

## **Relationship between Knowledge Level and Online Consumer Purchasing Attitude during Covid-19 Endemic Phase**

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### **Abstract**

Malaysia has entered the endemic phase of Covid-19. Most economic sectors are operating as usual. However, online purchasing activities are still preferred by most consumers. This study was conducted to determine the level of respondents' knowledge of online purchasing activities and the relationship between the level of knowledge and consumer purchasing attitude. In addition, the study will determine the difference in consumer purchasing attitudes based on the demographics of the respondents. A total of 235 public respondents were randomly selected in a study conducted using a quantitative method by employing a questionnaire as a research instrument. The descriptive analysis was used to determine the level of knowledge and attitudes of the respondents toward online purchases while Pearson's correlation was used to determine the relationship between the level of knowledge and consumer purchasing attitudes. The findings of the study showed that the level of knowledge about online purchases was at a high level with a mean value of 4.35 while the attitude towards online purchases was also at a high level with a mean value of 3.89. The correlation analysis

showed that there was a positive relationship with a moderate correlation between the level of knowledge and the online purchasing attitude of the respondents.

**Keywords:** Consumer behaviour, endemic phase, level of knowledge, online purchasing

## **Introduction**

Even though Malaysia has entered the endemic phase of Covid-19, online buying and selling activities still show a significant increase among Malaysians. Because of that, online purchases have now become a trend among the Malaysian community and the world (Isa et al., 2020; Isa & Latiff, 2018). Increasing types of goods and services are sold through various mediums such as Facebook, Twitter, Instagram, websites, and individual or group blogs. Online buying and selling activities have become the choice of consumers as they can reduce the use of cash (Givan et al., 2021), there is no need to queue at the counter (Prashar & Singhal, 2020), reduce traffic congestion (De Vos, 2020), and reduce the use of parking spaces in public places (Jannatul'Agilah & Narimah, 2021). In addition, the online buying and selling activities can also create new job opportunities for the goods delivery service sector and becomes the best alternative for those who have lost their source of income during the Covid-19 pandemic (OECD, 2021).

A study conducted by Bain and Company revealed that as many as 46% Malaysians are high-status buyers with an estimated average purchase of RM 250, while 34% consist of consumers who shop moderately with an average spending value between RM 166 to 250. Only 20% Malaysians spend a minimum rate below the average of RM166. In the same report, Bain and Company found a 40% increase in user spending on the platform used within one year (Arpizio et al., 2020). This finding clearly shows that the trend of online shopping is increasing which supports the Southeast Asia (SEA) e-Commerce Barometer 2021 report. This report is released by the Ninja Van Group which found that the number of online shoppers in Southeast Asia is expected to continue to increase to approximately 380 million people by 2026 (Ninja Van Group and DPDgroup, 2021).

The findings from the Malaysian Communications and Multimedia Commission (MCMC) show that 88.7 percent of Malaysians used the internet in 2020, which was an increase of 1.3 percent from year 2018. Of that number, 93.3 percent of users are surfing social media such as Facebook (91.7%), YouTube (80.6%) and Instagram (63.1%) (MCMC, 2020). At the same time, online buying and selling activities recorded an increase of 28.9 percent in April 2020, when the country enforced the Movement Control Order (MCO), starting from March 2020 (The Star Online, 2020). FICO, a global analytics software firm revealed that 61 percent Malaysians used mobile phones to manage online purchases (Fintech News Malaysia, 2021). Among the famous e-commerce platforms that receive high attention from users are Amazon, eBay, Carousell, Taobao, Mudah.my, Lazada and Shopee.

According to Isa et al. (2020), the three leading shopping websites accessed by customers were Shopee, Lazada, and Food Panda, which supply regular everyday essentials required by the consumers. Moreover, the features of a convenient online platform including impressive feature, user friendly interface, native language choice (for communication), uploaded information (in percentage), and product description reviews, were the aspects that contributed to the attraction of customers to participate in online purchasing. According to Bain and Company, Malaysian consumers prefer to review approximately between four (4) to eight (8) sales pages first, before making any purchasing so that they will be satisfied with the item purchased (Arpizio et al., 2020).

Havas Worldwide in its research has found that today's consumers are smarter, are more empowered and urgent in their purchasing activities, have more alternatives in obtaining information, are more proactive, try to reduce the impact of purchases on the environment, spend moderately, and are responsible for their purchase compared to consumers in the past (Elks, 2014). In support of that statement, Bain and Company reported that about 66% of consumers make a comparison of platforms first before deciding to purchase (Arpizio et al., 2020). However, there are some consumers who are less intelligent in understanding and knowing, especially in the aspect of consumer protection in using information technology. Therefore, based on recent trends, the aim of this study was to examine the relationship between the level of consumer knowledge and online consumer behaviour during the endemic Covid-19 phase. Three elements were measured in this paper: knowledge, attitude, and the influencing pattern of the consumer behaviour toward online purchasing.

## Literature Review

According to Brown et al. (2007), consumer purchasing behaviour refers to the process and actions of consumers involved in the purchase and use of products or services. The impact of the Covid-19 pandemic and Industry Revolution 4.0 have caused a transformation in the buying and selling activities from conventional to online. According to Arisah et al. (2016), the demand for online purchases has increased over the past decade in line with the increase in the internet usage. Most consumers prefer to buy online as it is handier and time-saving (Huseynov & Yildirim, 2016). In addition, Al-Debei et al. (2015) stated that the consumers feel comfortable carrying out shopping from home, can save the time and cost of going out, and enjoy the easy payment method.

The transformation from conventional selling and buying activities to online has its differences. The conventional businessmen have their physical premises where consumers can visit and verify the quality of product compared to online businessmen where they need to choose the appropriate platform to inform the consumers about the products they sell. Husin & Roslan (2021) in their study found that some consumers still choose to buy at conventional business premises as they care about safety and trust factors, especially regarding issues involving the quality and authenticity of goods. Therefore, it is not surprising that the findings of the study conducted by Azri & Ahmad (2020) show that the attention of Malaysians toward online purchases is still lacking as consumers prefer to buy goods at the business premises.

In a conventional business, Rahayu & Melinda (2017) found that customers' purchase decisions in shop were influenced by eight aspects: geography, commodities, sales prices, channels of distribution, service and support, visual merchandising and presentation, influences (socio-cultural), and internal (psychological). However, for online businessman, they need to advertise their business because it cannot be seen physically. There are several challenges that online resellers have to face to ensure that consumers get to know their business. According to Daroch et al. (2021), the worry of payment process and faith, conventional shopping being more practical than online shopping, image and services offered, expertise, safety and inadequate product details, and lack of confidence are some of the barriers that consumers face when purchasing from internet sites.

Meanwhile, Husin & Roslan (2021) found that factors that encourage consumers to buy online include internet convenience, trust, demography, safety, and industrial 4.0 revolution. A study conducted by Isa et al. (2020) found that the impulsive transaction of Malaysian perspective was the best indicator of customers' online buying intentions. Other than

that, they found that the factor that contributes to consumer behaviour to purchase online is determined by their customer loyalty, online purchasing experience, and product attributes. However, according to Kotni (2019), it is more important for traders to understand what motivates customers to purchase the products or services advertised in order to pique their interest in the products being marketed.

According to Levy & Weitz (2001)'s basic concept model of purchasing process, purchase is a process that begins with identifying the needs and wants of consumers, finding all information about retailers that sell the desired consumer goods, assessing whether the retailer is suitable for retail activities in the area, and other aspects such as brand, goods, location, and distance from the residential area, and then visiting the business premises that have been identified or accommodated. The consumer will make a selection process for the goods they want while at the business premises, which begins with gathering information about the goods such as expiry dates, manufacturer details, and nutritional contents, and then evaluating, choosing, and making the purchase. Following the completion of the purchase process, the user will test the purchased item and then evaluate its utility. The repeat purchasers will purchase the item again in the future. If the consumer is dissatisfied with the goods purchased, he or she will look for a better option to purchase the same goods at another business location.

The same principles apply to online shoppers, who make purchases based on the seller's proclaimed marketing strategy and demand from the customers (Gracia & de-Magistris, 2013). Therefore, the online businessman should strategize their marketing approach to attract consumers to buy their product or at least visit their website or any platform they used to advertise their business. In line with that, Shah et al. (2018) pointed out in their study that there are several factors that influence consumer purchasing decisions such as cultural aspects, beliefs, brand image, and price of goods. However, Isa et al. (2020) found out in their that customers' intention to purchase online was unaffected by the branding orientation. Nevertheless, the Investigation Report on the Use and Access of ICT by Individuals and Households in Malaysia stated that the three main reasons why internet users do not buy or order goods or services via the internet are that they are not interested (69.5 %), prefer to buy in traditional stores (49.1 %), and lack the knowledge or skills (41.8 %) (Nawi & Sulaiman, 2021). Thus, the online transaction security continues to dominate the discussions of electronic commerce (Adiyanto & Febrianto, 2020; Aggarwal & Rahul, 2018; Indiani & Fahik, 2020).

Simultaneously, Husin & Roslan (2021) and Kee et al. (2022) found that strong line connectivity, rapid internet connection, and great trade operations are a few of the elements that have led to Malaysians' preference for online buying. Therefore, most of the online businessman use the best platform and provide all the information needed by the consumer. Isa et al. (2020) found that the quantity of data provided and product information updated could influence consumers to buy meanwhile, Pandiangan et al. (2021) and Ashraf et al. (2019) stated that traders had to ensure their website designed was basic and easy for the consumers to utilize while purchasing the items. Furthermore, Smith (2020) found that the consumer character and goals could influence their behaviour in purchasing, intention to revisit the website and attitude toward the website.

Furthermore, Barusman (2019) suggests that the aspects of company's security policy and dependability are the important considerations when making online purchases. In addition, Barusman (2019) and Anantharaman et al. (2022) state that there is a strong link between trustworthiness and online shopping in ecommerce, where the more the customer has trust on the online platform, the higher the customer's intention to buy becomes.

## Research Methodology

### *Research Design*

This study was conducted using a quantitative method by distributing the study instrument in the form of a cross-sectional survey to the respondents. A cross-sectional survey study means that the study data is collected only once from the study sample. The selection of this design is in accordance with the norms of this study as well as being the practical procedure of the previous studies in the same field.

### *Sample Study*

A total of 235 Malaysians including the east Malaysia were involved in this survey. The instrument of this survey was disseminated through social media, email, and messaging applications in the form of Google Forms. The study sample was selected using a stratified sampling method while the sample size was determined using the sample size determination technique of Morgan & Krejcie (1970).

### *Study Instrument*

The survey was conducted to identify the level of consumer knowledge and attitude toward online purchasing, as well as its relationship with the consumer patterns in online purchasing. There were three sections in the questionnaire consisting of: (i) respondent demographic, (ii) knowledge toward online purchasing, and (iii) attitude toward online purchasing. The respondents' demographic details comprised questions like gender, age, race, job status, job types, estimated monthly household income, and marital status. This research employed a self-developed questionnaire with four Likert scales as the research instrument which were: 1=Strongly Disagree, 2=Disagree, 3=Agree, and 4=Strongly Agree to determine the knowledge levels toward online purchasing and attitude toward online purchasing. Knowledge toward online purchasing instrument consisted of seven (7) items and attitude toward online purchasing consisted of nine (9) items.

### *Data Analysis*

All the data were analyzed using SPSS version 24. Descriptive analyses were used to determine the level of consumer knowledge toward online purchasing and consumer attitude toward online purchasing. The mean value was used for the measurement of level as described in Table 1.

**Table 1:** *Mean Value for Each Level of Variable*

Mean Value	Description
1.00 – 2.33	LOW
2.34 – 3.66	MODERATE
3.67 – 5.00	HIGH

Meanwhile, inferential analyses using Pearson Correlation was used to examine the relationship between the level of consumer knowledge and online consumer behaviour during the Covid-19 endemic phase. The interpretation of the correlation coefficient is per shown in Table 2.

**Table 2: Pearson Correlation Interpretation (Guilford, 1956)**

Range	Interpretation
< 0.20	Very Low Positive Correlation
0.20 – 0.40	Low Correlation
0.41 – 0.71	Moderate Correlation
0.71 – 0.90	High Correlation
> 0.91	Very High Correlation

## Result and Discussion

**Table 3: Demographic Profile**

	Variables	Frequency	Percent (%)
Gender	Male	105	44.7
	Female	130	55.3
Age	< - 19 years	97	41.3
	20 years - 29 years	90	38.3
	30 years - 39 years	37	15.7
	40 years - 49 years	11	4.7
Race	Malay	184	78.3
	Chinese	14	6.0
	Indian	4	1.7
	Sabahan	6	2.6
	Sarawakian	23	9.8
	Others	4	1.7
	Unemployed	5	2.1
Job status	Employed	86	36.6
	Retired	1	.4
	Student	142	60.4
	Housewife	1	.4
Job types	Government sector	86	36.6
	Private sector	15	6.4
	Entrepreneur / Trader	3	1.3
	Corporation	1	.4
	None	130	55.3
Estimated monthly household income	No income	137	58.3
	Less than RM 1,000	8	3.4
	RM 1,001 - RM 2,500	38	16.2
	RM 2,501 - RM 3,500	14	6.0
	RM 3,501 - RM 4,500	21	8.9
	RM 4,501 - RM 5,500	6	2.6
Marital status	More than RM 5,501	11	4.7
	Single	158	67.2
	Married	77	32.8

### Demographic Profile

The questionnaires were distributed online through various platforms in this study to reach out to the academicians from various backgrounds and states in Malaysia. There was a total of 235 online consumers who participated in this study. In this research, the female respondents consisted of 55.3 percent (n=130), while the male respondents consisted of 44.7 percent (n=105). Most of the responders were below 19 years old (41.3 %), followed by 20 -

29 years old (38.3 %), and some of them were within 30 – 37 years old (15.7%). Only 4.7 percent respondents were aged between 40 – 49 years old. Most of the respondents were Malays with a total of 78% (n=184), followed by Sarawakian, 9.8% (n=23), Chinese, 6% (n=14), Sabahan, 2.6% (n=6%), Indian and others, only 1.7% (n=4) respectively. According to the data analysis, the majority of the respondents were students with a total of 60.4 percent (n=142), followed by employed respondents with a total of 36.6 percent (n=86) and the rest were unemployed with a total of 2.5% (n=7).

### ***Knowledge toward Online Purchasing***

The analysis showed that respondents had a high level of knowledge about online purchasing activities, with a mean value of 4.35. Before purchasing goods, the majority of the respondents stated that they looked for and read the recommendations and reviews from the previous buyers (mean=4.60). Consumers will be more likely to buy goods online if this approach is used. The respondents also stated that they would look for product information before purchasing goods online (mean = 4.49). The level of respondents' knowledge of online purchases was also influenced by the situation where the users read positive comments from the previous buyers about a product before making a decision to buy the item (mean = 4.59). In support of these findings, Flavián et al. (2016), Kurniasari et al. (2022) and Mangold & Smith (2012) stated that a wise online customer will read the online review first before making any purchases. Before purchase, a wise consumer needs to know the product first by understanding the product, its features, applications, advantages, and disadvantages. These are the key subjects included in the online product review. It will be a waste if the user does not use these advantages to the best of his or her ability. Thus, due to the increased consumer knowledge, there is a growing need for product review websites. Nowadays, any product presented to the online marketplace depends heavily on the reviews toward the succeed or failure of the business (Floyd et al., 2014). Not only that the customers will not be deceived if they have this knowledge, but they will also be able to navigate a variety of items available and limit their options with the help of the product review.

**Table 4:** *Mean and the standard deviation of knowledge toward online purchasing*

<b>No.</b>	<b>Items</b>	<b>Mean</b>	<b>Std. Deviation</b>
1	I often read positive online reviews about products before buying online.	4.59	.630
2	When I want to buy this product online, the recommendations and online reviews of users make me more confident to buy the product.	4.60	.628
3	I have enough knowledge to buy online.	3.98	.7977
4	I understand the transaction model of buying online.	4.19	.715
5	I am aware of the risks of online purchases.	4.40	.687
6	I understand the security issues of online transactions.	4.21	.761
7	I look for information first before making an online purchase decision.	4.49	.700
<b>Total</b>		<b>4.35</b>	<b>0.70</b>

### ***Attitude toward Online Purchasing***

As shown in Table 4, the level of respondent attitude toward online purchasing is high with a mean value of 3.89. Most of the respondents preferred to buy online if the price was lower than before (mean of 4.39). In this case, price-saving orientation was main influence why some consumers chose to buy online. It showed that if the price of the product including the postage was cheaper than the physical store, they preferred to buy it online. This finding was

in line with the study conducted by Novita & Husna (2020), that the consumers preferred to buy at actual physical store if the price was more expensive online than offline, and vice versa. Besides, the respondents perceived this as a great opportunity to buy anything at any time (mean = 4.27) as consumers could save more time (mean = 4.32) with the online purchasing activities. This orientation showed that the consumers were still willing to pay for the benefits of the time-saving if they were running out of time to purchase offline. Prabowo & Nugroho (2019) stated in their study that consumers would no longer emphasis on the costs and the need to save money to pay for the benefits of time-saving. In this study, the indicator for price-saving orientation was higher than time-saving orientation. This was due to the fact that the majority of the respondents this research were students without any source of income. However, when the orientations overlapped where if they were able to pay less online, they would choose to buy online for the benefit they could get.

This study found that more respondents agreed that online purchasing was easier (mean of 4.02) compared to those who agreed online purchasing was at high compared to buying from an actual physical store (mean = 2.78). According to Prabowo & Nugroho (2019), the attitude toward online purchasing were thought to be significantly influenced by a customer's experience when doing so. Setiawan et al. (2020) claimed that some consumers stayed away from online purchasing as they felt more comfortable and satisfied with the conventional purchasing activities. However, in this study, the respondents viewed otherwise from the findings of Setiawan et al. (2020), where the respondents felt it was more convenience to shop online than offline. However, the issues of consumers seeking for pleasure and easiness were still similar to the findings of the research conducted by Prabowo & Nugroho (2019) and Setiawan et al. (2020).

**Table 5:** *Mean and the standard deviation of Attitude toward Online Purchasing*

No.	Items	Mean	Std. Deviation
1	For me buying on the internet saves time.	4.32	.804
2	It is a great opportunity for me to be able to buy anytime on the internet.	4.27	.753
3	For me, it is easier to buy on the internet.	4.02	.865
4	For me, buying online is safer than buying from an actual physical store (conventionally).	2.78	1.114
5	I believe online shopping will eventually replace my regular/traditional shopping.	3.65	.938
6	I would prefer to buy online if the price is lower than the actual price.	4.39	.831
7	For me, buying online is a good idea.	4.06	.774
8	For me, buying online is better than buying from an actual physical store (conventionally).	3.38	.942
9	For me, buying online is a pleasure.	4.10	.761
Total		3.89	0.865

***Correlation between Knowledge and Consumer Attitude toward Online Purchasing***

Table 6 shows that there are positive correlations between knowledge and online purchasing, and attitude and online purchasing ( $r=0.598$ ;  $p>0.01$ ). Based on the Pearson Correlation Interpretation in Table 2, there are moderate correlations between the variables. Besides, this result showed that the variables of knowledge and consumer attitude have a one-way or linear relationship. This finding supported the previous studies showing that there was a significant relationship between knowledge and online purchasing, and attitude and online

purchasing. According to Chi-Hsien & Shinya (2019), Dhir et al. (2021), Mangold & Smith (2012), Piha et al. (2018) and Wistedt & Jinow Afrah (2022), when the individuals know how to buy online safely, they will not be sceptical of online purchases and will be more enthusiastic in making online purchases.

**Table 6:** *Correlation between variables*

		<b>a</b>	<b>b</b>
Knowledge and Online Purchasing (a)	Pearson Correlation	1	.598**
	Sig. (2-tailed)		.000
Attitude and Online Purchasing (b)	Pearson Correlation	.598**	1
	Sig. (2-tailed)	.000	

\*\* . Correlation is significant at 0.01 level (2-tailed).

## Conclusion

In conclusion, the results showed that respondents had a high level of knowledge of online purchasing activities and respondent attitude toward online purchasing. Before purchasing goods, most respondents would read the recommendations and reviews from the previous buyers and price-saving and time-saving orientations were the main influence for some consumers to opt for online purchases. If the consumers had knowledge to prevent losses and fraudulent while purchasing product via online, they could build their trust by showing good attitude toward online purchasing. Not only can they reduce the risk of being cheated but also benefit from online purchasing where they could save money and time. Besides, users who had skills in online purchases could also reduce bad experiences from online purchasing and feel more comfortable and satisfied with conventional purchasing activities. Therefore, this would enhance their interests in online purchases. Based on the study, it can be concluded that consumers now have high intelligence in online purchasing by doing product research through online reviews and recommendation. Business owners can evaluate how the review will affect their operation and thereafter, design a strategic business plan to improve they businesses. This is because positive review has the power to influence consumer decisions and can enhance the reputation of a company. To increase consumers' online shopping intentions about online shopping sites, it is recommended that business owners improve their online customer reviews. One way is to respond to the comments given by the consumers as soon as possible in the comment's column, for both of those directly related to the products offered and the services provided. Therefore, the consumer confidence level can be improved for a better outcome of online purchasing in the future.

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