

## Halal Consumption Determinants: The Mediating Role of Risk Perception and Muslim Lifestyle

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### Abstract

Malaysia has been known as one of the top five leading countries in centralising the halal market globally. Although the government has actively promoted the halal food market, it is found that only 4% of SMEs (Small and Medium Enterprises) in Malaysia possess the Halal Certification Food from JAKIM (MITI, 2016). This points to several factors that can implicate the consumption of halal food, such as Muslim lifestyle, green consumerism, and government policy. Hence, the objective of this paper was to examine the factors that might influence halal food consumption, as well as the mediating effects of risk perception and Muslim lifestyle on the proposed relationships. This quantitative study consisted of five variables and measured by a total of 41 items using a seven-point Likert scale. For this study, data were obtained from 350 Muslim household consumers and analysed through the Partial Least Square, SEM (Smart PLS 3.0). The empirical result showed that green halal consumerism, government policy, and Muslim lifestyle posed significant impacts on halal consumption patterns. Muslim lifestyle was thus proven to be a mediator for the relationship between green halal consumerism and halal consumption pattern. The finding also suggested that food producers must abide in good manufacturing practices, especially in halal labelling to reduce consumer concerns and ensure the sustainability of halal food businesses. It is henceforth recommended that Muslim consumers may never sit on their laurel in combating non-halal food issues. From the consumer market perspective, such non-halal issues may be endless and contributed by various industry players. Hence, a monitoring committee should be formed, consisting of government agencies, halal industry representatives, and non-government organisations. This committee should meet regularly to solve contemporary halal issues, wherein improvements of the halal food product quality can promote the Malaysian economy to be the global halal hub, namely by ensuring quality halal products for exports.

**Keywords:** halal consumption pattern, Muslim lifestyle, government policy, green halal consumerism, risk perception.

## 1.0 Introduction

According to the Ministry of International Trade and Industry (MITI, 2016), a total of 5,726 SMEs has been certified with Halal certificate, wherein 76% from the amount consists of the food schemes. They include food beverages, food premises, and consumer goods. However, the total of SMEs indicated 153 000 with 116,280 from the total are food industry, and only 3.8% of the total amount is certified with the Halal Food certificates (Tariq, 2017).

Therefore, Muslims will manifest the subsequent effect on the demand for halal foods through their significant buying power. Despite the rapid growth of the halal food market, this population is sometimes doubtful of the halal status for their food consumption due to alleged contamination with non-halal ingredients. The question arises on how risky the consumption of halal food and how the specified factors explain halal food consumption.

Hence the objective of this paper is to examine the factors that may influence halal food consumption, as well as the mediating effects of risk perception and Muslim lifestyle on the proposed relationships.

## 2.0 Review of Literature

### 2.1 Halal Consumption Pattern

According to Ajzen (1991), purchase intention is a prioritised predictor for consumption pattern behaviour (Cheah, Phau, & Liang, 2015). Here, the consumption pattern behaviour is defined as consumer buying behaviour regardless of how they select, purchase, use, and dispose products, services, ideas, or experience (Kotler, 2012). Hence, buying behaviour, purchase behaviour, purchase intention, usage, selection, and disposal behaviour are all collectively considered equivalent to the consumption pattern behaviour.

### 2.2 Muslim Lifestyle and Halal Consumption Pattern

Islam is not only a religion but also a way of life. Therefore, a Muslim's lifestyle is their way of living their lives (Salehudin & Luthfi, 2011). Conventionally, the consumer lifestyle represents how a person lives and spends their time and money. It is based on the social and

psychological factors that have been internalised by that person, as well as their demographic background (Evans & Berman, 2007, p. A-29). In marketing, consumer lifestyle is used for lifestyle segmentation (Well & Tigert, 1977), which measures one's activities. This is done in terms of how they spend their time, what interests they have, and what importance they place on their immediate surroundings, as well as their views of themselves and the world around them, and some basic demographic characteristics. Following this, the Muslim lifestyle is the way a Muslim person lives and spends their time and money according to the five pillars of Islam, namely: faith (shahada), prayers (salat), charity (zakat), fasting (sawm), and pilgrimage to Mecca.

### 2.3 Halal Green Consumerism and Halal Consumption Pattern

According to Dangelico and Pontrandolfo (2010), green consumerism is defined as using a product equipped with ecological features, political attributes, incorporates corporate social responsiveness, and engage in fair trade, conservation, non-profit, new consumerism, sustainability, and equity. In simple words, it is considered as the usage of products that strive to protect or conserve natural resources, reduce or eliminate the use of toxic substances, and prevent pollution and waste (Ottman, 2006 as cited in Gunawardena, 2012). Previous studies have shown that this relationship yields equivocal results in which some are found to be significant (Hassan, Kua, & Harun, 2016; Jaiswal & Singh, 2018), while others are insignificant (Moser, 2015). Similarly, consumerism has not been studied widely.

To accommodate this, green halal consumerism is assimilated with other similar terms, such as pro-environmental attitude, eco-friendly behaviour, and green purchase attitudes. Akin to this, halal consumption pattern is also synonymous to green consumerism, intention to visit, green purchase behaviour, and green purchase intention. Hence, the results may show a consistent and positive relationship between green consumerism and consumption behaviour.

### 2.4 Risk Perception and Halal Consumption Pattern

People's judgments and evaluations of hazards or their facilities, or environments or they might be exposed to, are called "risk perception". They are the interpretations of the world based on experiences and/or beliefs. Besides, this element is embedded in the

norms, value systems, and cultural idiosyncrasies of societies (Finucane & Holup, 2006). The findings of risk perception and its relationship with consumption behaviour in previous studies have shown consistent and significant negative linkages (Olya & Al-Ansi, 2018; Yener, 2014). However, research on halal consumption pattern is scarce (Yener, 2014). Instead, the intention to recommend and intention to use have been utilised to reflect consumption behaviour (Olya & Al-Ansi, 2018) and consumption levels.

## 2.5 Government Policy and Halal Consumption Pattern

The government policy regarding halal issues is expected to affect consumer consumption patterns and Muslim lifestyles. In Malaysia, the halal product industry is regulated by Jabatan Kemajuan Islam Malaysia (JAKIM), which is tasked with overseeing any matters regarding halal product certification and complaints ([www.islam.gov.my](http://www.islam.gov.my)). Previous studies investigating the relationship between government role and purchase intention have thus found a significant and positive relationship (Shamsollahi et al., 2013; Mei, Ling & Pew, 2012; Craig, 2016). This implies that government policy is essential in enhancing the halal consumption pattern.

## 2.6 The Mediating Effects of Muslim Lifestyle

The concept of lifestyle can be traced to its early roots in personality psychology and marketing (Sjöberg & Engelberg, 2005). A healthy lifestyle should be considered as a mediator intervening the independent variables (i.e. health consciousness and environmental attitudes) and dependent variable (i.e. consumer attitude towards organic food) (Chen, 2009). As seen in this study, the Muslim lifestyle is a way of life (Salehudin & Luthfi, 2011) that represents how a person lives, spends time and money. The mediating role of the Muslim lifestyle in this study serves to explain how external physical events, which are government policy and Halal green consumerism, take on the internal psychological significance (Halal consumption pattern).

## 2.7 The Mediating Effects of Risk Perception

Risk perception has been an important research topic since the 1970s up until today (Sjöberg, 1979). The reason behind this is that risk is believed to be a crucial factor in policy attitudes and decisions

(Sjöberg & Engelberg, 2005). Therefore, empirical studies have been shown to investigate the mediating role of risk perception, such as Sitkin and Weingart (1995). The scholars revealed the determinants of risky decision-making behaviour by testing the mediating role of risk perceptions and propensity. Meanwhile, other research efforts have detailed how risk perception mediates the influence on individual risk-taking behaviour (Sim & Laurie, 1995) and described risk perception as a mediator in the food field (Labrecque & Charlebois, 2011). Besides, in reference to Lo (2013), some studies have identified the role of social norms in climate adaptation through it mediating the risk perception and flood insurance purchase.

According to Moon and Balasubramanian (2004), investigating public attitudes towards agro-biotechnology shows the mediating role of risk perceptions on the impact of trust, awareness, and outrage. The result has further proven that risk perceptions exert a more significant effect on public attitudes towards agro-biotechnology as opposed to benefit perceptions. To date, limited empirical research efforts are available on risk perception and its mediating role towards Muslim lifestyle and halal consumption patterns. Thus, this study intends to close the gaps by enriching the available studies in the halal consumption pattern context.

## 2.8 Underpinning Theory

The underpinning theory of this work is the buying behaviour model (Kotler & Armstrong, 2014). It suggests that the consumer decision behaviour to purchase or consume is alleged influenced initially by their personal characteristics, such as nationality, ethnicity, religion, age, gender, lifecycle, occupation, economic standing, lifestyle, and personality. Other than that, the consumption pattern is also influenced by the consumer's psychological characteristics, such as attitudes, beliefs, perception, motivation, and learning. In this study, the buyer purchasing behaviour is equated to consumption behaviour based on the operational definition of the concepts across various previous studies.

The theoretical framework cum hypothesised model is illustrated in Figure 1. It consists of two independent variables (i.e. halal green consumption and government policy), two mediators (i.e. Muslim lifestyle and risk perception), and halal consumption pattern as the

dependent variable. Thirteen hypotheses were hence developed in this study. They are:

- H1 There is a significant influence between Government Policy and Halal Consumption Pattern
- H2 There is a significant influence between Government Policy and Muslim Lifestyle
- H3 There is a significant influence between Government Policy and Risk Perception
- H4 There is a significant influence between Halal Green Consumerism and Halal Consumption Pattern
- H5 There is a significant influence between Halal Green Consumerism and Muslim Lifestyle
- H6 There is a significant influence between Halal Green Consumption and Risk Perception
- H7 There is a significant influence between Muslim Lifestyle and Halal Consumption Pattern
- H8 There is a significant influence between Muslim Lifestyle and Risk Perception
- H9 There is a significant influence between Risk Perception and Halal Consumption Pattern
- H10 Muslim Lifestyle mediates the relationship between Government Policy and Halal Consumption Pattern
- H11 Muslim Lifestyle mediates the relationship between Halal Green Consumerism and Halal Consumption Pattern
- H12 Risk Perception mediates the relationship between Government Policy and Halal Consumption Pattern
- H13 Risk Perception mediates the relationship between Halal Green Consumerism and Halal Consumption Pattern
- H14 Risk Perception mediates the relationship between Muslim Lifestyle and Halal Consumption Pattern

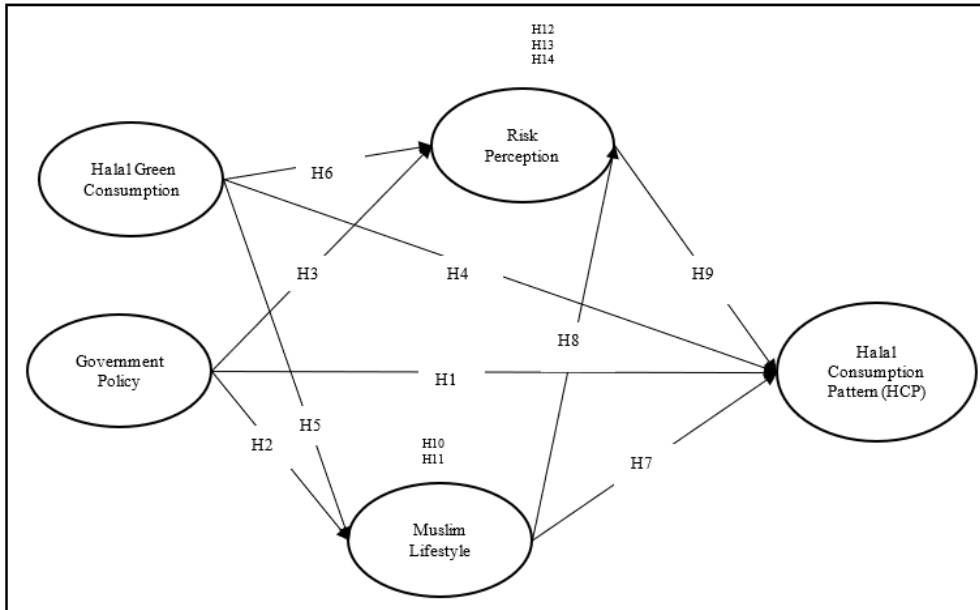


Figure 1 : Hypothesised Model of Halal Consumption Pattern

### 3.0 Methodology

This study utilised the quantitative method of research design, whereby the primary data were collected from consumers across five regions in Malaysia. A set of questionnaire consisting of 145 statements were adapted in measuring the halal consumption pattern model and a total of 700 questionnaires were distributed randomly in housing estates to reach the specified respondents. A response rate of 60% (420 questionnaires) was thus obtained; however, only 350 surveys were complete to be analysed. Therefore, the response rate in Malaysia among the consumers was around 40-60%.

### 4.0 Findings

The demographic profile described the background profile of 350 halal consumers in Malaysia. The descriptive statistics results showed that 171 (48%) of the consumers were male, while the remaining 179 (52%) were females. For their marital status, 143 (40.8%) were single, while 207 (59.2%) were married. The ethnicity of respondents consisted of 311(88.9%) Malays, 16 (4.6%) Chinese, and 23 (6.6%) of other ethnicities, who are Muslims. As Malaysia is a well-known multi-racial country, others included Indians and numerous indigenous people. The education of respondents illustrated that high

school holders were a total of 150 (42.9%), diploma holders made up 85 (24.2%), degree holders consisted of 79 (22.5%), Master's holders were 8 (2.3%) while PhD holders were 4 (1.2%). The remaining consisted of others, which totalled up to 24 (6.9%).

The measurement model of HCP explains the descriptive statistics and reliability of the constructs as tabulated in Table 1.

Table 1 : Descriptive Statistic and Reliability of Constructs (N=350)

	Items	Loading	AVE	CR	Deleted Item
Government Policy (GP)	PBC5	0.900	0.869	0.964	<b>PBC7</b>
	PBC6	0.941			
	PBC8	0.948			
	PBC9	0.937			
Green Halal Consumption (GHC)	GHC1	0.875	0.800	0.960	
	GHC2	0.896			
	GHC3	0.931			
	GHC4	0.917			
	GHC5	0.897			
	GHC6	0.850			
Halal Consumption Pattern (HCP)	HCP1	0.829	0.724	0.966	
	HCP2	0.812			
	HCP3	0.750			
	HCP4	0.879			
	HCP5	0.853			
	HCP6	0.888			
	HCP7	0.887			
	HCP8	0.849			
	HCP9	0.861			
	HCP10	0.874			
	HCP11	0.869			
Muslim Consumer Lifestyle (ML)	MCL1	0.777	0.666	0.947	
	MCL2	0.804			
	MCL3	0.869			
	MCL4	0.896			
	MCL5	0.868			
	MCL6	0.838			
	MCL7	0.797			
	MCL8	0.736			
	MCL9	0.742			



Table 1 : Descriptive Statistic and Reliability of Constructs (N=350) - continue

	Items	Loading	AVE	CR	Deleted Item
Risk Perception (RP)	RP1	0.754	0.645	0.952	<b>RP12</b>
	RP2	0.745			
	RP3	0.801			
	RP4	0.810			
	RP5	0.791			
	RP6	0.767			
	RP7	0.791			
	RP8	0.862			
	RP9	0.859			
	RP10	0.805			
	RP11	0.840			

All 350 usable data were analysed and the results showed that the item loadings were all above 0.7. Two items were deleted (i.e. PBC7 and RP12) as items with loadings below 0.6 should be removed (Hair, Hult, Ringle, & Sarstedt, 2014). Furthermore, the average variance extracted (AVE) for all variables in this study exceeded 0.5 and thus were validated for the structural analysis. Meanwhile, the construct reliability (CR) for all variables was above the 0.9 value.

The discriminant validity of the latent variables in this study illustrated that all were bold diagonal elements that exceeded the off-diagonal inter-construct correlations. In particular, Government Policy (GP) scored 0.932, Green Halal Consumption (GHC) scored 0.895, Halal Consumption Pattern (HCP) scored 0.851, Muslim Lifestyle (MCL) scored 0.816, and Risk Perception scored 0.803.

Next, an assessment of the structural model was done through bootstrapping analysis (Streukens & Werelds, 2016). In this study, 1000 subsamples through bootstrapping are generated and the results of the structural model are illustrated in Figure 2.

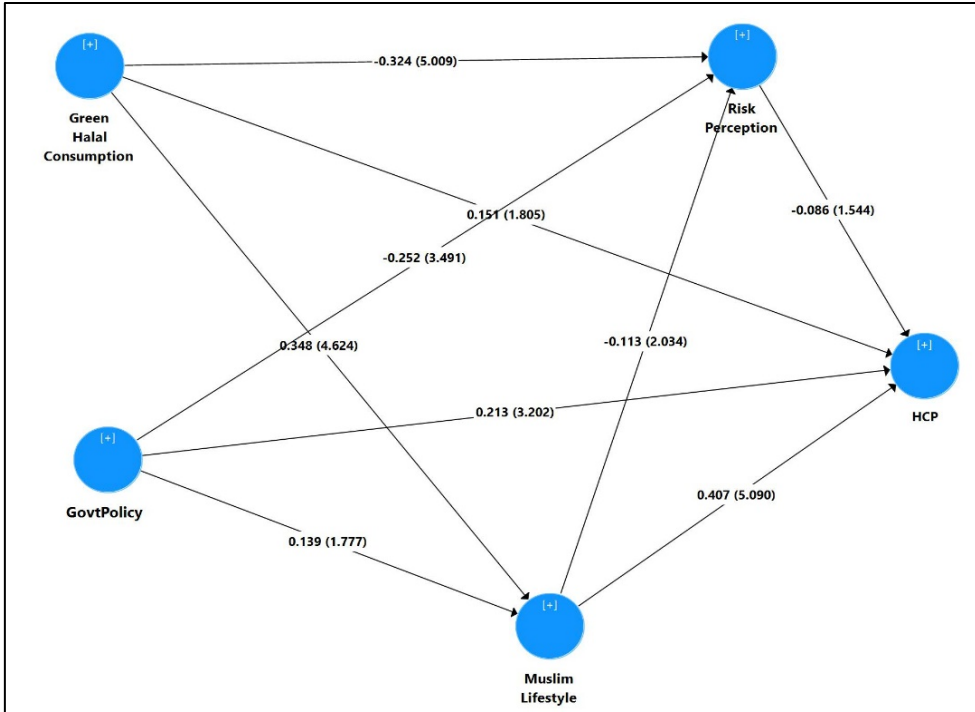


Figure 2 : Structural Model of Halal Consumption Pattern

All eight hypotheses (H1, H2, H3, H4, H5, H6, H7, and H8) in this study showed supported results, except for H9, which indicated a non-significant relationship between risk perception and halal consumption pattern. The results are otherwise as shown in Table 2. According to Fisher (1956), the standard level of significance used to justify a claim of a statistically significant effect is 0.05. For better or worse, the term statistically significant has become synonymous with  $P \leq 0.05$  and the continuous usage of the 5% level is indicative of another important practical point: it is a feasible level at which research work can be done. In other words, if the 5% level is used, then in most experimental situations, it is deemed reasonable (Hair, 2015).

Table 2 : Direct Hypotheses Result of Structural Model

Hypothesis	Direct Hypothesis	Beta Coefficient	t-value	p-value	Decision
H1	Government Policy→ Halal Consumption Pattern	0.213	3.202	0.001	Supported
H2	Government Policy→ Muslim Lifestyle	0.139	1.777	0.038	Supported
H3	Government Policy→Risk Perception	-0.252	3.491	0.000	Supported
H4	Halal Green Consumption→Halal Consumption Pattern	0.151	1.805	0.036	Supported
H5	Halal Green Consumption→Muslim Lifestyle	0.348	4.624	0.000	Supported
H6	Halal Green Consumption→Risk Perception	-0.324	5.009	0.000	Supported
H7	Muslim Lifestyle→ Halal Consumption Pattern	0.407	5.090	0.000	Supported
H8	Muslim Lifestyle→ Risk Perception	-0.113	2.034	0.021	Supported
H9	Risk Perception → Halal Consumption Pattern	-0.081	1.417	0.078	Not Supported

\*Correlation is significant at the 0.05 level (1-tailed) N=244 Significance level at t-values > 1.645 ( $p < 0.05$ )

Five indirect relationships were obtained in this study (i.e. H10, H11, H12, H13 and H14). Only two hypotheses were supported (i.e. H10 and H11), however, while the other three were not supported (i.e. H12, H13 and H14). The results are tabulated in Table 3 and show that risk perception do not mediate the respective relationships as stated.

Table 3 : Specific Indirect Hypothesis of Structural Model

Hypothesis	Sequential Mediating	Beta Coefficient	t-value	p-value	Decision
H10	Government Policy →Muslim Lifestyle →Halal Consumption Pattern	0.057	1.743	0.041	Supported
H11	Halal Green Consumption →Muslim Lifestyle → Halal Consumption Pattern	0.142	3.912	0.000	Supported
H12	Government Policy → Risk Perception →Halal Consumption Pattern	0.022	1.283	0.100	Not Supported
H13	Halal Green Consumption → Risk Perception →Halal Consumption Pattern	0.028	1.424	0.089	Not Supported
H14	Muslim Lifestyle →Risk Perception →Halal Consumption Pattern	0.010	1.414	0.092	Not supported

*\*Correlation is significant at the 0.05 level (1-tailed) N=244 Significance level at t-values > 1.645 ( $p < 0.05$ )*

According to the result of  $R^2$  for the dependent paths in this study, the model explained 46.2 per cent of Halal consumption pattern (HCP), while Muslim Lifestyle (MCL) scored 20.6 per cent and risk perception achieved 34.6 per cent.

## 5.0 Discussion and Recommendation

This study established the three significant direct relationships of Halal consumption patterns, namely Muslim lifestyle, Halal green consumerism, and Government policy. The significant relationship between the Muslim lifestyle and HCP has found similar supportive function in previous studies of lifestyle and consumption (Kim et al., 2013; Nikolić, Uzunović, & Spaho, 2014). Meanwhile, the indirect result showed the mediating roles of Muslim lifestyle between the two linkages (Government policy and Halal green consumerism) towards Halal Consumption pattern. It proved that the policies by the government had an influence on the Muslim lifestyle to consume Halal products. Similarly, halal green consumerism was also a predictor of the Muslim lifestyle in consuming Halal products. This finding is in accordance with a few past studies (Noor, Masuod, Said,

Kamaruzaman & Mustapha, 2016; Diyah & Wijaya, 2017; Han & Yoon, 2015). The findings further suggest that government policy, halal green consumption, and Muslim lifestyle play a vital role in ensuring the adherence to Halal consumption patterns. To prevent errant Muslim tendencies by the presence of non-halal products, the consumers need to practice the Muslim lifestyle to strengthen their faith further. Meanwhile, risk perception did not mediate these relationships as Malaysian consumers did not perceive halal products as a risk. This is due to Malaysia's status as an Islamic country with a majority of the Muslim population, rendering them taking things for granted, assuming that the products sold are halal.

## 6.0 Conclusion

Some objectives of this study were successfully achieved. The hypotheses tested proved the significant predictors of Halal consumption patterns, namely Government policy, Halal Green consumerism, and Muslim lifestyle. Meanwhile, the Muslim lifestyle was a mediator for Halal green consumerism and government policy towards Halal consumption pattern. Thus, the importance of knowledge, attitude, and government intervention on halal and haram elements in Islam leads to the current lifestyle and pattern of Muslim Halal product consumption.

It is recommended that Muslim consumers could never sit on their laurel in combating the non-halal food issues. From the consumer market perspective, non-halal issues may be endless and contributed by various industry players. Hence, a monitoring committee should be formed consisting of government agencies such as JAKIM, Ministry of International Trade and Industri (MITI), Halal Development Centre (HDC), Malaysia External Trade Development Corporation (MATRADE), halal industry representatives (retailers, suppliers, manufacturers), and non-government organisations. This committee should meet regularly to solve contemporary halal issues. Improvement in the quality of halal food products can promote the Malaysian economy to be global halal hub players by ensuring quality halal products for exports.

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