

## Analyzing Consumers Online Shopping Behavior Using Different Online Shopping Platforms: A Case Study in Malaysia

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**Abstract:** Nowadays, online shopping is gaining increasing popularity in Malaysia. The development of online shopping has led some to argue that there are additional elements influencing consumer behavior. As a result, a growing number of researchers are currently studying online consumer behavior to better understand the specific characteristics of online shopping. Therefore, this study is conducted to determine the factors that influence online shopping behavior between different online shopping platforms among Malaysian consumers. This is a quantitative study, and 371 students and staff from Universiti Teknologi MARA (UiTM) were randomly picked to participate. The data was gathered via an online questionnaire using Google Forms. The findings show a positive relationship between the variables, namely web characteristics, external stimulus, affection, and cognition. It indicates that all variables influence online shopping behavior among Malaysian consumers. Furthermore, the findings reveal that consumer behavior patterns for online shopping are not different even when using different online shopping platforms. Therefore, it is very critical to understand consumer online purchasing behavior and its influencing factors to improve online shopping in Malaysia. Malaysian businesses must have an in-depth knowledge of the market for their goods and the demographics of the customers they are targeting before engaging in online commerce.

**Keywords:** *Behavior, external stimuli, cognition, affection, web characteristics*

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### 1. Introduction and Background

Nowadays, the population predominantly resides in the digital realm. Originally a means of spreading knowledge, the Internet is now essential to modern life. In Malaysia, there has been a rapid expansion in information and communication technology. Commerce, social interaction, and shopping are just a few of the categories in which the World Wide Web enables connectivity. Online shopping is also becoming more common as people transition from traditional to digital lifestyles. Malaysia has 21.93 million internet users as of 2018, with a figure expected to rise in the next few years, opening new online commerce opportunities (Alias, 2018). The popularity of online shopping is rising as more people become aware of the advantages of the Internet. It is frequently referred to as the practice of purchasing and selling goods online. Stated differently, buying goods directly from a vendor without the help of a dealer is known as "direct buying." Consumers have access to a broad selection of items and services while purchasing online. They can compare those prices with those of other intermediaries at the same time to find the best deal (Sivanesan, 2017).

Currently, many sellers or retailers in Malaysia are involved in e-commerce. Online retailers have started providing numerous deals, leading to a significant increase in online traffic. Their goal when they started using online shopping was to cut costs associated with marketing, which would make them have to reduce the price of their goods to remain competitive in very competitive markets. Businesses connect, transmit, and distribute

information and products using the Internet (Singh & Sailo, 2013). Even though continuing to purchase goods from traditional stores, the majority of people find online shopping incredibly useful. Consumers can gain a lot from online shopping, primarily due to its 24-hour accessibility to the products they want to purchase. Due to their hectic schedules, modern customers find that online shopping is a big help when it comes to saving time (Rahman, Islam, Esha, Sultana, & Chakravorty, 2018). Consumers are searching for a more beneficial deal in terms of variety, pricing, information, and convenience. Online stores describe every product in detail using text, photos, and multimedia, in contrast to traditional stores. Many internet sellers include links to pages containing further details about their goods. Additionally, consumers use the Internet for a variety of purposes, such as making online purchases and evaluating product features, prices, warranties, and delivery options.

The development of online shopping has led some to argue that there are additional elements influencing consumer behavior. Usually, consumer behavior is regarded as an applied topic since some choices have a major impact on how people behave and take expected actions. The composition balances the fields of economics, sociology, psychology, and management. It tries to comprehend how customers decide, both individually and collectively (Kuester, 2012). Individual customers' characteristics, such as their demographics and behaviors, are the main focus to comprehend what they want. As a result, a growing number of researchers are currently studying online consumer behavior to better understand the specific characteristics of online shopping. It has become one of the most significant research themes in e-commerce. Only a few studies have been conducted on consumer online buying behavior in Malaysia. The knowledge and comprehension of consumers' opinions about online shopping seem insufficient. There is still much to learn about the significance of online buying behavior among consumers and how it affects e-commerce. Thus, the purpose of this study is to identify the variables influencing Malaysian consumers' online purchasing decisions across various e-commerce platforms.

## 2. Literature Review

### Behavior

Consumer behavior is the study of how individuals select, acquire, and arrange goods, services, events, or ideas to satisfy their wants as well as the requirements of society (Kuester, 2012). According to Rafsandjani (2018), to meet their needs and desires and promote customer loyalty, individuals, groups, and organizations pick, purchase, use, assess, and reject goods and services. This is known as consumer behavior. It is a procedure whereby the customer decides whether to buy, use, or discard the good or service to satisfy their needs and wants (Jongeeun, 2004). In addition, studies on consumer behavior have discovered a wide model of purchasing behavior that embodies the decisions consumers make when making purchases (Vrender, 2016). Marketers use these designs because they improve in predicting and understanding consumer purchasing trends. Meanwhile, Javadi, Dolatabadi, Nourbakhsh, Poursaeedi & Asadollahi (2012) stated that online shopping behavior is the act of purchasing goods or services over the Internet. Liang & Lai (2000) stated that online shopping involves several processes that are similar to those involved in traditional buying activity. First, throughout the online buying process, prospective consumers use the Internet to find out the needs they have before deciding to buy a good or service. After that, individuals assess each choice and decide which best meets their needs to fulfill the perceived need. At last, a deal is completed, and post-purchase services are provided.

### Web Characteristics

The qualities of a website play a key role in online purchasing. According to Chen, Hsu, & Lin (2010), a website incorporating functional and content development increases customer happiness and online purchase intent, ultimately boosting the return rate. Several factors are used to evaluate a website's characteristics, including information content, design, safety, and confidentiality (Wu & Tsai, 2017). For a website to successfully serve customers, it must first provide the necessary information or services, then present those services or information on an appropriately designed web page, and finally ensure complete security and privacy during transactions to ensure that customers will complete the transaction as intended (Lai, Li, & Lin, 2017). Additionally, Jadhav & Khanna (2016) mentioned that a website's layout and functionality could motivate customers to purchase by encouraging them to shop there. To enhance user experience and help with decision-making, consider including more photographs, product videos, and three-dimensional (3D) imagery on the website (Daroch, Nagrath, & Gupta, 2021). Furthermore, it should be made interesting and more user-friendly, providing detailed product information and member discounts to encourage online shoppers to spend time

discovering the site and making online price comparisons.

### **External Stimulus**

According to Sawyer & Dickson (1984), along with being impacted by internal factors like personal ideas and values, people's attitudes will change in response to external stimuli and will therefore reflect their actions. Customers will be persuaded to purchase when a business owner uses promotional activities to present external stimuli, making external stimuli a vital component of a successful marketing plan. Online sellers would gain customer favor if they could offer specific personalized services or products in response to their individual wants. Marketing, products, quality, cost, offers, and customer service are the main external factors influencing customers' purchasing decisions (Wu & Tsai, 2017). Based on Li (2022), the consumer's consciousness is first stimulated by external stimuli, which can be categorized into social stimuli and marketing stimuli. Social stimuli fall into two categories: those created by peers, family, and other associated groups, and those created by the macroenvironment, which includes cultural and economic factors. In the meantime, promotion, channel, pricing, and quality stimuli are examples of marketing stimuli.

### **Affection**

Affection is related to emotional characteristics such as satisfaction (Fihartini, Ramelan, Karim, & Andriani, 2023). Peter, Olson & Grunert (1999) divided affection into sensations, specific emotions, moods, and evaluations. However, Hanna & Wozniak (2001) defined affection as an attitude resulting from an individual's understanding of the subject matter, irrespective of the subject's liking or dislike. Meanwhile, affective is recognized as influencing loyalty in addition to motivational, perceptual, and behavioral effects (Sari & Alversia, 2019). The affective state of the customer resulting from order fulfillment is referred to as shopping satisfaction in the context of e-commerce; it is a result of previous e-commerce transactions (McKinney, Yoon, & Zahedi, 2002). As per the findings of Verhagen & Van Dolen (2011), virtual information about emotional experiences such as website atmosphere, feelings evoked during website interactions, or web page browsing can direct viewers towards a specific emotional atmosphere or elicit a specific emotional response in them.

### **Cognition**

Consumer cognition is the total of observation, beliefs, and subject-matter knowledge about the attitude, according to (Peter, Olson, & Grunert, 1999). Typically, this idea is based on personal experience or other pertinent information sources. Therefore, cognition is the comprehension and perception of an attitude's subject matter that arises by combining information about the issue from diverse sources with personal experiences. Meanwhile, Fihartini, Ramelan, Karim, & Andriani (2023) claimed that the consumer's cognitive variables in the context of online shopping include emotional intelligence and buying values such as utilitarian and hedonistic values. The cognitive method, however, argues that measuring buying behavior is not the only sign of brand loyalty, as it can also result from low prices (Kuleh & Setyadi, 2016).

### **Past Studies on Online Shopping**

Numerous studies have been conducted to decide the causes that influence online shopping. One study found that the primary variables influencing online purchases are time, diversity of options, customer service, availability, cheap pricing, discounts, and comparisons (Jadhav & Khanna, 2016). It was supported by several studies (Abd Aziz & Abd Wahid, 2018; Martin, Mortimer, & Andrews, 2015). Prices may be easily compared while shopping online, according to these findings. The competitive rates and offers made by online businesses are significant drivers of online purchases. Due to online shops providing lower costs than traditional channels, consumers choose to shop online to save money (Harn, Khatibi, & Ismail, 2006). Younger people appreciate it more since online merchants offer a range of sales and discounts during the festive and holiday seasons, increasing online traffic (Karthikeyan, 2016). Aside from that, convenience is one of the major aspects of online shopping. It can save customers time because services are always available, and products are typically delivered to their destination (Piliik, Klimek, Jurickova & Palka, 2016). Shopping online is more convenient for busy customers since online shops cater to their specific needs.

Trust is also a main factor influencing consumers to shop online. Customers who believe they have a higher level of confidence in an online medium are more likely to make purchases through it (Ching, Hasan, & Hasan, 2021). Based on Verhagen & Van Dolen (2011), trust is very valuable in the context of online purchasing. This is due to the consumer's perception that there is more transaction risk in an online setting when they do not

have direct contact with the seller and the items they want to purchase. They frequently deal with the issue of the product presented being different from the one that is sold. Customers' trust in the website may be impacted by this situation, and they may decide not to make another order therein (Isa, Shah, Palpanadan, & Isa, 2020). Other findings also indicate that the perception of risk has an impact on an individual's propensity to shop online (Ha, Nguyen, Van Pham, & Nguyen, 2021). The term perceived risk refers to how customers perceive the unpredictability and unfavorable outcomes when purchasing a website. A few of the risks associated with online purchasing are financial risks, product risks, seller risks, privacy risks, and security risks where personal information can be stolen. Demographic variables that affect consumers' perceptions and behaviors, such as age, gender, and economic level, also make it easier for people to shop online (Sabbir Rahman, 2012).

### 3. Research Methodology

#### Sampling Technique

This quantitative study investigates consumers' online shopping behavior between different online shopping platforms. This study was conducted at the Universiti Teknologi MARA (UiTM) in Malaysia. In this study, convenience sampling was used to select respondents, which were students and staff. This technique was used due to low cost and ease of use. Sekaran & Bougie (2016) and Roscoe (1975) recommended adequate sample sizes for the majority of cases of study that were greater than 30 and lower than 500. A minimum of 300 observations has been chosen as the sample size for this investigation in light of these claims. 371 respondents were randomly picked to participate and cooperate in answering the questionnaire.

#### Data Collection Method and Research Instrument

Data was gathered via an online survey made with Google Forms. The questionnaire used in this study was adopted from Wu & Tsai (2017). It consists of two sections. The first section focuses on the demographic profiles of respondents, including gender, level of education, age group, UiTM branch, and preferred online shopping platforms. Meanwhile, the second section consists of 39 items on a 7-point Likert scale ranging from strongly disagree to strongly agree. This section assesses the degree of agreement among respondents on five variables: web characteristics, external stimulus, cognition, affection, and behaviors.

**Table 1: Distribution of Items**

Variables	No. of Items
Web Characteristics	9
External Stimulus	12
Affection	6
Cognition	6
Behavior	6

Since the questionnaire was adopted from a previous study, it has been tested for reliability and validity. The internal consistency of the questionnaire was sufficient, with 0.932, 0.935, 0.923, 0.860, and 0.922 for web characteristics, external stimulus, affection, cognition, and behavior, respectively. These results showed the instruments' reliability. This leads to the conclusion that these questionnaires are already reliable and valid.

#### Data Analysis

In this study, descriptive statistics, the Pearson correlation coefficient, and an independent T-test were applied. A frequency table was used to identify the demographic profiles of the respondents. A bar chart was also used to determine the online shopping platforms that respondents preferred. Then, the mean and standard deviation were used to identify the level of the five variables involved. The Pearson correlation coefficient was applied to see the relationship between the two variables. Then, an independent T-test was conducted to determine the differences in online shopping behavior among consumers involving different online shopping platforms.

#### 4. Results

##### Demographic Profiles

Table 2 indicates the demographic profiles of the 371 consumers. Based on Table 2, the majority of the consumers are female, which is 70.9%, while 29.1% are from the male group. Meanwhile, 45.3% of the consumers studied at the diploma level, and another 20.8% came from the degree level. The highest percentage of the consumers was from the age group of 18 to 25 years old (62.5%). The age group of 36 to 40 years old came in second (10.2%), and the group of 26 to 30 years old had the lowest percentage, which was 4%.

**Table 2: Demographic profile of the consumers (n = 371)**

Variable	Frequency	Percentage
<b>GENDER</b>		
Male	108	29.1%
Female	263	70.9%
<b>Total</b>	<b>371</b>	<b>100%</b>
<b>AGE (years old)</b>		
18-25	232	62.5%
26-30	15	4.00%
31-35	27	7.30%
36-40	38	10.2%
41-45	24	6.50%
More than 45	35	9.40%
<b>Total</b>	<b>371</b>	<b>100%</b>
<b>LEVEL OF EDUCATION</b>		
SPM/ Pra Diploma	18	4.9%
Diploma	168	45.3%
Degree	77	20.8%
Masters	71	19%
PHD	37	10
<b>Total</b>	<b>371</b>	<b>100%</b>

##### Online Shopping Platforms in Malaysia

Table 3 presents the top online shops that respondents choose. Shopee was selected as the top online shopping platform in Malaysia by about 86.5% of those who responded. This was followed by TikTok Shop, with 4.3%, and another 3.8% preferred shopping online at Lazada.

**Table 3: Online shopping platforms preferred by 371 consumers**

Online Shopping Platforms	Frequency	Percentage
Lazada	14	3.8 %
Shopee	321	86.5 %
Lelong	1	0.3 %
Mudah. my	2	0.5 %
Sephora	2	0.5 %
Zalora	9	2.4 %
Carousell	4	1.1 %
Amazon	1	0.3 %
TikTok Shop	16	4.3 %
Shein	1	0.3 %

**The Level of Web Characteristics, External Stimuli, Cognition, Affection, and Behavior among Consumers** Table 3 shows descriptive statistics for each item in the construct for web characteristics, external stimulus, cognition, affection, and behavior. The overall mean score of constructs under web characteristics was  $5.53 \pm 1.207$  on the 7-point Likert scale. Therefore, most of the consumers agreed that the statement related to web characteristics towards online shopping. "The online shop accepts a variety of payment methods" is ranked as the highest attribute compared to others. The overall mean for external stimulus items



was  $5.07 \pm 1.291$ . It indicates that the majority of consumers agreed with all statements regarding external stimulus on online shopping behavior, with the highest rating item being "The online shopping website ensures that customers can obtain real-time promotional information". Meanwhile, the overall mean score for cognition was  $5.43 \pm 1.346$ . It shows a moderate level at which most of the consumers agreed with all statements that relate to cognitive online shopping behavior. The topmost rating is "Shopping online is attractive". Aside from that, the overall mean score for affection at the moderate level is  $4.93 \pm 1.357$ . The results show that the majority of consumers agreed with the statement that online shopping is very convenient and time-saving. However, consumers disagree with the statement that people shopping online do not have to worry about being cheated. Then, the overall mean score of behavior toward online shopping was  $4.68 \pm 1.555$ , which indicates a moderate level. Overall, the level of web characteristics, external stimuli, cognition, affection, and behavior among consumers was moderate.

**Table 3: Level of Web Characteristics, External Stimuli, Cognition, Affection and Behavior**

No.	Items	Mean	Standard deviation	Interpretation
A1	The online shopping website is designed with a good interface.	5.63	1.125	Moderate
A2	The online shopping website allows for a diversified means of payment.	6.09	1.157	High
A3	The online shopping website is updated on a real-time or regular basis.	5.71	1.177	High
A4	The online shopping website comes with safe transaction mechanisms.	5.55	1.178	Moderate
A5	The online shopping website makes it easy to find the information one needs.	5.75	1.180	High
A6	The online shopping website provides a rich amount of information in detail.	5.47	1.209	Moderate
A7	The online shopping website is designed with satisfactory operational interfaces.	5.57	1.106	Moderate
A8	It is safe to have transactions on the online shopping website.	5.37	1.186	Moderate
A9	The online shopping website will not cause any data leakage.	4.62	1.548	Moderate
<b>Web Characteristics</b>		<b>5.53</b>	<b>1.207</b>	<b>Moderate</b>
B1	The online shopping website makes sure that consumers can buy intact products on it.	5.05	1.303	Moderate
B2	The online shopping website makes sure that the products displayed on it are the cheapest.	4.99	1.401	Moderate
B3	The online shopping website makes sure that the products displayed on it are quality-guaranteed.	4.67	1.369	Moderate
B4	Online shopping websites launch new products frequently.	5.22	1.186	Moderate
B5	The online shopping website makes sure that the products displayed on it are satisfactory and of good quality.	4.88	1.296	Moderate
B6	The online shopping website makes sure that consumers can receive promotional information in real-time.	5.41	1.129	Moderate
B7	The prices on the online shopping website are set reasonably.	5.32	1.161	Moderate
B8	The products displayed on the online shopping website allow for greater bargaining space.	4.51	1.648	Moderate
B9	The online shopping website is designed with a satisfactory return/exchange mechanism.	5.01	1.330	Moderate
B10	The online shopping website is designed with a satisfactory interaction mechanism with customers.	5.24	1.215	Moderate
B11	The online shopping website could respond to customers' needs immediately.	5.11	1.262	Moderate

<b>B12</b>	The online shopping website makes sure that consumers can buy discount products on it.	5.39	1.190	Moderate
<b>External Stimulus</b>		<b>5.07</b>	<b>1.291</b>	<b>Moderate</b>
<b>C1</b>	Shopping on the website is very interesting.	5.77	1.147	High
<b>C2</b>	I like shopping on the Internet.	5.61	1.301	Moderate
<b>C3</b>	Shopping online is attractive.	5.74	1.191	High
<b>C4</b>	I prefer to shop online.	5.21	1.457	Moderate
<b>C5</b>	Shopping online is as interesting as hunting for treasure.	4.99	1.517	Moderate
<b>C6</b>	Compared with physical stores, I prefer to search for information on a product online.	5.25	1.460	Moderate
<b>Affection</b>		<b>5.43</b>	<b>1.346</b>	<b>Moderate</b>
<b>D1</b>	Online shopping can be reassuring.	4.52	1.338	Moderate
<b>D2</b>	Online shopping for goods is inexpensive.	5.38	1.275	Moderate
<b>D3</b>	In online shopping do not have to worry about being cheated.	3.55	1.688	Low
<b>D4</b>	Online shopping return mechanisms can reduce transaction risk.	4.46	1.485	Moderate
<b>D5</b>	Online shopping is more time-saving.	5.80	1.200	High
<b>D6</b>	Online shopping is very convenient.	5.85	1.156	High
<b>Cognition</b>		<b>4.93</b>	<b>1.357</b>	<b>Moderate</b>
<b>E1</b>	I shop online for the products I need regularly.	4.81	1.469	Moderate
<b>E2</b>	When I want to buy something, online shopping is my first choice.	4.72	1.635	Moderate
<b>E3</b>	I do all the shopping on the Internet.	4.17	1.696	Moderate
<b>E4</b>	When I want to buy something, I would buy it online.	4.44	1.542	Moderate
<b>E5</b>	I have a great intention to shop online.	4.84	1.504	Moderate
<b>E6</b>	Shopping online is more convenient.	5.09	1.486	Moderate
<b>Behavior</b>		<b>4.68</b>	<b>1.555</b>	<b>Moderate</b>

**The Relationship Between Web Characteristics, External Stimulus, Cognition and Affection with Consumers Online Shopping Behavior**

Table 4 demonstrates the correlations between independent variables, which are web characteristics, external stimulus, affection, and cognition and the dependent variable, which is behavior. The findings indicate that every independent variable and consumer online buying behavior have significant correlations. The relationship between web characteristics and consumer online shopping behavior is 0.445, which indicates that there is a moderately positive relationship between these two variables. Similarly, there is a moderately positive relationship between external stimulus, affection and consumer online shopping behavior, which is 0.522 and 0.695, respectively. Meanwhile, the relationship between cognition and brand consumer online shopping behavior is 0.705, which indicates that there is a strong positive correlation between these two variables.

**Table 4: Correlations between Independent Variables and Dependent Variable**

<b>Variables</b>	<b>Web Characteristics</b>	<b>External Stimulus</b>	<b>Affection</b>	<b>Cognition</b>	<b>Behavior</b>
<b>Web Characteristics</b>	1	0.711	0.630	0.623	<b>0.445</b>
<b>External Stimulus</b>	0.711	1	0.621	0.713	<b>0.522</b>
<b>Affection</b>	0.630	0.621	1	0.712	<b>0.695</b>
<b>Cognition</b>	0.623	0.713	0.712	1	<b>0.705</b>
<b>Behavior</b>	0.445	0.522	0.695	0.705	1

*\*\* At the 0.01 level, the correlation is significant.*

**Consumers' Online Shopping Behavior Based on Different Online Shopping Platforms**

Table 5 shows the result of the difference between consumers' online shopping behavior and online shopping platforms using a one-way ANOVA. The results indicated that the p-value exceeded the significance level ( $p = 0.063 > \alpha = 0.05$ ). As a result, customers using various online shopping platforms did not differ in their online buying habits. This indicates that even while using various online shopping platforms, including Shopee, Lazada, Zalora, TikTok Shop, and so on, the pattern of customer behaviors for online purchasing remained the same.

**Table 5: The Difference between consumer behavior and Online Shopping Platforms**

Model	Sum Squares	DF	Mean Square	F	P-Value
Between Groups	26.223	9	2.914	1.821	0.063
Within Groups	577.536	361	1.600		
Total	603.759	370			

*\*\* At the 0.05 level, the correlation is significant.*

**Discussion**

According to the findings, respondents prefer Shopee more than any other e-commerce website. Previous research found that Shopee, Lazada, and Food Panda were the top three online shopping sites where consumers went to purchase their everyday basic needs, with Shopee ranking best (Isa, Shah, Palpanadan, & Isa, 2020). These findings are also supported by Vasudevan & Arokiasamy (2021) and Ching, Hasan, & Hasan (2021). As stated by their research, Malaysian consumers' two favorite online shopping sites are Lazada and Shopee. Most consumers from different online shopping platforms indicated that they agreed with all statements related to web characteristics, external stimulus, affection, cognition, and behavior since the level of all these variables was moderate. Most of the respondents agreed that the online shop accepts a variety of payment methods. This is in line with Rahman, Islam, Esha, Sultana, & Chakravorty (2018), who indicates that websites with various payment methods are a highly important factor in purchasing decisions among consumers. On the other hand, consumers mostly agreed that the online shopping website ensures that customers can obtain real-time promotional information. People are now more likely to make purchases through e-commerce sites as the promotional strategies for a particular product are highly effective. According to Shariff & Abd Hamid (2021), their findings proved that respondents agreed with statements related to various promotional strategies via online shopping. In this study, consumers agreed that online shopping is convenient and time-saving. By allowing consumers to make purchases online and have their purchases delivered, e-commerce sites offer convenience. Shariff & Abd Hamid (2021) suggested that customers were more likely to use an online shopping platform if they thought it was convenient, which meant they could shop from home or go to get the necessary items. They can also save time by shopping online.

Aside from that, this study found that all independent variables, which are web characteristics, external stimulus, affection, and cognition, are positively correlated with consumers' online shopping behavior. At the  $p$ -value  $< 0.01$  level of significance, all the variables have an association with each other that influences online shopping behavior among consumers in Malaysia. All these factors should be continually emphasized by e-commerce companies on all online shopping websites to expand or grow their business and ensure the success of their online retail operation in Malaysia. According to the findings, web characteristics have a positive influence on consumer behavior. This finding is consistent with Pandey & Parmar (2019), who hypothesized that website design influences customers' online purchasing behaviors. About Isa, Shah, Palpanadan, & Isa (2020), most consumers prefer to explore websites with attractive designs. They claimed that to choose what products to buy online, they needed a comfortable website. Internet consumers are encouraged to participate in online purchasing activities by the attractive effects of captivating and interesting e-tailer websites (Ganesh, Reynolds, Luckett, & Pomirleanu, 2010). However, Hasanov & Khalid (2015) stated that website quality is not the only aspect that could influence a consumer's purchase decision; other factors like effective product distribution and logistics, outstanding customer service, and positive consumer feedback are also significant.

This study also reveals a positive relationship between external stimuli and consumers' online shopping behavior. This means that the buying decisions of consumers are influenced by external stimuli like promotion, marketing, products, price, and others. The many buying channels offer external stimulus. It was supported by Wu & Tsai (2017), who found that the influence coefficient between external stimulus and online shopping



behavior was the same for both high-frequency and low-frequency groups. The external stimulus that both groups are exposed to while buying online will have an impact on their behaviors. Other studies also claimed that several factors in external stimuli affect consumer behavior. The product quality, pricing, and channel components of the advertising strategy have a major impact on the quantity and frequency of consumer purchases. This finding suggests that consumers are more likely to make purchases when a product's quality is higher, its price is more reasonable, and the channel is easier to use (Li, 2022). Additionally, credit cards and encouragement for more purchases allow online shoppers to frequent online retail stores, which could lead to an increase in impulsive purchases (Dawson & Kim, 2009). In contrast, about the use of a credit card has the smallest effect on impulsive purchasing (Khalil & Raza, 2018).

Besides that, the result also shows a positive relationship between affection and consumer behavior towards online shopping. It implies that if a customer experiences positive emotions about shopping online, such feelings will be successfully translated into actual online shopping behavior. Successfully enhancing consumers' emotions towards online shopping may positively influence both their purchase intent and behavior. This was agreed upon by Mis (2022). Positive attitudes and repurchases were influenced by favorable emotions. Emotional encounters are recognized as having an important impact on customers' behavior when they shop online. Customer emotion can be influenced by satisfaction, thereby enhancing customer frequency, purchase intentions, and consumption behavior. Additionally, Fihartini, Ramelan, Karim, & Andriani (2023) also claimed that consumer purchase behavior is greatly influenced by emotional or affective variables. According to Kidwell, Hardesty, & Childers (2008), emotional intelligence and shopping behavior are associated with customers exhibiting higher emotional intelligence and making better purchasing decisions than those with lower emotional intelligence. Pappas, Kourouthanassis, Giannakos, & Chrissikopoulos (2014) also stated that emotions, feelings, and moods had been linked to consumer behavior. Positive emotions like happiness raise purchase intention, whereas negative emotions like fear, hopelessness, and anger reduce it.

Conversely, however, the analysis of the findings also proves that the cognition variable is strongly correlated with consumers' online shopping behavior. It suggests that a customer's positive perception of online shopping will be effectively influenced if they begin making purchases there. Previous studies provided evidence in support of this claim. When purchasing online, consumer behavior has a strong positive impact on consumer cognition (Wu & Tsai, 2017). Ning Shen & Khalifa (2012) found that the relationship between the desire to buy and actual impulsive behavior is moderated by the consumer's cognition. Useful cognition positively affects consumer purchase habits in terms of the relationship between cognitive and behavioral actions (Hu, Huang, Zhong, Davison, & Zhao, 2016). Some results show that respondents had a favorable opinion of online shopping and that consumers behave differently while making purchases online than they do in-store (Badlani, 2010). Cognitive characteristics like complexity, relative advantage, trust, feasibility, and observability were used by Yadav, Goel, & Sharma (2020). According to their findings, these elements show how respondents view the value of internet shopping and how it affects consumer behavior.

## **5. Managerial Implications and Recommendations**

The endemic era continues to present challenges for many businesses. Low consumer confidence has resulted in high unemployment rates and a sluggish pace of economic recovery. However, encouraging recovery indicators are beginning to emerge in a few industries. The online business is beginning to show improvement. Online retailers' sales have increased recently, indicating that consumers may be starting to spend more money again. This is good news for the economy. This also clarifies why online shopping is so common these days. On the other hand, businesses usually experience lower overhead costs while conducting operations online compared to having physical stores. Because of its efficiency, consumers may pay less, which would encourage more spending and boost the economy. Nowadays, online shopping has also become more familiar among consumers. Most of them preferred to do online shopping rather than go to physical stores. Consumers frequently spend more money since online shopping is so convenient. They may be more likely to make impulsive purchases when they have the flexibility to browse and buy things whenever they want, which would increase overall economic productivity. As a result, companies or internet retailers should improve their online businesses to increase sales. Several factors, such as the website, external stimulus, affection, and cognition, should be concentrated so that they will meet the consumer's requirements when doing online shopping. Aside from that, the government needs to work harder to encourage online shopping. The government should

improve IT infrastructure and facilities, as well as online payment security. Therefore, this can help stimulate the demand for online shopping, expand consumption, and create jobs, thus strengthening the global economy. In this study, various limitations could be fixed for future research. This study is only available to university students and staff. The current study should thus be conducted with consumers in Malaysia outside of this university. Besides that, employing advanced statistical techniques for analyzing consumers' online shopping behavior, especially the factors that affect consumer behavior when shopping online could further enhance the depth and accuracy of the research findings.

### Conclusion

In conclusion, there is a relationship between all the variables and consumers' online shopping behavior. There is a positive relationship between the variables, namely web characteristics, external stimulus, affection, and cognition. The finding also shows that consumer behavior patterns for online shopping do not differ even when using different online shopping platforms such as Shopee, Lazada, Zalora, TikTok Shop, and others. Therefore, this study is useful and crucial for ensuring the success of an online retail business in Malaysia. Understanding consumer online purchase behavior and the elements that influence it is crucial for improving online shopping in Malaysia. Malaysian businesses must possess in-depth knowledge of the market for their goods and the demographics of the customers they are targeting before engaging in online commerce. Businesses and retailers can create more targeted and efficient online retail operations that satisfy the needs and expectations of their new customers by developing a thorough grasp of their target consumer base. Furthermore, sellers on the internet have at their disposal a range of strategies for convincing individuals to shop online. To do this, businesses must point out the shortcomings of their products and provide fixes, turning the infrequent or non-existent online shopper into a devoted patron. To achieve continuous growth in a competitive global market, online businesses can benchmark with successful companies that offer outstanding goods and services. This mission has also benefited the adoption of the digital strategy by enterprises, creating more opportunities for Malaysians to find employment. For this reason, the government should continue to assist internet merchants to ensure the sector's prosperity.

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