

## Investigating the effect of perceived risk factors and COVID-19 pandemic situation on online shopping behavior among Malaysians

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### CHRONICLE

### ABSTRACT

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This study investigates the effect of perceived risks, i.e., financial risk, product risk, and convenience risk, as well as the COVID-19 pandemic situation on online shopping behavior among Malaysians. This study uses convenience sampling techniques and comprises 185 respondents who have experience buying online. In addition, the study setting was non-contrived, and data was gathered using a closed-ended questionnaire through an online survey. Descriptive analysis was conducted using SPSS version 25.0 software and SmartPLS version 3.2.8 to test the proposed hypotheses. This study found that perceived risk factors such as financial, product, and convenience risk did not influence online shopping behavior. In contrast, the COVID-19 pandemic positively influences online shopping behavior among consumers. It showed a new development in the theory of online shopping behavior, where users continue to make purchases despite being aware that there may be various risks due to the spread of COVID-19. The role of the ministry, business owners, and consumer associations needs to be given attention to form a sustainable electronic commerce system and protect the rights of consumers. This research can help consumers understand their rights.

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## 1. Introduction

Shopping is a functional and utilitarian activity and a way to socialize or have fun with hedonistic characteristics (Hirschman & Holbrook, 1982). Karekla et al. (2021) stated that digital transformation is changing how businesses use technology to promote productivity, customer engagement, and revenue. Each business has its strategy and takes a distinct route when going digital. Many studies show simply using and acquiring new digital technology is not always enough to achieve goals. The internet or online shopping offers several advantages regarding the information search stage and purchasing (Rose & Samouel, 2009; Rose & Dhandayudham, 2014). However, the Coronavirus Disease Pandemic 2019 (COVID-19) has changed the buying habits of Malaysians who used to buy in stores but now buy online. There has been a long history of fear of pandemic outbreaks (Donthu & Gustafsson, 2020). The discussion did not focus on whether there would be an outbreak but on whether new outbreaks would occur (Stöhr & Esveld, 2004). COVID-19 will majorly impact various industries (e.g., the publishing industry, travel and tourism industry) and significantly transform global trends (Bhatti et al., 2020; Nguyen et al., 2020). Given that physical stores may be forced to close temporarily and that consumers may not want to travel to such brick-and-mortar stores due to health issues, the demand for online shopping is expected to grow rapidly in the short term (Nguyen et al., 2020). This lifestyle change due to COVID-19 is concentrated in Malaysia and contributes to increased online shopping worldwide. In addition, many Malaysian customers made panic purchases due to implementing the Movement Control Order in March 2020 to prevent and control the coronavirus (Covid-19) (Mohamed, 2020). According to the World Health

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Organization (WHO), the COVID-19 crisis is far from over (Unknown, 2022). Furthermore, over 9,800 deaths were reported in week 3 of September 2022, indicating a 17 percent decrease in the number of deaths compared to the previous week, while 3.2 million new cases were reported (Unknown, 2022). However, research into the situational impact of online purchases is scarce. In particular, the COVID-19 pandemic appears to be a crucial situational factor that influences consumer behavior towards online shopping. Therefore, this study attempts to investigate the influence of perceived risks, namely financial risk, product risk, convenience risk and COVID-19 pandemic situation on online shopping behavior. This study was conducted comprehensively on consumers' online shopping behavior for all types of products across Malaysia. This study used perceived risks (Forsythe et al., 2006) as a main variable and the COVID-19 pandemic situation (Nguyen et al., 2020) as an additional variable to achieve this study's objectives.

The findings of this research will provide empirical evidence of factors that could influence online shopping behavior during COVID-19 and bring new insights into online shopping behavior, which is still a very limited area in consumer studies, especially during COVID-19. This study provides significant contributions to both theory and practice. In terms of theoretical contributions, this study extends the existing literature on online shopping behavior trends during COVID-19. The findings provide useful information regarding practical contributions to the government, companies and consumers. The information provided will help business owners construct marketing communication strategies and design appealing website environments.

## 2. Literature Review

### 2.1 Overview of online shopping behavior

Online shopping differs from traditional shopping in many ways (Burke, 2002; Eroglu et al., 2003; Koernig, 2003). Online shopping is a form of behavior in which consumers surf websites to find, select, evaluate, and buy products that are either ideas, goods, or services that fully satisfy their needs and wants (Ariff et al., 2014). Online shopping can provide greater product selection, accessibility, and convenience without time and space constraints (Brynjolfsson & Smith, 2000). A variety of internal and external factors influence online consumer shopping behavior. The internet has now become a prerequisite for consumers who want to shop online. Online shopping has created a new business model known as business-to-consumer (B2C), in which it is beneficial for an individual to use internet technology to buy and sell things electronically (Masoud, 2013). Malaysian online buying and selling activities have shown signs of improvement occasionally. Today, purchasing tangible things over Internet access via mobile devices such as mobile phones and tablets has become a regular way of life for Malaysian Internet users. Several websites have been built to help purchase and sell (Esa & Basri, 2018).

### 2.2 Hypotheses Development and Theoretical Framework

#### 2.2.1. Perceived Risks

Bauer (1960) defined perceived risk as the consumer's perception of uncertainty and the potential for unfavorable outcomes while purchasing a good or service. Barnes et al. (2007) highlighted that risk plays an important part in consumer behavior and contributes significantly to understanding information-seeking behavior and purchasing decisions. There are two theoretical viewpoints on risk: one based on the uncertainty of a choice result and the other on the costs or implications of such results. While consumers believe the internet has numerous benefits, the internet tends to amplify some of the uncertainty associated with any buying process (Lee & Tan, 2003). Masoud (2013) examined the effect of perceived risks, such as financial, product, time, delivery, social, and information security, on Jordan's online buying behavior. The findings revealed that financial risk, product risk, delivery risk, and information security all had a negative effect on online shopping behavior. On the other hand, perceived time and social risks do not affect online purchasing behavior. There are different levels of fear according to different types of risk when consumers do online shopping (Ariff et al., 2014). Esa and Basri (2018) mentioned that numerous factors influence consumers' online shopping decisions, and one issue that frequently arises in online purchases is fraud. Furthermore, time constraints prevent people from making in-person transactions, meaning they must go to the store to obtain things. Others include items that do not come after payment, goods that arrive damaged, and so on. Tham et al. (2019) investigated the effects of perceived risk factors on online shopping behavior. They discovered that perceived product and financial risks negatively impacted online shopping behavior. Ariff et al. (2014) and Crespo et al. (2009) analyzed the influence of perceived risk in online shopping and found that perceived risk has a negative effect on attitude. Aubel et al. (2022) mentioned that consumer risk perceptions are the lowest in the human manipulation condition, and they found that the risk was significant for privacy, although not for psychological, functional, or time risks.

##### 2.2.1.1. Financial Risk

Ariff et al. (2014) mentioned that consumers may be concerned about internet security when using credit cards and exposing personal information. Consumers may order things online, but most choose alternative payment methods such as cash on delivery, bank account transfers, and PayPal over using their credit cards. In other cases, customers are concerned that certain e-commerce websites are not safe enough and require continual reassurance. Previous research found that the fear of credit card fraud is one of the most expressed concerns when shopping online (Ariff et al., 2014; Masoud, 2013). Financial risk is

the belief that a specific sum of money could be lost or needed to fix a product (Masoud, 2014). Financial risk is the greatest concern of customers in the event of a financial loss due to credit card fraud, and this issue has a negative effect on attitude and online shopping behavior (Arriff et al., 2014), as well as the exposure of revealing personal information to scammers (Pallab, 1996). Therefore, based on the above literature, the following hypothesis was developed.

**H<sub>1</sub>:** *Financial risk has a negative influence on online shopping behavior.*

#### 2.2.1.2. Product Risk

Customers who shop online cannot physically inspect the quality of the merchandise since they can only rely on the limited information, sketches, visuals, graphics, and photos displayed on the computer screen (Kim, 2010). There was a possibility that the goods received would differ in size, color, and quality from those advertised (Esa & Basri, 2018). Therefore, it is possible that the things you buy will not perform as they are supposed to (Bhatnagar et al., 2000). Typically, a product's risk does not perform as intended after acquisition (Almoussa, 2011). It relates to the product performance risk, a cost for consumers when a brand or product does not function as anticipated as it claims because of the consumers' inability to accurately predict product performance (Saprikis et al., 2011). Hence the following hypothesis was included in the study:

**H<sub>2</sub>:** *Product risk has a negative influence on online shopping behavior.*

#### 2.2.1.3. Convenience risk

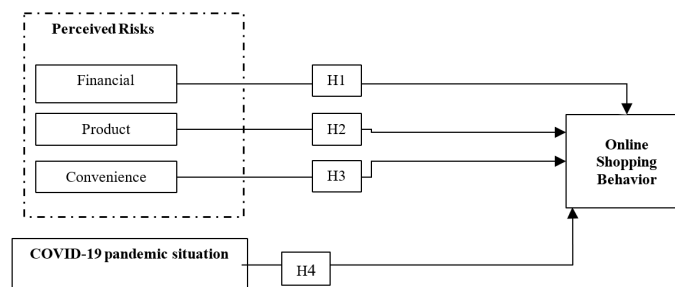
Dissatisfaction from online shopping is referred to as a “convenience risk”. The ease of the buying experience can influence consumers' perceptions of the degree of convenience risk (Kim, 2010). Tham et al. (2019) investigated the effect of convenience risk on online shopping behavior among Malaysian consumers. They claimed that convenience risk had a negative impact on online shopping behavior. Customers are concerned that deliveries will take longer than expected for some reasons, including the delivery service's failure to deliver the purchased products by the mutually agreed-upon deadline. Furthermore, convenience risk can relate to the risk perception of consumers who must spend significant time and effort adjusting and fine-tuning the acquired goods before their use (Chang & Chen, 2008; Lee & Tan, 2003). That led to the introduction of this hypothesis:

**H<sub>3</sub>:** *Convenience risk has a negative influence on online shopping behavior.*

#### 2.3 COVID-19 Pandemic Situation

These studies investigated the impact of situational factors on home and internet shopping. Gillett (1976) discovered that in-home shopping was frequently motivated by specific wants or circumstances, such as avoiding an extra drive to pick up a desired item. Following that, Morganosky and Cude (2000) observed that convenience was a particularly relevant motivation when there were situational constraints such as illness or the presence of small children in the home. Hand et al. (2009) claimed that situational factors, particularly those involving the use of technology, such as internet-based shopping, are seldom addressed in consumer behavior research. Nguyen et al. (2020) studied the impact of the COVID-19 pandemic situation on online book shopping among 275 Vietnamese customers. The findings of this study indicated that the COVID-19 pandemic has a positive relationship with consumer intention to purchase online. It is due to the literal closure of stores, health risks, the trend of internet purchasing, and marketing strategy efforts among shop owners during the pandemic. All these elements influence consumers' decisions to purchase books online. Eger et al. (2021) studied fear factors for health and economic well-being as a predictor of switching to online buying behavior, and they discovered that people of all ages limited their purchases to necessities and that fear about their health was significantly associated with changes in shopping behavior during the pandemic. According to this research, situational factors may play a significant role in forming and enhancing online purchasing motives. As a result, situational factors are now included as antecedent variables in the proposed framework. According to this empirical evidence, the following research hypothesis is shown:

**H<sub>4</sub>:** *COVID-19 pandemic situation factors have a positive influence on online shopping behavior.*



**Fig. 1.** Proposed framework for online shopping behavior

### 3. Methodology

#### 3.1. Population and Sample Determination

Convenience sampling was used in this study, which is strongly advised given the unidentified target population (Hulland et al., 2017). The Malaysian consumer was the survey's unit of analysis. The data were acquired using an online survey via Google Forms and circulated via social media. In terms of sample size, the G-power was utilized to calculate it, and five primary variables make up the model of the study. Based on the G-Power, the minimal sample size necessary was 129 respondents, with four predictors, an effect size of 0.15, an alpha of 0.05, and a power of 0.95 (as shown in Appendix 1). However, this study was able to obtain data from 185 Malaysian consumers. Therefore, this study's sample size of 185 is enough, and the findings can be used confidently.

#### 3.2. Measurement items

The questionnaire was divided into five segments. The instruments, which included 33 items (seven variables) related to the research framework, were adapted from previous research and refined for the setting of this study. In section A, respondents were asked about their online shopping behavior using a five-point Likert scale (1 = strongly disagree and 5 = strongly agree), as used by Aref and Okasha (2020), Laohapensang (2009) and Moon and Kim (2001). Section B includes 15 questions about perceived risk factors (financial risk, product risk, and convenience risk) adapted from Forsythe et al. (2006). Section C includes five questions about the COVID-19 pandemic situation adapted from Nguyen et al. (2020). All questions in sections B through C were graded on a seven-point Likert scale (1 = strongly disagree and 7 = strongly agree). Section D queried respondents about their gender, age, marital status, employment, monthly income, education level, ethnicity, religion and work experience. Furthermore, two content experts and one language expert have consented to every item used in the study.

#### 3.3. Data Analysis

This study examined the measurement and structural model using partial least squares (PLS) modelling with the SmartPLS 4 version (Henseler et al., 2015). The data does not have to be normally distributed if PLS is used as the statistical method. Furthermore, the survey research data is frequently not normally distributed (Chin et al., 2003). However, as indicated by Hair et al. (2017), the multivariate normality was tested by looking at the skewness and kurtosis using the tools provided at:

<https://webpower.psychstat.org/models/kurtosis/results.php?url=0271e46319ff2a476ac97e0f0adfcac3>. The analysis exhibits that the Mardia's multivariate skewness was ( $\beta = 10.101$ ,  $p < 0.01$ ) and the Mardia's multivariate kurtosis was ( $\beta = 45.595$ ,  $p < 0.01$ ). Hence, it can be said that the data was not normal. Hence, the use of PLS-SEM for this study is appropriate. Hence, the data was slightly abnormal and applying the Smart PLS software in this study is appropriate. Next, before further analysis, it was disclosed that common method variance (CMV) should be free from bias if the data were collected from a single source (MacKenzie et al. 2011). To avoid CMV, the study used a procedural approach in which the different anchor scales were used to qualify exogenous and endogenous variables.

### 4. Results

#### 4.1. Demographic Profile of Respondents

As can be seen in Table 1, 185 respondents (83.2%) were female, and the rest (31,16.8%) were male. Regarding age, the largest proportion (141) of the respondents (76.2%) were aged between 18 to 25 years old and this is followed by 20 respondents aged between 41 years old and above and only two respondents aged between 26 to 30 years old.

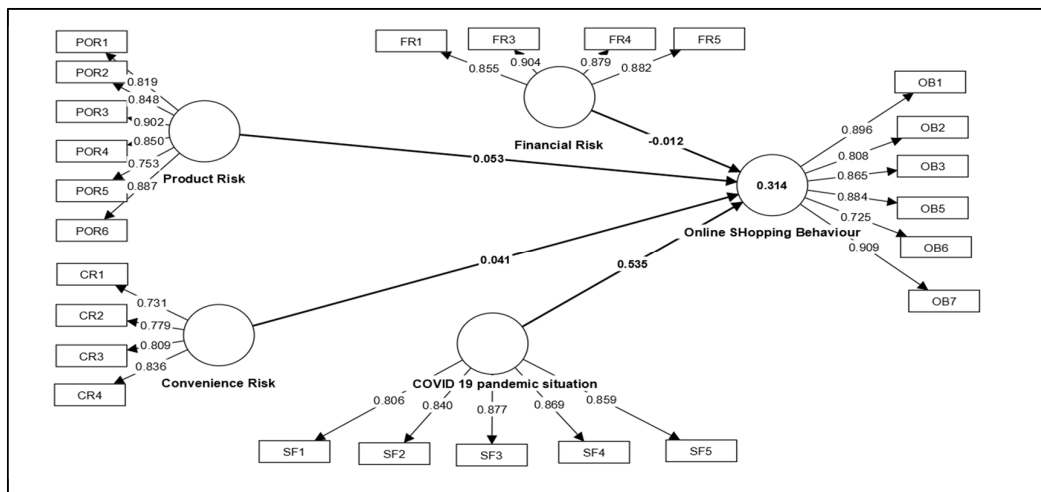
**Table 1**  
Demographic Profile of Respondents (N=185)

Profile	Description	Freq	%	Profile	Description	Freq	%
Gender	Male	31	16.8	Residence	Urban	117	68
	Female	154	83.2		Rural	68	36.8
Marital Status	Married	37	20	Education Level	Higher School/SPM Certificate	10	5.4
	Not Married	142	16.8		Diploma	3	1.6
	Others	6	3.2		Bachelor's Degree	69	37.3
					Bachelor's Degree	79	42.7
			Master's Degree		15	8.1	
Age (years)	18 - 25	141	76.2	PhD	9	4.9	
	26 - 30	2	1.1	Occupation	Government	28	15.1
	31 - 35	10	5.4		Private	17	9.2
	36 - 40	12	6.5		Self-Employed/Business	4	2.2
			Student		130	70.3	
Race	Malay	185	100				

As indicated in Table 1, just over half of the respondents were diploma and Bachelors' Degree holders (148, 80%), and all were Muslim (185, 100%). Furthermore, the largest group of respondents (130, 70.3%) were students. Migratorily, the respondents stayed in urban areas (117, 68%). Finally, all respondents (185, 100%) belonged to the Malay ethnic group. Table 2 shows the result of evaluating the discriminant validity of the model. All loadings that surpass the recommended value of 0.708 (Hair et al., 2017) are maintained. Because of the lower loading values, items FR2 and OB4 were removed. As a result, after the item deletion procedure, all five constructs meet the CR and AVE threshold values and minimum cut-off values, with all CRs better than 0.7 and all AVEs greater than 0.5 (Hair et al., 2017).

**Table 2**  
Measurement Model

Construct	Items	Loading	CR	AVE	Construct	Items	Loading	CR	AVE
Online Shopping Behavior	OB1	0.896	0.940	0.723	Product Risk	POR1	0.819	0.937	0.714
	OB2	0.808				POR2	0.848		
	OB3	0.865				POR3	0.902		
	OB5	0.884				POR4	0.850		
	OB6	0.725				POR5	0.753		
	OB7	0.909				POR6	0.887		
	Financial Risk	FR1				0.855	0.932		
FR3		0.904	CR2	0.779					
FR4		0.879	CR3	0.809					
FR5		0.882	CR4	0.836					
SF1		0.806	0.929	0.723	COVID 19 pandemic situation	SF2		0.840	
SF2	0.840	SF3				0.877			
SF3	0.877	SF4				0.869			
SF4	0.869	SF5				0.859			
SF5	0.859								



**Fig. 2.** Path analysis result for measurement model

Next, the HTMT approach is used to evaluate the discriminant validity as proposed by Henseler et al. (2015). According to Franke and Sarstedt (2019), the Heterotrait-Monotrait (HTMT) ratio is a stringent way of confirming a study's discriminant validity when using the Smart PLS. As seen in Table 3, all the values meet the requirement of HTMT<sub>90</sub> (Gold et al., 2001) and HTMT<sub>85</sub> (Kline, 2011). It was clear that the study's discriminant validity had been established. Table 3 displays the results of the HTMT ratio analysis.

**Table 3**  
HTMT Criterion

	1	2	3	4	5
1. COVID 19 pandemic situation					
2. Convenience Risk	0.152				
3. Financial Risk	0.147	0.399			
4. Online Shopping Behavior	0.593	0.143	0.105		
5. Product Risk	0.269	0.268	0.516	0.206	

Before analyzing the structural model, it is critical to ensure no lateral collinearities. All of the inner VIF values for all of the variables (financial risk, product risk, convenience risk, COVID-19 pandemic situation, and online purchasing behavior) that need to be analyzed for multicollinearity are less than 3.3, showing that multicollinearity is not a concern in this study (Diamantopoulos & Sigauw, 2006). Before evaluating the structural model, it is vital to confirm that there is no lateral collinearity issue in the structural model. All the inner VIF values for all the variables (financial risk, product risk, convenience risk, COVID-19 pandemic situation and online shopping behavior) that need to be examined for multicollinearity are less than 3.3, indicating that the multicollinearity is not a concern in this study. In order to analyze the hypotheses of this study, a bootstrapping method was used with a resampling of 5000 proposed by Hair et al. (2017). Based on the path coefficient assessment presented in Table 4, only one relationship was discovered to have a t-value > 1.645, making it significant at the 0.05 significance level. The COVID-19 pandemic positively influences online shopping behavior, accounting for 31.4% of the variations. Thus, H4 is supported but not for H1, H2 and H3. The R<sup>2</sup> value of 0.314 is above the 0.26 value, indicating that it is a substantial model, as Cohen (1988) suggested.

**Table 4**  
Result of hypotheses testing

No	Path Model	Beta	Std. Error	t-value	Confidence Interval (BC)		R <sup>2</sup>	VIF	Result
					LL	UL			
H1	Financial Risk → Online Shopping	-0.012	0.081	0.142	-0.192	0.093	0.314	1.372	Not Supported
H2	Product Risk → Online Shopping	0.053	0.084	0.635	-0.076	0.200		1.373	Not Supported
H3	Convenience Risk → Online Shopping Behavior	0.041	0.066	0.617	-0.075	0.141		1.215	Not Supported
H4	COVID-19 pandemic situation → Online Shopping	0.535	0.083	6.412	0.389	0.661		1.091	Supported

Shmueli et al. (2019) proposed that PLS-predicts is a hold-out sample-based procedure that generates case-level predictions on an item or a constructed level using the PLS predictions with a 10-fold procedure to check for predictive relevance. Shmueli et al. (2019) also suggested that there was a high predictive power if all the item differences (PLS-LM) were lower than LM. If all the item differences are higher than LM, then the predictive relevance is not confirmed. There is moderate predictive power if most item differences are lower than LM. If the minority of item differences are lower than LM, then there is low predictive power. As seen in Table 5, the analysis results show that all item differences are higher. Based on guidelines by Shmueli et al. (2019) for online shopping behavior, the result of this study showed that the predictive power of this model is high predictive power.

**Table 5**  
Prediction Summary

Items	Q <sup>2</sup> predict	PLS-SEM RMSE	LM RMSE	PLS-LM
OB1	0.179	0.757	0.814	-0.057
OB2	0.186	0.906	1.012	-0.106
OB3	0.221	0.739	0.798	-0.059
OB5	0.232	0.704	0.76	-0.056
OB6	0.058	0.928	0.993	-0.065
OB7	0.219	0.764	0.829	-0.065

## 5. Discussion

This study investigates how perceived risks, such as financial, product, convenience, and the COVID-19 pandemic, influence online shopping behavior. However, H1, H2, and H3 were unsupported, which found that perceived risk, specifically financial, product, and convenience, had no negative influence on online shopping behavior during COVID-19. The results of this study are distinct from those of previous studies. Based on Ariff et al. (2014), Crespo et al. (2009) and Tham et al. (2019), perceived risks, including financial risks, product risks, and convenience risks, have a negative impact on online shopping behavior. Consumers are reluctant to make online purchases because of the perceived risks. The adverse consequence intended here is that when perceived risk rises, consumers will make fewer online purchases. On the other hand, the findings of this study demonstrate that the COVID-19 pandemic condition is not a barrier to consumers' continued use of the internet for shopping. It is because all Malaysians have been told to practice social distancing, such as working from home (WFH) or staying at home, as part of the government initiative to prevent the spread of COVID-19. As a result, online shopping has become increasingly important because it is the only option for meeting daily needs. Although people are concerned about the perceived risks associated with internet shopping, they are equally concerned about acquiring COVID-19. In addition to adhering to the standard operating procedures (SOPs) established by the government and the Malaysian Ministry of Health, it is not surprising that the COVID-19 pandemic has a positive influence on online shopping behavior. Therefore, hypothesis 3 in the study is consistent with Eger et al. (2021) and Nguyen et al. (2020). In April 2022, the statistics showed 4,346,421 people infected with COVID-19, 4,006 new patients and 10,223 patients who have recovered from the outbreak (Kementerian

Kesihatan Malaysia, 2022). It indicates that more patients are affected by COVID-19, and the spread of the virus is becoming more serious. It has led to a rise in online shopping. It suggests that the COVID-19 pandemic has increased online buying and selling activities. Therefore, the current situation favors business owners to pursue aggressive sales while developing their talents to become digital entrepreneurs. In line with Vorzhakova and Boiarynova (2020), it highlighted that the increasing role of digitalization in the operation of enterprises actualizes the implementation of the basic methods of proper digitalization processes. In addition, selecting an appropriate method to introduce digitalization is crucial, as it affects the optimization level of the business operation. In this situation, business owners' ability to run their firms more successfully and efficiently is heavily reliant on their knowledge of IT and other digital skills. Thus, the current situation is an excellent opportunity for business owners to introduce or diversify their product offerings. In addition, customers also have many options without having to leave the house. Although the perceived risk factor does not influence online shopping behavior significantly, business owners should be more responsible and not take advantage of the COVID-19 pandemic. It is essential to grab this opportunity to grow their business or increase their market share because business activities can be conducted without regard to geographical limitations.

## 6. Conclusion & Recommendation

The ministry must view its role in enhancing the cooperation between many parties, such as the Consumer Association, Polis Diraja Malaysia, Bank Negara Malaysia, Malaysian Communications Commission, Cyber Security Malaysia, SME Corporation, and Multimedia Development Corporation, to ensure that all online business transactions are carried out in compliance with the law. Then, it has been encouraged that business owners should use the Malaysian Trustmark website to facilitate the ministry's monitoring procedure. Additionally, improvements to consumer protection rules address to online business transactions. Finally, the Malaysian Communications and Multimedia Commission should play its role in educating consumers to be more cautious while making online purchases, such as by implementing social marketing. In this situation, it is clear that business owners' ability to run their firms more successfully and efficiently is heavily reliant on their knowledge of IT and other digital skills. Thus, the current situation is an excellent opportunity for business owners to introduce or diversify their product offerings. In addition, customers also have many options without having to leave the house. Although the perceived risk factor does not influence online shopping behavior significantly, business owners should be more responsible and not take advantage of the COVID-19 pandemic. It is essential to grab this opportunity to grow their business or increase their market share because business activities can be conducted without regard to geographical limitations.

Finally, the COVID-19 pandemic situation caused perceived risks to have no negative impact on online shopping behavior. During the COVID-19 epidemic, it was discovered that there is a distinct phenomenon in consumers' online shopping behavior in which perceived risks, namely financial risks, product risks, and convenience risks, do not prevent consumers from purchasing via the internet. Consumers, on the other hand, must take precautions when shopping online. While business owners must be honest and responsible when conducting business, consumers are perceived as a little desperate when purchasing. Business owners must remember that acquiring new consumers is easy but retaining them is difficult. Lastly, the ministry should be aware of any misconduct by online business owners and use all social media platforms to spread related messages to consumers.

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**Appendix 1****Research Instrument**

Variable	Coding	Statement	Ahor(s) & Year
<b>Online Shopping Behavior</b>	OB1	I do my shopping on the internet	Aref & Okasha (2020) Laohapensang (2009) Moon & Kim (2001)
	OB2	I use the internet frequently to shop for products	
	OB3	Whenever appropriate, I will do an online shopping	
	OB4	I choose to do online shopping to gain experience	
	OB5	For me to shop online is convenient	
	OB6	Buying online was a satisfactory experience	
	OB7	I will buy again online	
<b>Situational factors</b>	SF1	Many physical stores close during the COVID-19 pandemic	Nguyen et al., (2020)
	SF2	There are significant health risks associated with visiting physical stores during the COVID-19 pandemic	
	SF3	Online stores extend their product portfolio during the COVID-19 pandemic.	
	SF4	Online stores offer more sales promotions during the COVID-19 pandemic.	
	SF5	Online shopping is a trend during the COVID-19 pandemic	
<b>Perceived Risks</b>			
<b>Financial risk</b>	FR1	I feel personal data might be lost or used incorrectly by the website	Forsythe et al. (2006)
	FR2	May purchase something by accident	
	FR3	My financial information may not be secured	
	FR4	I may not get what I want	
	FR5	Might be overcharged	
<b>Product risk</b>	POR1	The information provided on the website may be exaggerated for advertising purposes	
	POR2	Can examine the actual product	
	POR3	Size may be a problem to choose right clothes	
	POR4	Cannot try on clothing online	
	POR5	Inability to touch and feel the item	
	POR6	Must pay for shipping and handling	
<b>Time /Convenience risk</b>	CR1	Too complicated to place order	
	CR2	Difficult to find appropriate websites	
	CR3	Pictures take too long to come up	
	CR4	Time required to buy and obtain the travel items will be longer on the website	



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