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## Exploring attitude-behaviour inconsistencies in organic food consumption during the COVID-19 pandemic in the Klang Valley, Malaysia

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### ABSTRACT

Many consumers have shown positive attitude towards green consumption; nevertheless, these attitudes do not necessarily translate into intention and or behaviours. Human consumption patterns are responsible for approximately 40% of environmental challenges; therefore, consumer decisions and behaviours have a big impact on the environment. Food consumption is known to have an important impact on public health, individuals, and the environment. Organic food purchase is widely known to promote sustainable attitudes and lifestyles. The disparity between green concern (having a positive attitude and or intention) and green behaviour (the act of purchasing and consuming organic food) is known as the attitude-behaviour inconsistency or green gap in the scholarly sphere. To explore the attitude-behaviour inconsistency, this study employs exogenous influences such as motives and barriers which extends the original theory of planned behaviour. This qualitative study which was carried out during the COVID-19 pandemic involved 22 key respondents' residents in the Klang Valley, Malaysia (KVM) using key informant interviews and interpretive phenomenological analysis. The findings indicated motives and barriers to purchase, coexist with a positive attitude (endogenous influence) and favourable intentions, resulting in real behaviour or purchase not being possible; therefore, the attitude-behaviour inconsistencies. To band the attitude-behaviour inconsistency, it is proposed that decision makers such as government agencies create a national environmental certification procedure and logo that verifies companies' environmental claims. Assisting the government, the private sector should be more proactive in implementing green lifestyle initiatives in their corporate policies and when conducting business.

### 1. Introduction

Food consumption is known to have an important impact on public health, individuals, and the environment. Importantly, food consumption is linked to environmental challenges like heightened pollution, scarcity of water, and CO<sub>2</sub> emissions. Consuming organic food, minimizing consumption of unhealthy foods, and preparing food products that facilitate reduced wastage are a few viable options that can be considered in this regard (Hoang et al., 2019). The promulgation of these behaviours in a developing country such as Malaysia has always been faced with grave environmental concerns and a massive surge in food intake assumes great significance. Consumers have a responsibility to protect the environment by choosing environmentally friendly products such as organic food (Tavares, 2021). Over the past few years, studies have revolved around the inexplicable chasm between the attitude of people toward the environment and their actual green purchase behaviours (Barbarossa and De Pelsmacker, 2016).

Many studies have investigated the intention and actual behaviour behind food choices to predict consumers' purchase patterns via intention. However, the objectives achieved by this study are different in that they provide helpful pointers about the on-ground purchase behavioural patterns of consumers. This information can be helpful for manufacturers, retailers (product, price, promotional, and place aspects), government or policymakers (to develop favourable conditions for organic food productions and consumptions), researchers (by helping them better understand the attitudes of people), consumers (attitudes, intentions, key impediments and drivers of the intake of organic food), pro-environment groups (advocate reduce, reuse and recycle sustainability actions) and other stakeholders in the society.

In addition, much research has investigated behavioural intention and behaviour, with the majority of them attempting to predict people's behaviour using behavioural intention. This study, on the other hand, will look at actual behaviour as well as anticipate behaviour based on behavioural intention. As a result, the findings are "hard" useful

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information to the many stakeholders in the society. Extending from this, these “hard” useful information such as guidelines in encouraging active and meaningful consumer engagement towards organic food consumption are crucial information to marketers and policymakers.

This research advances the body of literature by exploring 4 research questions; namely, how attitudes influence organic food consumption behaviour, how intention affects the behaviour of organic food consumption, what key drivers impact consumption of organic food in the KVM, and what are the salient challenges that come in the way of organic food consumption behaviour. This research provided actionable insights into the key barriers faced by manufacturers and or retailers of organic food, governments as well as policymakers, researchers, consumers, pro-environment groups, and all other stakeholders in the society. This research is very relevant and timely for all countries because what we consume daily unavoidably impacts our future health, which has been imperiled due to COVID-19.

This research employs exogenous influences such as motives and barriers which extends the original theory of planned behaviour; thus, providing us with deeper insights into understanding the attitude-behaviour inconsistencies or gaps in the purchase and consumption of organic food in the KVM.

Despite the increasing concern for ethical production and distribution practices around the globe, there seems to be a research gap in this area in context of developing countries. This implies that green food consumption is still a subject of study that is to be explored in developing nations (Budhathoki et al., 2019).

Developing countries like Malaysia faces great challenges in sustainable development. Deforestation, water quality, household waste and industry waste are some of the reasons that cause environmental deterioration.

In Malaysia, a recent study pointed out that 38,000 tonnes of environmental waste were generated daily without considering labour, social and environmental costs. Malaysia depended on the United States to export 0.5 million metrics of environmental waste between January and July 2018 because it is a source of revenue. Given that the Malaysian government lacks a proper mechanism to treat environmental waste generated by consumers, only 9% of the environmental waste was recycled, 12% was incinerated and 79% landed up in landfills as well as natural environments. Therefore, this resulted in an increased number of illegal dumping sites and open air burning which led to environmental and health problems among citizens. Unsurprisingly, Malaysia has been ranked eighth in the world for its contribution to environmental waste (Ogiewonyi, 2019). Understanding consumers’ purchase behaviours toward eco-friendly products is critical for future sustainable development and cleaner production (Nguyen, 2022).

World Health Organization (WHO) commented that Malaysia is the country with one of the fattest people in Asia, with an almost 50% obesity rate (Rachmi et al., 2016). According to WHO statistics, 44.4 percent of individuals have a BMI of greater than 25 kg and are overweight (Tee et al., 2020). Malaysia has been confronting challenges about eating disorders and obesity since the year 2000 because the country’s obese population is the highest in entire Southeast Asia accounting for 48% of her total population (Al Mamun et al., 2018). Despite the government’s interventions, Malaysians have yet to adopt healthier dietary choices on a large scale due to psychological considerations such as attitudes, subjective perceptions of benefits or impediments/concerns, social moorings such as perceived influence or support of the society, as well as environmental contributors such as affordability and accessibility. Much more needs to change and can be done in terms of Malaysia’s policy on food, in which the role of the government can be pivotal. The indiscreet choices made by Malaysians in terms of their dietary habits are not making things easier by predisposing them to various medical problems that, if left unattended, can be fatal. Hence, all Malaysians would do well to ensure that they adopt healthy practices in their diet (Al Mamun et al., 2018).

In addition to waste disposal and health-related issues, the high price

of organic and environmentally sustainable foods in Malaysia has deterred people from buying green food items (Sharaf and Perumal, 2018). The Department of Statistics Malaysia (2020) suggested that 40% of the nation’s population comes under the low-income group. This information is worrying because 74% of consumers stated that they do not mind making higher payments to buy organic food and 25% can purchase a further 100%. However, the willingness to pay across all income categories has a positive correlation with income.

Little is known about the attitude-behaviour inconsistencies in organic food consumption during the COVID-19 pandemic in the KVM from a qualitative lens, and how the emergency situation induced by COVID-19 disease has impacted food consumption and sustainable diet. As a result, this research attempted to discuss and explain the research gaps in this area; providing answers to the 4 research questions set-forth in this research.

## 2. Literature review

### 2.1. Green product

Green products, unlike organic products, contribute to sustainability by protecting and preserving natural resources. Green products are often called sustainable, environmentally friendly, or ecological products (Ottman, 2017). On the other hand, some of the attributes of green products include products that can be recycled or that use little toxic materials such as plastic and pesticides (Chen and Chai, 2010).

Green products address a myriad of environmental issues. Consequently, it is crucial to nurture and support environmentally responsible consumption behaviours such as the purchase of organic food to lessen the direct and indirect effects of individual consumption decision on environmental degradation particularly in the trend of urbanization which include changing lifestyle notably an increasing number of affluent people in Malaysia (Sulaiman and Djerman, 2017).

A study by Kumar et al. (2021), consumers are far more conscious of the environmental damage caused by materials used in products for daily use. Businesses are becoming more conscious of their packaging choices, pesticide use, and waste disposal. The popularity of responsible environmental behaviour is a result of its long-term advantages for both the individual and for all nations. Similarly, according to Kim and Seock (2019), this understanding in recent decades has altered the eco-friendly vision of many businesses, with many of them taking ecological practises into consideration.

### 2.2. Organic food towards human health in the COVID-19 pandemic

Plant-based diets boost the number of beneficial bacteria in the gut and improve the general health of the gut microbiome, which accounts for up to 85% of the body’s immune system (Arshad et al., 2020). Organic food is defined as food produced in accordance with organic farming guidelines. Standards differ from country to country. Resource cycling, ecological balance, and biodiversity conservation are all characteristics of organic farming. The term “Organic” refers to the manner agriculture goods are cultivated and handled (Ramesh and Divya, 2015). Organic crops must be cultivated in safe soil, without restriction, and must be kept separate from organic products. Organic food has numerous health benefits, including lowering the risk of allergic disorders, overweight, obesity, and a variety of other ailments. The most essential factor is that pesticides are no longer allowed in organic produce. When opposed to organic foods, organic foods have a variety of nutritionally important components (Tomar et al., 2021). During the COVID-19 pandemic, maintaining a healthy diet and lifestyle was critical for battling viral infections and sustaining mental health and well-being. A well-balanced diet provides adequate nutrients to support a robust immune system in the face of respiratory diseases like coronavirus (Dietz and Santos-Burgoa, 2020). To maintain the immunity of the human body, WHO urges people to consume healthier foods to

strengthened body immunity.

### 2.3. Green consumers

Despite the lack of a universal definition, the majority of research defines green consumers as those whose purchasing decisions are considerably influenced by their environmental and social concerns (Shiel et al., 2020). However, Lv and Li (2021) noted that there are three types of green consumers: light green consumers (this segment is potential consumers and will stop buying green products if, for instance, the price of the green product has increased), medium green consumers (this segment has strong environmental awareness, but their overall environmental awareness is relatively limited), and heavy green consumers (this segment is active or loyalist of green products). The same study by Shiel et al. (2020) yielded contrary results. The study demonstrated that age is the sole demographic trait of green customers that significantly influences the purchasing of green products due to its association with environmental awareness and concerns. However, despite the fact that many green consumers claim to have extremely good views toward green products, the majority of them only seldom purchase them, a phenomenon known as an attitude-behavior inconsistencies or green gap (Feil et al., 2020).

### 2.4. Green attitude

Consumer attitudes about purchasing green products are formed by their lifelong accumulation of beliefs, knowledge, and concern about the concept of green products. Recognizing the seriousness of environmental problems caused by excessive use of energy and non-renewable natural resources, abundant supplies of foods and products, environmentally unfriendly production processes, and environmental disasters, an increasing number of people are aware of environmental issues and believe that our natural resources are limited, and that the environment is more fragile than we once believed. Such environmental awareness instils in the public a positive attitude toward environmentally friendly activities and encourages people to engage in environmentally friendly behaviours more frequently in their daily lives (Han et al., 2011).

Literature has long held that behaviour can be predicted by attitude (Quaquab et al., 2021; Saleki et al., 2019). The stronger the positive attitudes, the more likely the intention to buy will be, and so the likelihood that consumers will choose green items over conventional alternatives will be higher (Sethi, 2018). Though prior research has found a link between environmental attitudes and environmentally friendly actions and a link between environmental approach and green purchase actions, but the potency of the attitude-behaviour association has been found to be uncertain (Butt, 2017). Similarly, a study by Hong et al. (2019) found that energy-saving beliefs among Chinese citizens have a considerable impact on energy-saving behaviour. Although theory suggests that attitudes and behaviours are related, there were research produced otherwise. A link between attitude and behaviour could not be found in studies by Fu et al. (2020) on Beijing truck drivers, Xu et al. (2020) on Chinese green furniture purchasers, and Moser (2016) on German consumers. According to a study on Spanish customers, a positive attitude can affect behaviour, but a negative attitude cannot (Casalo and Escario, 2018).

### 2.5. Green purchase intention

According to Ajzen (2011), the most important aspects that influence a consumer's actual purchase of a product is the consumer's intentions. The variable of consumers' behavioural intentions has been extensively studied to better understand the different elements that influence consumers' purchasing of organic products (Dagher and Itani, 2014). The intention of customers to buy organic food is the first step in creating demand for organic products. Furthermore, customer intent to purchase is critical in influencing customer attitudes to adopt consistent green

product behaviours. Green buying intent is a strong predictor of green purchasing behaviour, implying that purchasing intent is positively influencing the possibility that a client decides to buy green products (Chiew et al., 2014).

On the other hand, intention does not always entail purchase. According to Chiew et al. (2014), there is a large discrepancy between declared and actual purchasing behaviour when it comes to organic food. According to their findings, 50% of customers claim to purchase organic products, but only 15% of those who claim to do so actually do so. A study by Pooja and Kumar (2019) highlighted that some recent studies also established the direct relationship of green purchase intention and green purchase behavior in their local context including India (Lai and Cheng, 2016; Kanchanapibul et al., 2014; Kim, 2013) and in India by (Kumar et al., 2017; Yadav and Pathak, 2016a,b). In addition, the same study made note that consumers expressed willingness is more effective than other behavioral factors in capturing consumers' green purchases.

### 2.6. Green purchase behaviour

A study by Quaquab et al. (2021) referred green purchase behaviour as consumers' actions of purchasing green products informed by environmental concern as the main focus in every purchase decision. Much research has found a link between intent and actual conduct or behaviour. Many academics, including Sheppard et al. (1988), have stated that there is an overwhelming amount of correlation between intention and behaviour. For example, Saba and Messina (2003) and Thøgersen and Zhou (2012) found a substantial positive link between purchase intention and purchase behaviour when studying natural food purchasing behaviour. According to Mohd Suki and Mohd Suki (2019), earlier studies on consumer green purchasing behaviour in Western nations include those by De Angelis et al. (2017), De Medeiros and Ribeiro (2017), and Persaud and Schillo (2017). In contrast, studies by Prakash and Pathak (2017), Sangroya and Nayak (2017), Nguyen et al. (2017), Souri et al. (2018), and Wang et al. (2018) in India, Vietnam, Iran and China respectively; showed that there are disparities in environmental concern, perceived environmental problems getting worse, and responsibility.

According to Jaiswal and Bihari's (2020) market researchers, and consumer researchers are beginning to view green consumer behaviour as an emerging paradigm. In order to appreciate green consumer behaviour, research has already been conducted on a variety of factors, including sociodemographics (Pokus and Ukaskien, 2017), environmental consciousness and awareness (Diamantopoulos et al., 2003), green consumption values (Haws et al., 2014), personal norms (Gleim et al., 2013), self-perception (Cornelissen et al., 2008) and social motives (Adnan et al., 2017).

### 2.7. Attitude-behaviour inconsistencies

According to research by Quaquab et al. (2021), there is ongoing discussion about the attitude-behavior inconsistencies which contends that even when people have positive attitudes toward some things, they may not always put such attitude into actions or behaviours. For instance, studies by Fu et al. (2020) on Beijing truck drivers, Xu et al. (2020) on Chinese buyers of eco-friendly furniture, and Moser (2016) on German buyers; all failed to find a link between attitude and behaviour. According to a study on Spanish customers, a positive attitude can affect behaviour, but a negative attitude cannot (Casalo and Escario, 2018).

### 2.8. Theory of planned behaviour/TPB

The well-known TPB was used in this study as the theoretical framework to explain the attitude-behavior discrepancies for organic food purchase and consumption. Teixeira et al. (2021) claimed that this theory has been successful at predicting consumer intent in a variety of

markets, particularly organic food. In fact, this paradigm was successfully applied in extensive literature that sought to understand and investigate customers' intentions to purchase organic foods (Boobalan et al., 2021; Fleseriu and CosmaBocanet, 2020). To better understand consumer behaviour with relation to organic food, Singh and Verma (2017) and Yadav and Pathak (2016) underlined in their studies the need to take a closer look at the role of purchase intention, specifically of the elements that drive it.

According to Kumar et al. (2021), attitude is a key factor in the TPB when determining a person's behavioural intentions. The term attitude refers to positive or negative evaluations of cognitive ideas about the idea, people, objects, events, or behaviours under consideration. Since attitude is a psychological feeling, previous research has indicated that it is one of the most significant determinants of green buying (Nguyen et al., 2018). Previous research has been done to examine the significance of attitude, particularly in relation to waste management, recycling, eco-friendly packaging, and green purchasing in various nations (Kumar, 2019; Prakash et al., 2019). The majority of studies discovered that customers who are highly concerned about the environment's future have attitudes that significantly influence their intentions.

In a variety of green/pro-environmental fields, TPB has been hailed as a crucial theoretical lens for anticipating consumer intention as well as behaviour (Dilotsothe, 2021). In more detail, the theory's applicability and robustness have been demonstrated in a number of studies looking at recycling behaviours (Khan et al., 2019), green apparel (Nam et al., 2017), energy efficient products (Gao et al., 2017), organic food choices (Rana and Paul, 2017), green hotels and restaurants (Chen and Tung, 2014), and environmentally friendly cars (Chen and Peng, 2012).

A review of the usage of TPB in environmentally friendly behaviour, TPB has evolved over time by including two independent (direct and indirect) variables that have an impact on the desired behaviour (Kumar et al., 2021). Behavioral, normative, and control beliefs are employed as indirect variables, while attitude, subjective norm, and PBC are considered direct variables (Yuriev et al., 2020).

Yuriev et al. (2020) provide a thorough analysis of TPB framework. The researchers have discovered its applicability in various fields, industries, and regions. The majority of TPB research focuses on measuring the effects of internal and external factors and bridging the gap between attitude-intention relationships (Higuera-Castillo et al., 2019; Jaiswal and Kant, 2018). In the context of the TPB model, research has been done to determine the relationship between attitude, intention, and behaviour. However, most of the research has focused on the impact of intention on behaviour or the indirect effect of attitude on behaviour through intention (Al Mamun et al., 2018; Taufique and Vaithianathan, 2018).

On the other hand, this study employed both the endogenous influence (attitude variable) and exogenous influences such as motives and barriers which extends the original theory of planned behaviour in answering the 4 research questions.

The TPB theoretical framework is presented as illustrated in the Fig. 1.

### 3. Methods

For this qualitative study, purposive sampling was used. Purposive sampling is the most utilized sampling technique in qualitative research as it entails identifying and selecting individuals or groups of individuals who are knowledgeable and skilled about a topic of interest (Etikan et al., 2016). The research instrument used was key informant interview technique. Key informant interviews entail interviewing a small group of persons who are likely to supply the required information, thoughts, and knowledge on a certain topic (Kumar, 1989). Kumar (1989) added this research instrument only included key informants; hence the number of people participating is usually between 15 and 35. Key informant interviews should not be confused with formal and informal surveys in which a large number of people are interviewed. 35 consumers who have purchased and consumed organic food for a minimum of one year were initially informed that they will be interviewed for this study. Eventually, 22 informants were interviewed until data saturation was attained/no new information was revealed. Face-to-face semi-structured interviews were conducted from September 11 to December 2, 2021. The National Recovery Plan for COVID-19 in Malaysia was in the late stage of the pandemic phase. All 22 informants consented to meet for interviews in person.

The researcher was able to observe social cues such as tone of voice, expressions, and body language in the interviews as a result of this. Males accounted for 40.70% of the population, while females account for 59.30%. Most of the informants were between the ages of 40 and 52, accounting for 60% of the total; the age bracket of 25–39 years old accounted for 40% of the total. 3.60% of respondents had a vocational degree, 83.10% had a bachelor's degree, and 13.3% had a postgraduate degree in terms of educational attainment. This revealed a high literacy rate of the sample informants.

### 4. Results

#### 4.1. Health concerns

The necessity of living a healthy lifestyle and health consciousness is seen to be the primary drivers of respondents' choice for organic food. All respondents buy organic foods because they believed organic foods are healthier than conventional foods, which is how widely viewed organic food is. According to this study, respondents who are more worried about their health have a positive attitude toward buying and eating organic food.

"I have been buying organic fruits and veggies for my family for the past 5 years. I prefer to give them natural foods and buy them fresh for their wellness. This is also for my wellbeing." (Informant number 20).

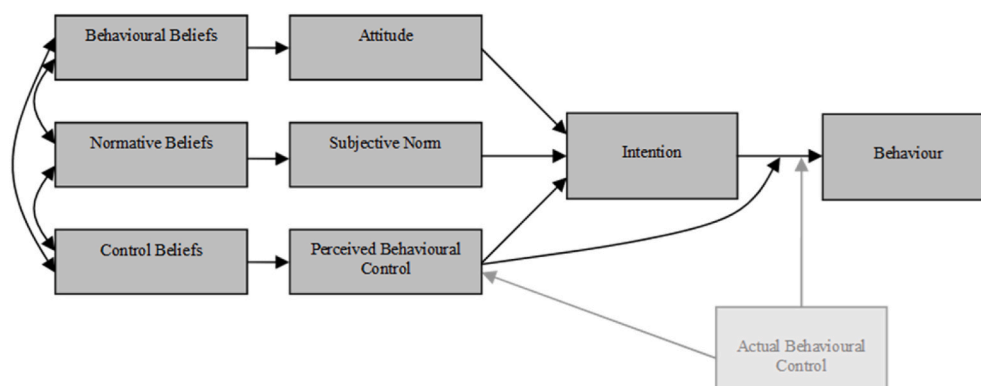


Fig. 1. Theoretical framework/Theory of Planned Behaviour.

"I have been purchasing organic produce. The biggest reason is that I am concerned about my health." (Informant number 12).

#### 4.2. Consumers' environmental concerns

One of the key elements influencing respondents' views toward purchases was discovered to be their environmental worries. An environment that is more conducive to acting in an ecologically conscious manner can be created by environmental awareness and good environmental behaviour. As a result, it is evident that concern for the environment has a favourable effect on attitudes toward the purchase and consumption of organic food.

"We have issues such as a lack of land for trash and garbage disposal, air pollution, and river pollution. People do not take it seriously, and we are oblivious of the size and ramifications of these issues on themselves and the country." (Informant number 11).

#### 4.3. Perceived quality

An influencing factor that appeared 17 times in this study was perceived food quality. When deciding which organic foods to buy, respondents gave food safety some thoughts. Since respondents perceived organic food as being safer than non-green foods, the propensity for purchasing organic food rises.

"I believe that consuming organic food give me assurance that the food which I feed my body are free from chemical that will not harm my body" (Informant number 1).

Informant number 1 view was also concurred by informant number 2, 4, 5, 7, 8, 9, 10, 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22.

#### 4.4. Attitude toward the role of government and other agencies

This study also showed that attitudes on the government's role in environmental protection have a big impact on how customers behave when making organic food purchases. The importance of the government's involvement in preserving the environment, according to the respondents, will influence them to support environmental government policies. As a result, respondents believed that government actions can reduce environmental problems more quickly than their own purchasing actions. Fifteen people said that to be effective, the government would have to step in, either by regulating and enforcing the use of more ecologically friendly items or by educating the general public.

"Individuals have no role; even if someone wants to take action, it is insufficient and will yield no results. Government and relevant government agencies should enact stringent legislation and restrictions. People's efforts will be ineffective and will not affect the situation by even 1%. I don't believe people can safeguard the environment because the impact of one person out of Malaysia's 30 million-plus people is like dust in the wind." (Informant number 21).

#### 4.5. Price

According to findings, one of the biggest barriers to purchasing organic food is price. For eco-conscious consumers, this is an extremely significant barrier. Extending from this, the decrease in regular pricing for organic foods is crucial for encouraging these respondents and green customers to buy organic foods.

"They are more expensive than mass non-organic food. I only bought them for one reason which is the nutrients in them; thus, organic food is beneficial to my health." (Informant number 21).

#### 4.6. Product availability

If respondents believed that a specific organic food is hard to locate and buy, chances are that they will lose interest, as they may not be willing to make the required efforts to acquire the food. Respondents

seek shops that offer a wider range of certified organic foods. Thus, an ineffective distribution and promotion system affects the availability of organic food in the market. Removing this barrier is very crucial for encouraging green purchases. Store locations and the varieties of organic foods are important aspects to consider, as they impact purchase intentions.

"The organic food I am aware of isn't available in stores, and if it is, it's only for a few variants of food" (Informant number 10).

"I would buy more organic food if I could find it without having to order it online or go out of my way to find it." (Informant number 14).

## 5. Discussion

### 5.1. Theoretical implications

This study conveyed vital implications for research as green food consumption continues to be an important research issue.

This qualitative study was conducted to explore the attitude-behaviour inconsistencies in organic food consumption during the COVID-19 Pandemic in the Klang Valley, Malaysia by employing exogenous influences such as motives and barriers which extends the original TPB framework. The results from this study can be useful and resourceful in understanding the endogenous and exogenous influences in why the green gap exist within the TPB framework. In addition, this study can be considered as a tool for policy development with regards to the emerging micro and macroeconomic issues such as demand, supply of organic foods and sustainability issues that developing and many countries are facing. Thirdly, this study deepens the theoretical understanding of the TPB model and its measures, such as the relationship between attitude, intention and behaviour in organic food purchase and consumption. According to the findings, informants' purchase intentions for organic food are positively influenced by their attitude. The more positive a consumer's purchasing attitude is, the stronger the consumer's intention to behave under his or her control. Consumers who engage in positive environmental attitude, for example, have a more positive intention to act in an ecologically conscious manner and then act on that intention. In this study, buying intention has a positive impact on the likelihood that a consumer will purchase organic food. This finding is in line with what was proposed in TPB (Ajzen, 1991) and Brown's (Chiew et al., 2014) work, which indicated that consumers who demonstrated an intention to buy a product will have greater actual buying rates than those who demonstrated no intention to buy. Other contributory factors, such as motives and barriers to purchase, coexist with a positive attitude and favourable intentions, resulting in real behaviour or purchase not being possible; therefore, the attitude-behavioural inconsistencies. Furthermore, this study is amongst the pioneers in understanding why the green gap exist from the qualitative lens. The "hard" and real time information from respondents served as useful information to add and supplement to the many quantitative existing body of knowledge in this area.

### 5.2. Managerial implications

Environmental knowledge, awareness and concern were identified as 2 of the most powerful influences on informants' intentions to purchase organic foods. As a result, there is a need to raise customer awareness by labelling eco-friendly items with green certification and environmental claims, which may have a beneficial impact on their attitude and intention toward green products. Marketers must effectively communicate the environmental benefits of their products to consumers, as both environmental knowledge and environmental concern have a significant impact on consumers' attitudes and intentions to purchase green products.

The government has a role to play in this situation. To begin with, the creation of a national environmental certification procedure and symbol or logo would verify that companies' environmental claims are credible.

Second, having a single logo that customers can recognize, and trust will make it easier for them to identify green items.

Malaysian conglomerates and businesses should be more proactive in assisting the government in implementing green lifestyle initiatives in their corporate policies and when conducting business. While the younger generation of consumers becomes a potential market target for the green movement, mass media and social interaction should be encouraged in the belief that this segment of the population has the power to propagate greener consumption and is obligated to reduce the environmental problems that Malaysia as a nation is currently facing. This research found that, in addition to the criteria mentioned in the literature, Malaysian marketers should be aware that young consumers are the primary drivers of green consumption.

## 6. Conclusion

Overall, this study has shown the extended TPB model is useful and comprehensive in exploring the attitude-behaviour inconsistencies in organic food purchase and consumption during the COVID-19 in the KVM. The extent literature has attempted to explain this paradox with the assertion that there is a positive consumer attitude towards organic food that rarely translates into actual behaviour; thus, the term attitude-behaviour inconsistencies. This research has used a theoretical framework; namely the TPB that accounted for the study of consumer behaviour and behavioural difficulty to explore attitude-behaviour inconsistencies in organic food consumption during COVID-19 pandemic in the KVM. Consumer environmental knowledge (environmental knowledge, knowledge about organic food's existence and availability, and knowledge about organic food's repercussions or impacts), intention (environmental concern and perceived consumer effectiveness), motives, and barriers to purchasing organic food all played key roles in the attitude-behaviour inconsistencies in purchasing and consuming organic food, according to the findings. Based on the findings, this study recommended policies and business strategies that focus on minimizing consumers' dissonance and reasons against organic food purchase and consumption. In other words, motives and barriers needs to be addressed simultaneously with endogenous influence such as attitude to band the attitude-behaviour inconsistencies.

## 7. Limitations and future research

The original goal was to conduct this research utilizing 2 research instruments: focus groups and key informant interviews. However, this was not possible since several informants told the researcher that they were uncomfortable sharing their opinions in a group context. In addition, some informants have stated that they do not want to divulge their identities in a focus group setting or that they do not want other informants to know who they are. As a result, it would be fascinating if future research included 2 research instruments, so that findings from each instrument could be compared to see if themes and sub-themes, as well as their ranking or relevance, are similar.

Future studies should capture data when purchase behaviour is occurring or through observation. Future data can be acquired, for example, from green customers in a store while they are making purchases or at the mall's entrance. In addition, future study should assess real knowledge, such as through a knowledge test. According to [Abdul Latip et al. \(2021\)](#), studies on organic food purchases from the lens of consumers must be conducted on a consistent interval in order to understand consumer intent and demand.

Only organic foods are considered in this research. As a result, future studies may shift its focus to non-tangible product categories including green hotels, green investment, and green banking.

This research's informants were skewed toward the educated sector of green consumers, which may have skewed the results because educated green consumers are more likely to respond in socially desirable ways. As a result, future studies should consider the various levels

of education attained by the informants.

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## Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Data availability

The data that has been used is confidential.

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