

Factors Affecting Consumer Behaviour during the Covid-19 Pandemic in Malaysia

Sudhashini Nair*, Goh Ming Wei, Neeta Jayabalan, Ilangovan Perumal

Faculty of Business, Accounting, Communication and Hospitality Management, SEGi University, Selangor, Malaysia

Abstract: Consumer behavior has changed during the Covid-19 pandemic in all spheres of life. In Malaysia, there was a surge in e-commerce, a preference to buy essential goods from trusted brands while being cautious with spending. During the pandemic, Malaysian consumers have been more careful about spending their money and where they spend their money. Based on the review of past literature, the study's goal was to examine the relationships of variables such as perceived severity, cyberchondria, self-efficacy, and self-isolation on consumer behavior during the Covid-19 pandemic in Malaysia. The aim of the study was also to highlight the implications of the study that will be beneficial to the Malaysian government, the consumer association, and retailers. The quantitative research method was used to conduct this study via online questionnaires. The target respondents were consumers from Selangor between the ages of 20 to 60, mainly those with jobs and who earned a monthly income. A total of 196 respondents answered the questionnaire. The reliability, linearity, normality, correlation, and multiple regression tests were conducted using SPSS. The study results revealed that only perceived severity and self-isolation had significant relationships with consumer behavior. The scientific novelty of the study was that both cyberchondria and self-efficacy were insignificant. These findings imply that both cyberchondria and self-efficacy do not affect the consumer behaviour of Malaysian during the pandemic. The implications of the research findings were discussed.

Keywords: consumer behavior, perceived severity, cyberchondria, self-efficacy, self-isolation.

马来西亚新冠肺炎大流行期间影响消费者行为的因素

摘要：在新冠肺炎 大流行期间，消费者的行为在生活的各个领域都发生了变化。在马来西亚，电子商务激增，人们倾向于从值得信赖的品牌购买必需品，同时对支出持谨慎态度。在大流行期间，马来西亚消费者在花钱和花钱的地方都更加谨慎。基于对过去文献的回顾，该研究的目标是检查在马来西亚新冠肺炎大流行期间感知严重性、网络软骨、自我效能和自我隔离等变量对消费者行为的关系。该研究的目的还在于强调该研究对马来西亚政府、消费者协会和零售商的影响。本研究采用定量研究方法，通过在线问卷调查进行。目标受访者是雪兰莪州 20 至 60 岁的消费者，主要是那些有工作和每月有收入的人。共有 196 名受访者回答了问卷。使用社会科学统计软件包进行可靠性、线性、正态性、相关性和多元回归测试。研究结果表明，只有感知的严重性和自我孤立与消费者行为有显著关系。该研究的科学新颖性在于，网络软骨症和自我效能感都微不足道。这些发现表明，网络软骨症和自我效能感都不会影响大马人在大流行期间的消费者行为。讨论了研究结果的影响。

关键词：消费者行为、感知严重性、网络软骨症、自我效能感、自我隔离。

1. Introduction

Consumption is a form of communication for

consumers to position, express, and distinguish themselves in society or affiliated groups [1]. On the other hand, consumer behavior is the intention of

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About the authors: Sudhashini Nair, Goh Ming Wei, Neeta Jayabalan, Ilangovan Perumal, Faculty of Business, Accounting, Communication and Hospitality Management, SEGi University, Selangor, Malaysia

Corresponding author Sudhashini Nair, sudhashini@segi.edu.my

consumers to participate in the decision-making process that involves the evaluation, acquisition, and use or disposal of products and services [2]. [3] mentioned that consumers purchase products when they need them. The consumer decision-making process includes five stages: problem recognition, information search, evaluation of alternatives, purchase decision, and post-purchase behavior. Similarly, [4] stated that consumers have different behaviors at each stage of the consumer decision-making process. Although the consumer market is highly saturated, most businesses are faced with several competitors who do precisely what they do; as such, the study of consumer behavior is vital in helping businesses understand what drives customers to make a purchase [5]. This information is vital in allowing businesses to refine every area of their business, from the product to the marketing and services. Although consumer behavior develops over time about what, when, and where to consume, behavior is contextually based on social context, technology, consumption rules, and regulations or ad hoc natural disasters. The Covid-19 pandemic may have also affected consumer behavior, and studying its impact would allow businesses to develop marketing strategies to meet consumers' needs and feelings [6].

During the Covid-19 pandemic, social distancing and lockdowns caused significant disruptions to consumer behavior, leading to new habits [6]. That is consistent with the research done by [7], which mentioned that consumers worldwide were looking for products and brands in new ways and forming new habits. Similarly, [8] stated that more than 60% of global consumers had changed their shopping behavior during the pandemic. A study in Malaysia by [9] found that 85% of Malaysian consumers wash their hands or use sanitizer more frequently than before, explaining new habits. Besides, stay-at-home orders have led to significant reductions in spending, especially in sectors related to social interaction and mobility [10]. Furthermore, compared to pre-pandemic levels, visits to non-essential businesses fell by 51%, total travel distance fell by 33%, and sales of restaurants and non-restaurant small businesses fell by 37% [10]. In addition, the role of technology in shopping, primarily e-commerce, has triggered unique consumer behavior during Covid-19 [11]. In fact, since the beginning of Covid-19, 43% of all respondents had shopped online, compared with 12% before the pandemic [12]. In India, Covid-19 led to a significant increase in stocking behavior and impulse buying behavior in India [13]. [14] mentioned that Indian consumers only buy or consume essential products, such as groceries, choose local products for availability, ease of use, quality assurance, and use technology in shopping activities. In Europe, consumers in Greece and Sweden have similar behaviors, only stockpiling certain products, such as dry food and sanitizers [15]. Furthermore, a study on

consumer behavior in China showed that the scale of food reserves was extended from 3.37 days to 7.37 days after the Covid-19 outbreak [16]. In the United States (U.S.), it was found that all consumers cut spending from March 2020 to early April 2020 due to the Covid-19 pandemic [17]. [18] mentioned that understanding consumer behavior and its complexity is challenging. Nevertheless, understanding consumer behavior enables marketers to improve their marketing activities to reach consumers more effectively, especially during the pandemic. Similarly, [19] stated that understanding consumer behavior could help leaders and managers promote their brands. Additionally, it enables companies to understand the reaction of potential customers to new products or services [20].

Past studies have revealed that corporate social responsibility, social media, perceived usefulness, ease, risk, and user acceptance may affect consumer behavior [21-25]. However, there is still a shortage of research examining the effect of perceived severity, cyberchondria, self-efficacy, and self-isolation on consumer behavior in Malaysia during the Covid-19 pandemic [26-31]. Therefore, this study aims to determine the impact of perceived severity, cyberchondria, self-efficacy, and self-isolation on consumer behavior during Covid-19 in Malaysia, which can help marketers develop appropriate marketing strategies that can increase profits. Additionally, the results can predict or control the perceived severity, cyberchondria, self-efficacy, and self-isolation levels in future outbreaks or pandemics.

In Malaysia, there is an increase in the perceived severity of the Covid-19 Omicron variant infection as the daily infection in Malaysia reached almost 15,000 at the beginning of February 2022; this has a possible effect on consumer behavior in Malaysia [32]. The research by Fitch Solutions Country Risk and Industry Research at the beginning of January 2022 saw that sales and consumer confidence indices were still struggling to resume pre-pandemic levels [33]. Furthermore, according to [34], the perceived severity of Covid-19 is one of the factors that influences consumer behavior. In fact, [35] stated that the perceived severity of Covid-19 at the beginning of the year 2020 led to panic buying showing a clear indication of the effect of perceived severity on consumer behavior in Malaysia. Hence, this study will examine the relationship between perceived severity and consumer behavior during the Covid-19 pandemic in Malaysia.

Studies have shown that the number of cyberchondria cases has increased due to Covid-19 [36-38]. In Malaysia [39] mentioned that most Malaysians obtain information about Covid-19 through social media (97.4%), mass media (94%), friends and family (79.3%), and medical staff (59.8%), and this has proved that cyberchondria has increased due to the high

rate of online information search. According to [40], cyberchondria can cause anxiety and other mental health problems, affecting daily life. [41] also revealed that misinformation and anxiety caused by several viral videos hinder Malaysia's Covid-19 vaccination program for teenagers. In order to reduce cyberchondria, health experts advise consumers to stop searching for symptoms on the Internet [42]. Thus, this study will examine the impact of cyberchondria on consumer behavior during the Covid-19 pandemic in Malaysia.

Moreover, this study will explore the issue of self-efficacy in Malaysia. For example, during the Covid-19 pandemic, some Malaysians could not shop as usual because they thought they could not afford it, indicating a low self-efficacy level. Although the Malaysian government has provided subsidies, especially for the people living in poverty, it does not entirely solve this issue [43]. In addition, the successful experience of Chinese medicine in China has convinced some Malaysians that the implementation of Chinese medicine can help prevent and control the spread of the Covid-19 virus, showing a high level of self-efficacy [44]. Therefore, this study will examine the impact of self-efficacy on consumer behavior during the Covid-19 pandemic in Malaysia.

Furthermore, self-isolation during Covid-19 in Malaysia will be studied as well. Self-isolation helps prevent the spread of Covid-19 [45]. In Malaysia, self-isolation led to changes in consumer behavior, with consumers buying more groceries and cooking from home [46]. People must strictly practice self-isolation, especially those who have tested positive for Covid-19. Like other countries, the Malaysian government encourages people to use Covid-19 self-test kits to detect infection quickly. Those found to be positive should practice self-isolation to prevent the spread of the Covid-19 virus effectively; this has also affected consumer behavior [47]. Self-isolation has also led to an increase in digital media, such as social media and online games [48, 49]. Therefore, this study will examine the effect of self-isolation on consumer behavior during the COVID-19 pandemic in Malaysia. Although research on consumer behavior is essential, research on consumer behavior during the Covid-19 pandemic in Malaysia is minimal. Thus, it is necessary to study consumer behavior in Malaysia, especially during the Covid-19 pandemic.

2. Literature Review

2.1. Perceived Severity

Perceived severity is defined as the individual's perception of the degree of damage caused by engaging in a health-threatening situation [50]. In fact, in a study conducted by [51] in Wuhan and Shanghai, China, it was found that perceived severity had a significant relationship with consumer behavior during the Covid-

19 pandemic. The authors found that psychological and behavioral responses to Covid-19 were very intense during the rising stage of the Covid-19 outbreak, and perceived severity is the strongest predictor of behavior changes. In another similar study conducted in China, perceived severity positively impacted consumer behavior, including the increase in mobile phone usage [52]. The authors mentioned that although perceived severity is usually associated with more emotional and behavioral problems, it was also associated with more preventive behaviors.

On the other hand, according to the study conducted by [53], spending has dropped significantly due to the Covid-19 pandemic. However, the perceived severity of Covid-19 has led to an increase in boredom state and sensation-seeking expression, which is closely related to impulsive buying behaviors after the pandemic. The findings of the results indicate that the perceived severity of Covid-19 may affect the willingness to consume after the pandemic and affect Chinese people's future consumption patterns. Besides that, [54] surveyed in the U.S. found that people with higher perceived severity of Covid-19 were more likely to take preventive measures, such as wearing a mask, which directly impacts consumer behavior, especially the purchase and consumption of health care products. Hence, based on the literature review, the following hypothesis is proposed:

H1: There is a significant relationship between perceived severity and consumer behavior during the Covid-19 pandemic in Malaysia.

2.2. Cyberchondria

Cyberchondria is an excessive or repeated search of health-related issues on the Internet that are distressing or anxiety-provoking [55]. [56] stated that there is a strong relationship between cyberchondria and consumer behavior, especially with an online shopping addiction. Spending more time on the Internet can lead to cyberchondria, affecting online shopping behaviors. The authors found that 63.4% of participants indicated that the frequency of online shopping had increased. Besides, the study [57] had similar results, showing that excessive use of the Internet caused consumers to move towards cyberchondria, which ultimately led to intentional unusual purchases. The study also found that consumers' buying behavior has changed from physical shopping to online shopping. In addition, [58] conducted a study related to cyberchondria and social media use in Saudi Arabia and found that cyberchondria is more common among young adult females, who spend more time searching for health information and purchasing health products online than males. According to the research conducted by [59], it was found that cyberchondria had a significant relationship with consumer behavior in India during Covid-19. In the study, most participants took preventive behaviors, including wearing masks,

affected by the range of information received on the Internet. Thus, cyberchondria increased online purchase behavior, especially health care products. In another study conducted in Vietnam, the frequent use of the Internet to search for health-related information, also known as cyberchondria, is a typical safety-seeking behavior [60]. The safety-seeking behaviors also include increased consumption of toilet papers, masks, and hygiene products. Hence, based on the literature review, the following hypothesis is proposed:

H2: There is a significant relationship between cyberchondria and consumer behavior during the Covid-19 pandemic in Malaysia.

2.3. Self-Efficacy

[61] defined self-efficacy as the individual's capacity to produce essential effects. [61] stated that higher levels of self-efficacy indicate that individuals are more motivated to perform specific tasks. Higher levels of self-efficacy are associated with better preventive behavioral responses in a pandemic outbreak, such as the SARS and influenza A pandemics. People with higher levels of self-efficacy are more likely to take preventive measures, including washing hands and wearing masks, which directly affect their buying behavior in healthcare and hygienic products. Furthermore, [63] study on vegetable consumption behavior of Nigerians discovered a link between self-efficacy and consumer behavior. People who have a higher sense of self-efficacy in preparing vegetables have a higher consumption of vegetables. The study also mentioned that improving self-efficacy can increase vegetable consumption. Moreover, a [64] study on consumers' purchase behavior of halal food in Bangladesh found that self-efficacy significantly affects the purchase of halal food. According to the study, consumers' self-efficacy in purchasing halal food directly affects their perceived behavior control, which directly affects their purchasing behavior. [65] have studied the relationship between self-efficacy and online shopping behavior among Spanish game app players.

The study revealed that game-related self-efficacy promotes the e-commerce of game-related products. If gamers demonstrate self-efficacy when purchasing online game-related products, they will get more games and accessories online. Additionally, consumers who exhibit low self-efficacy are unsure and feel uncomfortable shopping online. Hence, based on the literature review, the following hypothesis is proposed:

H3: There is a significant relationship between self-efficacy and consumer behavior during the Covid-19 pandemic in Malaysia.

2.4. Self-Isolation

In this study, self-isolation is defined as separating ill persons with contagious diseases from others to protect those who are not infected [66]. A study

conducted in Adelaide, Australia, [67] discussed the relationship between self-isolation and consumer behavior.

The authors found that after implementing self-isolation measures in April 2020, there was a reduction in alcohol consumption due to reduced socialization and alcoholism in bars and clubs. It has shown that self-isolation impacts consumers' alcohol purchase behavior. [68] mentioned that people reduced consumption in entertainment categories, such as casinos and movie theaters. However, the shortage of essential foods such as vegetables, grains, protein, and healthy fats showed that consumers buy more essentials during self-isolation. Besides, [69] conducted a study in the United Kingdom (U.K.) to examine the relationship between self-isolation and consumer behavior.

The results showed that people who do not self-isolate went out to buy non-essential goods. That indicates that a low self-isolation rate is related to high purchase behavior, especially non-essential goods. According to [70], Finnish consumers reduced their spending on non-essential items such as travel, clothing, and cosmetics during self-isolation. On the other hand, Finnish consumers only increased their spending on essentials during the self-isolation period, mainly on food. The study also pointed out that most consumers tend to shop more online due to self-isolation. In a similar study conducted by [71] in China and Russia, during the self-isolation period, the entire "product" category is expected to decline except for the "fresh products" category.

The study also mentioned that those who increased spending aimed to create stocks during the self-isolation period. Hence, based on the literature review, the following hypothesis is proposed:

H4: There is a significant relationship between self-isolation and consumer behavior during the Covid-19 pandemic in Malaysia.

Fig. 1 shows the conceptual framework based on the literature review.

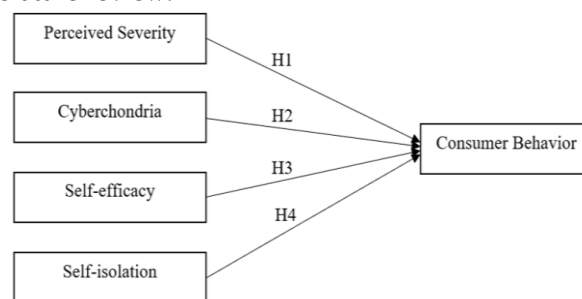


Fig. 1 The conceptual framework

3. Research Method

3.1. Sample

This research employed a deductive approach using a quantitative method. Data were collected from 196 residents in Selangor between the ages of 20 and 60

who had to have a job with income Questionnaires were distributed online. The sample was collected using the purposive sampling technique's non-probability sampling method. Fig. 2 shows the research methodology flowchart.

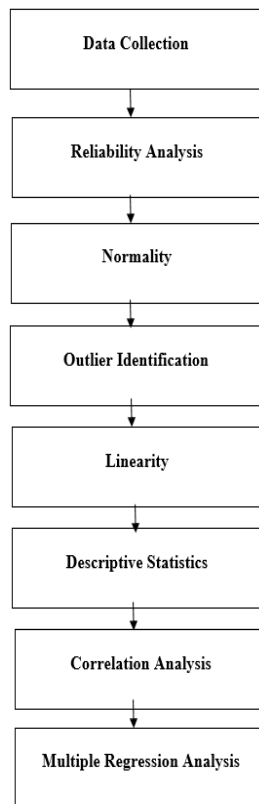


Fig. 2 The research methodology flowchart

3.2. Questionnaire Design

The questionnaire required business owners to answer questions on their demographic profile that covered gender, age, race, highest education level, marital status, income level, and industry. The second section required respondents to answer questions related to the variables in this study. A four-item scale was used to measure consumer behavior adapted from [72]. A four-item scale was also used to measure perceived severity adapted [50] and [54]. The variable cyberchondria employed a four-item scale adapted from [73]. Self-efficacy was adapted from [50], and self-isolation was adapted from [69] and [74], both using a four-item scale as well. Each of the variables in this study was measured using a 5 point Likert scale ranging from (1) "strongly disagree" to (5) "strongly agree". Data analysis was conducted using Statistical Package for Social Sciences (SPSS) software.

3.3. Data Analysis

The results of the overall reliability test of the study were 0.868, which is above 0.70. The reliability test for each variable was above 0.70 (0.696 for perceived severity, 0.788 for cyberchondria, 0.668 for self-efficacy, 0.806 for self-isolation, and 0.656 for consumer behavior). The Z-score test showed a value of -3.703, within $-3.29 < Z < 3.29$, the acceptable standard range. Therefore, it indicates that the data was

average. To confirm the outcome value of the Z-score test, the boxplot chart generated from SPSS had no outliers. Moreover, a linearity test was conducted to determine the linearity of the relationships between the independent variable and the dependent variable using a scatter plot graph. The randomized pattern of the scatter plot indicated that the linearity assumption was met [75].

3.4. Demographics of Respondents

The respondents comprised 35 percent male and 65 percent female. In terms of the age of respondents, about 60 percent of the respondents were between the age of 20 to 30 years. 85 percent of the respondents were Chinese, and 10 percent of the respondents were Malay. 62 percent of the respondents had a Bachelor's degree as their highest qualification. 72 percent were single and never married, while 25.5 percent were married.

Furthermore, 49 percent of the respondents have an income below RM2,000, and 16 percent have an income level between RM2,001-RM3,000. Lastly, 32 percent of the respondents were in the finance sector, while 18 percent were in the telecommunication sector. Table 1 shows the respondents' demographic profiles.

Table 1 The respondents' demographic profiles

Demographic Features		Frequency	Percentage
Gender	Male	69	35
	Female	127	65
Age	20-30 years old	117	60
	31-40 years old	33	17
	41-50 years old	24	12
	51-60 years old	22	11
	Others	20	10
Race	Malay	166	85
	Chinese	6	3
	Indian	4	2
	Others	26	13
	O Levels	29	15
Highest Education Level	Diploma /A level	121	62
	Bachelor's Degree	11	6
	Master Degree	3	1
	Doctoral Degree	6	3
	Professional Studies	141	72
Marital Status	Single/Never Married	50	25.5
	Married	1	0.5
	Divorced	3	1.5
	Widowed	1	0.5
	Separated	96	49
Income level	Below RM2,000	31	16
	RM2,001-RM3,000	18	9
	RM3,001-RM4,000	14	7
	RM4,001-RM5,000	37	19
	Above RM5,000	62	32
Industry	Finance	35	18
	Telecommunication	11	5
	Manufacturing	23	12
	Education	2	1
	Entertainment	9	4
	Hospitality	3	1
	Transportation	11	6
	Healthcare	19	10
	Information Technology	21	11
	Others		

4. Results and Discussion

4.1. Pearson Correlation

The Pearson correlation test shows that the significant values of all variables are less than 0.05 indicating significant linear relationships. For example, perceived severity and self-isolation had moderate

positive correlations with consumer behavior with an r-value of 0.454 and 0.570. In contrast, cyberchondria and self-efficacy had low positive correlations with consumer behavior with an r-value of 0.355 and 0.305, respectively. Table 2 shows the results of the Pearson Correlation test.

Table 2 Results of the Pearson correlation test

		Consumer Behaviour	Perceived Severity	Cyberchondria	Self-efficacy	Self-isolation
Consumer Behaviour	Pearson Correlation	1	.454	.355	.305	.570
	Sig. (2 tailed)					
	N	196	196	196	196	196

4.2. Multiple Regression Analysis

The R Square value of 0.407 indicates that 40.7% of the total variation of the dependent variable (consumer behavior) can be explained by the independent variables (perceived severity, cyberchondria, self-efficacy, and self-isolation). The Durbin-Watson value determines and calculates the errors to obtain the autocorrelation. There is no autocorrelation problem if the Durbin-Watson value is between 1 and 3. As shown in Table 3, the Durbin-Watson value is 1.816, proving that there is no autocorrelation problem between the residuals. Hence, the data are independent of error. Table 3 shows the model summary. According to ANOVA analysis, the model is statistically significant as it achieves a p-value of 0.001. It shows a significant relationship between a dependent variable and independent variables.

Table 3 Model summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimation	Durbin Watson
1	.638 ^a	.407	.394	.45302	1.816

As such, the model is considered fit for further analysis. Furthermore, the F value of 32.719 indicates that the conceptual model is enormously significant, and the variation is not accounted for by possibility. Moreover, the df value shown above indicates that the independent variables (perceived severity, cyberchondria, self-efficacy, self-isolation) influence the dependent variable consumer behavior due to the regression. Table 4 shows the analysis of variance (ANOVA) in this study.

Table 4 Analysis of variance (ANOVA) in this study

ANOVA ^a						
Model		Sum of Squares	DF	Mean Square	F	Significance
1	Regression	26.859	4	6.715	32.719	.001 ^b
	Residual	39.198	191	.205		
	Total	66.057	195			

According to the coefficients in table 5, the significant value of perceived severity and self-isolation is lower than 0.05, indicating that the H1 and H4 are acceptable. However, the significant value of cyberchondria is 0.051, and the significant value of self-efficacy is 0.060, both greater than 0.05. Therefore, the hypothesis H2 and H3 are rejected. Furthermore, the highest B value obtained in this study belongs to the self-isolation, which was 0.431. Hence, self-isolation is the most crucial factor in this study have a positive B value.

Moreover, the B value of all independent variables is positive, which means that consumer behavior will increase when the independent variable increases; lastly, the analysis of collinearity statistics was analyzed. In this study, the VIF value for all independent variables was moderately correlated. Therefore, the result shows that no multicollinearity problem exists. Table 5 represents the results of the coefficients, while Table 6 shows the summary of the hypotheses results.

Table 5 Results of the coefficients

Coefficients							
Unstandardized Coefficients			Standardized Coefficients			Collinearity Statistics	
Model	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
Constant	.748	.307		2.436	.016		
Perceived Severity	.155	.060	.179	2.595	.010	.656	1.523
Cyberchondria	.096	.049	.128	1.967	.051	.732	1.366

Continuation of Table 5

Self-efficacy	.111	.059	.113	1.894	.060	.880	1.136
Self-isolation	.450	.066	.431	6.837	< .001	.783	1.278

Table 6 Summary of the hypotheses result

		Significance	Results	Gradient (Beta, β)
H1	There is a significant relationship between perceived severity and consumer behavior during the Covid-19 pandemic in Malaysia	.010	Accepted	.179
H2	There is a significant relationship between cyberchondria and consumer behavior during the Covid-19 pandemic in Malaysia.	.051	Rejected	.128
H3	There is a significant relationship between self-efficacy and consumer behavior during the Covid-19 pandemic in Malaysia	.060	Rejected	.113
H4	There is a significant relationship between self-isolation and consumer behavior during the Covid-19 pandemic in Malaysia	< .001	Accepted	.431

5. Conclusion

As Table 6 shows, the results of this study have shown that perceived severity has a significant and also positive association with consumer behavior during the covid-19 pandemic in Malaysia, similar to past studies [51-54]. Malaysians may be affected by the perceived severity of the Covid-19 pandemic and may have taken several preventive actions such as wearing a facemask, sanitizing, and washing hands. Hence, this finding has implications for the Malaysian government, the consumer association of Malaysia, and retailers. The Malaysian Ministry of Health plays an essential role in providing the public with timely and accurate information, crucial in managing anxiety and impulsive buying [51]. Also, as mentioned by [76], the Malaysian government should formulate and promote strategies that consider people's behavioral habits and efforts to engage in protective behaviors.

Likewise, similar to past research, self-isolation also has a significant and positive association with consumer behavior during the Covid-19 pandemic in Malaysia [67-71]. In Malaysia, self-isolation may have prompted Malaysians to opt for food delivery as [77] mentioned a 30 percent jump in food delivery orders. At the same time, [78] stated a surge in purchasing games. Hence, this finding provides implications for the Malaysian government, the consumer association of Malaysia, and retailers. Whereby retailers and restaurant owners, especially small and medium-sized (SMEs), must use e-commerce and mobile marketing strategies to reach out to existing and potential customers [71]. Compared to previous studies, this research provides implications that will benefit the Malaysian government, consumer associations, and retailers. They must pay more attention to consumer trends and focus on the most critical areas [71].

The scientific novelty of this study is the findings from the results of cyberchondria and self-efficacy that refute the results of past studies, as these traits may be common among Malaysians and may not affect consumer behavior regardless if there was a pandemic.

Strategical impacts will affect strategic things in the company and the company's future business. Tactical impacts will affect the organization's internal affairs, both managerial and operational levels. The study

found that ERP implementation in Indonesia has a more significant strategical impact than tactical impact. ERP can give both strategical and tactical impacts.

6. Limitation and Future Research

There are a few limitations to this study. One of which is that other states must be included in Malaysia. It is suggested that future research should have a broader-based population. Since this paper is a cross-sectional study, a longitudinal study may also be conducted to see how consumer behavior changes when Covid-19 reaches the endemic stage. Also, the mediating factor may be included, such as consumer knowledge sharing behavior as a mediator to consumer behavior [79].

The results of this research have several strengths. Firstly, it provides empirical knowledge on the study of consumer behavior during the Covid-19 pandemic. Secondly, the research has highlighted the importance of providing accurate and timely information to the public to reduce anxiety and potential impulsive purchasing and the importance of e-commerce to enhance business performance and consumer satisfaction. However, this cannot be achieved without the intervention of the Malaysian government and consumer associations in Malaysia.

References

- [1] DÖRTYOL İ. T., COŞKUN A., and KITAPCI O. Chapter 3: A Review of Factors Affecting Turkish Consumer Behaviour. *Marketing Management in Turkey*. Emerald Publishing Limited, Bingley, 2018: 105–139. <https://doi.org/10.1108/978-1-78714-557-320181010>
- [2] RATH S., & MISHRA D. P. Consumer buying behavior towards washing machine: an empirical study. *International Journal of Current Research*, 2017, 9(07): 54185–24188. <http://www.journalcra.com>
- [3] QAZZAFI S. Consumer Buying Decision Process Toward Products. *International Journal of Scientific Research and Engineering Development*, 2019, 2(5): 1–6. <http://www.ijrsred.com/volume2/issue5/IJSRED-V2I5P15.pdf>
- [4] SAEED Z. A study of theories on consumer behavior. *Journal of Computing and Management Studies*, 2019, 1(3). <https://doi.org/10.13140/RG.2.2.14215.85929>
- [5] AHMED A. Benefit of Studying Consumer Behaviour. *Bizfluent*, 2019. <https://bizfluent.com/facts-5949659-benefit->

[studying-consumer-behaviour.html](#)

- [6] SHETH J. Impact of Covid-19 on consumer behavior: Will the old habits return or die? *Journal of Business Research*, 2020, 117: 280–283. <https://doi.org/10.1016/j.jbusres.2020.05.059>
- [7] MARYATI T. Consumer Behavior Changes Post Pandemic Covid-19. *International Journal of Halal Research*, 2020, 2(2): 84–89. <https://doi.org/10.18517/ijhr.2.2.84-89.2020>
- [8] BHARGAVA S., BUZZELL C., CHARM T., DAS R., FRADIN M., GRIMMELT A., MANDEL J., ROBINSON K., PFLUMM S., and SEID C. A global view of how consumer behavior is changing amid COVID-19. *McKinsey & Company*, 2020. <https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/a-global-view-of-how-consumer-behavior-is-changing-amid-covid-19>
- [9] DALI N. R. S. M., HAMID H. A., NAWANG W. R. W., and NAZARIE W. N. F. W. M. Post Pandemic Consumer Behavior: Conceptual Framework. *The Journal of Muamalat and Islamic Finance Research*, 2020, 17: 13–24. <https://doi.org/10.33102/jmifr.v17i3.280>
- [10] ALEXANDER D., & KARGER E. Do Stay-at-Home Orders Cause People to Stay at Home? Effects of Stay-at-Home Orders on Consumer Behavior. *SSRN Electronic Journal*, 2020. <https://doi.org/10.2139/ssrn.3583625>
- [11] CRUZ-CÁRDENAS J., ZABELINA E., GUADALUPE-LANAS J., PALACIO-FIERRO A., and RAMOS-GALARZA C. COVID-19, consumer behavior, technology, and society: A literature review and bibliometric analysis. *Technological Forecasting and Social Change*, 2021, 173, 121179. <https://doi.org/10.1016/j.techfore.2021.121179>
- [12] JÍLKOVÁ P., & KRÁLOVÁ P. Digital Consumer Behaviour and eCommerce Trends during the COVID-19 Crisis. *International Advances in Economic Research*, 2021, 27(1): 83–85. <https://doi.org/10.1007/S11294-021-09817-4>
- [13] GUPTA V., CAHYANTO I., SAJNANI M., and SHAH C. Changing dynamics and travel evading: a case of Indian tourists amidst the COVID 19 pandemic. *Journal of Tourism Futures*, 2021. <https://doi.org/10.1108/JTF-04-2020-0061>
- [14] CHAUHAN V., & SHAH H. An Empirical Analysis into Sentiments, Media Consumption Habits, and Consumer Behaviour during the Coronavirus (COVID-19) Outbreak Dr. Vilas Chauhan* and Ms. Heer Shah**. *UGC Care Journal*, 2020, 31(20): 353–378. <https://doi.org/10.13140/RG.2.2.32269.15846>
- [15] ANASTASIADOU E., CHRISOS ANESTIS M., KARANTZA I., and VLACHAKIS S. The coronavirus' effects on consumer behavior and supermarket activities: insights from Greece and Sweden. *International Journal of Sociology and Social Policy*, 2020, 40(9–10): 893–907. <https://doi.org/10.1108/IJSSP-07-2020-0275>
- [16] WANG E., AN N., GAO Z., KIPROP E., and GENG X. Consumer food stockpiling behavior and willingness to pay for food reserves in COVID-19. *Food Security*, 2020, 12(4): 739–747. <https://doi.org/10.1007/s12571-020-01092-1>
- [17] COX N., GANONG P., NOEL P., VAVRA J., WONG A., FARRELL D., GREIG F., and DEADMAN E. Initial impacts of the pandemic on consumer behavior: Evidence from linked income, spending, and savings data. *Brookings Papers on Economic Activity*, 2020, 2: 35–82. <https://doi.org/10.1353/eca.2020.0006>
- [18] KHAN F., AHMED W., and NAJMI A. Understanding consumers' behavior intentions towards dealing with the

- plastic waste: Perspective of a developing country. *Resources, Conservation and Recycling*, 2019, 142: 49–58. <https://doi.org/10.1016/j.resconrec.2018.11.020>
- [19] KOOTENAIE M. F., & KOOTENAIE S. M. Investigating the Relationship between Brand and consumer behavior. *Journal of Science, Management and Tourism Letter*, 2021, 1(6): JSMTL-2107182112375. https://jms.procedia.org/archive/JSMTL_254/procedia_2021_2021_jsmtl-2107182112375.pdf
- [20] BENDA-PROKEINOVÁ R., DOBEŠ K., MURA L., and BULECA J. Engel's approach as a tool for estimating consumer behaviour. *E a M: Ekonomie a Management*, 2017, 20(2): 15–29. <https://doi.org/10.15240/tul/001/2017-2-002>
- [21] ALAEDDIN O., RANA A., ZAINUDIN Z., and KAMARUDIN F. From physical to digital: Investigating consumer behaviour of switching to mobile wallet. *Polish Journal of Management Studies*, 2018, 17(2): 18–30. <http://dx.doi.org/10.17512%2Fpjms.2018.17.2.02>
- [22] HANAYSHA J. R. An examination of the factors affecting consumer's purchase decision in the Malaysian retail market. *PSU Research Review*, 2018, 2(1): 7–23. <https://www.emerald.com/insight/content/doi/10.1108/PRR-08-2017-0034/full/html>
- [23] MOSLEHPOUR M., PHAM V. K., WONG W. K., and BILGIÇLI İ. E-purchase intention of Taiwanese consumers: Sustainable mediation of perceived usefulness and perceived ease of use. *Sustainability*, 2018, 10(1): 234. <https://doi.org/10.3390/su10010234>
- [24] VORAMONTRI D., & KLIEB L. Impact of social media on consumer behaviour. *International Journal of Information and Decision Sciences*, 2019, 11(3): 209–233. <https://www.inderscienceonline.com/doi/pdf/10.1504/IJIDS.2019.101994>
- [25] WAI K., DASTANE O., JOHARI Z., and ISMAIL N. B. Perceived risk factors affecting consumers' online shopping behaviour. *The Journal of Asian Finance, Economics and Business*, 2019, 6(4): 246–260. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=349876
- [26] AFRIDI F. E. A., AYAZ B., and IRFAN M. Adoption of online retail banking practices as a precautionary protective. *International Journal of Human Capital in Urban Management*, 2021, 6: 1–10. <https://dx.doi.org/10.22034/IJHCUM.2021.04.02>
- [27] CHUA G., YUEN K. F., WANG X., and WONG Y. D. The determinants of panic buying during COVID-19. *International Journal of Environmental Research and Public Health*, 2021, 18(6): 1–28. <https://doi.org/10.3390/ijerph18063247>
- [28] DHIR A., FAROOQ A., ISLAM A. K. M. N., and LAATO S. Unusual purchasing behavior during the early stages of the COVID-19 pandemic: The stimulus-organism-response approach. *Journal of Retailing and Consumer Services*, 2020, 57: 102224. <https://doi.org/10.1016/j.jretconser.2020.102224>
- [29] KIM N. L., & IM H. Do liberals want curbside pickup more than conservatives? Contactless shopping as protectionary action against the COVID-19 pandemic. *International Journal of Consumer Studies*, 2021, 46(2): 589–600. <https://doi.org/10.1111/ijcs.12714>
- [30] ONG A. K. S., CLEOFAS M. A., PRASETYO Y. T., CHUENYINDEE T., YOUNG M. N., DIAZ J. F. T., NADLIFATIN R., & REDI A. A. N. P. Consumer Behavior in Clothing Industry and Its Relationship with Open

- Innovation Dynamics during the COVID-19 Pandemic. *Journal of Open Innovation: Technology, Market, and Complexity*, 2021, 7(4): 211. <https://doi.org/10.3390/JOITMC7040211>
- [31] RAJKUMAR R. P., & ARAFAT S. M. Y. Model Driven Causal Factors of Panic Buying and Their Implications for Prevention: A Systematic Review. *Psychiatry International*, 2021, 2(3): 325–343. <https://doi.org/10.3390/psychiatryint2030025>
- [32] LIEW J. X., & KAOS J. J. Covid-19: Malaysia hit by Omicron wave, new cases daily will reach 15,000 says K.J. The Star, 2022. <https://www.thestar.com.my/news/nation/2022/02/06/covid-19-malaysia-hit-by-omicron-wave-new-cases-daily-will-reach-15000-says-kj>
- [33] YEO A. 2022 is about building a better Malaysia. *New Straits Times*, 2022. <https://www.nst.com.my/opinion/columnists/2022/01/76399/8/2022-about-building-better-malaysia>
- [34] NGUYEN V. T., NGUYEN M. Q., LE N. T., NGUYEN T. N. H., and HUYNH G. Predictors of Intention to Get a COVID-19 Vaccine of Health Science Students: A Cross-Sectional Study. *Risk Management and Healthcare Policy*, Volume, 2021, 14: 4023–4030. <https://doi.org/10.2147/rmhp.s328665>
- [35] OMAR N. A., NAZRI M. A., ALI M. H., and ALAM S. S. The panic buying behavior of consumers during the COVID-19 pandemic: Examining the influences of uncertainty, perceptions of severity, perceptions of scarcity, and anxiety. *Journal of Retailing and Consumer Services*, 2021, 62: 102600.
- [36] BROWN A. COVID and anxiety: Two sides of same coin. *The Famuan*, 2020. <http://www.thefamuanonline.com/2020/09/23/covid-and-anxiety-two-sides-of-same-coin/>
- [37] HIRSCHLAG A. COVID-19 Is Making Everybody's Cyberchondria Worse. *Elle*, 2020. <https://www.elle.com/life-love/a33482294/covid-19-cyberchondria-webmd/>
- [38] THE FREE PRESS JOURNAL. Indore: Cases of cyberchondria increased during Covid, 2021. <https://www.freepressjournal.in/indore/indore-cases-of-cyberchondria-increased-during-covid>
- [39] SYED ALWI S. A. R., RAFIDAH E., ZURRAINI A., JUSLINA O., BROHI I. B., and LUKAS S. A survey on COVID-19 vaccine acceptance and concern among Malaysians. *BMC Public Health*, 2021, 21(1): 1–12. <https://doi.org/10.1186/s12889-021-11071-6>
- [40] LAWRENZ L. Cyberchondria: What It Is, Symptoms, and Treatments. *PsychCentral*, 2021. <https://psychcentral.com/anxiety/cyberchondria>
- [41] RAM A. Misinformation anxiety plague Malaysia's teenage covid-19 vaccination programme. *The Straits Times*, 2021. <https://www.straitstimes.com/asia/se-asia/misinformation-anxiety-plague-malaysias-teenage-covid-19-vaccination-programme>
- [42] THE STAR. Stop Googling your symptoms right now, health experts say, 2018. <https://www.thestar.com.my/tech/tech-news/2018/12/19/stop-googling-your-symptoms-right-now-health-experts-say/>
- [43] NAMBIAR S. Commentary: Malaysia's coffers run dry as COVID-19 pandemic worsens. Channel News Asia, 2021. <https://www.channelnewsasia.com/commentary/covid-19-package-permerkasa-malaysia-government-debt-spend-2074471>
- [44] TEO C. S., TAN P. M., SHU C. S. I., CHOO Z. X., and TE K. K. Challenges and Strategies for implementing Chinese Medicine during COVID-19 in Malaysia. *Integrative Medicine Research*, 2021: 100783. <https://doi.org/10.1016/j.imr.2021.100783>
- [45] ARDEN M. A., & CHILCOT J. Health psychology and the coronavirus (COVID-19) global pandemic: A call for research. In *British Journal of Health Psychology*, 2020, 25(2): 231–232. <https://doi.org/10.1111/bjhp.12414>
- [46] DURAI A. How self-isolation has spurred more Malaysian to cook from home. *The Star*, 2020. <https://www.thestar.com.my/food/food-news/2020/04/05/how-self-isolation-has-spurred-more-malaysians-to-cook-at-home>
- [47] SALIM S. Malaysia's new Covid-19 cases rise to 8,817 on Oct 5 as infections in Selangor jump 96%. *The Edge Markets*, 2021. <https://www.theedgemarkets.com/article/malaysias-new-covid19-cases-rise-8817-oct-5>
- [48] AMIN K. P., GRIFFITHS M. D., and DSOUZA D. D. Online Gaming During the COVID-19 Pandemic in India: Strategies for Work-Life Balance. *International Journal of Mental Health and Addiction*, 2020, 20: 296–302. <https://doi.org/10.1007/s11469-020-00358-1>
- [49] VARGO D., ZHU L., BENWELL B., and YAN Z. Digital technology use during COVID-19 pandemic: A rapid review. *Human Behavior and Emerging Technologies*, 2021, 3(1): 13–24. <https://doi.org/10.1002/hbe2.242>
- [50] ALWREIKAT A., SHEHATA A., and EDAKAR M. A. M. Arab women feelings while seeking information during COVID-19 pandemic: applying PMT constructs. *Online Information Review*, 2021. <https://doi.org/10.1108/oir-09-2020-0419>
- [51] QIAN M., WU Q., WU P., HOU Z., LIANG Y., COWLING B. J., and YU H. Psychological responses, behavioral changes and public perceptions during the early phase of the COVID-19 outbreak in China: A population based cross-sectional survey. *MedRxiv*, 2020. <https://doi.org/10.1101/2020.02.18.20024448>
- [52] LI J.-B., YANG A., DOU K., WANG L.-X., ZHANG M.-C., and LIN X.-Q. Chinese public's knowledge, perceived severity, and perceived controllability of COVID-19 and their associations with emotional and behavioural reactions, social participation, and precautionary behaviour: a national survey. *BMC Public Health*, 2020, 20(1): 1–14. <https://doi.org/10.1186/S12889-020-09695-1>
- [53] DENG S., WANG W., XIE P., CHAO Y., and ZHU J. Perceived Severity of COVID-19 and Post-pandemic Consumption Willingness: The Roles of Boredom and Sensation-Seeking. *Frontiers in Psychology*, 2020, 11: 2437. <https://doi.org/10.3389/fpsyg.2020.567784>
- [54] LUO Y., CHENG Y., and SUI M. The moderating effects of perceived severity on the generational gap in preventive behaviors during the COVID-19 pandemic in the U.S. *International Journal of Environmental Research and Public Health*, 2021, 18(4): 1–12. <https://doi.org/10.3390/ijerph18042011>
- [55] STARCEVIC V., & BERLE D. Cyberchondria: Towards a better understanding of excessive health-related Internet use. *Expert Review of Neurotherapeutics*, 2013, 13(2): 205–213. <https://doi.org/10.1586/ern.12.162>
- [56] SARIGEDIK E., BAHAR OLMEZ S., and KANUNI SULTAN İ. The Investigation of the Relationships among

- Coronavirus Anxiety, Cyberchondria, and Online Shopping. *Medical Journal*, 2021, 13(S1): 446. <https://doi.org/10.18521/ktd.928468>
- [57] ALFLAYYEH S. Theoretical perspective of unusual purchasing tendencies during pandemic situation of covid-19. *European Journal of Molecular and Clinical Medicine*, 2020, 7(1): 3475–3482. https://ejmcm.com/article_3580.html
- [58] TURKISTANI A., MASHAIKHI A., BAJABER A., ALGHAMDI W., ALTHOBAITY B., ALHARTHI N., and ALHOMAIANI S. The prevalence of cyberchondria and the impact of social media among the students in Taif University. *International Journal of Medicine in Developing Countries*, 2020, 4(11): 1759–1765. <https://doi.org/10.24911/ijmdc.51-1598363146>
- [59] BALA R., SRIVASTAVA A., NINGTHOUJAM G. D., POTSANGBAM T., OINAM A., and ANAL C. L. An observational study in Manipur state, India on preventive behavior influenced by social media during the covid-19 pandemic mediated by cyberchondria and information overload. *Journal of Preventive Medicine and Public Health*, 2021, 54(1): 22–30. <https://doi.org/10.3961/JPMMPH.20.465>
- [60] TAM L. T., HO H. X., NGUYEN D. P., ELIAS A., and LE A. N. H. Receptivity of Governmental Communication and Its Effectiveness During COVID-19 Pandemic Emergency in Vietnam: A Qualitative Study. *Global Journal of Flexible Systems Management*, 2021, 22(1): 45–64. <https://doi.org/10.1007/s40171-021-00269-7>
- [61] FLAMMER A. Self-Efficacy. In *International Encyclopedia of the Social & Behavioral Sciences: Second Edition*. Elsevier, Amsterdam, 2015: 504–508. <https://doi.org/10.1016/B978-0-08-097086-8.25033-2>
- [62] HERNÁNDEZ-PADILLA J. M., GRANEROMOLINA J., RUIZ-FERNÁNDEZ M. D., DOBARRIO-SANZ I., LÓPEZ-RODRÍGUEZ M. M., FERNÁNDEZ-MEDINA I. M., CORREA-CASADO M., and FERNÁNDEZ-SOLA C. Design and psychometric analysis of the COVID-19 prevention, recognition and home-management self-efficacy scale. *International Journal of Environmental Research and Public Health*, 2020, 17(13): 1–14. <https://doi.org/10.3390/ijerph17134653>
- [63] RAAIJMAKERS I., SNOEK H., MAZIYA-DIXON B., and ACHTERBOSCH T. Drivers of vegetable consumption in urban Nigeria: Food choice motives, knowledge, and self-efficacy. *Sustainability*, 2018, 10(12). <https://doi.org/10.3390/su10124771>
- [64] ASHRAF M. A. Islamic marketing and consumer behavior toward halal food purchase in Bangladesh: An analysis using SEM. *Journal of Islamic Marketing*, 2019, 10(3): 893–910. <https://doi.org/10.1108/JIMA-03-2018-0051>
- [65] SAN-MARTÍN S., JIMENEZ N., CAMARERO C., and SAN-JOSÉ R. The path between personality, self-efficacy, and shopping regarding games apps. *Journal of Theoretical and Applied Electronic Commerce Research*, 2020, 15(2): 59–75. <https://doi.org/10.4067/S0718-18762020000200105>
- [66] SUPPAWITTAYA P., YIEMPHAT P., and YASRI P. Effects of Social Distancing, Self-Quarantine, and Self-Isolation during the COVID-19 Pandemic on People's Well-Being, and How to Cope with It. *International Journal of Science and Healthcare Research*, 2020, 5: 12–20. https://ijshr.com/IJSHR_Vol.5_Issue.2_April2020/IJSHR003.pdf
- [67] BADE R., SIMPSON B. S., GHETIA M., NGUYEN L., WHITE J. M., and GERBER C. Changes in alcohol consumption associated with social distancing and self-isolation policies triggered by COVID-19 in South Australia: a wastewater analysis study. *Addiction*, 2021, 116(6): 1600–1605. <https://doi.org/10.1111/add.15256>
- [68] AHMED H. O. The impact of social distancing and self-isolation in the last corona COVID-19 outbreak on the body weight in Sulaimani governorate- Kurdistan/Iraq, a prospective case series study. *Annals of Medicine and Surgery*, 2020, 59: 110–117. <https://doi.org/10.1016/j.amsu.2020.09.024>
- [69] SMITH L. E., AMLÔT R., LAMBERT H., OLIVER I., ROBIN C., YARDLEY L., and RUBIN G. J. Factors associated with adherence to self-isolation and lockdown measures in the U.K.: a cross-sectional survey. *Public Health*, 2020, 187: 41–52. <https://doi.org/10.1016/j.puhe.2020.07.024>
- [70] TSVETKOVA E. The impact of COVID-19 on consumer behavior: Finnish students. *Theseus*, 2021. <http://www.theseus.fi/handle/10024/497300>
- [71] LI T., YE X., and RYZHIKH A. Consumer behavior in China and Russia: Comparative analysis. *BRICS Journal of Economics*, 2021, 2(1): 74–90. <https://doi.org/10.38050/2712-7508-2021-30>
- [72] GOPINATH V. Consumer Behavior Trends During COVID-19 Pandemic. *International Journal of Scientific Development and Research*, 2020, 5(9): 310–313. <https://www.ijedr.org/papers/IJSDR2009050.pdf>
- [73] JOKIC-BEGIC N., KORAJLIJA A. L., and MIKAC U. Cyberchondria in the age of COVID-19. *PLoS ONE*, 2020, 15(12): e0243704. <https://doi.org/10.1371/journal.pone.0243704>
- [74] RUBIN G. J., AMLÔT R., PAGE L., and WESSELY S. Public perceptions, anxiety and behaviour change, in relation to the swine flu outbreak: Cross sectional telephone survey. *BMJ Online*, 2009, 339(7713): 156. <https://doi.org/10.1136/bmj.b2651>
- [75] SAUNDERS M. N. K., LEWIS P., and THORNHILL A. *Research Methods for Business Students*, 8th ed. Pearson, London, 2019.
- [76] KIM S., & KIM S. Analysis of the impact of health beliefs and resource factors on preventive behaviors against the COVID-19 pandemic. *International journal of environmental research and public health*, 2020, 17(22): 8666. <https://dx.doi.org/10.3390%2Fijerph17228666>
- [77] FREE MALAYSIA TODAY. *Malaysia's Covid-19 crisis sees 30% jump in delivery orders*, 2020. <https://www.freemalaysiatoday.com/category/leisure/2020/03/18/malaysias-covid-19-crisis-sees-30-jump-in-delivery-orders/>
- [78] LEONG B. COVID-19 impact on Malaysian e-commerce market. *Janio*, 2020. <https://janio.asia/articles/ecommerce-online-shopping-malaysia-covid-19/>
- [79] EBRAHIMI P., HAMZA K. A., GORGENYI-HEGYES E., ZAREA H., and FEKETE-FARKAS M. Consumer knowledge sharing behavior and consumer purchase behavior: evidence from E-commerce and online retail in Hungary. *Sustainability*, 2021, 13(18): 10375. <https://doi.org/10.3390/su131810375>

参考文献:

- [1] DÖRTYOL İ. T., COŞKUN A., 和 KITAPCI O. 第三章：影响土耳其消费者行为的因素回顾。土耳其的营销

- 管理。翡翠出版有限公司, 宾利, 2018: 105–139. <https://doi.org/10.1108/978-1-78714-557-320181010>
- [2] RATH S., 和 MISHRA D. P. 消费者对洗衣机的购买行为: 实证研究. 国际当代研究杂志, 2017, 9(07): 54185–24188. <http://www.journalcra.com>
- [3] QAZZAFI S. 消费者对产品的购买决策过程. 国际科学与工程发展杂志, 2019, 2(5): 1–6. <http://www.ijssred.com/volume2/issue5/IJSRED-V2I5P15.pdf>
- [4] SAEED Z. 消费者行为理论研究. 计算与管理研究杂志, 2019, 1(3). <https://doi.org/10.13140/RG.2.2.14215.85929>
- [5] AHMED A. 研究消费者行为的好处. 商务流利, 2019. <https://bizfluent.com/facts-5949659-benefit-studying-consumer-behaviour.html>
- [6] SHETH J. 新冠肺炎对消费者行为的影响: 旧习惯会回归还是消失? 商业研究杂志, 2020, 117: 280–283. <https://doi.org/10.1016/j.jbusres.2020.05.059>
- [7] MARYATI T. 大流行新冠肺炎后的消费者行为变化. 国际清真研究杂志, 2020, 2(2): 84–89. <https://doi.org/10.18517/ijhr.2.2.84-89.2020>
- [8] BHARGAVA S., BUZZELL C., CHARM T., DAS R., FRADIN M., GRIMMELT A., MANDEL J., ROBINSON K., PFLUMM S., 和 SEID C. 在新冠肺炎期间消费者行为如何变化的全球视野. 麦肯锡公司, 2020. <https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/a-global-view-of-how-consumer-behavior-is-changing-amid-covid-19>
- [9] DALI N. R. S. M., HAMID H. A., NAWANG W. R. W., 和 NAZARIE W. N. F. W. M. 大流行后消费者行为: 概念框架. 伊斯兰教义和伊斯兰金融研究杂志, 2020, 17: 13–24. <https://doi.org/10.33102/jmifr.v17i3.280>
- [10] ALEXANDER D., 和 KARGER E. 居家令会导致人们呆在家里吗? 居家令对消费者行为的影响. 社会科学网电子期刊, 2020. <https://doi.org/10.2139/ssrn.3583625>
- [11] CRUZ-CÁRDENAS J., ZABELINA E., GUADALUPE-LANAS J., PALACIO-FIERRO A., 和 RAMOS-GALARZA C. 新冠肺炎、消费者行为、技术和社会: 文献回顾和文献计量分析. 技术预测与社会变革, 2021, 173, 121179. <https://doi.org/10.1016/j.techfore.2021.121179>
- [12] JÍLKOVÁ P., 和 KRÁLOVÁ P. 新冠肺炎危机期间的数字消费者行为和电子商务趋势. 国际经济研究进展, 2021, 27(1): 83–85. <https://doi.org/10.1007/S11294-021-09817-4>
- [13] GUPTA V., CAHYANTO I., SAJNANI M., 和 SHAH C. 不断变化的动态和逃避旅行: 印度游客在新冠肺炎大流行中的案例. 旅游期货杂志, 2021. <https://doi.org/10.1108/JTF-04-2020-0061>
- [14] CHAUHAN V., 和 SHAH H. 对冠状病毒(新冠肺炎)爆发期间情绪、媒体消费习惯和消费者行为的实证分析. 维拉斯乔汉博士*和赫尔沙女士**. 教资会护理杂志, 2020, 31(20): 353–378. <https://doi.org/10.13140/RG.2.2.32269.15846>
- [15] ANASTASIADOU E., CHRISSOS ANESTIS M., KARANTZA I., 和 VLACHAKIS S. 冠状病毒对消费者行为和超市活动的影响: 来自希腊和瑞典的见解. 国际社会学与社会政策杂志, 2020, 40(9–10): 893–907. <https://doi.org/10.1108/IJSSP-07-2020-0275>
- [16] WANG E., AN N., GAO Z., KIPROP E., 和 GENG X. 消费者在新冠肺炎中的食品储存行为和支付食品储备的意愿. 食品安全, 2020, 12(4), 739–747. <https://doi.org/10.1007/s12571-020-01092-1>
- [17] COX N., GANONG P., NOEL P., VAVRA J., WONG A., FARRELL D., GREIG F., 和 DEADMAN E. 大流行对消费者行为的初步影响: 来自相关收入、支出和储蓄数据的证据. 布鲁金斯经济活动论文, 2020, 2: 35–82. <https://doi.org/10.1353/eca.2020.0006>
- [18] KHAN F., AHMED W., 和 NAJMI A. 了解消费者处理塑料垃圾的行为意图: 一个发展中国家的视角. 资源、保护和回收, 2019, 142: 49–58. <https://doi.org/10.1016/j.resconrec.2018.11.020>
- [19] KOOTENAIE M. F., 和 KOOTENAIE S. M. 调查品牌与消费者行为之间的关系. 科学、管理和旅游杂志, 2021, 1(6): JSMTL-2107182112375. https://jms.procedia.org/archive/JSMTL_254/procedia_2021_2021_jsmtl-2107182112375.pdf
- [20] BENDA-PROKEINOVÁ R., DOBEŠ K., MURA L., 和 BULECA J. 恩格尔作为估计消费者行为工具的方法. 经济管理, 2017, 20(2): 15–29. <https://doi.org/10.15240/tul/001/2017-2-002>
- [21] ALAEDDIN O., RANA A., ZAINUDIN Z., 和 KAMARUDIN F. 从实体到数字: 调查消费者转向移动钱包的行为. 波兰管理研究杂志, 2018, 17(2): 18–30. <http://dx.doi.org/10.17512/2Fpjms.2018.17.2.02>
- [22] HANAYSHA J. R. 考察影响马来西亚零售市场消费者购买决定的因素. 宾夕法尼亚州立大学研究评论, 2018, 2(1): 7–23. <https://www.emerald.com/insight/content/doi/10.1108/PRR-08-2017-0034/full/html>
- [23] MOSLEHPOUR M., PHAM V. K., WONG W. K., 和 BILGIÇLI İ. 台湾消费者的电子购买意向: 感知有用性和感知易用性的可持续中介. 可持续性, 2018, 10(1): 234. <https://doi.org/10.3390/su10010234>
- [24] VORAMONTRI D., 和 KLIEB L. 社交媒体对消费者行为的影响. 国际信息与决策科学杂志, 2019, 11(3): 209–233. <https://www.inderscienceonline.com/doi/pdf/10.1504/IJIDS.2019.101994>
- [25] WAI K., DASTANE O., JOHARI Z., 和 ISMAIL N. B. 影响消费者在线购物行为的感知风险因素. 亚洲金融、经济和商业杂志, 2019, 6(4): 246–260. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3498766
- [26] AFRIDI F. E. A., AYAZ B., 和 IRFAN M. 采用在线零售银行业务作为预防性保护措施. 国际城市管理人力资本杂志, 2021, 6: 1–10. <https://dx.doi.org/10.22034/IJHCUM.2021.04.02>
- [27] CHUA G., YUEN K. F., WANG X., 和 WONG Y. D. 新冠肺炎期间恐慌性购买的决定因素. 国际环境研究与公共卫生杂志, 2021, 18(6): 1–28. <https://doi.org/10.3390/ijerph18063247>
- [28] DHIR A., FAROOQ A., ISLAM A. K. M. N., 和 LAATO S. 新冠肺炎大流行早期阶段的异常购买行为: 刺激-有机体-反应方法. 零售与消费者服务杂志, 2020, 57: 102224. <https://doi.org/10.1016/j.jretconser.2020.102224>
- [29] KIM N. L., 和 IM H. 自由派比保守派更希望路边取

货吗？非接触式购物作为针对新冠肺炎大流行的保护措施。国际消费者研究杂志，2021，46(2): 589-600. <https://doi.org/10.1111/ijcs.12714>

[30] ONG A. K. S., CLEOFAS M. A., PRASETYO Y. T., CHUENYINDEE T., YOUNG M. N., DIAZ J. F. T., NADLIFATIN R., 和 REDI A. A. N. P. 新冠肺炎疫情期间服装行业消费者行为及其与开放创新动态的关系[J]. 开放式创新杂志：技术、市场和复杂性，2021，7(4): 211. <https://doi.org/10.3390/JOITMC7040211>

[31] RAJKUMAR R. P., 和 ARAFAT S. M. Y. 模型恐慌性购买的驱动因素及其对预防的影响：系统评价。精神病学国际，2021，2(3): 325-343. <https://doi.org/10.3390/psychiatryint2030025>

[32] LIEW J. X., 和 KAOS J. J. 新冠肺炎：马来西亚受到奥米克戎浪潮的打击，每日新增病例将达到 15,000 例 K. J. 星，2022. <https://www.thestar.com.my/news/nation/2022/02/06/covid-19-malaysia-hit-by-omicron-wave-new-cases-daily-will-reach-15000-says-kj>

[33] YEO A. 2022年是关于建设一个更美好的马来西亚。新海峡时报，2022. <https://www.nst.com.my/opinion/columnists/2022/01/76399/8/2022-about-building-better-malaysia>

[34] NGUYEN V. T., NGUYEN M. Q., LE N. T., NGUYEN T. N. H., 和 HUYNH G. 健康科学专业学生接种新冠肺炎疫苗意向的预测因素：一项横断面研究。风险管理和医疗保健政策，卷，2021，14: 4023-4030. <https://doi.org/10.2147/rmhp.s328665>

[35] OMAR N. A., NAZRI M. A., ALI M. H., 和 ALAM S. S. 新冠肺炎疫情期间消费者的恐慌性购买行为：考察不确定性、严重性感知、稀缺性和焦虑感的影响。零售与消费者服务杂志，2021，62: 102600.

[36] BROWN A. 冠状病毒病和焦虑：同一枚硬币的两个方面。法門，2020. <http://www.thefamuanonline.com/2020/09/23/covid-and-anxiety-two-sides-of-same-coin/>

[37] HIRSCHLAG A. 新冠肺炎正在让每个人的网络神经症都变得更糟。艾丽，2020. <https://www.elle.com/life-love/a33482294/covid-19-cyberchondria-webmd/>

[38] 自由新闻杂志. 印多尔：冠状病毒病期间网络软骨病病例增加，2021. <https://www.freepressjournal.in/indore/indore-cases-of-cyberchondria-increased-during-covid>

[39] SYED ALWI S. A. R., RAFIDAH E., ZURRAINI A., JUSLINA O., BROHI I. B., 和 LUKAS S. 马来西亚人对新冠肺炎疫苗接受度和关注度的调查。生物医学中心公共卫生，2021，21(1): 1-12. <https://doi.org/10.1186/s12889-021-11071-6>

[40] LAWRENZ L. 网络软骨：它是什么，症状和治疗。心理中心，2021. <https://psychcentral.com/anxiety/cyberchondria>

[41] RAM A. 错误信息焦虑困扰着马来西亚的青少年新冠肺炎疫苗接种计划。海峡时报，2021. <https://www.straitstimes.com/asia/se-asia/misinformation-anxiety-plague-malaysias-teenage-covid-19-vaccination-programme>

[42] 星. 健康专家说，现在停止搜索你的症状，2018. [https://www.thestar.com.my/tech/tech-](https://www.thestar.com.my/tech/tech-news/2018/12/19/stop-googling-your-symptoms-right-now-health-experts-say/)

[news/2018/12/19/stop-googling-your-symptoms-right-now-health-experts-say/](https://www.thestar.com.my/tech/tech-news/2018/12/19/stop-googling-your-symptoms-right-now-health-experts-say/)

[43] NAMBIAR S. 评论：随着新冠肺炎疫情的恶化，马来西亚的金库枯竭。亚洲新闻频道，2021. <https://www.channelnewsasia.com/commentary/covid-19-package-permerkasa-malaysia-government-debt-spend-2074471>

[44] TEO C. S., TAN P. M., SHU C. S. I., CHOO Z. X., 和 TE K. K. 马来西亚新冠肺炎实施中医药面临的挑战与策略。中西医结合研究，2021: 100783. <https://doi.org/10.1016/j.imr.2021.100783>

[45] ARDEN M. A., 和 CHILCOT J. 健康心理学与冠状病毒（新冠肺炎）全球大流行：呼吁研究。在英国健康心理学杂志，2020，25(2): 231-232. <https://doi.org/10.1111/bjhp.12414>

[46] DURAI A. 自我隔离如何促使更多马来西亚人在家做饭。星，2020. <https://www.thestar.com.my/food/food-news/2020/04/05/how-self-isolation-has-spurred-more-malaysians-to-cook-at-home>

[47] SALIM S. 10月5日，马来西亚新冠肺炎病例上升至8,817，雪兰莪州的感染率上升了96%。边缘市场，2021. <https://www.theedgemarkets.com/article/malaysias-new-covid19-cases-rise-8817-oct-5>

[48] AMIN K. P., GRIFFITHS M. D., 和 DSOUZA D. D. 印度新冠肺炎大流行期间的在线游戏：工作与生活平衡的策略。国际心理健康与成瘾杂志，2020，20: 296-302. <https://doi.org/10.1007/s11469-020-00358-1>

[49] VARGO D., ZHU L., BENWELL B., 和 YAN Z. 新冠肺炎大流行期间的数字技术使用：快速回顾。人类行为和新兴技术，2021，3(1): 13-24. <https://doi.org/10.1002/hbe2.242>

[50] ALWREIKAT A., SHEHATA A., 和 EDAKAR M. A. M. 阿拉伯妇女在新冠肺炎大流行期间寻求信息时的感受：应用起搏器介导的心动过速结构。在线信息审查，2021. <https://doi.org/10.1108/oir-09-2020-0419>

[51] QIAN M., WU Q., WU P., HOU Z., LIANG Y., COWLING B. J., 和 YU H. 中国新冠肺炎疫情初期的心理反应、行为变化与公众认知：基于人群的横断面调查。医学档案，2020. <https://doi.org/10.1101/2020.02.18.20024448>

[52] LI J.-B., YANG A., DOU K., WANG L.-X., ZHANG M.-C., 和 LIN X.-Q. 中国公众对新冠肺炎的认识、感知严重性和感知可控性及其与情绪和行为反应、社会参与和预防行为的关联：一项全国性调查。生物医学中心公共卫生，2020，20(1): 1-14. <https://doi.org/10.1186/S12889-020-09695-1>

[53] DENG S., WANG W., XIE P., CHAO Y., 和 ZHU J. 感知新冠肺炎的严重性与大流行后的消费意愿：无聊和寻求感觉的作用。心理学前沿，2020，11: 2437. <https://doi.org/10.3389/fpsyg.2020.567784>

[54] LUO Y., CHENG Y., 和 SUI M. 美国国际环境研究与公共卫生杂志上新冠肺炎大流行期间感知严重性对预防行为代沟的调节作用，2021，18(4): 1-12. <https://doi.org/10.3390/ijerph18042011>

[55] STARCEVIC V., 和 BERLE D. 网络软骨：更好地了解与健康相关的过度使用互联网。神经治疗学专家评论，2013，13(2): 205-213. <https://doi.org/10.1586/ern.12.162>

[56] SARIGEDIK E., BAHAR OLMEZ S., 和 KANUNI

SULTAN İ. 冠状病毒焦虑、网络软骨症和网上购物之间关系的调查。医学期刊, 2021, 13(S1): 446. <https://doi.org/10.18521/ktd.928468>

[57] ALFLAYYEH S. 新冠肺炎大流行期间异常购买趋势的理论视角。欧洲分子与临床医学杂志, 2020, 7(1): 3475–3482. https://ejmcm.com/article_3580.html

[58] TURKISTANI A., MASHAIKHI A., BAJABER A., ALGHAMDI W., ALTHOBAITY B., ALHARTHI N., 和 ALHOMAIANI S. 塔伊夫大学学生中网络软骨病的流行和社交媒体的影响。发展中国家国际医学杂志, 2020, 4(11): 1759–1765. <https://doi.org/10.24911/ijmdc.51-1598363146>

[59] BALA R., SRIVASTAVA A., NINGTHOUJAM G. D., POTSANGBAM T., OINAM A., 和 ANAL C. L. 在印度曼尼普尔邦进行的一项观察性研究, 研究在由网络软骨病和信息过载介导的新冠肺炎大流行期间受社交媒体影响的预防行为。预防医学与公共卫生杂志, 2021, 54(1): 22–30. <https://doi.org/10.3961/JPMMPH.20.465>

[60] TAM L. T., HO H. X., NGUYEN D. P., ELIAS A., 和 LE A. N. H. 新冠肺炎疫情期间越南政府沟通的接受度及其有效性: 一项定性研究全球灵活系统管理杂志, 2021, 22(1): 45–64. <https://doi.org/10.1007/s40171-021-00269-7>

[61] FLAMMER A. 自我效能。在国际社会与行为科学百科全书: 第二版。爱思唯尔, 阿姆斯特丹, 2015: 504–508. <https://doi.org/10.1016/B978-0-08-097086-8.25033-2>

[62] HERNÁNDEZ-PADILLA J. M., GRANEROMOLINA J., RUIZ-FERNÁNDEZ M. D., DOBARRIO-SANZ I., LÓPEZ-RODRÍGUEZ M. M., FERNÁNDEZ-MEDINA I. M., CORREA-CASADO M., 和 FERNÁNDEZ-SOLA C. 新冠肺炎预防、识别与家庭管理自我效能感量表的设计与心理测量分析。国际环境研究与公共卫生杂志, 2020, 17(13): 1–14. <https://doi.org/10.3390/ijerph17134653>

[63] RAAIJMAKERS I., SNOEK H., MAZIYA-DIXON B., 和 ACHTERBOSCH T. 尼日利亚城市蔬菜消费的驱动因素: 食物选择动机、知识和自我效能。可持续性, 2018, 10(12). <https://doi.org/10.3390/su10124771>

[64] ASHRAF M. A. 孟加拉国对清真食品购买的伊斯兰营销和消费者行为: 使用扫描电子显微镜进行的分析。伊斯兰营销杂志, 2019, 10(3): 893–910. <https://doi.org/10.1108/IJIMA-03-2018-0051>

[65] SAN-MARTÍN S., JIMENEZ N., CAMARERO C., 和 SAN-JOSÉ R. 关于游戏应用程序的个性、自我效能和购物之间的路径。电子商务理论与应用研究杂志, 2020, 15(2): 59–75. <https://doi.org/10.4067/S0718-18762020000200105>

[66] SUPPAWITTAYA P., YIEMPHAT P., 和 YASRI P. 新冠肺炎疫情期间保持社交距离、自我隔离和自我隔离对人们福祉的影响, 以及如何应对。国际科学与医疗研究杂志, 2020, 5: 12–20. https://ijshr.com/IJSHR_Vol.5_Issue.2_April2020/IJSHR003.pdf

[67] BADE R., SIMPSON B. S., GHETIA M., NGUYEN L., WHITE J. M., 和 GERBER C. 南澳大利亚新冠肺炎引发的与社交距离和自我隔离政策相关的酒精消费变化: 一项废水分析。瘾, 2021, 116(6): 1600–1605. <https://doi.org/10.1111/add.15256>

[68] AHMED H. O. 一项前瞻性案例系列研究, 在苏莱曼

尼省-库尔德斯坦/伊拉克, 上一次新冠肺炎爆发时的社会距离和自我隔离对体重的影响。医学和外科年鉴, 2020, 59: 110–117. <https://doi.org/10.1016/j.amsu.2020.09.024>

[69] SMITH L. E., AMLÔT R., LAMBERT H., OLIVER I., ROBIN C., YARDLEY L., 和 RUBIN G. J. 在英国与坚持自我隔离和封锁措施相关的因素: 一项横断面调查。公共卫生, 2020, 187: 41–52. <https://doi.org/10.1016/j.puhe.2020.07.024>

[70] TSVETKOVA E. 新冠肺炎对消费者行为的影响: 芬兰学生。忒修斯, 2021. <http://www.theseus.fi/handle/10024/497300>

[71] LI T., YE X., 和 RYZHIKH A. 中国和俄罗斯的消费者行为: 比较分析。金砖国家经济学杂志, 2021, 2(1): 74–90. <https://doi.org/10.38050/2712-7508-2021-30>

[72] GOPINATH V. 新冠肺炎疫情期间的消费者行为趋势。国际科学发展与研究杂志, 2020, 5(9): 310–313. <https://www.ijedr.org/papers/IJEDR2009050.pdf>

[73] JOKIC-BEGIC N., KORAJLIJA A. L., 和 MIKAC U. 新冠肺炎时代的网络软骨病。公共科学图书馆一, 2020, 15(12): e0243704. <https://doi.org/10.1371/journal.pone.0243704>

[74] RUBIN G. J., AMLÔT R., PAGE L., 和 WESSELY S. 与猪流感爆发有关的公众看法、焦虑和行为改变: 横断面电话调查。英国医学杂志在线, 2009, 339(7713): 156. <https://doi.org/10.1136/bmj.b2651>

[75] SAUNDERS M. N. K., LEWIS P., 和 THORNHILL A. 商科学生研究方法, 第8版。皮尔逊, 伦敦, 2019.

[76] KIM S., & KIM S. 健康信念和资源因素对新冠肺炎疫情预防行为的影响分析。国际环境研究与公共卫生杂志, 2020, 17(22): 8666. <https://dx.doi.org/10.3390/2Fijerph17228666>

[77] FREE MALAYSIA TODAY. 马来西亚的新冠肺炎危机导致交付订单猛增30%, 2020. <https://www.freemalaysiatoday.com/category/leisure/2020/03/18/malaysias-covid-19-crisis-sees-30-jump-in-delivery-orders/>

[78] LEONG B. 新冠肺炎对马来西亚电商市场的影响贾尼奥, 2020. <https://janio.asia/articles/ecommerce-online-shopping-malaysia-covid-19/>

[79] EBRAHIMI P., HAMZA K. A., GORGENYI-HEGYES E., ZAREA H., 和 FEKETE-FARKAS M. 消费者知识共享行为和消费者购买行为: 来自匈牙利电子商务和在线零售的证据。可持续性, 2021, 13(18): 10375. <https://doi.org/10.3390/su131810375>