

Drivers of Consumer Behaviour in Using E-shopping during the Covid-19 Pandemic

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Abstract

This study aims to examine four factors that drive consumers to engage in e-shopping during the Covid-19 pandemic. The factors are environmental concern, ethical responsibility, lack of alternatives, and panic buying. This survey focused on consumers who have online shopping experience. A total of 241 responses were received. The data was analysed using SPSS version 27 and SmartPLS 3 for descriptive and inferential analyses, respectively. The findings show that environmental concern, ethical responsibility, and lack of alternatives significantly correlate with consumer behavior to use e-shopping during the pandemic. However, panic buying did not significantly influence consumers to shop online during the pandemic. The research findings will contribute to the managerial implications for online retailers with insightful information. It can be used by the consumers as the guideline for e-shopping in their future transactions. The research limitations and recommendations for future research are discussed in the final section.

Keywords: e-shopping, consumer behavior, pandemic, environmental concern, ethical responsibility

Introduction

The outbreak of Covid-19 has altered consumers' way of life. According to Donnell (2020), consumer behavior has shifted to new spending ways due to the pandemic. A survey by Standard Chartered reveals that over 73% of Malaysians made online purchases due to the pandemic. Fifty-one percent of the survey respondents indicated that they prefer online payment rather than paying physically with cash or credit card. Furthermore, the survey found that the increased preference for online payments is applicable across various shopping categories, including groceries and digital items (Jaafar, 2020).

Online shopping has been gaining popularity since consumers can reduce their search effort and save time. Besides that, more comprehensive product selection and superior quality products are available online than physical stores, which offer limited choices (Chin et al., 2018). From 2015 to 2017, e-commerce revenue in Malaysia increased by 6% yearly (MIDA, 2020). When the pandemic hit Malaysia in 2020, more purchases shifted from traditional brick-and-mortar shops to online retailers. According to Malaysiakini (2020), e-commerce posed a much more threat to traditional retailers. Traditional players have already suffered from the worst sales since 1987 (The Edge Markets.com, 2020). Reportedly, 80% of the survey respondents aged between 16 and 64 years in Malaysia prefer to make online purchases. The yearly growth rate of e-commerce is forecasted to be 8.4%, a significant disparity with traditional retailing global growth of 2.2% annually.

However, there are specific issues with online shopping. For instance, online food purchases are often risky, involving

food quality issues. The current pandemic contributed to new challenges for online purchasing, as handling the Standard Operating Procedures (SOP) of food products or essential products is unknown to the consumers. The main concern being could items purchased possibly be infected with the virus of the food delivery staff. This risk perception of buying online during the pandemic may influence peoples' usage of web shopping. The lack of environmental products created difficulties for consumers to buy especially green food and environmentally friendly products online. Besides, these products are costly, and often hard to purchase green food via the internet platform.

Another problem is e-commerce fraud, where for online purchases, there is an e-service that could encompass deliberate or unpredictable delivery of products. According to Pillay (2017), there is a rising problem of e-retailers who had to defend their responsibility for lost items. Most cases blamed the courier companies for the missing parcels. Similarly, Katrina and Benedict (2019) noted that 9% of consumers had experienced an online purchase that did not receive the product ordered. Another 23% received a product that was different from what was promised. Therefore, it raises the question of whether ethical responsibility will influence the usage of e-shopping.

Lack of alternatives may also drive consumers to shop online during the pandemic. To reduce the spread of the virus, the Malaysian government imposed legal fines on individuals if they did not wear face masks in public places and imposed the costly RM1,000 compound amount (Yeoh & Qarirah, 2020). At the same time, other Movement Control Order (MCO) restrictions discourage consumers from visiting traditional malls for shopping purposes. Thus, consumers are driven to make purchases online. Not every product is suitable to buy online, such as clothing, as the consumer cannot try and inspect the genuine item (Katawetawaraks & Wang, 2011). Therefore, it is vital to examine if the lack of alternatives influences customer decision to buy online during the pandemic.

Panic buying has reportedly occurred during the pandemic when consumers panic about the insufficient availability of food and other essential items to purchase. The transparency of e-commerce shopping platforms whereby consumers can see the rate and number of products being sold out in real-time likely cause consumers to do panic about buying to stock up the required items. As a result, panic buying may affect consumers' decision to purchase online.

The objective of this study is to investigate the driving factors, i.e., environmental concern, ethical responsibility, lack of alternatives, and panic buying on consumers' behaviour to use e-shopping. The findings will help online retailers focus on the essential drivers for more consumers to purchase from their websites during this pandemic.

Literature Review

Consumer Behaviour in E-Shopping.

Consumer behavior can be defined as people using their buying power to search for or purchase products and services that meet their needs and desires (Echchakoui, 2016). In Hashem (2020), the researcher observed that consumer behaviour involving acquiring goods and services includes all actions and behaviours that consumers directly or indirectly carry out.

Malik and Gupta (2013) described the features of the e-commerce environment as unique, intangible, inseparable, and diverse. The main reason is due to the internet platform where both goods and services are considered intangible. With online shopping, consumers have greater convenience and no geographical boundary (Dharmesti et al., 2019). Thus, consumers may still intend to buy products online, although they have no chance of tasting, feeling, and touching the physical goods (Malik & Gupta, 2013).

According to Li et al. (2018), gratification theory (UGT) can explain consumer behaviour in online shopping. It could help determine the social and psychological needs that lead consumers to choose particular platforms for online shopping. It could also study the role of consumer behaviour and motivation for consumers to interact online with companies (Tran, 2020). The Covid-19 pandemic may have increased consumers' intention to buy online rather than from traditional physical retail outlets because consumers perceive the health and safety benefits (Tran, 2020).

Environmental Concern.

According to Hao and Song (2020), environmental concerns relate to the range of people recognizing the environmental harms and are trying to avoid them. Brieger (2019) noted that environmental concerns could be seen from two perspectives: cognitive and affective. The cognitive perspective looks at the harm to the environment, whereas the affective perspective is getting solutions to protect the environment. Environmental concerns can be viewed as an approach and solution to one's behaviour towards the environmental implications (Fransson & Gärling, 1999). When consumers are concerned about the environment, they are more willing to change their consumption behaviour to protect the environment. Sustainable consumption means that consumers engage in green lifestyles to meet their needs without sacrificing the earth's resources and damaging future generations (Sharma & Jha, 2017).

While the Covid-19 pandemic has sparked global alarm as it spreads rapidly, the disease may have also positively affected society. It made consumers more concerned about health and safety and pushed them to shop online to reduce the chance of contracting the virus. It also fosters the wise use of purchasing online to improve quality of life and reduce environmental pollutants (Guillen-Royo, 2019). Additionally, environmentally conscious people tend to have positive behaviour to consume green items to protect the environment. According to McCarthy (2015) and Westervelt (2015), the concern about

environmental issues and self-interest, such as worrying about family health and safety, are the primary factors why consumers buy green foods. Therefore, community safety is the main reason for adopting online shopping, buying intention during the pandemic period (Tran, 2020).

Some past studies found that environmental concerns have a direct relationship with consumer behaviour in online shopping. Hartmann and Apaolaza-Ibáñez (2012) observed that environmental concerns influence consumers' purchasing behaviour of green products. It was also noted that consumers who adopt green products tend to be more friendly towards the environment than the general population. Hence, the following is suggested for this current study:

H1: Environmental concern is significantly related to consumer behaviour in e-shopping during the Covid-19 pandemic.

Ethical Responsibility.

Ethics are related to the ethical aspects of voluntary actions that affect other people. It could also refer to human behaviour from the perspective of their properness or fault. In the research by Kurt and Hacıoglu (2010), these researchers argued that the critical responsibility of online retailers is to deal equally, decently, and carefully with customers. In online retailing, there are some crucial ethical dimensions: privacy, security, and trustworthiness highlighted in these researches (Sharma & Lijuan, 2014; Kurt & Hacıoglu, 2010; Limbu, Wolf & Lunsford, 2011).

Protection of information is a critical element of the consumers' ethical beliefs when they shop online. The consumer has to share personal and private information with the online retailer and trust that the details will be kept confidential (Elbeltagi & Agag, 2016; Limbu et al., 2011). Past research demonstrates that consumers have concerns regarding the business practices of web retailers that may potentially expose their details (Limbu et al., 2011). A subsequent study by Elbeltagi and Agag (2016) also found that consumer opinions about online sellers are primarily on privacy issues. Therefore, online retailers should act responsibly concerning data protection to increase credibility and consumer confidence to make internet purchases.

Another consumer concern with ethical responsibility is the security of the online seller. This area is related to the online transaction's security and protection against unauthorized access to financial details (Limbu et al., 2011). There are two types of security concerns. Financial security refers to providing financial information, while non-financial security relates to disclosing personal information (Elbeltagi & Agag, 2016). Limbu et al. (2011) also showed that online shoppers are seriously worried about transferring financial information to online retailers. If online sellers mishandle their customer details either unintentionally or intentionally, pass the information to other parties, ethical issues may arise and cause online shoppers to perceive the ethical behaviour of the online seller negatively.

The Covid-19 pandemic has been causing economic problems resulting in financial hardships for some consumers. Hence, online retailers become essential characters to help decrease the burden of consumers who buy online by delivering genuine products as promised on their websites. The ethical attitudes of the online sellers would benefit both the company and their customers (Kurt & Hacıoglu, 2010). The main reason is that the retailer's ethical behaviour can make customers satisfied with the business firm, which is an essential step for the company's long-term success. On the other hand, unethical retailers will lose customers quickly. Thus, it is vital to examine the ethical responsibility of online retailers during the pandemic, and the following is proposed:

H2: Ethical responsibility is significantly related to consumer behaviour in e-shopping during the Covid-19 pandemic.

Lack of Alternatives.

Lack of alternatives refers to the availability of the feasible competitive alternatives available in the market from the perspective of consumers. Salem and Nor (2020) noted that consumers perceive a lack of alternatives in traditional physical shops. However, there are viable competing alternatives when e-commerce is used for shopping purposes, and many options are available on the internet. Following the pandemic, consumers have to adopt safer and healthier options by using the online platform as a shopping mortar alternative (Salem & Nor, 2020). Other authors describe lack of alternative as switching behavior (Chin et al., 2018; Akwensivie, 2014). According to Chin et al. (2018), switching behavior can be regarded as the means of changing from one choice to another from consumers' perspective. For example, the purchases of goods from physical stores moved to e-shopping in the marketplace, and the consumers were delighted and enjoyed their choice to shop online.

It is reasonable to infer that E-stores or E-retailers should provide more variety of goods to draw consumers to make purchases online (Nagar & Gandotra, 2016). E-retailers can offer a broader range of attractive products to online shoppers. Since online shops have been overgrowing and consumers have discovered that website shopping is feasible to purchase products, many potential customers may be willing to buy online (Nagar & Gandotra, 2016). Therefore, the hypothesis is suggested as below:

H3: Lack of alternatives is significantly related to consumer behaviour in e-shopping during the Covid-19 pandemic.

Panic Buying.

According to several researchers, panic buying refers to the negative perceived sense of insecurity and instability that affects the consumer’s usual purchase behavior (Lins & Aquino, 2020; Arafat et al., 2020). For example, the Covid-19 pandemic makes society have feelings of fretfulness and scarcity. People are uncertain if and when the disaster will come to an end. As such, they try to acquire all essential needs by purchasing as large quantities of items as possible. Hence, panic buying also relates to the significant increases in purchasing more essential goods than regular demand, which surface during an epidemic or disaster that disrupts economic activities (Arafat et al., 2020). Consumers tend to build up vital products such as rice, pasta, flour, fresh food, and other crucial items to avoid lack of required necessities during the pandemic (Yoon, Narasimhan & Kim, 2017).

Online shopping channels can help reduce panic buying of foodstuff as it is a convenient way to shop, enabling consumers to avoid the risk of infection in crowded places (Hao, Wang & Zhou, 2020). Obviously, e-commerce businesses can earn high profits and gain credibility for their contribution, particularly in food supply services. The study by Hao et al. (2020) on the Shanghai e-commerce platform found that sales, especially for fresh food items, had gone up by 167%, and orders increased by 80%. Furthermore, the daily number of active shoppers increased by 125%. Thus, the research findings imply that online shopping for fresh food may reduce consumers' panic about insufficient food supplies during the pandemic.

Similarly, a survey by Burian, Nielsen and Winder (2020) on consumers showed that 45% bought goods for storage purposes. Out of this, 25% of them made online purchases. The data indicates that panic buying causes consumers to buy more usual to keep. In China, other than the standard websites that consumers use to buy fresh food items, online platforms such as Jing Dong or Taobao are used as the shopping medium. They became popular on social media during the pandemic (Hao et al., 2020). Thus, the following is suggested:

H4: Panic buying is significantly related to consumer behaviour in e-shopping during the Covid-19 pandemic.

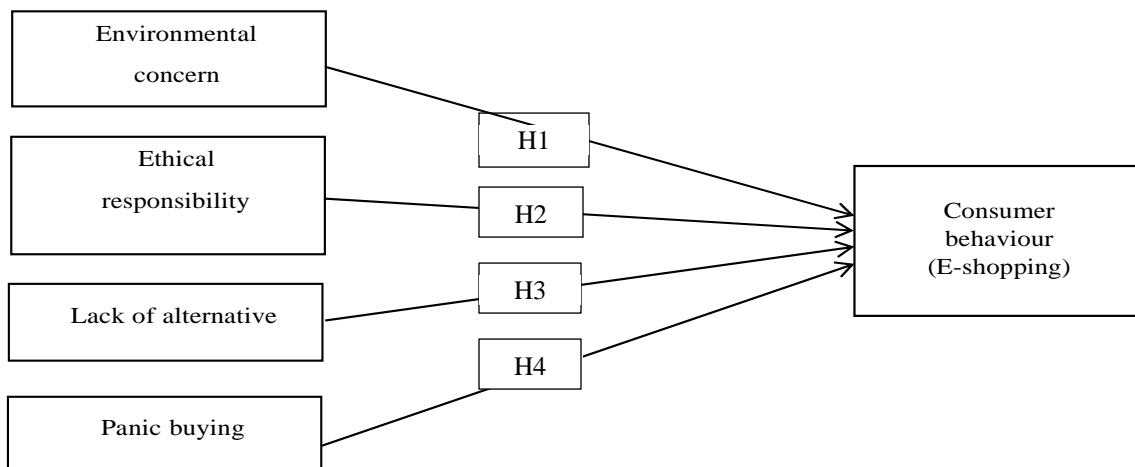


Figure 1: Research Framework

Research Methodology

This study uses structured questionnaire to collect data from respondents residing in Klang Valley, Malaysia. The main advantages of this kind of question are less time-consuming and efficient for respondents by providing certain particular options (Zikmund et al., 2013). The survey questionnaires were in English and contained close-ended questions in a five-point Likert scale from 1 - Strongly Disagree to 5 - Strongly Agree. The questionnaire is separated into three sections. The first section consists of general questions. The second section contains questions about the demographics of the respondents. The third section includes closed-ended questions for the respondents to rate their level of agreement with the factors that influence consumer behaviour in e-shopping during the pandemic.

Data collection

This study used the non-probability sampling technique, and convenience sampling was selected. The non-probability sampling technique is using the convenience and personal judgement to pick the sample unit (Zikmund et al., 2013). The questionnaires were distributed in Klang Valley which has the largest population in Malaysia (Hirschmann, 2021). A total of 241 sets of useable of questionnaires were collected for data analysis.

Assessment of measures and path modeling

This study used a two-stage procedure to assess the measurement model. Firstly, to test for the integrity of the measures, using validity and reliability test to verify the data. According to Sekaran and Bougie (2016), validity tests how well an instrument can measure any particular concept that it plans to measure. In contrast, reliability may be defined as whether the measuring instrument has internal stability and consistency to measure whatever concept it is supposed to measure (Sekaran, 2003). Secondly, to investigate the structural model to test for the strength and direction of the relationship of the path between constructs.

Descriptive Analysis

Demographic Profile

In total, 241 responses were received. Most of the respondents are female (63.9%), while the rest are males (36.1%). In terms of age, most respondents are between 18 and 28 years old (76.8%). Most have obtained an undergraduate education (58.1%) and have a monthly income of less than RM4,000 (78%). Lastly, for the frequency of e-shopping, most respondents shopped online less than twice per month (59.3%). The result shown 60.2% of respondents are using E-shopping because of the Covid-19 pandemic while 39.8% of respondents are not starting to use E-shopping during the pandemic time. The summary of the demographic profile is shown in the Table 1.

Table 1: Summary of the Demographic Profile

	Frequency	Percent (%)
Gender		
Male	87	36.1
Female	154	63.9
Age		
18-28 years old	185	76.8
29-39 years old	39	16.2
40-50 years old	13	5.4
Above 51 years old	4	1.7
Use E-shopping because of the Covid-19 pandemic?		
Yes	145	60.2
No	96	39.8
Education level		
High school	15	6.2
Diploma	31	12.9
Undergraduate	140	58.1
Postgraduate	51	21.2
Doctorate and above	4	1.7
Monthly income		
Less than RM4000	187	78
RM4001-RM6000	24	10
RM6001-RM8000	14	5.5
Above RM8000	16	6.5
Frequency of E-shopping		
Less than two times/month	143	59.3
Three times/month	37	15.4
Four times/month	14	5.8
Above four times/month	47	19.5

Data Analysis and Findings

SPSS version 27 was utilized for descriptive data analysis. In order to validate the measurement and hypotheses testing, the research used SmartPLS 3 (Ringle, Wende & Becker, 2015) for verification. After the validation, as Chin (2010) suggested, the researcher used the two-step procedure to evaluate the research model. Firstly, the measurement model is assessed for reliability, followed by convergent and discriminant validity. Secondly, it followed to examine the structural model to determine the strength and direction of the path relationship.

*Measurement Model Evaluation**Reliability.*

Table 2 shows composite reliability values ranging from 0.877 to 0.941. As shown, the values are all above the minimum threshold of 0.70, hence indicating high internal consistency reliability within each construct (Nunnally, 1978).

Table 2: Construct Reliability and Validity

Model Construct	Measurement Item	Loading	Composite Reliability	Average Variance Extracted (AVE)
Consumer behaviour	Consbehav1	0.829	0.913	0.677
	Consbehav2	0.794		
	Consbehav3	0.784		
	Consbehav4	0.837		
	Consbehav5	0.868		
Environmental concern	Envirncon1	0.783	0.877	0.587
	Envirncon2	0.783		
	Envirncon3	0.785		
	Envirncon4	0.742		
	Envirncon5	0.736		
Ethical responsibility	Eth resp1	0.757	0.912	0.675
	Eth resp2	0.842		
	Eth resp3	0.833		
	Eth resp4	0.851		
	Eth resp5	0.820		
Lack of alternative	Lack Altert1	0.724	0.879	0.594
	Lack Altert2	0.783		
	Lack Altert3	0.780		
	Lack Altert4	0.814		
	Lack Altert5	0.748		
Panic buying	Panic buy1	0.800	0.941	0.761
	Panic buy2	0.879		
	Panic buy3	0.896		
	Panic buy4	0.898		
	Panic buy5	0.885		

Convergent Validity.

The convergent validity of the individual constructs is assessed through the average variance extracted (AVE) values. From table 2, all AVE scores are above the lower limit of 0.50, thus supporting the convergent validity of the items in each construct (Fornell & Larcker, 1981). Additionally, the figures confirm that the five constructs encompassing consumer behaviour: environmental concern, ethical responsibility, lack of alternatives, and panic buying are valid measures of their respective constructs based on the parameter estimates and statistical significance as all p-values fall below 0.05.

Discriminant Validity.

Assessment of the discriminant validity between the constructs is conducted through three criteria, i.e., by examining the (1) cross-loadings, (2) AVE square root, and (3) heterotrait monotrait ratio (HTMT). Firstly, the cross-loadings are presented in Table 3. All the measurement items loaded higher against their intended latent variable than the other variables. Moreover, the results demonstrate that the loadings of each block are higher than their loadings with other blocks in the same rows and columns, therefore confirming discriminant validity between the model constructs.

Table 3: Cross Loadings

	Consumer behaviour	Environmental concern	Ethical responsibility	Lack of alternative	Panic buying
Consbehav1	0.829	0.495	0.441	0.701	0.356
Consbehav2	0.794	0.501	0.420	0.589	0.318
Consbehav3	0.784	0.408	0.453	0.473	0.410
Consbehav4	0.837	0.484	0.462	0.593	0.327
Consbehav5	0.868	0.545	0.422	0.591	0.312
Envirncon1	0.503	0.783	0.475	0.377	0.406
Envirncon2	0.465	0.783	0.409	0.374	0.336
Envirncon3	0.389	0.785	0.382	0.295	0.288
Envirncon4	0.432	0.742	0.342	0.356	0.173
Envirncon5	0.468	0.736	0.319	0.472	0.156
Eth resp1	0.342	0.404	0.757	0.272	0.349
Eth resp2	0.488	0.424	0.842	0.464	0.394
Eth resp3	0.398	0.380	0.833	0.353	0.340
Eth resp4	0.484	0.451	0.851	0.430	0.424
Eth resp5	0.449	0.417	0.820	0.443	0.366
Lack Altert1	0.488	0.291	0.415	0.724	0.342
Lack Altert2	0.583	0.381	0.318	0.783	0.250
Lack Altert3	0.610	0.399	0.385	0.780	0.270
Lack Altert4	0.608	0.441	0.416	0.814	0.296
Lack Altert5	0.470	0.376	0.345	0.748	0.234
Panic buy1	0.413	0.376	0.478	0.367	0.800
Panic buy2	0.321	0.277	0.352	0.316	0.879
Panic buy3	0.367	0.361	0.409	0.326	0.896
Panic buy4	0.352	0.239	0.361	0.278	0.898
Panic buy5	0.343	0.290	0.374	0.265	0.885

The second criterion is that the AVE square root must be more than its correlation with other constructs (Fornell & Larcker, 1981). From table 4, the off-diagonal values are less than the AVE square root along the diagonal, thus establishing adequate discriminant validity between each construct in the research model.

Table 4: Discriminant Validity

	Consumer behaviour	Environ-mental concern	Ethical responsibility	Lack of alternative	Panic buying
Consumer behaviour	0.823				
Environmental concern	0.594	0.766			
Ethical responsibility	0.533	0.506	0.821		
Lack of alternative	0.723	0.494	0.487	0.771	
Panic buying	0.416	0.359	0.459	0.36	0.872

Thirdly, the heterotrait monotrait ratio (HTMT) has to be examined for discriminant validity, as Henseler et al. (2015) suggested. The most recent approach is required to estimate the actual correlation between two constructs, whereby the recommended threshold value is 0.90 (Henseler et al., 2015). Values above 0.90 indicate that discriminant validity is lacking. From table 5, it shows that all values are less than 0.90. Thus, it meets the HTMT criterion, which supports discriminant validity between the model constructs.

Table 5: Heterotrait-Monotrait Ratio (HTMT)

Consumer behavior	Environmental concern	Ethical responsibility	Lack of alternative	Panic buying
0.688				
0.600	0.589			
0.831	0.587	0.561		
0.460	0.401	0.500	0.409	

The structural model is evaluated for issues with collinearity and model relationships. In order to assess if there is collinearity between constructs, the variance inflation factor (VIF) is used. For this research, the inner VIF range from 1.324 to 1.636. Since all inner VIF values fall below the threshold of 5, they indicate no major collinearity issues. The path model is shown in Figure 2, and the related results from the hypotheses tests are presented in Table 6.

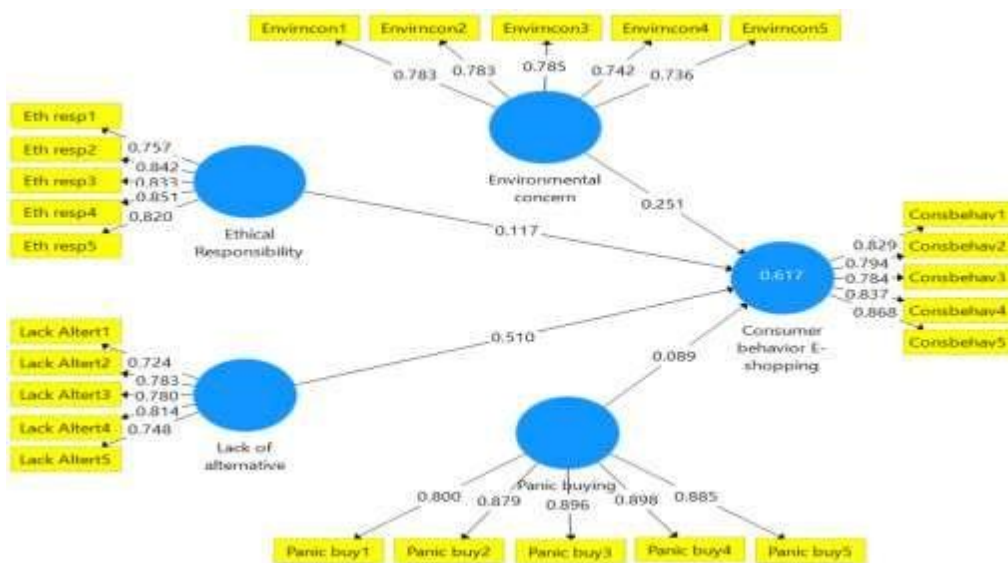


Figure 2. Results of the Path Model

Based on the results in Table 6, lack of alternative has the most significant influence on consumer behaviour in e-shopping with a p-value less than 0.05 ($p=0.000$) and t-value over 2.26 ($t=10.099$). Thus, H3 is supported. The next most significant factor which affects consumer behaviour in e-shopping is an environmental concern, with $p=0.000$ and $t=4.567$, therefore

supporting H1. Ethical responsibility is the third most significant factor affecting the e-shopping behaviour of consumers ($p=0.022$, $t=2.291$), which supports H2. However, panic buying has a p-value greater than 0.05 and a t-value less than 2.26 ($p=0.073$, $t=1.796$). Thus, H4 is not supported. These results indicate panic buying is not significantly related to consumer behaviour in e-shopping during the Covid-19 pandemic

Table 6: Hypotheses Test Results

	Coefficient	Standard Deviation (STDEV)	t-values	p-values	Supported
H1: Environmental concern -> Consumer behavior	0.251	0.055	4.567	0.000	Yes
H2: Ethical Responsibility -> Consumer behavior	0.117	0.051	2.291	0.022	Yes
H3: Lack of alternative -> Consumer behavior	0.510	0.050	10.099	0.000	Yes
H4: Panic buying -> Consumer behavior	0.089	0.049	1.796	0.073	No

In terms of predictive relevance, the coefficient of determination, R^2 , is assessed. R^2 may be anywhere from 0 up to 1. From table 7, the R^2 for the endogenous construct, Consumer behaviour is 0.617. Thus, for the current research model, 61.7 % of the variance in Consumer behaviour is explained by the exogenous constructs comprising of environmental concern, ethical responsibility, lack of alternative and panic buying. In general, higher R^2 indicates higher level of accuracy and explains a high amount of variance in Consumer behavior (Hair et al., 2014).

Table 7: R Square

	R Square	R Square Adjusted
Consumer behavior	0.617	0.61

Discussions

The Covid-19 pandemic has shifted the current business model and led to a new paradigm for Malaysia in terms of the entire e-commerce world that leads to the changes of the nature of the current business model. The impact affected the business operation; it shifted the consumer buying behaviour and the e-commerce and digital world trend. This study aims to examine the relationship between customer behaviour during Covid-19 pandemic and the e-shopping element. The findings show a relationship between environmental concern, ethical responsibility, and lack of alternatives, whereas panic buying has no relationship toward consumer behaviour in using e-shopping.

The research by Cherian and Jacob (2020), proved that the public is concerned about the environmental issues, and green elements for products will be the primary consideration in their purchase intention; they should buy the green products even though during the Covid-19 pandemic. Nowadays, consumers are concerned about environmental factors when buying through online platforms. This statement was reinforced by Hartmann and Apaolaza-Ibáñez (2012). These researchers stressed that environmental concerns would affect the consumer decision to buy green products. The research carried out by Sun, Su, Guo and Tian (2021) highlighted that self-regulation and green consumption behaviour are highly related to being adopted under the influence of the current pandemic.

One of the crucial factor practices by the e-sellers will be ethical responsibility. Amir, Mannan, and Nasiruddin (2020) proved a good business ethic, will attract loyal consumers for long-term business relations, especially during a hard time of the pandemic. It leads to the high confidence gained by the existing and potential consumers towards the e-seller. This factor could also be used to differentiate them from their competitors using an online platform. (Creyer, 1997).

In the research by Maat and Konings (2018), the lack of alternatives will change the buying habit of the consumers through the online shopping platform during the pandemic situation. Consumers can spend more time with excellent access and saving time through online purchase because direct buying physically is prohibited during this period,

besides avoiding the epidemic's impact. Kaufman-Scarborough and Lindquist (2002) mentioned that e-shopping provided choices through multiple channels and platforms to get the necessary items. Therefore, with more alternatives, online purchases are more likely to increase. Hao, Wang and Zhou (2020) also proved that online purchase choices could avoid crowded shopping malls and reduce the risk of infection due to the pandemic. To avoid crowded places, most of the consumers prefer e-shopping to purchase their daily necessities products, especially foodstuffs. Therefore, e-shopping now-day has become a famous stage where it could offer an assortment of products with diverse attributes and make e-shopping a more multifaceted business model for their consumers.

The research findings found there is no relationship between panic buying to online shopping in Malaysia. Lins and Aquino (2020) found a positive relationship between these two variables as impulse buying or panic buying links to the emotional states. The main reason could be the strictness of the standard operating procedure (SOP) in every place. The possible reasons could be that the essential industries in Malaysia are allowed to operate; therefore, panic buying is unnecessary during the pandemic. Based on the research by Hence, Arafat et al. (2020), the main reason for panic buying behaviour could be triggered by the rumors spread by the social media on shortages of the supply and trigger consumer in panic buying.

Conclusions

This research focuses on the driving forces of consumer behaviour such as environmental concern, ethical responsibility, lack of alternatives, and panic buying in using e-shopping during this pandemic. The research is helpful for online retailers on how to change to the new paradigm, doing business in abnormal norms, switching mindset and adjusting their company strategy in the Covid-19 competitive environment. The company will not expect an increase in sales and profits; at least, the intention is to maintain their brick-and-mortar business status quo.

The research provides insights into managerial implications. The e-sellers and e-commerce companies should offer varieties of green products during the pandemic period and sell value-for-money products for the sustainability of the healthy lifestyle, to attract new and loyal customers. E-sellers should ensure variety by offering alternatives or choices of goods to improve their bottom-line for firm sustainability in terms of supply chain management by reducing the congestion in the warehouse and physical shops through online purchase.

To ensure no panic buying, replenishment of stock becomes a good practice for e-sellers. Also, limiting the amount and quantity of purchases for particular essential grocery items can reduce customers' anxiety and fulfill their basic needs. On top of that, the ethical behaviour of the e-sellers is critical during this period, to avoid good returns and minimize the reversed logistics, in gaining their reputation besides reducing hassles for good returns to upkeep company's image, particularly during the pandemic time.

The industry should provide training for staff development to build a positive attitude and increase the integrity towards good ethical behaviour when dealing with customers, to get repeated purchases through word-of-mouth promotion that ultimately boosts the company image and share price. The company should allow pick up in the conventional brick and mortar shop for convenience and saving the postal charge. E-shopping will be the norm in the long run; companies can promote their business using e-commerce platform in advertisement and promotion to create consumer awareness about the product's ranges and increase sales and profit in the long run.

To overcome all these challenges, one of the popular programmes implemented by the Malaysian government was the "Buy Malaysian" campaign to rejuvenate the economy (Povera & Harun, 2020). The different shopping platforms such as Shopee, Lazada, Go Shop, and E-sellers to enhance this campaign's success besides reducing anxiety on out of stocks allows local entrepreneurs to increase revenues and reduce customer panic feelings.

This study is not without its limitations, the hassle for data collection during the Covid -19 pandemic, restricted in terms of the follow up process, and narrow geographical coverage in the Klang Valley only. For future research, researchers can explore the buying behavior from the psychological perspective and post Covid towards consumer buying behaviour, and the impact on the e-shopping patterns due to the potential new business model in the near future.

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