

## FACTORS INFLUENCING ONLINE SHOPPING BEHAVIOUR OF YOUTH CUSTOMERS IN MALAYSIA AFTER COVID-19 PANDEMIC

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### ABSTRACT

**Background and Purpose:** The Movement Control Order (MCO) requires a higher demand for online services. In light of recent events in the business environment, it is becoming challenging to ignore online channels, including online shopping platforms. The current study investigates the impact of customer satisfaction, convenience, social media influence, and websites on online shopping behaviour.

**Methodology:** Two hundred respondents were selected based on the convenience sample. Online questionnaires were distributed to young Kota Kinabalu, Sabah, Malaysia customers. This case study was conducted after the COVID-19 pandemic in the region. Harman's Single Factor Test, Validity test, and Partial Least Square Structural Equation Model were used to validate the model of this study and the relationship between constructs.

**Findings:** The results reveal that customer satisfaction, convenience, and social media influence are significantly related to the online shopping behaviour of youth in Malaysia after the Covid-19 pandemic. Furthermore, the relationship between customer satisfaction and online shopping behaviour is higher than that between other factors in this study model.

**Contributions:** This study enhances the theoretical understanding of online shopping behaviour among Malaysian youth consumers. From a practical perspective, it highlights the importance of leveraging e-commerce platforms to optimise customer satisfaction and foster trust in online shopping services.

**Keywords:** Convenience, customer satisfaction, online shopping behaviour, youth customers, social media influence.

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## 1.0 INTRODUCTION

The trend toward online shopping has accelerated substantially during the last two decades. The number of internet users continues to grow dramatically, which has aided in developing electronic commerce operations. A study by Vasudevan and Arokiasamy (2021) attempted to explain online shopping development and growth to understand youth consumer behaviour during the COVID-19 pandemic. The advancement of internet technology has significantly influenced online shopping worldwide (Shafiee & Bazargan, 2019). There were 22 million people, or 88 per cent of digital consumers, in 2021. The digital transformation provides the organization with the potential to grow their business and communicate with consumers on the things that concern them most—according to data from the Department of Statistics Malaysia (DOSM), Malaysia's e-commerce revenue quadrupled in three years, reaching RM896.4 billion in 2020 from RM447.8 billion in 2017 (DOSM, 2021).

In the new global economy, online shopping has become essential in expanding traditional business methods and has excellent potential to attract new customers (Liu, 2012). Online shopping is a dominant feature during the COVID-19 pandemic. Since COVID-19 has had such a significant impact on communities and the world economy, it can be regarded as more than merely a health disaster (Julia Koch, 2020). As economic data on sales reveals, this traumatic scenario has had a significant impact on a global health disruption, and at the same time affecting the global economy (Isa & Razak, 2021) and consumer attitudes and behaviours (Despin, 2020).

Mobile devices, particularly smartphones, continue to be the primary platform for online shopping (Luceri et al., 2022). Thus, retailers optimized their websites and apps for mobile users to enhance the shopping experience. Shopping through mobile devices and using

smartphones for in-store payments has become increasingly prevalent and is expected to continue its growth in the coming years, as indicated by Hillman and Neustaedter (2017). Mobile shopping has experienced rapid expansion and accounts for more than a third of global e-commerce transactions. Additionally, numerous industry reports emphasize its significant role as an entry point that leads customers to engage with other sales channels, as highlighted by Chopdar et al. (2018).

The research findings highlighted distinctions between the factors influencing online purchase intentions during the pandemic and those affecting future purchase intentions. Notably, the most significant influence during the pandemic was the apprehension associated with shopping in physical stores. The results from a previous study by Theodorou et al. (2023) indicated that attitudes towards online shopping, subjective norms, perceived control over behaviour, and fear of in-store shopping positively influenced the intention to make online purchases during the pandemic. Conversely, only attitudes towards online shopping and perceived control over behaviour played a role in shaping future purchase intentions. Additionally, in line with expectations, the intention to shop online directly impacted actual online purchase behaviour.

In Malaysia, the standard of procedure for Movement Control Order (MCO) 1.0 on 18 March 2020 during the COVID-19 pandemic required all types of brick-and-mortar businesses to be closed (Isa & Razak, 2021). Moreover, the MCO requires a higher demand for online services. In other words, the COVID-19 outbreak has forced local businesses to upgrade their face of business in the country from offline to online shopping to sustain. In light of recent events in the business environment, it is becoming challenging to ignore the existence of online channels, including online shopping platforms. Thus, online shopping has been the subject of many studies internationally. For example, a study on businesses' behaviour intention to change demonstrated that many business changes in online behaviour are expected to survive the COVID-19 pandemic (Kenny, 2020). Another study indicated that online shopping motives during COVID-19 reveal that e-commerce has risen significantly (Julia Koch, 2020). There is a need for more studies on the effect of risk perception toward epidemics on consumer behaviour and decision-making (Shim et al., 2021). As the phenomena are unprecedented, more studies must be conducted on factors influencing online shopping behaviour among youth customers after the COVID-19 pandemic, especially in Malaysia.

To the best of the authors' knowledge, no similar research focused on specific conditions, notably in Sabah, Malaysia. Considering these significant developments in online

shopping, there is an exciting yet untapped potential to understand better how youth as consumers' purchase experiences throughout online shopping affect their shopping behaviour. Therefore, the current study investigates the relationship between determinant factors (customer satisfaction, convenience, social media influence, and website) and online shopping behaviour. Thus, the model under investigation is expected to provide critical insights into online shopping and answer the following question. Is there any relationship between customer satisfaction, convenience, social media influence, and website and online shopping behaviour among youth customers?

## **2.0 LITERATURE REVIEW**

### **2.1 Theoretical Background**

The Theory of Planned Behaviour (TPB) is a psychological theory that helps explain human behaviour by considering the role of attitudes, subjective norms, and perceived behavioural control. Regarding online shopping behaviour, TPB provides valuable insights into understanding why individuals engage in online shopping and how their intentions and attitudes influence their actual behaviour. Previously, Hansen (2008) found that people tend to be inclined to purchase online due to the influence of their families and friends. Online shopping behaviour is subject to the subjective norm in the TBP and refers to social influence (Hansen, 2008).

Additionally, another study found that subjective norms and the role of friends play a significant role in influencing online purchase intentions, which leads to online shopping behaviour (Ketabi et al., 2014). Another study, the fear of shopping in physical stores due to the COVID-19 pandemic, uses the TBP. This study found that subjective norms online affected the intention to buy online during the pandemic but not afterwards (Theodorou et al., 2023). In contrast, findings in another study found that subjective norm does not impact the intention to buy online but affects online shopping behaviour, which supported the findings of this study. Additionally, website trust is essential in intention and decision-making about online buying (Tang et al., 2021). Customers' trust is the key to the success of any website. Trust is vital for websites to set reasonable expectations and actions toward online shopping behaviour.

TBP provides a valuable understanding of online behaviour. Additionally, the rapidly evolving nature of technology and online platforms may shift the factors influencing online behaviour over time (Sutisna & Handra, 2022). They have used TPB to understand factors influencing consumers' intentions to shop online, such as their attitudes toward online shopping, subjective norms (influence of friends and family), and perceived ease of use of e-

commerce websites. COVID-19 significantly impacted consumer behaviour, including how people shop online.

Previously, it was found that the perception of a shopping mall's image significantly affects an individual's sense of well-being while shopping, ultimately influencing their loyalty to the mall (Shafiee & Es-haghi, 2017). Furthermore, their study suggested strategies for enhancing shopper loyalty through improving shopping well-being and delved into the influence of gender differences on loyalty patterns among shoppers. Moreover, other dimensions of retailer equity positively influence loyalty towards the retailer (Ghorbanian et al., 2016).

Eyvazpour et al. (2020) discovered that the primary factors influencing buyers' evolving mindset and behaviour in contemporary business revolve around ethics and a steadfast commitment to moral values. This trend is particularly pronounced given the growing preference of consumers to make electronic purchases, necessitating a heightened emphasis on ethical conduct among online retailers (Tabaeeian & Shafiee, 2023). Consequently, this ethical focus among e-retailers significantly contributes to shaping retailers' overall image in consumers' eyes.

## **2.2 Online Shopping Behaviour Among Youth**

Over 50% of online shoppers in Malaysia are young (Vasudevan & Arokiasamy, 2021) due to the growth of technology and infrastructure. Youth are well-known for being early adopters of most new technology because they like discovery and continuously search for new knowledge. Even though older generations are becoming more technologically aware, the internet community is still dominated by young people. In addition to being more familiar with electronic commerce, younger generations process website information five times faster than older generations (Ammeter, 2018).

Moreover, the youth is exposed to advanced technology, having grown up in the information age and being accustomed to constant media intake. It is the largest category of consumers who make Internet purchases. Youth with smartphones, internet access, and social media accounts like Facebook, Instagram, and Twitter are generally self-sufficient enough to make purchase decisions (Mokhtar et al., 2020). As a result, regardless of their financial resources or allowances, young customers are more likely to purchase items or do product searches from online shops (Mokhtar et al., 2020). Individuals who purchase online are often younger than those who shop in-store (Roesler, 2018). Electronic and printed media heavily influence youths' daily routines and shopping habits.

Online shopping provides several advantages to consumers and sellers. Online shopping allows merchants to assess customer behaviour as it relates to what customer is looking for, acquiring, using, reviewing, and disposing of items and services that they believe will meet their requirements (Vasudevan & Arokiasamy, 2021). On the other hand, online shopping provides several benefits that consumers enjoy when customer do online shopping, such as time-saving (Alreck et al., 2009), online shopping while staying at home, and no need to travel to get items from physical stores instead of scrolling through online catalogue, consumers might obtain the items they require while still saving time, they could avoid crowd, traffic and purchase items that are difficult to find at local stores (Mokhtar et al., 2020). In addition, the empirical evidence indicated that perceived and convenience risks are significantly and adversely linked with online shopping (Sun, 2017). Moreover, Malaysia reported a low number of frauds in online transactions, which only accounts for 0.02 percent. This situation shows that e-commerce is business-friendly and trustable by people (Vasudevan & Arokiasamy, 2021).

Expanding online shopping trends create new possibilities for businesses to sustain during and after COVID-19 (Soares et al., 2022). Many recent studies (e.g., Sheth, 2020) have shown that the pandemic may have had long-term effects on consumer culture, changed the market structure for the post-pandemic period, altered consumer purchase decisions, and perhaps produced new genuine and enduring buying habits and behaviours. In previous studies on online shopping, different constructs such as attitude (Bhatti et al., 2018), behaviours of their consumers to online shopping and their background (Soares et al., 2022) are related to online shopping.

These results show that there is still room for empirical research exploring the determinant factors of online shopping and the relationship between the determinant factors and youth online shopping behaviour in different contexts, like in Malaysia. From this perspective, it is essential to note that this study aided the growth of studies investigating online shopping behaviour after the Covid-19 pandemic. The following part of this paper describes the determinants of online shopping, such as customer satisfaction, convenience, social media influence, and website.

### **2.3 Customer Satisfaction**

Consumer satisfaction refers to a person's feelings and experiences with a product or service acquired through an online channel (Rao et al., 2021). Customer satisfaction is an essential element in any business sector. Customers' interactions with businesses, particularly during the

pandemic, may have an instant and lasting influence on their feelings of trust and loyalty (Prasetyo et al., 2021). Customer satisfaction can be indicated by a company's past, current, and future performance since customers are more likely to purchase items again if they have a positive purchasing experience rather than based only on a single transaction (Anderson, 1994).

A considerable amount of literature has been published on the effect of customer satisfaction on online shopping behaviour. Customer satisfaction has been observed to benefit customer loyalty in research by showing a more vital readiness to repurchase and spread positive word of mouth toward others (Edward et al., 2010). A previous study revealed that a satisfied customer is a happy customer; those who are happy with a business or its services are likely to tell others about their experience (Nelson Oly Ndubisi, 2009). Furthermore, several researchers indicated that customer experience links to customer satisfaction and company sustainability. Customer experience has progressively been the significant source of companies' sustained competitive advantage through differences as online and conventional physical store purchasing have intertwined to produce distinct shopping circumstances (Pei et al., 2020). Many studies agreed that customer satisfaction is a factor that appears to be a more reliable predictor of customer intentions and behaviour (Lervik-Olsen & Johnson, 2003) enhancement of E-commerce (Moon et al., 2021).

A previous study by Shafiee et al. (2020) aims to pinpoint and create a model for the critical internal and external elements that contribute to successfully implementing a customer relationship management system within a social security organization. Furthermore, the study examines how this implementation positively impacts the organization's internal processes, enhancing customer satisfaction and profitability. Shafiee et al. (2020) indicates that proficiently implementing a customer relationship management system yields favorable outcomes in enhancing the organization's internal processes, increasing profitability, and elevating customer satisfaction levels.

This subsection began by describing customer satisfaction and arguing that customer satisfaction plays a vital role in youth customers' online shopping behaviour. It went on to draw the hypothesis as follows:

*Hypothesis 1: There is a significant relationship between customer satisfaction on online shopping behaviour of youth customer.*

## **2.4 Convenience**

Convenience is one of the emerging marketplaces in the modern economy (Bhatti et al., 2018). Convenience has been referred to as a convenient location that reduces the entire travel expense incurred by the consumer (Andrew J Rohm, 2004). When online shop becomes relevant, consumers can purchase online 24 hours a day, seven days a week, so businesses should promote healthy online shopping environments to increase revenue (Gulfraz et al., 2022). On the other hand, retail convenience costs customers the time and effort they spend buying in a retail setting (Duarte et al., 2018). As regards the fact that convenience has always been a driving element in customers' decisions to purchase online. This study has operationalized convenience into how easy it is to browse or search for information online as opposed to traditional retail shopping.

Consumer spending levels in online shopping changed internationally due to the spread of the COVID-19 pandemic due to convenience, which was expressed in a change in consumer behaviour (NielsenIQ, 2020). A considerable amount of literature has been published on convenience, and it is related to online shopping. These studies must explore the convenience construct dimensions and investigate the convenience link to other constructs. For example, Jiang et al. (2013) have synthesized most of the empirical findings and found that service convenience significantly impacts customers' overall satisfaction and purchasing behaviour. Moreover, researchers summarized that several elements had been investigated under the convenience factor, including access, search, transaction, and possession convenience. It is well known that convenience motivates consumers to shop online. Still, much of the prior research considers convenience as one of the predictor constructs, alongside customer service and trust. This affects outcome constructs like customer satisfaction, search engines, online shopping malls, auction websites, convenience, price, brand, security, promotion, and refunds (Kotler et al., 2019). Researchers have synthesized most empirical findings and found that service convenience significantly impacts customers' overall satisfaction and purchasing behaviour.

Moreover, researchers summarised that several elements had been investigated under the convenience factor, including access, search, transaction, and possession convenience. Although convenience is one of the primary motivators for consumers to do online shopping, much of the prior research on this area has treated the convenience construct as one of the predictor constructs, such as customer service and trust, that affect outcome constructs, such as customer satisfaction, search engines, online shopping malls, auction websites, convenience,



price, brand, security, promotion, and refund (Duarte et al., 2018). The following hypothesis can be postulated:

*Hypothesis 2: There is a significant relationship between convenience on online shopping behaviour of youth customer.*

## **2.5 Social Media Influence**

Social influence functions substitute subjective norms (Wahid et al., 2011). In the past, social influence was limited to their narrow social circle. However, along with technological development, social influence has broadened due to the use of the internet and social media (Kwahk, 2012). Organizations have used social media to create a social space and build a reputation (Colicev et al., 2019). Besides, it has been used for communication within the social environment context. Social media influence through activities can improve business communication, directly related to social presence (Huang et al., 2015).

Digital communication has unquestionably become essential to global economic growth due to the vast potential it provides for businesses worldwide. Previous study finds that there are various reasons why consumer behaviour can change, such as independent traits such as economic circumstances or psychosocial factors, as well as environmental and societal influences (Crosta et al., 2021). Moreover, social media can be used to understand the social, economic, and behavioural aspects of humankind (Grover et al., 2022).

*Hypothesis 3: There is a significant relationship between social media influence on online shopping behaviour of youth customer.*

## **2.6 Website**

One of the most important influencing aspects of online buying is a website. An e-commerce website offers a meeting point for a vendor and an online customer to connect. In this sense, the efficacy and success of online shopping are highly dependent on a website (Kwaku & Antwi, 2021). Website design, website reliability, website customer service, and website security/privacy are the most appealing aspects that impact the consumer's view of online shopping (Shergill & Chen, 2005). In addition, one of the deciding constructs that might enhance customer purchase intention is website quality (Hasanov & Khalid, 2015). The website features design should be more straightforward for the consumers to comprehend the layout

and browse information online, as well as to minimize the dissatisfaction customers experience when shopping online (Masoudi et al., 2015).

Several studies discussed the characteristics of a good website. According to Tandon et al. (2018), a good website must have an outstanding design and be easy to navigate, retaining and attracting more online consumers. It is a crucial success factor for an e-commerce business. Adding to this array, Kwaku and Antwi (2021) emphasize that a website should feature information that defines a product offering. Researchers described information provided on the website as being associated with the quality of a website, which is likely to generate more traffic from online consumers, subsequently leading to actual shopping behaviour. It is noted that website quality, or performance, is determined by online customers (Chen & Cheng, 2009; Chen et al., 2015; Chen et al., 2017). Thus, businesses operating in the online platform must also create environments integrated into web portals that influence customers' perspectives and experiences with the online business (Rayburn & Voss, 2013). Therefore, to influence youth customers' online shopping behaviour, sellers must provide them with an excellent website. The following hypothesis is:

*Hypothesis 4: There is a significant relationship between websites on online shopping behaviour of youth customer.*

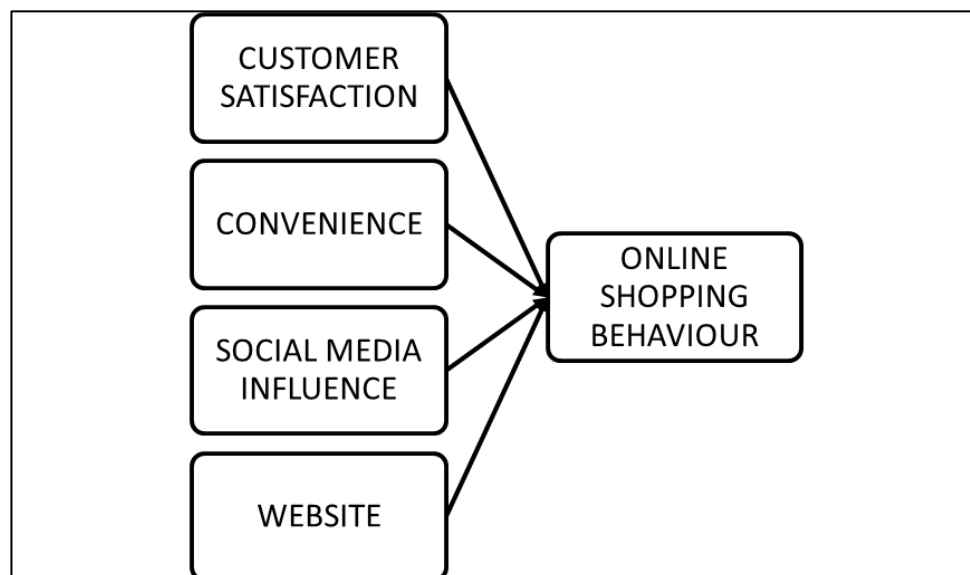


Figure 1: Conceptual framework

Figure 1 below illustrates the factors that influence youth customers' online shopping behaviour in the study.

### **3.0 METHODOLOGY**

#### **3.1 Target Population and Sampling Technique**

The target population for this study was youth online shoppers in Malaysia. Youth were selected as the population aged 15 to 24 residing in Malaysia (Ministry of Youth and Sport, 1997). This study focuses on youth recognized for technological preferences, media awareness, and high life expectancy (Abdul Ghafoor Awan, 2014). By using a convenience sample, 200 questionnaires were issued. 129 usable return questionnaires equal a 64.5 per cent response rate. The questionnaire was made using Google Forms and distributed through *WhatsApp*, *Telegram*, *Facebook*, and *Twitter*. The responses regarding consumer behaviour towards online shopping were gathered within one month, from the 18th of August 2021 to the 18th of September 2021. The questionnaire was prepared based on past studies and divided into three sections. Demographic information was collected in Section 1 of the questionnaire, including gender, age, income, education, marital status, occupation, and online shopping frequency. For sections 2 and 3, respondents will be asked about dependent and independent constructs. The items of the questionnaire are shown in Table 1. Respondents must indicate their agreement using a 5-point Likert scale anchored from 1 (strongly disagree) to 5 (strongly agree) to provide valuable and meaningful data that can aid in understanding the extent of online shopping behaviour among the respondent.

Table 1: Items of the questionnaire

Construct	Items of the Questionnaire	Sources
<b>Convenience</b>	I feel detailed information is available while shopping online.	Sultan & Uddin (2011)
	I think it is easy to choose and make comparison with other products while shopping online.	Sultan & Uddin (2011)
	I feel, it is great advantage to be able to shop at any time of the day.	Mokhtar et al. (2020)
	I believe online shopping could save travel cost.	Mokhtar et al. (2020)
	I will not have to face crowds at the physical store if I do online shopping.	Mokhtar et al. (2020)
	Online shopping allows me to find many products that I wouldn't be able to find from the nearby physical store.	Mokhtar et al. (2020)
<b>Customer Satisfaction</b>	The information given about the products and services on the internet is sufficient.	Anurag Pandey (2019)
	I do not mind paying in advance for the products on the internet.	Anurag Pandey (2019)
	I am satisfied with the customer services provided by the online shopping.	Anurag Pandey (2019)
	In my overall experience, I am satisfied with online shopping.	Anurag Pandey (2019)
<b>Social Media Influence</b>	People around me frequently do online shopping.	Heri Kuswanto (2019)
	People around me recommend online shopping over traditional shopping.	Heri Kuswanto (2019)
	Technology development influences me to shop online.	Heri Kuswanto (2019)
	I do shop based on social media feeds or posts (Instagram, WhatsApp status, Facebook posts, Twitter).	Felicita Davis (2021)
	I use online forums and online communities for acquiring information about a product.	Felicita Davis (2021)
	If I am offered a reward for sharing my purchase, I would share them in social media.	Felicita Davis (2021)
<b>Website</b>	The website provides good security measure.	Arif et al. (2013)
	I buy from online shop because it is visually interesting and has a well-organized appearance.	Heri Kuswanto (2019)
	I buy from online shop because the navigation flow is user friendly.	Heri Kuswanto (2019)

	I buy from online shop because the website is easy to understand and has detailed information.	Heri Kuswanto (2019)
<b>Online Shopping Behaviour</b>	I prefer to shop from internet because it is convenient and easier for me.	Mokhtar et al. (2020)
	I feel very satisfied from the service and information given as well as the product quality from the online store.	Mokhtar et al. (2020)
	I prefer online shopping over conventional shopping.	Heri Kuswanto (2019)
	I will repeat shopping online.	Heri Kuswanto (2019)

### 3.2 Data Analysis Method

The type of analysis used in this study is descriptive analysis. Descriptive analysis is a method of data processing that assists in describing, displaying, and constructively summarising data points so that structures can develop that satisfy all the conditions of the data (Rawat, 2021). Data were analysed using Statistical Package of Social Science (SPSS) version 28.0 and Partial Least Square (PLS) with the Smart PLS software version 3.2.8.

### 3.3 Descriptive Analysis

Based on Table 2, the respondents' demographic of 129 youth respondents based on gender, age, monthly income, education, marital status, occupation, and frequency of shopping online are summarized and presented.

### 3.3.1 Demographic

Table 2: Demographic profile

Demographic variables	Categories	Frequency	Percentage (%)
<b>Gender</b>	Male	45	34.9
	Female	84	65.1
<b>Age</b>	15 to 17	17	13.2
	18 to 20	20	15.5
	21 to 24	92	71.3
<b>Income</b>	RM1000 and below	92	71.3
	RM1001 to RM5000	32	24.8
	RM5001 to RM10000	4	3.1
	RM10001 and above	1	0.8
<b>Education</b>	PMR/PT3	17	13.2
	SPM Level	18	14.0
	STPM/Diploma/A-Level	25	19.4
	Bachelor degree	65	50.4
	Master Degree	2	1.6
	Others	2	1.6
<b>Marital status</b>	Single	114	88.4
	Married	15	11.6
<b>Occupation</b>	Student	83	64.3
	Employed	29	22.5
	Self-employed	12	9.3
	Unemployed	5	3.9
<b>Frequency of shopping online</b>	Daily	3	2.3
	Weekly	25	19.4
	Monthly	73	56.6
	Annually	28	21.7

Table 3: Factor analysis Harman's single factor test

Factor	Total Variance Explained					
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.510	45.287	45.287	8.964	42.687	42.687
2	1.615	7.692	52.979			
3	1.347	6.413	59.391			
4	1.206	5.741	65.133			
5	.959	4.567	69.700			
6	.850	4.047	73.747			
7	.726	3.458	77.205			
8	.614	2.925	80.130			
9	.563	2.682	82.812			
10	.521	2.479	85.291			
11	.445	2.121	87.412			
12	.406	1.934	89.346			
13	.371	1.765	91.112			
14	.340	1.619	92.730			
15	.317	1.512	94.242			
16	.267	1.270	95.512			
17	.237	1.126	96.638			
18	.224	1.068	97.706			
19	.192	.916	98.622			
20	.170	.807	99.430			
21	.120	.570	100.000			
Extraction Method: Principal Axis Factoring.						

Harman's single-factor test Analysis showed that the first factor accounted for 42.687 per cent, at most 50 per cent. The per cent total variance did not exceed 50 per cent, indicating that this factor does not account for most of the variance (Rahlin & Gualin, 2023; Rahlin et al., 2023; Awang, 2015). Therefore, common method bias is absent in this study.

### 3.3.2 Collinearity Assessment

Collinearity was examined for this structural model. If the VIF is higher than 5, it suggests a multicollinearity problem (Hair et al., 2019). Multicollinearity is an issue in SEM because it might influence the findings of some analyses. The standard approach is to compute bivariate correlation or to perform multiple regression and observe the values of tolerance and variance

inflation factor (VIF). All constructs in the construct have VIF values for convenience (1.63), customer satisfaction (2.059), social media influence (2.390), and website (2.394) are below 5, indicating no indication of multicollinearity in the model.

### **3.3.3 Convergent Validity**

As shown in Table 4, the factor loading of all items in the range of 0.6 to 0.914 which are indicated that on the assigned items in the construct higher than 0.6, the cut-off value of factor loading suggested by Awang (2015) and Rahlin et al. (2019, 2020). When looking at the cross-loading, the factor loading indicators on the allocated construct must be higher than all loading indicators on other constructs (Becker et al., 2012).

All the components have a good level of composite reliability above 0.7, indicating good internal data consistency. For adequate convergent validity, AVE's value must exceed 0.5 (Bagozzi & Yi, 1988; Fornell & Larcker, 1981). The AVE values are higher than the threshold of 0.5. All components have an acceptable AVE level between 0.563 and 0.799. The composite reliability measure of the scale reliability of latent constructs, a value greater than 0.7, was considered acceptable (Hair et al., 2019). The conditions for convergent validity based on the AVE and composite reliability were met. The Cronbach's Alpha for this model shows a value between 0.760 and 0.874, and all values were greater than 0.7. Hence, all the values were accepted for internal reliability. Generally, alpha values greater than 0.7 are acceptable for internal reliability (Taber, 2018). Hence, sufficient convergent validity and internal reliability existed for all constructs in this study.



Table 4: Results of the measurement model

Construct	Item	Outer Loading	Cronbach's Alpha	Composite Reliability	AVE
Convenience	CO1	0.764	0.760	0.846	0.761
	CO2	0.754			
	CO3	0.745			
	CO4	0.780			
Customer Satisfaction	CS1	0.914	0.874	0.923	0.894
	CS2	0.899			
	CS3	0.867			
Social Media Influence	SI1	0.718	0.845	0.885	0.751
	SI2	0.799			
	SI3	0.733			
	SI4	0.757			
	SI5	0.800			
	SI6	0.690			
Website	WE1	0.863	0.873	0.913	0.815
	WE2	0.824			
	WE3	0.890			
	WE4	0.825			
Online Shopping Behaviour	B1	0.865	0.823	0.883	0.809
	B2	0.802			
	B3	0.803			
	B4	0.763			

### 3.3.4 Discriminant Validity

Table 5: Discriminant validity using Fornell-Larcker (1981) criterion

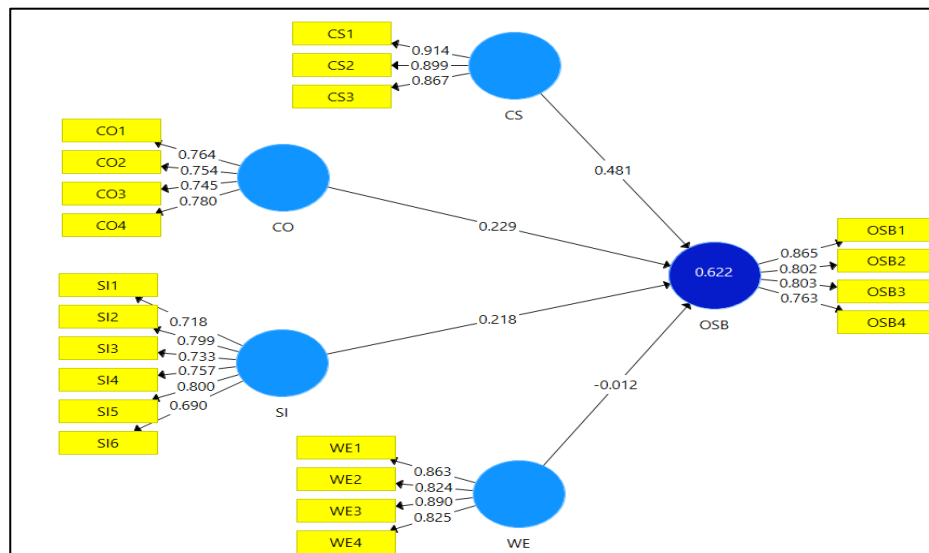
Construct	Convenience	Customer Satisfaction	Online Shopping Behaviour	Social Media Influence	Website
Convenience	<b>0.761</b>				
Customer Satisfaction	0.502	<b>0.894</b>			
Social Media Influence	0.585	0.732	<b>0.809</b>		
Website	0.560	0.660	0.655	<b>0.751</b>	
Online Shopping Behaviour	0.573	0.653	0.585	0.699	<b>0.851</b>

To evaluate connections between latent constructs, discriminant validity evaluation has become a widely acknowledged requirement. Among the ways used to evaluate discriminant validity in variance-based structural equation modelling techniques such as partial least squares, the Fornell-Larcker (1981) criteria, and cross-loading evaluation are the most used methods (Henseler et al., 2015). A comparison was made between the square root of the AVE for each construct and the correlation between that construct and the other constructs. Table 5 shows the discriminant validity accepted and supported for this measurement model.

### ***3.3.5 Path Coefficient***

As can be seen in Figure 2 and Table 6, the structural model results from SEM-PLS are presented. The results indicate that three path relations were significant: customer satisfaction, convenience, and social media influence, while one-path relationships were significant. The effect of convenience is significant. This is reflected by the p-value of 0.022. The path coefficient is positive, with a value of 0.229. Hence, convenience affects online shopping behaviour.

Similarly, there is a significant effect between customer satisfaction on online shopping behaviour with p- a path coefficient of 0.481 and a value of 0.000. Social media influence has a significant effect on online shopping behaviour. It can be seen from the p-value of 0.025 and a positive path coefficient of 0.218. The website does not affect online shopping behaviour. The negative path coefficients of 0.012 and p-value 0.889 indicate that the website has no impact on the online shopping behaviour of youth in Sabah.



Note: CO: Convenience, CS: Customer Satisfaction, SI: Social Media Influence, WE: Website and OSB: Online Shopping Behaviour

Figure 2: Structural model result

Table 6: Result for path coefficients (Mean, T-Values, P-Value, VIF)

Hypothesis	Path Coefficients	T-Value ( $\geq 1.96$ )	P-Value ( $\leq 0.05$ )	VIF ( $< 3$ )	Decision
CO -> OSB	0.229	2.296	0.022	1.630	Supported
CS -> OSB	0.481	4.880	0.000	2.059	Supported
SI -> OSB	0.218	2.249	0.025	2.390	Supported
WE -> OSB	0.012	0.140	0.889	2.394	Not supported

Note: CO: Convenience, CS: Customer Satisfaction, SI: Social Media Influence, WE: Website and OSB: Online Shopping Behaviour

### 3.3.6 Coefficient of Determination ( $R^2$ )

The coefficient of determination ( $R^2$ ) was calculated in this study to evaluate how strong the linear association of correlation between customer happiness, convenience, social media impact, and website to online buying behaviour is (Schober et al., 2018; Ozer, 1985). The computations were done using the SEM-PLS, as shown in Figure 2. The  $R^2$  value indicates how well all independent constructs explain the dependent construct. This study has an  $R^2$  value of 0.622. Therefore, this value indicates that the independent constructs explain 62.2 per cent of the variance in the dependent construct.

#### **4.0 RESULTS AND DISCUSSION**

This study sought to determine the impact of convenience, customer satisfaction, social media influence and websites on online shopping behaviour. The study demonstrates a correlation between variables, and it is suggested that hypothesis 1 is supported, which is that there is a significant relationship between convenience on online shopping behaviour among youth. It is consistent with Aziz et al. (2021) that convenience determines online shopping behaviour. As discussed, many conveniences influence online shopping behaviour, such as the ability to instantly buy goods, track an order's status, and the ease of returning an item. In addition, Han et al. (2018) found that convenience is crucial in influencing customers' shopping decisions. By offering easy access to stores, products, and information, online shopping saves time and effort for customers. Moreover, customers can place orders anytime, making online shopping convenient. It allows customers to engage in one-stop shopping, eliminating the need to travel to different stores, and the customers receive their orders within the promised timeframe, adding to the overall convenience of online shopping. Some people are more likely to shop online because it is more convenient, while others shop online because it is a more efficient way to buy items.

Convenience is a significant factor that influences a customer's online shopping behaviour. According to Awalina and Maya (2017), with the increasing availability of technology and internet connectivity, customers now have access to a vast array of products and services that they can purchase online. Besides that, customers also have busy schedules and limited time, so they prioritize convenience when purchasing online. For instance, the customer is likelier to choose an e-commerce website that offers fast and free shipping, an easy checkout process, and a hassle-free return policy over a website that does not (Bajdor, 2021). Similarly, customers are more likely to use a mobile app that offers one-click checkout and personalized recommendations, making the shopping experience faster and more convenient. As a result, retailers who prioritize convenience in their online shopping experiences are likely to attract and retain more customers. The research was conducted after the COVID-19 pandemic, and based on the findings, the researchers recommended some valuable strategies in the future to attract customers and improve the quality of their services. Customers increasingly turn to online shopping because it is more convenient than traditional brick-and-mortar stores. In sum, convenience is a crucial factor that shapes a customer's online behaviour. The results suggested that convenience among youth in Malaysia influences online shopping behaviour.

The results of this study suggested that hypothesis 2 is supported, which indicates a significant relationship between customer satisfaction and online shopping behaviour among youth. In other words, online shopping behaviour is influenced by customer satisfaction. It is consistent with Rita et al. (2019), which found that customer satisfaction is a determinant factor of online shopping behaviour. As discussed, customer satisfaction influences online shopping behaviour. Satisfied customers are more likely to return to a website to make future purchases (Szasz et al., 2022). Besides, customers who are satisfied with their online shopping experience are more likely to develop a sense of loyalty to the brand, resulting in increased customer retention. It is supported by Kvalsvik (2022), the food delivered to the customers in a state that is as fresh and appealing as it would be if they had gone to the store in person and inspected the products with their senses of sight, touch, and smell.

On the other hand, customer satisfaction is vital in influencing a customer's final online shopping decision (Choi et al., 2019). Apart from that, evidence suggests that satisfaction levels are higher among youth when they can successfully complete a transaction without experiencing any difficulties (Adibfar et al., 2022). Therefore, retailers should strive to create a positive online shopping experience by offering high-quality products, excellent customer service, and fast and reliable delivery. By doing so, they can increase customer satisfaction and encourage repeat business and positive word-of-mouth recommendations, which can ultimately drive online shopping behaviour. From the above, it was suggested that young customers are more likely to be satisfied with a purchase if they can complete it easily and without hassles. To conclude, the results suggested that customer satisfaction among youth in Malaysia influences online shopping behaviour.

For Hypothesis 3, this study was accepted since the tests supported the hypothesis that social media influence and online shopping behaviour are positively connected. That is consistent with the findings in the previous study that social media influence can impact student buying decisions on online marketplaces such as Shopee (Al Karimah et al., 2022). Moreover, it is supported by the result of research by (Kuswanto et al., 2020), which reveals that social influence impacts online shopping behaviour among students. While in another study, positive informational social influence increases consumers' attitudes toward online shopping and their intention to shop online (Lee et al., 2006; Lee et al., 2019). Online customers will likely look at their peers or other customers' opinions before purchasing. As a result, the community will strongly encourage people to purchase online. In this context, online sellers must connect with the community through social commerce and use them as marketing strategies (Dinesh & MuniRaju, 2021). They regarded repeat customers, recommendations, and technology

development. When a product or online shop has many repeat customers and receives positive comments, people are likelier to purchase it (Kuswanto et al., 2019).

Hypothesis 4 is not supported, indicating no significant relationship exists between the website and online shopping behaviour among youth. This finding contradicts a previous study by Rita et al. (2019), which aimed to study the vital dimension of e-service quality in online shopping and found that website design is one factor that impacts e-service quality, affecting online shopping customers. Website design and features may promote purchasing from a given website (Daroch et al., 2021; Tandon et al., 2018). Promoting online shopping sites and products through different websites will be more effective for organizations (Rahman et al., 2018). Interestingly, the website did not play a significant role in determining online shopping behaviour in this study since the study did not support Hypothesis 4, which is that website is not positively significant on online shopping behaviour. A possible explanation is that people might think the information provided by online stores needs to be revised before deciding on a purchasing choice (Daroch et al., 2021). Tandon et al. (2018) found that customers may purchase products from online sellers if the website is easy to navigate. As a result, if more than the website is needed to convince the customer to buy online, the website's quality is an issue that needs to be resolved. Furthermore, online shoppers may need help to trust the information they get from the website. In the absence of psychological factors such as truth, the role of a website is pointless and ineffective (Kuswanto et al., 2019; Rungtapisawat et al., 2019). This fact might explain the study's findings: a website has no significant relationship with online buying behaviour since it does not inspire consumers to spend money online.

## **5.0 LIMITATION**

Every study has limitations, and the current study is no exception. Firstly, the study results cannot be generalized to all online shopping customers because of the small sample size and geographical location from where data is collected. The current study was conducted in Malaysia, and its conclusions only apply to Malaysia. The findings of this research may not generalize to other countries or states. More statistical approaches may be used in future research to increase the conclusiveness of the findings provided in this study. Another area for improvement is that only four factors were chosen, even though more could not have been investigated owing to the paper's scope. Many other factors influence online shopping behaviour; however, they are omitted. It is also possible to explore other dimensions in this context. In addition to the factors already identified, a few other factors influencing customers'

online behaviour could also be explored. In addition, different locations, as well as more or different people, might provide different outcomes.

## **6.0 IMPLICATION**

The implementation of this study gives a better understanding of the factors affecting the online shopping behaviour of youth in the Sabah context. These results give a better insight into how youth as consumers behave online and, therefore, can be used in future research. Therefore, this study generally contributes to the online marketer or seller in Sabah because it is the first attempt to study the relationship among customer satisfaction, convenience, social media influence, and website towards online shopping behaviour of youth in Sabah.

## **7.0 CONCLUSION**

This study examined the influence of convenience, customer satisfaction, social media influence, and website factors on the online shopping behaviour of youth. The findings indicate that convenience plays a significant role in shaping online shopping behaviour among young people. Factors such as the ability to make instant purchases, track orders, and easily return items contribute to the convenience of online shopping. Additionally, online shopping saves time and effort for customers by providing easy access to products and information, making it a convenient option. Customer satisfaction was found to have a significant impact on online shopping behaviour. Satisfied customers are more likely to make repeat purchases and develop loyalty towards a brand. Factors such as fast and free shipping, an easy checkout process, and a hassle-free return policy contribute to customer satisfaction. Providing high-quality products, excellent customer service, and reliable delivery can enhance the online shopping experience and encourage repeat business. The study also revealed a positive connection between social media influence and online shopping behaviour. Social factors, such as peers' opinions and recommendations, play a role in influencing purchasing decisions. Online sellers can leverage social commerce and marketing strategies to connect with the community and encourage online shopping behaviour. However, the study did not find a significant relationship between website factors and online shopping behaviour among youth. Website design and features were not found to be influential in determining online buying behaviour. It is possible that customers may require additional factors beyond website design to make purchasing decisions and trust in the information provided on the website is crucial. Overall, businesses should focus on enhancing convenience, customer satisfaction, and leveraging social media influence to

promote online shopping behaviour among youth. Utilizing e-commerce platform features effectively can improve the online customer experience and foster customer trust.

## REFERENCES

- Abdul Ghafoor Awan, A. F. (2014). Impact of marketing strategies on youth purchasing behaviour: A case study of mobile phone industry. *British Journal of Marketing Studies*, 2(4), 72-80.
- Adibfar, A., Gulhare, S., Srinivasan, S., & Costin, A. (2022). Analysis and modeling of changes in online shopping behaviour due to COVID-19 pandemic: A Florida case study. *Transport Policy*, 126(1), 162-176.
- Al Karimah, F. L., Nurdin, & Hestiningtyas, W. (2022). The effect of social influence on students' purchase decision at marketplace of Shopee. *Journal of Economics Education and Entrepreneurship*, 3(1), 65–74.
- Alreck, P. L., DiBartolo, G. R., Diriker, M., Dover, H. F., Passyn, K. A., & Settle, R. B. (2009). Time pressure, time saving and online shopping: Exploring a contradiction. *Journal of Applied Business Research*, 25(5), 85–92.
- Ammeter, D. K. (2018). Shifts in online consumer behaviour: A preliminary investigation of the net generation. *Journal of Theoretical and Applied Electronic Commerce Research*, 13(1), 1-25.
- Anderson, E. W. (1994). Cross-category variation in customer satisfaction and retention. *Marketing Letters*, 5(1), 19–30.
- Andrew J Rohm, V. S. (2004). A typology of online shoppers based on shopping motivations. *Journal of Business Research*, 57(7), 748-757.
- Anurag Pandey, J. P. (2019). Factors affecting consumer's online shopping buying behaviour. *Proceedings of 10th International Conference on Digital Strategies for Organizational Success* (pp. 541-548). Prestige.
- Arif, M. S., Yan, N. S., Zakuan, N., & Bahari, A. Z. (2013). Web-based factors affecting online purchasing behaviour. *IOP Conference Series Materials Science and Engineering*, 46(2013), 012038.
- Awang, Z. (2015). Introduction to SEM in AMOS. In *SEM made simple: A Gentle approach to learning structural equation model* (pp. 17–43). MPWS Publisher.
- Awalina, S., & Maya, A. S. (2017). The influence of advertising on the consumers attitude followers in Instagram Magellan. *American Scientific Research Journal of Engineering, Technology and Sciences*, 36(1), 58-74.



- Aziz, A. A., Rashid, R. M., & Adnan, W. H. (2021). The usage of Instagram and e-commerce platform during COVID-19 among mothers. *Journal of Media and Information Warfare*, 14(1), 107-122.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74–94.
- Bajdor, P. (2021). Simulations of the relationship between the experience level of e-commerce customers and the adopted variables – Implications for management in the area of online shopping. *Procedia Computer Science*, 192(1), 2576-2585.
- Becker, J.-M., Klein, K., & Wetzels, M. (2012). Hierarchical latent variable models in PLS-SEM: Guidelines for using reflective-formative type models. *Long Range Planning*, 45(5-6), 359-394.
- Bhatti, A., Saad, S., & Gbadebo, S. M. (2018). Convenience risk, product risk, and perceived risk influence on online shopping: Moderating effect of attitude. *Science Arena Publications International Journal of Business Management*, 3(2), 1–11.
- Chen, C. W. D., & Cheng, C. Y. J. (2009). Understanding consumer intention in online shopping: A respecification and validation of the DeLone and McLean model. *Behaviour & Information Technology*, 28(4), 335–345.
- Chen, X., Huang, Q., & Davison, R. M. (2017). The role of website quality and social capital in building buyers' loyalty. *International Journal of Information Management*, 37(1), 1563–1574.
- Chen, X., Huang, Q., Davison, R. M., & Hua, Z. (2015). What drives trust transfer? The moderating roles of seller-specific and general institutional mechanisms. *International Journal of Electronic Commerce*, 20(2), 261–289.
- Choi, D., Chung, C. Y., & Young, J. (2019). Sustainable online shopping logistics for customer satisfaction and repeat purchasing behaviour: Evidence from China. *Sustainability*, 11(20), 1-20.
- Chopdar, P. K., Korfiatis, N., Sivakumar, V. J., & Lytras, M. D. (2018). Mobile shopping apps adoption and perceived risks: A cross-country perspective utilizing the unified theory of acceptance and use of technology. *Computers in Human Behaviour*, 86(1), 109-128.
- Colicev, A., Kumar, A., & O'Connor, P. (2019). Modeling the relationship between firm and user generated content and the stages of the marketing funnel. *International Journal of Research in Marketing*, 36(1), 100-116.
- Crosta, A. D., Ceccato, I., Marchetti, D., La Malva, P., Maiella, R., Cannito, L., Cipi, M., Mammarella, N., Palumbo, R., Verrocchio, M. C., Palumbo, R., & Di Domenico, A.

- (2021). Psychological factors and consumer behavior during the COVID-19 pandemic. *PloS One*, 16(8), e0256095.
- Daroch, B., Nagrath, G., & Gupta, A. (2021). A study on factors limiting online shopping behaviour of consumers. *Rajagiri Management Journal*, 15(1), 39–52.
- Despin, T. (2020, May 11). Knock-on effects of COVID-19 on consumer behaviour and how businesses can prepare for them. *Entrepreneur Asia Pacific*.  
<https://www.entrepreneur.com/article/350457>
- Dinesh, S., & MuniRaju, Y. (2021). Scalability of e-commerce in the COVID-19 era. *International Journal of Research -GRANTHAALAYAH*, 9(1), 123–128.
- DOSM. (2021). *Income of e-commerce transaction surged 30 percent in the first quarter 2021*. Department of Statistics Malaysia.
- Duarte, P., Costa e Silva, S., & Ferreira, M. B. (2018). How convenient is it? Delivering online shopping convenience to enhance customer satisfaction and encourage e-WOM. *Journal of Retailing and Consumer Services*, 44(1), 161–169.
- Edward, M., George, B. P., & Sarkar, S. K. (2010). The impact of switching costs upon the service quality–perceived value–customer satisfaction–service loyalty chain: A study in the context of cellular services in India. *Services Marketing Quarterly*, 31(2), 151-173.
- Eyvazpour, J., Dolatabadin, H. R., & Shafiee, M. M. (2020). Developing e-retailers ethics model and its impact on retailer image and competitive advantage. *Journal of Business Management Perspectives*, 19(41), 39-58.
- Felicita Davis, M. B. (2021). Trust and product as moderators in online shopping behaviour: Evidence from India. *South Asian Journal of Marketing*, 2(1), 28-50.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Ghorbanian, P., Yavari, Z., & Shafiee, M. M. (2016). Analysis of retailer equity based on selected store image dimensions (Case study: Refah, CityCenter (HyperStar) & Kowsar stores). *New Marketing Research Journal*, 5(3), 143-160.
- Grover, P., Kar, A. K., & Dwivedi, Y. (2022). The evolution of social media influence – A literature review and research agenda. *International Journal of Information Management Data Insights*, 2(2), 100116.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24.

- Han, Y., Rong, Z., & Bin, L. (2018). Analysis on consumers' purchase and shopping well-being in online shopping carnivals with two motivational dimensions. *Sustainability*, 10(12), 1-18.
- Hansen, T. (2008). Consumer values, the theory of planned behaviour and online grocery shopping. *International Journal of Consumer Studies*, 32(2), 128–137.
- Hasanov, J., & Khalid, H. (2015). The impact of website quality on online purchase intention of organic food in Malaysia: A WebQual model approach. *Procedia Computer Science*, 72(1), 382-389.
- Hillman, S., & Neustaedter, C. (2017). Trust and mobile commerce in North America. *Computers in Human Behaviour*, 70(1), 10-21.
- Huang, J., Baptista, J., & Newell, S. (2015). Communicational ambidexterity as a new capability to manage social media communication within organizations. *The Journal of Strategic Information Systems*, 24(2), 49-64.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135.
- Heri Kuswanto, W. B. (2019). Analysis of students' online shopping behaviour using a partial least squares approach: Case study of Indonesian students. *Cogent Business & Management*, 6(1), 1-13.
- Isa, K., & Razak, N. A. (2021). The impact of COVID-19 outbreak on SMEs in Malaysia. *International Journal on Lifelong Education and Leadership*, 7(1), 1-13.
- Jiang, L. A., Yang, Z., & Jun, M. (2013). Measuring consumer perceptions of online shopping convenience. *Journal of Service Management*, 24(2), 191–214.
- Julia Koch, B. F. (2020). Online shopping motives during the COVID-19 pandemic—Lessons from the crisis. *Sustainability*, 12(24), 10247.
- Kenny, P. (2020, October 8). COVID-19 changed online shopping forever: Survey – Most robust rise noted in China and Turkey, according to UN Trade and Development Agency. *Anadolu Ajansi*. <https://www.aa.com.tr/en/economy/covid-19-changed-online-shopping-forever-survey/1999904>
- Ketabi, S. N., Ranjbarian, B., & Ansari, A. (2014). Analysis of the effective factors on online purchase intention through theory of planned behaviour. *International Journal of Academic Research in Business and Social Sciences*, 4(4), 374–382.
- Kotler, P., Armstrong, G., Harris, L., & He, H. (2019). *Principles of marketing* (8<sup>th</sup> ed.). Pearson Education Limited.

- Kuswanto, H., Hadi Pratama, W. B., & Ahmad, I. S. (2020). Survey data on students' online shopping behaviour: A focus on selected university students in Indonesia. *Data in Brief*, 29(1), 105073.
- Kuswanto, H., Pratama, W. B. H., Ahmad, I. S., & Salamah, M. (2019). Analysis of students' online shopping behaviour using a partial least squares approach: Case study of Indonesian students. *Cogent Business and Management*, 6(1), 1699283.
- Kvalsvik, F. (2022). Understanding the role of situational factors on online grocery shopping among older adults. *Journal of Retailing and Consumer Services*, 68(1), 103009.
- Kwahk, K. Y. (2012). The effects of social media on e-commerce: A perspective of social impact theory. *45th Hawaii International Conference on System Sciences* (pp. 1814-1823). HICSS.
- Kwaku, A. R., & Antwi, S. (2021). Consumers attraction to purchase online: Website quality as a major influencing factor. *Open Journal of Business and Management*, 9(3), 1133–1150.
- Lee, M. K. O., Cheung, C. M. K., Sia, C. L., & Lim, K. H. (2006). How positive informational social influence affects consumers' decision of Internet shopping? *Proceedings of the Annual Hawaii International Conference on System Sciences*, 6(C), 1–10.
- Lee, S. W., Sung, H. J., & Jeon, H. M. (2019). Determinants of continuous intention on food delivery apps: Extending UTAUT2 with information quality. *Sustainability*, 11(11), 3141.
- Lervik-Olsen, L., & Johnson, M. D. (2003). Service equity, satisfaction, and loyalty: From transaction-specific to cumulative evaluations. *Journal of Service Research*, 5(3), 184–195.
- Liu, T. (2012). *Effect of e-service quality on consumer online repurchase intentions*. (Unpublished doctoral dissertation). Lynn University.
- Luceri, B., Bijmolt, T. H. A., Bellini, S., & Aiolfi, S. (2022). What drives consumers to shop on mobile devices? Insights from a meta-analysis. *Journal of Retailing*, 98(1), 178-196.
- Masoudi, M., Shekarriz, F., & Farokhi, S. (2015). The effect of web interface features on consumer online purchase intentions. *Management Science Letters*, 5(7), 709-714.
- Ministry of Youth and Sport (1997). National youth development policy. [https://www.youthpolicy.org/national/Malaysia\\_1997\\_National\\_Youth\\_Development\\_Policy.pdf](https://www.youthpolicy.org/national/Malaysia_1997_National_Youth_Development_Policy.pdf)

- Mokhtar, M., Yusoff, S., Asmuni, S., & M. Fauzi, N. A. (2020). An insight into online shopping behaviour among young adults in Malaysia. *Journal of Emerging Economies and Islamic Research*, 8(1), 77-88.
- Moon, N. N., Talha, I. M., & Salehin, I. (2021). An advanced intelligence system in customer online shopping behaviour and satisfaction analysis. *Current Research in Behavioural Sciences*, 2(1), 100051.
- Nelson Oly Ndubisi, N. M. (2009). Relationship marketing, customer satisfaction and loyalty: A theoretical and empirical analysis from an Asian perspective. *Journal of International Consumer Marketing*, 21(1), 5-16.
- NielsenIQ. (2020). Key consumer behaviour thresholds identified as the Coronavirus outbreak evolves. <https://nielseniq.com/global/en/insights/analysis/2020/key-consumer-behaviour-thresholds-identified-as-the-coronavirus-outbreak-evolves-2/>
- Ozer, D. (1985). *Correlation and the coefficient of determination*. Psychological Bulletin.
- Pei, X.-L., Guo, J.-N., Wu, T.-J., Zhou, W.-X., & Yeh, S.-P. (2020). Does the effect of customer experience on customer satisfaction create a sustainable competitive advantage? A comparative study of different shopping situations. *Sustainability*, 12(1), 7436.
- Prasetyo, Y. T., Tanto, H., Mariyanto, M., Hanjaya, C., Young, M. N., Persada, S. F., Miraja, B. A., & Redi, A. A. (2021). Factors affecting customer satisfaction and loyalty in online food delivery service during the COVID-19 pandemic: Its relation with open innovation. *Journal of Open Innovation: Technology, Market and Complexity*, 7(76), 1-16.
- Rahlin, N. A., Awang, Z., Afthanorhan, A., & Aimran, N. (2019). The art of covariance-based analysis in behaviour-based safety performance study using confirmatory factor analysis: Evidence from SMES. *International Journal of Innovation, Creativity and Change*, 7(10), 351–370.
- Rahlin, N. A., Awang, Z., Rahim, M. Z. A., & Bahkia, A. S. (2020). The impact of employee safety climate on safety behaviour in small & medium enterprises: An empirical study. *Humanities & Social Sciences Reviews*, 8(3), 163–177.
- Rahlin, N. A., & Gualin, C. J. (2023). A bright sight of green product market in Malaysia: An empirical evidence using structural equation modelling. *Global Business & Management Research*, 15(1), 22-36.
- Rahlin, N. A., Suriawaty, A., Bahkiar Bahkiar, S. A., Turan, S., & Fauzi, S. N. A. (2023). Global crucial risk factors associated stress among university students during post Covid-19 Pandemic: Empirical evidence from Asian country. In *Artificial Intelligence and Transforming Digital Marketing* (pp. 315-327). Springer.

- Rahman, M. A., Islam, M. A., Esha, B. H., Sultana, N., & Chakravorty, S. (2018). Consumer buying behaviour towards online shopping: An empirical study on Dhaka city, Bangladesh. *Cogent Business and Management*, 5(1), 1–22.
- Rao, Y., Saleem, A., Saeed, W., & Haq, J. U. (2021). Online consumer satisfaction during Covid-19: Perspective of a developing country. *Frontiers in Psychology*, 12(1), 751854.
- Rawat, A. S. (2021, March 31). An overview of descriptive analysis. *Analytic Step*. <https://www.analyticssteps.com/blogs/overview-descriptive-analysis>
- Rayburn, S. W., & Voss, K. E. (2013). A model of consumer's retail atmosphere perceptions. *Journal of Retailing and Consumer Services*, 20(4), 400-407.
- Rita, P., Oliveira, T., & Farisa, A. (2019). The impact of e-service quality and customer satisfaction on customer behaviour in online shopping. *Heliyon*, 5(10), e02690.
- Roesler, P. (2018, April 16). New research reveals more consumers are shopping online for everyday items: New survey of U.S. consumers and other markets reveals accelerating trends in online CPG shopping. *Inc*. <https://www.inc.com/peter-roesler/new-research-reveals-more-consumers-are-shopping-online-for-everyday-items.html>
- Rungsrisawat, S., Joemsittiprasert, W., & Jermisittiparsert, K. (2019). Factors determining consumer buying behaviour in online shopping. *International Journal of Innovation, Creativity and Change*, 8(8), 222–237.
- Schober, P., Boer, C., & Schwarte, L. A. (2018). Correlation coefficients: Appropriate use and interpretation. *Anesthesia & Analgesia*, 126(5), 1763-1768.
- Shafiee, M. M., & Bazargan, N. A. (2019). The impact e-exchange development on customers' e-loyalty and repurchase intention. *Journal of Business Administration Researchers*, 10(20), 71-90.
- Shafiee, M. M., & Es-Haghi, S. M. S. (2017). Mall image, shopping well-being and mall loyalty. *International Journal of Retail & Distribution Management*, 45(10), 1114-1134.
- Shafiee, M. M., Seify, M., & Mohammadi, M. (2020). The effects of customer relationship management on improving internal processes, customer satisfaction and profitability (Case study: Isfahan social security organization branches). *Commercial Strategies*, 15(12), 31-48.
- Shergill, G. S., & Chen, Z. (2005). Web-based shopping: Consumer attitudes towards online shopping in New Zealand. *Journal of Electronic Commerce Research*, 6(2), 79-94.
- Sheth, J. (2020). Impact of Covid-19 on consumer behaviour: Will the old habits return or die? *Journal of Business Research*, 117(1), 280–283.

- Shim, J., Moon, J., Song, M., & Lee, W. S. (2021). Antecedents of purchase intention at Starbucks in the context of Covid-19 pandemic. *Sustainability*, 13(4), 1–14.
- Soares, J. C., Limongi, R., de Sousa Júnior, J. H., Santos, W. S., Raasch, M., & Hoeckesfeld, L. (2022). Assessing the effects of COVID-19-related risk on online shopping behaviour. *Journal of Marketing Analytics*, 11(1), 82–94.
- Sultan, M. U., & Uddin, M. (2011). *Factors influencing Gotland consumers to shop online: Consumers' attitude towards online shopping*. (Unpublished master thesis). Gotland University.
- Sun, L. (2017). The timing game of new disruptive technology adoption under competition. *Academy of Management*, 2017(1), 13270.
- Sutisna, F., & Handra, T. (2022). Theory of planned behaviour influences online shopping behaviour. *Aptisi Transactions on Management*, 6(1), 52-61.
- Szasz, L., Balint, C., Csiki, O., Nagy, B. Z., Racz, B., Csala, D., & Harris, L. C. (2022). The impact of COVID-19 on the evolution of online retail: The pandemic as a window of opportunity. *Journal of Retailing and Consumer Services*, 69(1), 103089.
- Tabaeeian, R. A., & Shafiee, M. (2023). Identifying factors affecting the motivation of games users in social networks and their impact on the user attitude and shopping intention. *New Marketing Research Journal*, 12(4), 51-68.
- Taber, K. S. (2018). The use of Cronbach's Alpha when developing and reporting research instruments in Science education. *Research in Science Education*, 48(1), 1273–1296.
- Tandon, U., Kiran, R., & Sah, A. N. (2018). The influence of website functionality, drivers and perceived risk on customer satisfaction in online shopping: An emerging economy case. *Information Systems and E-Business Management*, 16(1), 57–91.
- Tang, H., Rasool, Z., Khan, M. A., Khan, A. I., Khan, F., Ali, H., Khan, A. A., & Abbas, S. A. (2021). Factors affecting e-shopping behaviour: Application of theory of planned behaviour. *Behavioural Neurology*, 2021(1), 1-15.
- Theodorou, A., Hatzithomas, L., Fotiadis, T., Diamantidis, A., & Gasteratos, A. (2023). The impact of the COVID-19 pandemic on online consumer behaviour: Applying the theory of planned behaviour. *Sustainability*, 15(3), 1–17.
- Vasudevan, P., & Arokiasamy, L. (2021). Online shopping among young generation in Malaysia. *Electronic Journal of Business and Management*, 6(1), 31-38.
- Wahid, N. A., Rahbar, E., & Shyan, T. S. (2011). Factors influencing the green purchase behaviour of Penang environmental volunteer. *International Business Management*, 5(1), 38-49.