

## Challenges & Opportunities of Grocery Retail During Pandemic: An Insight into The Case of Malaysia

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### ABSTRACT

COVID-19 pandemic has hit the world with surprise, and the impacts on socio-economic aspects are believed to linger longer even after it's ended. Building upon stress theory and social learning theory, this study aims to synthesize the changes in consumer patterns and behaviors as well as the challenges and opportunities grocery retailers are experiencing during the pandemic emergency in Malaysia at the end of the year 2020. Interviews were conducted in order to obtain the insights shared by the grocery retailers, and content analysis and qualitative aided software such as Quirkos were utilized. The findings suggested a few opportunities related to consumer patterns and behavior changes throughout the Pandemic. Besides, the challenges of merchandise and store management were addressed in the current study.

*Keywords: COVID-19, panic buying, grocery retail, social learning, bulk buying, Malaysia*

### INTRODUCTION

Consumer's display of certain behaviors that deviate from their previous shopping behavior is common during a pandemic (Harris et al., 2017; Phang et al., 2021). Changes in consumer lifestyles and emergency purchasing behaviors are frequently reported during these unprecedented moments (Cham et al., 2022; Somason & Voyer, 2014; Pantano et al., 2020). The strike of the COVID-19 pandemic has led to a new norm for almost everyone in the world. Within a year, the Malaysian government has implemented different phases of COVID-19 response strategies to flatten the curve, depending on the infection situation within the country since March 2020. Even though the length of time for each lockdown is intended for a matter of weeks, these lockdowns will be regularly implemented over a year to ensure the curve remains flattened (Ferguson et al., 2020).

To ensure society's wellbeing, the movement control orders allow essential services, including the grocery stores, to operate, with restrictions on operating hours and standard operating procedures (SOP) (Ganesan, 2020). Nevertheless, consumer buying behaviors and lifestyles are reported to be different (Baicu et al, 2020), affected by these movement control orders. People are stipulated to shop for more grocery products nearer to their housing area rather than dine out. They also stock more staple food and packaged food with longer stock life and opt for more online shopping (Euromonitor International, 2020). In fact, the grocery retail market had enjoyed double-digit growth in Malaysia and resumed as the anchors for

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shopping malls, where it had previously lost its attraction before the Pandemic. Even hypermarkets in Malaysia recorded good performance during the Pandemic as consumers opt for cheaper and one-stop grocery shopping experiences rather than performing frequent grocery trips, which could increase their risks of infection. Some industry experts propose that the Pandemic has revived some grocery retailers' businesses (Ganesan, 2020).

Nonetheless, Euromonitor International (2020) estimated a decline in grocery buying in a longer period due to the more challenging economic outlook, a definite consequence of the outbreak. The country's national income is reported to decline by 3 to 5 percent in the year 2020 due to the strict lockdown (Fernandes, 2020), and the world economies are badly hurt. Hence, reconsideration of challenges and opportunities is essential and unavoidable (Ting et al., 2020) since the retail industry is experiencing a drastic change (Evans, 2020, Pantano et al., 2020). Like many developing markets, Malaysia has witnessed the entry of multinational retailers over the past decade, and the retail markets have been highly competitive. As there are more small and medium-sized retail store formats (e.g., convenience stores, small/medium supermarkets and discounters) in developing countries compared to the larger-scale format such as hypermarkets and supermarkets (Cardinali & Bellini, 2014), the retail industry is more fragmented (Euromonitor International, 2020). Large grocery retailers enjoy the advantages of their size, financial resources, and marketing strategies; meanwhile, small grocery retailers are mostly located in housing areas that allow personal customer relationship building.

Due to differences in size, operation and marketing strategies, these grocery retailers would encounter a different set of opportunities and challenges during the pandemic period. An in-depth understanding of the local grocery retailers, which are primarily small and medium enterprises (SMEs) would provide valuable insights to practitioners and government agencies in handling the various challenges and opportunities encountered by the local grocery industry. However, the recently published Malaysian COVID-19 related literature is mainly focused on digital marketing (Ratnasingam et al., 2021); food safety (Soon et al., 2021), and brand loyalty (Shaari, 2021). The academic writing examining the challenges and opportunities in the grocery retail market in Malaysia is insufficient, particularly from the retailers' perspective. The current study fills in the research gaps by exploring the challenges and opportunities grocery retailers face in an emerging country context since previous literature mainly focused on grocery consumer behaviors to determine the retail format (Cham et al., 2022b; Fam et al., 2021; Lee, 2018; Namin & Dehdashti, 2019). Accordingly, three research questions were formulated to guide this exploratory study, as follows:

1. What are the changes in the consumer pattern and buying behavior during the pandemic emergency in Malaysia?
2. What are the opportunities provided to the grocery retail industry during the pandemic emergency in Malaysia?
3. What are the challenges faced by the grocery retail industry during the pandemic emergency in Malaysia?

## LITERATURE REVIEW

### Pandemic and Changes in Consumers' Buying Patterns and Preferences

Consumers are repeatedly changing their purchasing preferences and patterns over their lifetimes, and these changes are internal and externally driven (Andreasen, 1984; Cham et al., 2022c; Cham et al., 2022d; Lim et al., 2019; Mathur et al., 2003). In consumer behaviour studies, the changes in behavioural can be viewed in the context of stress theory and research where external factors such as environmental or social can affect consumers' preferences; In contrast, internal factors or demand requires the consumers to readjust their usual behaviour patterns (Thoit, 1995). Major life changes and transitions are often viewed as "stressors" that create a generalized demand for readjustment by the individual, thus causing changes in consumer buying preference. A study by Amalia, Mihaela, and Ionut (2012) stated different people view a situation with negative consequences, such as an economic or other crisis, in different ways. However, during a crisis, it was assumed that new trends in consumer behaviour would emerge. For instance, in recent media coverage of the COVID-19 Pandemic, people are reported to suddenly purchase household and health-related products excessively due to their worriedness over an unexpected threatening future condition is called panic buying or stockpiling (Taylor, 2021; Hall et al., 2020).

Similarly, Steven, O'Brien and Jones (2014) also concluded that panic buying is socially undesirable, herd behaviour where large quantities of groceries and medical supplies are purchased from markets often results in stockpiling situations. The panic buying phenomenon has been long neglected by academicians (Islam et al., 2021), and only recently there are several studies conducted to relate panic buying to the COVID-19 Pandemic (e.g., Cham et al., 2022, Islam et al., 2021; Naeem, 2021; Taylor, 2021), highlighting the importance to understanding panic buying as an essential social consequence (Taylor, 2021). Taylor (2021) concludes that people might not have to be in a state of panic to involve in panic buying, but they are indeed *"in a state of heightened anxiety, accompanied by a sense of urgency to procure the coveted items"* (p.1). Panic buying could lead to more social impacts as it involves a large crowd, creates anxiety and distress in the public, and leads to ineffectual and counterproductive messaging from community leaders. Not forgetting that the panic buying situation prevents individuals or more vulnerable groups (e.g., elderly or poor) who are in greater need of the products from accessing them (Wesseler, 2020).

Some authors attributed the panic buying phenomenon to the broad coverage of social media and main media news on the COVID-19 Pandemic (Hall et al., 2021; Naeem, 2021), heightening public anxiety and distress. Others also posit panic buying to be sporadic due to lockdown or movement control orders imposed by their own country or other countries to break the circuit of infection (Taylor, 2021; Keane & Neal, 2020). This could be explained by the social learning theory, which addresses that humans learn and adapt within a social context (Bandura, 1986). The capability of humans to learn by observing others allows them to avoid needless and costly mistakes. Vicarious experience is the main factor that contributes to the learning process. Besides the theory indicates that people learn from each other through interpersonal communication and they are motivated to learn proactively from the environment and social referents that define the learning behaviour (Lam et al., 2010; Rollins et al., 2014). Consequently, people could use panic buying as a psychological coping in their responses to the Pandemic (Islam et al., 2021). Panic buying worsens when combined with bulk buying when consumers are involved in stockpiling more than a two-week supply (Taylor, 2021). This leads to short-term depletion of stocks, not only for small but also for larger stores that carry large stocks and specialize in bulk purchasing (Donnelly, 2020). Many grocery stores are found to limit bulk buying items (Martin-Neuninger & Ruby, 2020), which could lead panic consumers to look for alternative stores or online buying.

Despite government and food suppliers' assurances on the stock availability, panic and bulk buying of certain products did not stop (Martin-Neuninger & Ruby, 2020). Some argue that bulk buying would be short-term as people will eventually stop stockpiling when they have more than enough at home (Hall et al., 2020). However, it is still not clear in the case of the COVID-19 pandemic, in which many countries have experienced repeated waves of infection. It is clear that consumers could involve in repeated panic and bulk buying circles as long as there is no effective cure for the virus.

### **Changes in Consumer Consumption Pattern and the Consequences**

COVID-19 pandemic is changing the way consumers shop in-store and their preferences for online purchases. The acceleration in the usage of e-commerce has proven especially in the U.S., where previously it took ten years to achieve an outstanding gain of 11% from 2009 to 2019, but during the Pandemic, the e-commerce penetration rate during the first quarter of 2020 increased from 16% to 27% of total retail (McKinsey, 2020). The changes can be seen in the grocery sector, which also goes to other items such as electronics and apparels (Kohan, 2020). In China, e-commerce has experienced an increase of 26.4% compared to 20.2% in the first two months of 2020 compared to the same period the year before (Kang, 2020). In research conducted by CPA Australia, the Pandemic has caused almost 40% of the small businesses in Malaysia to shift focus to online business (Syed Jaafar, 2021). The survey also indicated that social media is used as an essential platform for promotion (60%) and communication with customers (55%).

Furthermore, the Watson survey (2020) found that online users spend 40% more time on social media and a 20% increase in internet usage during the Pandemic. Consistent with the social learning theory, some researchers argue that sharing stories, pictures, and experiences on main and social media could affect consumers' buying decisions and preferences and exacerbate panic buying (Naeem, 2021). Social media is found to significantly influence consumers' preferences and decision-making (Barger et al., 2016; Islam et al., 2021). For instance, reports on the effectiveness of extracts of *forsythias fructus* dried fruit in inhibited SARS-CoV-2 in vitro have led to panic buying of traditional Chinese medication online and in-store in China (Liu et al., 2020). In India, due to the uncertainty of the pandemic situation, other than masks and hand sanitizers, items such as pulse oximeter (Al Amin, 2020) and drugs that were assumed to cure COVID-19 were in high demand. For example, Hydroxychloroquine tablets, Dexamethasone, and Azithromycin (Sourav, 2020) and even staple food such as rice and onions (Jagonews24.com, 2020) were the items bought during the panic buying episodes as media reported these items are in severely needed to improve one's health.

However, on the positive side, e-platforms and social media could be used as alternative solutions for consumers to shop safely and conveniently, especially when the platforms are supported with well-coordinated delivery and courier services. For instance, a report by U.S FDA (2020) stated that despite the challenges faced by food shoppers, such as inadequate public transit, food stockouts (i.e. exhausted inventories), and shorter hours at supermarkets and grocery stores, most shoppers in developed countries like the United States can retain sufficient access to food. This is all because of the existence and availability of online e-commerce platforms that assist consumers in shopping for food and later have it delivered to their home, or customers can opt for curbside pick-up. Amidst the challenging pandemic situation, e-commerce sites still manage to help businesses to boost sales revenue by leveraging current customers and attracting new ones, forming social groups, and ensuring

continuity with legacy systems by changing the business landscape due to the reduction of in-person contact (Nielsen, 2020; Tran, 2021).

## **RESEARCH METHOD**

The current study utilized a qualitative research design to obtain information shared among individuals about a particular social procedure and practices during the Pandemic based on the natural setting and context (Silverman, 2020). Such adoption of the qualitative approach allows experiences to be shared among a group of people (Aduce et al., 2021; Corbin & Strauss, 2014; Lim et al., 2021).

### **Data Collection**

The primary data for the study has been collected using in-depth personal interviews. An interview guideline is provided during the interview session, and probing questions are employed to obtain the participant's answers. Bernard (2012) has addressed the interview approach as one of the most powerful qualitative tools to reach data saturation. No specific numbers will be requested to reach data saturation since the researcher cannot quantify the numbers but solely depends on the desired information and insights obtained. For the current study, a non-probability sampling method has been used, and the participants included those grocery retailers that can provide and share specific information requested by the researchers (Sekaran & Bougie, 2016) during the movement control period in Malaysia. A total of 19 responses from the local grocery retail operators (e.g., supermarkets and minimarkets) were collected. The informants were all holding at least middle management positions (e.g., store manager, founder, or owner) in the grocery retail stores they work with. A smaller sample size is sufficient in conducting a qualitative study since qualitative research aims to gain valuable insights to assist the researcher in understanding the complexity of human experiences and interactions (Corbin & Straus, 2014; Johnson & Sohi, 2016).

To develop a credible qualitative research design, this research adapted Morrow's (2005) transcendent criteria, which consists of four factors: social validity, subjectivity and reflexivity, adequacy of data, and adequacy of interpretation. Social validity was achieved using a tool, in this case, Quirkos analytical software, to examine the large volumes of qualitative data. In terms of subjectivity and reflexivity, which refer to the degree to which qualitative researchers might influence their participants and create certain biases, the researchers took the initiative to minimize their involvement in these methodologies and maximize the role of the participants (Rennie, 2004). Participants were interviewed at their convenience and ease via online and offline platforms. Next, adequacy of data, the researcher has collected a sufficient quantity and quality of information, which is 19 responses, and adequacy of interpretation; the researcher has utilized qualitative data analysis techniques that will achieve their research objectives and answer their research questions and present in the next section. According to Morrow (2005), once these four factors are fulfilled, the research findings are deemed credible.

### **Data Analysis**

Content analysis and coding procedures were implemented where the textual data from the interview transcripts were transcribed verbatim and translated into a single language. Content analysis was utilized for coding and developing categories and themes for criteria under

opportunities and challenges faced by grocery retailers during the Pandemic (Miles, Huberman & Saldaña, 2018). To analyze the qualitative data, Quirkos analytical software has been employed since past studies have highlighted that the electronic approach is increasingly essential, especially for innovative researchers during the process of coding. Besides, qualitative data analysis tools enable researchers to perform further coding procedures, such as coding, labeling the themes, analytic memo writing, and discovering trends in progress (Basit, 2003; Saldana, 2021; Turner et al., 2021).

### **Validation Check**

Due to the nature of the exploratory study, the current study has conducted member checking to validate, verify and ensure the trustworthiness of qualitative findings (Harvey, 2015). The members have reviewed and agreed with the codes and themes in order to ensure trustworthiness and authenticity (Neuman & Robson, 2014). During the data analysis procedure, the same set of interview transcripts has been reviewed and crossed check until the agreement has been reached among the coders. Such practices also enhance the intercoder reliability of the interviews' data (Kurasaki, 2000).

## **RESULTS**

### **Themes emerged from the findings**

#### ***Theme (1) Panic buying and bulk-buying during Pandemic***

The findings of content analysis and coding procedure produced several important themes. First of all, panic buying was observed in almost all the grocery retail stores interviewed. Some quotes from the retailers:

*"...before MCO, customers come and want to look but not to buy. But during MCO, if they come, they must buy something..."*

*"...if a customer buys the product that we give a limit, they will push us and ask to give more. But we must explain to them. For the first week of MCO, we have that problem..."*

Consistent with Kostev and Lauterbach (2020) 's study, the COVID-19 pandemic has affected Malaysian buying behaviors. News about panic buying among Malaysians was reported before the first nationwide lockdown in March 2020, where people were stockpiling staples, pasta, canned food, and toilet paper (New Straits Times, 2021). Driven by unforeseen future conditions, the reported daily cases and the lockdown have triggered their worries and anxiety, hence resulting in panic buying. Panic buying was then observed from time to time, linking closely to the declaration of a movement control order. For instance, Malaysians were reported to queue for groceries in early 2021, ahead of a few movement curbs widely expected to be announced (Hassan & Anand, 2021), despite the fact that they have been fighting the Pandemic for almost a year. Regardless of their past experiences with different stages of a movement control order, the assurance from the government and retailers has failed to stop them from panic buying and stockpiling groceries.

In this study, the local grocery retailers have observed a change in customers' in-store buying habits and preferences. As shopping is a social activity, customers are said to form a higher

tendency to buy after observing the other in-store customers. The findings collaborated with Social Learning Theory in which people change their behaviour when a social referent is discovered experiencing fear or negative impact from a given stimulus; then, the observers may also develop a fear of the stimulus (Bandura, 1986). For example, the pandemic and movement restrictions are the stimuli that create a feeling of fear, uncertainties, and anxieties among the customers (Ting et al., 2020). After observing how the other customers behave in the store, many have engaged in panic buying.

Furthermore, the movement control order has discouraged visits to physical stores, shortened the operating hours of most stores, and the in-store crowd is limited to maintain social distancing. Other standard operating procedures (SOP) such as mask-wearing, queuing before entering the store, monitoring of temperature, and filling up contact tracing apps could have heightened the anxiety levels experienced by consumers and stimulated them to buy more to reduce the frequency of visits, in which one of the supermarket operators stated that:

*"...starting with the MCO, they buy for a large quantity. As usual and normal time, they buy just RM20 or RM30 but during that time is about RM100/RM200..." (Participant 3, supermarket)*

As argued by Hall et al. (2020), bulk buying is observed when there is an increase in the value of the transaction but a decrease in the number of transactions. In this study, bulk buying was a common phenomenon found in several grocery stores across different retail formats. One of the informants stated that

*"during MCO, the frequency with which they buy is high. There is very often. But in a small volume. They buy their need often but for a week or a day. Now, like usually, they buy for a month and large quantities." (Participant 6, minimarket).*

The findings are consistent with the initial speculation that consumers are not only involved in panic buying; they tend to buy more than what they used to buy, triggered by the lockdown. The limited operating hours of the grocery retailers and the closures of wet markets (such as pasar malam and tamu) have heightened their anxiety. Buying patterns have changed from frequent trips with smaller purchase volumes to less frequent purchases in more enormous volumes. Even though the Pandemic is experienced worldwide, it is frequently experienced locally (Hall et al., 2020). Social learning theory explains that individuals demonstrate the capability to learn by observing others and avoiding needless and costly consequences (Bandura, 1986; Rollins et al., 2014). In this study, grocery customers are increasing their one-time purchase volume to 4-5 times more than what they used to buy before COVID-19.

The grocery shoppers are also found to shop nearer to their houses as geographical restrictions were imposed as part of the standard operating procedures during the lockdown. The element of locality or "place" has been addressed by literature as a powerful influence on consumer's store choice decisions. Apart from being risky or costly, a strategic location could contribute to competitive advantages for the retailers (Ho, 2014; Levy et al., 2019; Lovelock & Patterson, 2015). In this study, consumers tend to prefer the closeness of a store location to their residential area or workplace as the primary consideration.

*"...because it is close to housing here. it is like in the middle like people say right... yes in the middle... because here is open until 12 o'clock again..." (Participant 5, supermarket)*

"...one of them is from this area near housing right. The area near housing area... and...near the federal office... so is this one of the opportunities..." (Participant 1, supermarket)

### **Theme (2) Emergence of the online marketing activities during Pandemic**

A consumption change is an interplay between demand vs. supply (Hall et al., 2020). Consumers' stockpiling behaviors seem to benefit the retailers in the short term. However, uncontrollable panic buying and bulk buying could lead to a shortage of grocery supplies and dissatisfactory shopping experiences as some customers may eventually leave the grocery stores empty-handed. Aware that consumers' responses to the emergency could dramatically impact their business, and they do not have much time to take action, retailers are learning and evolving. Specifically, while online grocery shopping has witnessed stable though limited growth in the last decade (Hand et al., 2009; Riley & Hand, 2017), online grocery has skyrocketed during the COVID-19 emergency due to the changes in buyer's preferences. In line with this unforeseen opportunity, the local grocery retailers are creating new approaches to move away from their traditional operations to capture organizational changes made by the Pandemic, such as adopting online commerce and e-payment. The availability of these services enhances more business opportunities on different platforms (Olazo, 2022; Wong et al., 2019).

This is substantiated theoretically by both commodity theory (Brock, 1968) and prospect theory (Tversky & Kahneman, 1992) which link how scarcity and risk aversion, respectively, may explain why consumers stockpile or hoard essential items. The theme generated from the content analysis explains the changing consumer behavior to shop online as well as their preference to shop via multiple platforms. It is human nature to learn skills through interpersonal communication and are motivated to learn proactively from social referents and the environment (Lam Kraus & Ahearne, 2010); many have turned to online communication and shopping during the current situation (Ting et al., 2020). This phenomenon was observed in many countries, and importantly, some argue that "*changing preferences are not likely to go back to the pre-outbreak period*" (Craven et al., 2020). This statement is partly agreed by Sheth (2020), whom he forecasted that it is not impossible that some habits might diminish as consumers find more convenient, affordable, and accessible alternative ways to shop during the lockdown; thus, bringing about structural changes to consumption as in consumers maintain their modified behaviours as what happened in China during the SARS pandemic in 2002-2003 (Clark, 2018).

The movement control orders of different phases and scales cause many people to work at home and reduce their outing frequencies to minimize the risk of infection. Consequently, Malaysian consumers minimize the frequency of grocery shopping, causing grocery retailers to have no choice but to offer more buying options and payment methods through their website or social media platforms such as Facebook and Instagram. In this study, some local grocery retailers upgrade their official websites to enable online commerce functions, while other smaller grocery retailers creatively utilize social messaging sites such as WhatsApp, WeChat, and Telegram to allow their customers to order for grocery. Some use the Facebook marketplace and Insta Checkouts to promote their products. Besides self-collection, the small grocery retailers provide door-to-door delivery with or without delivery charges to stay competitive during the pandemic. The delivery charges differ based on distance and volume of purchase. The emergence of e-delivery services such as Grab Mart, Food Panda Grocery Shop, and private runner services also allow more convenient grocery shopping alternatives.



Based on the findings, the grocery customers have the choice to make payments through debit, bank transfer, cash on delivery, or e-wallets during the Pandemic. However, customers in smaller towns still prefer cash payments due to their lack of exposure to the e-wallet payment. See some quotes to support the current findings:

*"...Credit cards are available... cash is available... boost is available..." (Participant 1, supermarket)*

*"...Yes, because our goal is to make it convenient and easy for customers to come to the store..." (Participant 4, minimart)*

The use of social media as a digital marketing strategy is vital during COVID-19 due to the increment online transactions (El Junusi, 2020). In addition, digital marketing allows effective communication among retailers and customers since it offers a wide variety of platforms to reach out to customers (Bolat et al., 2016; Royle & Laing, 2014). Some retailers are also utilizing social media platforms for sales promotion:

*"...Yes. We have Facebook. There every time there is a promotion like there is a new fish until then, we will post there..." (Participant 8, Supermarket)*

*"...Facebook alone... Facebook is just like that it's normal... if it's for those who sell from Facebook..." (Participant 2, supermarket)*

### ***Themes (3) Challenges in merchandise and store management during Pandemic***

The interview findings highlight several interesting challenges or issues faced by local grocery retailers during the COVID-19 pandemic period. The first challenge encounters the retailers is the merchandise management issues such as infrequent and inconsistent shipment frequency as well as delayed cargo clearance:

*"...due to many supplies couldn't send the products, a lot of the stocks were stuck in Kuala Lumpur..." (Participant 4, mini market)*

*"...I think the threat does not make enough stock, during the MCO, many customers but my store, not enough stock" (Participant 3, supermarket)*

Despite the earlier assumption that the Pandemic would lead to a downturn in seaborne trade, the shipping industry has experienced an increase in containerized trade flows and an unprecedented shortage of containers due to changing trade patterns and capacity imbalances (UNCTAD, 2021). Carriers, ports, and shippers are all shocked by the increase in maritime trade flows, and shipping costs surged as many containers are stuck at places where they are not needed. These have led to a shortage of in-stock availability, especially among the local grocery retailers who only play a small and passive role in the global supply chain system.

Zheng, Shou and Yang (2021) discussed several commonly adopted disruption risk management strategies which could be adopted by retailers, including diversifying the disruption risks by using multiple sources (e.g., Schmitt & Tomlin, 2012; Tomlin, 2006; Wang et al., 2010), holding the inventories (e.g., Tomlin & Wang, 2011), and improve the process to increase supply chain reliability (Wang et al., 2010). Holding the inventories could be an attractive and cost-effective strategy when the disruption is frequent but short-lived

(Tomlin, 2006), as in the case of panic buying. In other words, limiting the purchase volume could be a possible short-term solution for grocery retailers. However, this does not solve panic buying, as consumers would turn to other retailers and create another round of panic buying. As argued by Zheng et al. (2021), "the underlying decision mechanisms" between panic buying caused by intentionally induced product scarcity strategy vs. the perceived scarcity during a pandemic period are different, in which the latter one is not within the control of the retailers, in which they can only adjust the inventory strategy. Social learning could have induced more panic and increased the intensity of the panic than the accepted threshold and vice versa (Zheng et al., 2021). However, retailers will be on top of their games if they can predict and manage demand for groceries and other necessities demanded by consumers during the lockdown to avoid panic buying and stockpiling (Vader et al., 2020).

Store management, particularly the human resource constraint, is another challenge facing the local retailers. Retailers are facing lesser in-store customers and, at the same, a shortage of workers due to the movement control orders. Inter-district or inter-zone movement is restricted to customer visits and workers in different districts, while some workers could be quarantined due to the increasing number of local transmissions. The panic and bulk buying also lead to a heavier workload among the existing workers.

*"...because that time is limited... moreover our staff end up a lot... and not enough..."*  
(Participant 2, supermarket)

*"...during MCO, I can say that we do not have enough workers because every day there is a staff who are on leave..."* (Participant 6, minimart)

Hoe (2020) reports some trends in consumer behavior determined by the measures to limit physical contact and cash use during the pandemic crisis. By analyzing the effect of the COVID-19 Pandemic on the use of cash and payments, the work of Auer, Cornelli and Frost (2020) underlines that the shift toward digital payments might harm the older and unbanked consumer, which suggests that cash has to be defended. These older adults who are not well versed in online transactions or not active on the internet are at risk of social exclusion and feeling excluded from the digital society (Seifert, 2020). Thus, as the internet's societal pervasiveness grows, older offline people may become increasingly disadvantaged as a growing number of service providers has changed from personal service provision into virtual information on an online-only basis. To prevent this from happening, society must work together to minimize the risk of social exclusion in relation to digital content on the internet, especially regarding important health information or initiatives for social participation in times of physical distancing.

## **IMPLICATIONS AND RECOMMENDATION**

Based on the findings, the current study proposes in-depth insights and information encompassing the grocery industry's changes in buying behaviour, opportunities, and challenges during the Pandemic.

Kostev and Lauterbach (2020) argue that panic buying at a manageable level could benefit retailers and customers. From the healthcare perspective, patients could stockpile medicine at home for as long as physicians prescribe. Similarly, grocery consumers could have less frequent visits to stores by stockpiling grocery products to reduce the risk of infection. Zheng

et al. (2021) partially agree with this view; perceived product scarcity could benefit the retailers, especially when retailers have some control over the perceived scarcity. However, in the case of the COVID-19 Pandemic, where consumers could not foresee the future and perceived lack is hardly controllable by retailers, bulk buying and panic buying could lead to more disastrous impacts on the supply chain system. In other words, stockpiling is likely to be considered as a coping strategy for the anticipated shortage (Islam et al., 2021). This situation can be controlled and improved with the help of the retailers to mitigate the consequences of panic buying by accepting the substitution of products, considering the expected marginal revenue of holding inventory for the supply disruption and the holding cost (Tsao et al., 2019).

Retailers could play active roles not only in source for local supplies as an alternative solution to imported goods, but they could also play a part in making aware of consumers' vulnerability, special needs, acceptable times for responses, and possible health hazards during (offline) shopping expeditions, and should not underestimate the effect of retail service on consumers' sense of wellbeing. Local produce should be an alternative to the imported goods in serving the same needs. Retailers should reach out to more local farmers for fresher and cheaper locally produced vegetables, poultry, and meats.

At the same time, retailers must successfully transfer this awareness into communicating to their consumers how much they value their satisfaction and wellbeing, although it is more complex than usual in a time of uncertainty (Tarki et al., 2020). Safety and health should be the retailers' most profound concerns while providing the customer's products in a reasonable amount of time. A study by Pantano et al. (2020) stated that customers are more cautious in revealing their personal and sensitive information but do not hesitate to share this information in return for the benefits received. In addition, with proper explanation, consumers do not mind waiting if they are aware that such waiting is related to the enactment of safety measures, such as queuing for temperature checking or putting a limitation for a customer in the store to ensure social distancing. Awareness campaigns on sustainable consumption could be another way to curb the negative outcomes of panic and bulk buying.

It is essential for retailers to make a trade-off between the expected marginal revenue vs. costs of the holding stocks in determining the ordering quantity in which they should hold inventory for the forecast disruption as long as the revenue exceeds the holding costs. As suggested by Zheng et al. (2020), during the Pandemic, retailers can still make a profit by forecasting the supply disruption where a certain level of consumers' panic stockpiling will create some demand realized in advance. This has to be done carefully as if the panic exceeds the degree to which consumers' panic, unfortunately, will cause a severe shortage at the retailer and concurrently damage the retailer's profit (Tarki et al., 2020).

The government needs to realize the impact of panic and bulk buying on aggregate social welfare. Zheng et al. (2021) posit a large-scale panic buying could lead to a substantial shortage of basic necessities, making it essential for both government and retailers to control consumers' panic and protect social welfare. In fact, some argue that the ironic effect of negation (Adriaanse et al., 2011) for messages such as "Do not panic buying!" could intensify the panic and bulk buying frequency. Messages from community leaders or social influencers could be shared on social media platforms to highlight altruism and kinship to foster cooperation and reduce competition among customers for supplies (Stiff, 2020), as well as the adverse effects of panic buying and bulk buying on the less fortunate people, such as the B40 groups and food insecurity (Taylor, 2021).

Numerous controlling measures can be adapted to reduce panic buying. Media, for instance, could play a significant role in dealing with panic buying (Arafat et al., 2020). Strict media monitoring could be done to avoid any publication of unnecessary images that can cause panics, such as empty shelves, long queues in the retail stores, or anxious faces of in-store shoppers. The media should also provide adequate information on government capabilities in dealing with the supply chain (Lufkin, 2020) so that the people can understand and be confident that the government can deal with the crisis.

In conclusion, this study presents the findings of a qualitative inquiry into consumer behaviour, the challenges, and opportunities in the grocery retail industry in Malaysia. Several important insights are identified. First, panic and bulk buying were observed among retail grocery consumers. Second, the local grocery retailers provide various opportunities in buying, payment, and online marketing activities in response to the changes in consumers' buying patterns and behaviors. Also, the Pandemic has led to merchandise and stock management issues. Retailers need to make a tradeoff between marginal revenue and holding costs of stocks. It is important to note that close cooperation among grocery retailers, the government, and the general public is critical to curb the pandemic's negative effects and promote sustainable consumption and societal well-being.

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