ($\beta = 0.080, p < .05$). Thus, H4a, H4c, and H4g were supported. It was also found that attitude did not mediate the relationship between price and intention, product information and intention, convenience and intention, health consciousness and intention, or social influence and intention. Therefore, H4b, H4d, H4e, H4f, and H4h were not supported.

Table 5. Results of Mediation Effect

Description	Std. Beta	Std. error	t-value	p-value	BCI (LL)	BCI (UL)	Decision
H4a Brand → Attitude → Intention	0.054	0.031	1.748	0.040	0.013	0.113	Supported
H4b Price → Attitude → Intention	-0.010	0.019	0.528	0.299	-0.040	0.018	Not supported
H4c Halal Label → Attitude → Intention	0.085	0.033	2.551	0.005	0.033	0.143	Supported
H4d Product Info → Attitude → Intention	0.003	0.014	0.244	0.404	-0.020	0.029	Not supported
H4e Convenience → Attitude → Intention	0.023	0.015	1.497	0.067	0.002	0.051	Not supported
H4f Health Conscious → Attitude → Intention	-0.031	0.023	1.328	0.092	-0.070	0.001	Not supported
H4g Food Quality → Attitude → Intention	0.080	0.031	2.549	0.005	0.032	0.135	Supported
H4h Social → Attitude → Intention	0.010	0.017	0.564	0.286	-0.02	0.041	Not supported

MANAGERIAL IMPLICATIONS IN THE SOUTH EAST ASIAN CONTEXT

International food is becoming more popular and accepted in Southeast Asia. According to a survey conducted by the Japan External Trade Organization (JETRO), more than a third of Japanese companies in Malaysia intends to expand in the next one or two years, including those in the food sector (The Star, 2021b). Previous studies (Malekpour et al., 2022; Dorotic et al., 2012) have shown that there is an urgent need for the examination of the impact of product attributes on a firm's success in comparison with or in combination with other marketing attributes. Thus, this research has several significant implications for the Southeast Asian setting.

First, although Dabadi and Gurung (2020) found that brand reputation, an extrinsic characteristic, had a significant impact on consumers' purchase intentions toward frozen foods, the current study found no direct influence of brand reputation on the purchase intention of Japanese frozen foods. This study did suggest that brand reputation could indirectly affect purchase intention by improving consumers' positive attitudes toward Japanese frozen foods. This effect occurred only if consumers already had a positive attitude toward these foods. When a brand has a positive reputation, consumers feel confident about buying it and trust that it will be of value; in other words, they develop a favourable attitude toward the product. This reduces the perceived risk of choosing a particular product. It also saves consumers the time and effort associated with searching for products and comparing costs (Nguyen & Gizaw, 2014). A positive brand reputation can create a perception that a certain food is of high quality and has an authentic taste and unique flavour that cannot be found in other frozen food. Japanese cuisine is known for its attention to detail, use of fresh ingredients, and health benefits, and marketers of a reputable Japanese frozen food brand can capitalise on these traits to create a positive attitude toward their product and, consequently, influence purchase intentions.

Second, this study discovered that halal labelling significantly and directly influenced customer attitude. In fact, halal labelling was the main factor that caused consumers to purchase Japanese frozen foods. The study showed that extrinsic factors such as halal labelling were important and greatly influenced the attitude of consumers from Muslim countries and led to their purchase intentions. The intention to buy was driven by a desire to follow Islamic dietary laws and values, and consumers who prioritised halal consumption sought out products that met this criterion.

Customers from Southeast Asian Muslim countries always tend to find and purchase products that reflect their Islamic values. Halal food products are a must as they reflect Muslim religious beliefs and values. Individuals who prioritise halal consumption will look for the halal certification on the packaging or product label. Hence, manufacturers or producers who want to invest in frozen foods and export them to Muslim countries in Southeast Asia need to focus on the foods' extrinsic factors, especially the halal label, in their packaging of products. They should also emphasise halal certification in their marketing campaigns.

In addition, a product that is halal certified stands out from the competition and can be a focus of consumers' intentions to buy frozen food. According to the statistical findings of this study, consumer attitude mediated the relationship between the extrinsic factor of halal labelling and the purchase intention for Japanese frozen foods. Additionally, adherence to halal standards by manufacturers or producers was one of the criteria by which consumers judged the reputation of

the company that made the halal frozen food product. Manufacturers or producers from non-Muslim nations should strategically position their brand reputation when dealing with a Muslim country that is highly concerned about food consumption and taking care of the religious needs and sensitivities of its Muslim residents. Indeed, consumer attitudes toward foreign products and frozen foods differ not only across borders but also depending on the breadth of a country's religious beliefs and culture (Hati et al., 2021). Hence, manufacturers of frozen food should strive to get halal recognition, which eventually will result in high-quality products together with brand reputations that increase the likelihood of purchases by customers, especially in Muslim countries. The halal label drives buying behaviour not only among Muslim consumers but also among non-Muslim consumers because non-Muslim consumers associate halal certification with good quality (Birruntha, 2021).

Third, although this study did not find a significant direct or indirect relationship between convenience and intention to purchase Japanese frozen foods, it did establish a positive relationship between convenience and attitude toward Japanese frozen foods. This suggested that the time-saving factor created a favourable attitude among consumers toward Japanese frozen foods. However, the study also found that a positive attitude alone was not enough to generate purchase intentions. These findings were consistent with those of Sen et al. (2021), who observed that the convenience or time-saving factor had a relatively low impact on consumers' decisions to purchase frozen foods. Other factors, such as food quality, may have a greater influence on consumer behaviour in terms of purchasing Japanese frozen foods.

Fourth, this study revealed that health consciousness had no effect on the intention to purchase Japanese frozen foods directly or indirectly. There was, interestingly, a negative relationship between health consciousness and attitude toward Japanese frozen foods. This negative association hinted at a common misconception about the safety of frozen foods (NorthShore News, 2021). A study by Bolek (2020) found that almost 26% of consumers believed that frozen foods were dangerous to health and that 50% of consumers were not sure whether frozen foods were safe to eat. Therefore, Japanese frozen food manufacturers and producers who want to succeed in the Malaysian market need to educate consumers on the health benefits of their products in order to overcome these misconceptions. Manufacturers must also take into account the increasing health consciousness of Malaysian consumers and ensure that their products meet consumers' demands. By emphasising the health benefits of their products and promoting them as safe and healthy, manufacturers and producers can enhance positive attitudes toward their products and drive purchase intentions.

Fifth, this study did not find a direct relationship between food quality and intention to purchase Japanese frozen foods. However, the findings indicated that food quality could indirectly affect purchase intentions through a favourable attitude toward Japanese frozen foods. In other words, food quality could only drive the intention to purchase Japanese frozen foods if the consumer already had a positive attitude toward Japanese frozen foods. High-quality food products create the trust that can result in a positive attitude toward Japanese frozen foods. The findings supported the study of Sen et al. (2021) because they discovered that food quality was one of the most influential factors in purchase intention toward frozen food. Japanese frozen food manufacturers can leverage these findings to enhance the quality of their products and promote them to consumers. They can use advertising and marketing strategies to create a favourable attitude toward Japanese frozen foods, emphasising their high-quality ingredients, production standards, and country of origin certification. By doing so, they can indirectly influence consumers' purchase intentions and increase sales of Japanese frozen foods.

In addition, this study found a positive association between attitude and intention to purchase Japanese frozen foods. The finding was supported by previous research (e.g., Hati et al., 2021), which posited that attitude influenced consumer intentions to purchase frozen foods. Numerous studies conducted in various contexts and on different products have consistently shown a strong association between consumer attitude and purchase behaviour or purchase intention (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). This implied that consumers' attitudes toward a product played a vital role in their decision to buy or not to buy it. Therefore, understanding consumers' attitudes toward Japanese frozen foods could be useful in developing effective marketing strategies that could influence purchase decisions.

Contrary to expectation, price perception had no effect on either attitude or purchase intention toward Japanese frozen foods. Also, the mediating effect of attitude between price perception and intention to purchase Japanese frozen foods was found to be not significant. It is possible that the study participants had a mixed or conflicting attitudes toward Japanese frozen foods, which could make it difficult to detect a significant relationship with price. For example, participants may have liked the convenience of frozen food but also felt that it was less healthy than fresh food. The effect of price perception on attitude toward Japanese frozen foods may have been offset by the ambivalence of respondents' attitudes. Also, consumers may perceive frozen food as a cost-effective option because it has a longer shelf life and can be stored for longer periods, and this reduces food waste and saves money in the long run. This perception of cost-effectiveness may have contributed to the lack of a significant link between price perception and intention to purchase Japanese frozen foods. The findings of this study were consistent with the findings of Hati et al.

(2021), who found that the price of frozen food was not a significant factor in influencing purchase decisions among consumers who buy from modern markets. It is important to note that the sample of this study was limited to consumers in Kuala Lumpur and Selangor, which are the most developed parts of Malaysia and where many consumers make purchases from supermarkets. In these areas, consumers may be less sensitive to price and more focused on other factors, such as quality and brand reputation, when making purchase decisions for Japanese frozen foods.

However, it is possible that price may be a more important factor for consumers in other regions of Malaysia, especially those who shop at traditional markets or have lower incomes. Therefore, manufacturers and producers of Japanese frozen foods should consider the regional variations in consumer behaviour and tailor their marketing strategies accordingly. They may need to adjust their pricing strategies, product positioning strategies, or promotional activities in order to appeal to consumers in different regions or demographic groups.

Furthermore, this study did not find any significant association between product information, attitude, and purchase intention of Japanese frozen foods. Despite advances in labelling and certification systems, consumers can still feel overwhelmed and confused when faced with a plethora of information on product labels (Zander et al., 2018). Consumers may struggle to navigate the variety of labels and certifications found on frozen food products and may not always understand what they mean. For example, a frozen food product may bear labels such as “organic”, “all-natural”, or “non-GMO”, but consumers may not fully understand the implications of these labels. Additionally, labels may not always answer consumers’ concerns about a product, such as how fresh the food is or how it was processed (Risius et al., 2019). Therefore, it is important for the Japanese frozen food industry to provide clear and easily understandable labelling that addresses consumers’ concerns and provides meaningful information about the product. This can help consumers make informed decisions and increase their confidence in the quality and safety of Japanese frozen food products.

Also, this study did not establish a direct or indirect relationship with social influence and intention to purchase Japanese frozen foods and attitude toward Japanese frozen foods. A possible explanation for this finding could be that social influence may not be as relevant or important for consumers when it comes to developing attitude toward and purchasing frozen foods compared with other food products. For example, consumers may rely more on personal experience and product quality than external social influences when making decisions about frozen food purchases. With respect to this finding, the Japanese frozen food industry could focus on promoting the high quality and safety of its products. While social influence may not be as

important for consumers as other factors when it comes to purchasing frozen foods, marketing campaigns that are engaging and informative could still help to raise awareness and generate interest in Japanese frozen food products. For example, the industry could create videos or social media posts that showcase the variety of dishes that can be made with Japanese frozen foods, along with information on the health benefits and nutritional value of the products.

Although frozen food is typically chosen for its convenience and longer storage life, this study found that intrinsic factors such as food quality and health consciousness, as well as extrinsic factors such as the halal label and brand reputation, had a greater influence on consumers' attitude toward Japanese frozen foods than convenience. Specifically, the halal label was found to be the strongest influencing factor, followed by food quality, brand reputation, and health consciousness, while convenience was found to be the least influential factor. This suggested that Japanese frozen food manufacturers should prioritize these intrinsic and extrinsic factors in their marketing and product development efforts to improve consumer attitude toward their products.

THEORETICAL IMPLICATIONS

Japan has expanded its frozen food production to include a wider range of foods, such as tofu, seafood, meat, noodles, desserts, and vegetables, by utilizing more advanced technology that ensures a longer shelf life while maintaining product quality and taste (Henmi, 2020). However, fierce competition within the frozen food industry has compelled companies to improve their marketing and consumer relationship strategies, as well. Given Japanese companies' interest in expanding their frozen food market in Malaysia, which is a Muslim country, has a multiracial population, and is experiencing rapid economic growth, creating a huge demand for frozen food, it is critical to examine the factors that influence consumers' attitude toward Japanese frozen foods and their resulting intentions to purchase such products.

The findings show that brand reputation, halal label, convenience, and food quality were positively related to attitude, whereas health consciousness was negatively associated with attitude. In addition, the halal label was positively related to the purchase intention of Japanese frozen foods. The relationship between attitude and purchase intention for Japanese frozen foods has been found to be positively correlated, because the stronger the attitude, the stronger was the intention to enact purchase behaviour (Hoque et al., 2018). Also, the attitude toward Japanese frozen foods was found to mediate the relationships between brand reputation and purchase intention, halal label and purchase intention, and food quality and purchase intention of Japanese frozen foods.

Overall, the findings of this study offered valuable insights for Japanese frozen food businesses on the intrinsic and extrinsic factors that can shape consumer attitude and influence their intention to purchase Japanese frozen foods. Using the theory of reasoned action as a framework, this study highlighted the role of intrinsic factors (i.e., food quality, health consciousness, and convenience) and extrinsic factors (i.e., halal label and brand reputation) in shaping consumer attitudes toward Japanese frozen foods, which in turn influenced their intentions to purchase. Additionally, this study established the mediating effect of attitude between food quality, brand reputation, and the halal label and the consumers' intentions to purchase Japanese frozen foods. Interestingly, this study indicated that the halal label had the most influence of all the extrinsic factors on the attitude of consumers from Muslim countries and that it increased purchase intentions more than the other attributes. The findings of this study can be leveraged by the Japanese frozen food industry to develop effective marketing strategies that emphasize these influential factors to improve Malaysian consumer attitudes and increase the likelihood that consumers will purchase their products.

Despite the useful findings of this study, it has some limitations. The first limitation is that the scope of this study was limited to Malaysians—both Muslims and non-Muslims—who were aware of Japanese frozen foods. Examining the extrinsic and intrinsic attributes was crucial for Malaysia as the awareness and preference for Japanese frozen foods were still low, and there was limited knowledge of the product. This led to a lower response rate among respondents who had agreed to answer the survey questions. Moreover, the data were collected only from consumers in Kuala Lumpur and Selangor, and this might have influenced the results. These urban dwellers had differences in economic growth, demographics, and level of health consciousness from dwellers in semi-urban areas. Thus, different results may be obtained for a study conducted in other locations in Malaysia. Future researchers may want to examine the proposed framework in different nations and with different samples to tap into this potential market.

Another limitation is that the research was restricted to an online survey questionnaire. Although such surveys have been widely used in collecting data for research, they have had several issues. Bryman (2004) highlighted that many participants worried about the privacy of their answers at a time when fraud and hackers were common. Moreover, participants may be concerned with the privacy of the data they share online. Another issue is that respondents might not be able to finish the survey due to technical problems, such as a server crash, and this would cause the results to be lost. Respondents in an older age group might have been unwilling to answer the questions.

Lastly, the current research was limited to investigating the effect of extrinsic and intrinsic attributes on attitudes toward Japanese frozen foods. The study reported that the R^2 value of the

key dependent variable, purchase intention, was 23%. This indicated that the model could explain the factors associated with the customer's intention to purchase Japanese frozen foods. However, future work should add the relevant constructs to improve the prediction and explanatory power of the research framework.

CONCLUSION

This study advances the knowledge on consumer purchase behaviour in the context of Japanese frozen foods among consumers in Malaysia. Specifically, this study investigated the role of intrinsic factors (convenience, health consciousness, food quality, and social influence) and extrinsic factors (brand reputation, price perception, halal label, and product information) on attitude toward Japanese frozen foods, as well as consumers' intentions to purchase. Moreover, this study explored the mediating relationship between attitudes toward Japanese frozen foods in the relationship between intrinsic and extrinsic factors and the intention to purchase Japanese frozen foods.

The current study has revealed significant information that could contribute to the knowledge base on purchase intention in the Japanese frozen food context. Also, this study would extend the empirical literature on frozen food purchase intentions in Malaysia. The outcomes of this study could provide the manufacturers of frozen foods in Japan and other non-Muslim countries in Southeast Asia with a better understanding of consumer attitudes and intentions toward frozen foods in Muslim countries from the perspectives of extrinsic and intrinsic factors. The findings could also be helpful for other frozen food businesses if their market is Southeast Asian consumers that share similar cultural and sociodemographic characteristics as residents of Malaysia.

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Appendix

Construct	Item	Source
Brand reputation	The frozen food brand:is trustworthyis reputable makes honest claims	Veloutsou and Moutinho (2009)
Price perception the price is economical. considered to be a good value. the price is acceptable.	Ainscough (2005)
Halal label	Halal label will assist to identify the quality of frozen foods. The Halal label will make it easier to get information about the origin of frozen food. Halal label will provide the confidence to purchase frozen foods.	Nasution and Rossanty (2018)
Product information	The frozen food provides: comprehensive information about the product. useful information related to the product.detailed information about the product.	Ballantine and Fortin (2009); Kripesh et al. (2020)
Convenience	Frozen food is convenient because: ...it saves my time. it minimizes my effort. can use it anytime.	Gupta and Kim (2007); Kim et al. (2010)
Health consciousness	I am very self-conscious about my health. I am constantly examining my health/doing medical check-up. I'm usually aware of my health. I'm alert to changes in my health.	Gould (1988)
Social influence	People who influence my behavior think that I should use frozen food. People who are important to me think that I should use frozen food. The usage of frozen food is common in my community.	Venkatesh et al. (2003)
Food quality	Frozen food: is freshis prepared according to hygiene standards has a variety of choices.	Han et al. (2015)
Attitude	Consuming frozen food:is good.is pleasant.is favorable.	Hoque et al. (2018)
Intention to purchase	I want to buy Japanese frozen food next time I buy frozen food. I am planning to buy Japanese frozen food, next time I buy frozen food. The next time I go shopping for frozen food, I'm likely to purchase Japanese frozen food.	Hoque et al. (2018)