

Young Malaysian Muslims' online shopping intention and behaviour

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ABSTRACT

The internet's commercialization in 1991 marked the beginning of e-commerce, with online shopping rapidly growing among Malaysians, especially the young. The aim of this study is to explain the online shopping intention and behaviour of young Muslim consumers in Malaysia. An online survey was used to collect data from a convenience sample of young Muslims with prior online shopping experience. A regression analysis was conducted to analyse the data. The results show that security and safety and loyalty are the factors that influence online shopping intention, while attitude, trustworthiness, and marketing information do not. Online shopping intention has also been shown to be a predictor of online shopping behaviour. This study contributes to theory while highlighting practical implications for academics and practitioners in the fields of marketing, consumer behaviour, and online shopping.

INTRODUCTION

Online shopping is a form of e-commerce that allows consumers to buy goods or services directly from a seller over the Internet using a web browser or mobile application. Online shopping became possible when the Internet was made available to the public in 1991. Even so, it has taken a long time for online shopping to gain popularity, especially in many developing countries, including Malaysia. According to Joo and Teng (2022), before the pandemic, only 30% of Malaysians said they preferred to shop online, while 70% preferred to shop in physical stores. Nevertheless, the situation reversed with the plague of COVID-19. The pandemic has made online shopping the new norm, boosting e-commerce as people shift their purchases to online platforms. There are four categories of crowdfunding platforms: donation-based, reward-based, lending-based, and equity-based (Mollick, 2014). These platforms harness the crowd as a source of capital, with individuals contributing funds to a project in exchange for tangible or intangible rewards provided by the project initiator. In contrast to conventional marketing channels or specialized crowdfunding platforms used in other fundraising models like equity-based or reward-based approaches, social crowdfunding heavily relies on established relationships within communities. Within these communities, individuals

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actively engage in building public support for the initiatives at hand. Consequently, campaign organizers must develop focused social media strategies that foster meaningful connections with potential contributors while creating opportunities for viral sharing. Mollick (2014) argues that leveraging pre-existing relationships significantly enhances the likelihood of success by cultivating trust among contributors who may have been hesitant to participate otherwise.

The growth of online shopping in Malaysia has been very encouraging since the pandemic and has even increased post-pandemic, powered by rising Internet and smartphone penetration, as well as a more technologically savvy population. As of early 2023, there were 33.03 million Internet users and a total of 44.05 million mobile connections (representing 129.1% of the total population) in Malaysia, with Internet penetration at 96.8% (Kemp, 2023). According to the Department of Statistics Malaysia (DOSM), the country's revenue from e-commerce transactions surpassed RM1 trillion for the first time in 2021, with a growth rate of 21.8%, up from RM896 billion in 2020 (Mentek, 2022). E-commerce sales are expected to reach RM1.6 trillion by 2025 (Gomes, 2022). This is supported by the National E-commerce Strategic Roadmap (NESR) led by the Malaysia Digital Economy Corporation (MDEC) (Gomes, 2022) and complemented by the growing number of Malaysians shopping online (Azmi *et al.*, 2022; Chong *et al.*, 2023; Vasudevan & Arokiasamy, 2021). The growing trend towards cashless payments is also giving a boost to online shopping. In addition, micro-businesses such as cafés, stall owners, and small grocery shops are pushing for cashless payments, which explains the rise in online shopping. These arguments demonstrate that online shopping has enormous potential and numerous benefits for society, businesses, and the overall economy of the country.

On a global level, online shopping is well-researched as a field of research, but in developing countries such as Malaysia, the field of research is still in its nascent and developing stages, hence there is still much to be explored. According to Chung and Al-Khaled (2021), studies looking at online shopping intention and behaviour in Malaysia are still sparse and need exploration, especially among young people (Aris *et al.*, 2021). In Malaysia, young people aged 18-34 dominate the online population (Ipsos Malaysia, 2022), although older generations are becoming increasingly online-savvy. A similar report from EC Insider on the age of Malaysian online shoppers shows that more than half (51%) of online shoppers are aged between 25 and 34, with another quarter (24 %) aged between 18 and 24 (Milo, 2019). Overall, the young population accounts for 75% of online shoppers in Malaysia. As young consumers appear to be more likely to shop online than other age groups, this study sought to elucidate the determinants of their online shopping intention and behaviour to identify possible correlates of this behaviour. In addition, Muslims are a target group for this study as they are the largest religious group in the country, accounting for 57.8% of the total population (DOSM, 2023). Since young Muslim consumers are the largest age and religious group, their size and purchasing power provide an attractive opportunity to study this segment.

As the use and popularity of online shopping continue to grow, it is important to understand why consumers prefer to shop online. A slew of studies has found that intention influences online shopping behaviour (Bhatti, 2018; Lim *et al.*, 2016; Rattanaburi & Vongurai, 2021; Tang *et al.*, 2015). Nevertheless, Kim (2009) and Kim and Jones (2009) admonish that researchers should be careful not to draw sweeping conclusions, as intention does not always lead to action. Given these differences, Bhatti *et al.* (2018) recommend that future research should focus on online shopping behaviour. In particular, Jamil and Mat (2011) suggest that more research should be conducted on online shopping intention and behaviour.

With all of that said the aim of this study is to investigate online shopping intentions and behaviour among young Muslims in Malaysia. Specifically, it aims to investigate whether attitude, trustworthiness, safety and security, loyalty, and marketing information influence the intention to shop online. This study replicated the work of Chew and Kim (2021), using the same variables but with one variable expanded and different samples. The five variables were used by Chew and Kim (2021) in their study to examine Malaysians' online shopping intentions during the COVID-19 pandemic. In the current study, the variable is extended to include actual behaviour that is expected to be influenced by intention. It is anticipated that

the study of this group's shopping preferences will add to the burgeoning body of knowledge and provide new insights for scholars and practitioners in the fields of marketing, consumer behaviour, and online shopping.

The rest of the paper is structured as follows. Following this introduction, Section 2 reviews the underpinning theory and literature to date on the intended variables. Section 3 provides a discussion of the methodology used. Section 4 presents the results of the study. Finally, Section 5 contains a discussion of the results and a conclusion.

LITERATURE REVIEW

Underpinning Theories

The theories underlying this study are the Theory of Reasoned Action (TRA) developed by Fishbein and Ajzen (1975), the Theory of Planned Behaviour (TPB) established by Ajzen (1985, 1991), and the Theory of Acceptance Model (TAM) introduced by Davis (1989). These theories are often used in the study of intentions and behaviour related to the use of technology. Human-technology interaction is influenced by a variety of social and psychological factors and characteristics. Because predicting human behaviour is difficult, various theories and models have been developed to describe the adoption and use of new technologies. Using these theories as a foundation, the current study seeks to investigate attitude and other variables that may influence intention and subsequently cause online shopping behaviour.

Attitude

Scholars have proposed several definitions of attitude. An attitude is a succinct construct that represents a person's general feelings about an object or idea, their consistent evaluations of it, and their proclivity toward it (Belch & Belch, 2003; Kotler & Armstrong, 2021). Because consumers' attitudes are influenced by what they see, feel, receive, and value, they respond differently depending on the stimuli to which they are exposed; thus, different factors influence different attitudes. Although it is difficult to understand one's attitude because it is a complex construct (Bagozzi & Burnkrant, 1980; Niosi, 2021), Davis (1989) and Ajzen (1991) claim that consumers' attitudes can help predict purchase intention.

Previous research has looked into the relationship between attitude and online shopping intention. However, the studies yielded contradictory results. Chew and Kim (2021), Hebbar et al. (2020), Yew and Kamarulzaman (2020), and Suleman et al. (2019) found that attitude leads to online shopping intention. In contrast, Noor et al. (2020) found an insignificant relationship between the two. Because of the disparities in results, the role of attitude in influencing online shopping intention should be investigated further. This leads to the following hypothesis:

H₁: There is a significant relationship between attitude and intention to shop online.

Trustworthiness

Customer trustworthiness in e-commerce is one of the key factors for online buying and selling (Mahliza, 2020). Trustworthiness is referred to as consumers' perceived confidence in the reliability and integrity of online retailers (Belenger et al., 2002). This definition underlines the need for online traders to behave in a reliable, ethical, and socially appropriate manner and to fulfil the buyer's obligations, despite the buyer being vulnerable and dependent (Gefen et al., 2003). Consumer trustworthiness in online shopping can lie in aspects of the website attributes and features and its systems (Karayanni, 2003), even if the online seller is unknown. If online consumers do not have confidence in the competence, goodwill, and integrity of an online retailer, they would refrain from shopping online and consequently look for a more trustworthy alternative (Liu & Tang, 2018). Hence, a lack of trustworthiness in online retailers is, therefore, a major barrier to online shopping.

Several studies which investigated the relationship between trustworthiness over intention have found significant results (Abou Ali *et al.*, 2020; Al-Adwan *et al.*, 2022; Chew & Kim, 2021; Ching *et al.*, 2021; Yew & Kamarulzaman, 2020). Contradictory Ru *et al.* (2021) reported that trustworthiness did not impact the intention to shop online. As a result of the contradictory findings, the impact of trustworthiness on online shopping intention should be examined further. This then leads to the following hypothesis:

H₂: There is a significant relationship between trustworthiness and intention to shop online.

Safety and Security

One of the primary concerns with online shopping is transaction security and safety. Online transactions involve payment methods that reveal financial information such as personal data that can be accessed illegally. For this reason, customers are less likely to shop online. Reducing online shopping insecurity is therefore expected to increase shopping intention (Wang *et al.*, 2017). Hence, safe and reliable online security is highly desirable (Zhu *et al.*, 2020).

Previous research has looked at the impact of safety and security on online shopping intention. Chew and Kim (2021) and Tran and Nguyen (2022) found that safety and security have a significant influence on online shopping intention. While Neger and Uddin (2020) found that safety and security was not significant predictor of intention to shop online. These studies provided contradictory results. Therefore, the role of safety and security in influencing online shopping intention should be further studied. Thus, the subsequent hypothesis is put forth:

H₃: There is a significant relationship between safety and security and intention to shop online.

Loyalty

Most marketing scholars use Oliver's (1999) definition to define loyalty. According to Oliver (1999, p.34), loyalty is 'a deeply held commitment to re-buy or re-patronize a preferred product or service consistently in the future, thereby causing repetitive same brand or same brand set purchasing, despite situational influences and marketing efforts having the potential to cause switching behaviour.' In the context of online shopping, loyalty represents a customer's intention to frequently do business with an online retailer and recommend it to family and friends (Al-Adwan *et al.*, 2020) and share positive reviews and purchase experiences, which can lead to word of mouth (Yeoh *et al.*, 2014) and eventually to the intention to shop online.

A number of studies provide empirical evidence for a significant connection between loyalty and online shopping intention (Chew & Kim, 2021; Savila *et al.*, 2019). Accordingly, the following hypothesis is proposed:

H₄: There is a significant relationship between loyalty and intention to shop online.

Marketing Information

The layout of the retailer's website, sales promotion tools (such as discounts, coupons, vouchers, offers, and deals), a broader selection of products and services, and product comparisons are all examples of marketing information. Customers expect online retailers to provide complete and accurate product information (Smith, 2007). Similarly, innovative, creative, and high-quality content attracts the attention of online consumers, leading to higher online presence and consumer engagement (Dabbous & Barakat, 2020). Thus, providing sufficient information can assist online retailers in assuaging consumers' concerns and fears about a specific product or online purchase. Researchers have found that marketing information about a company, product, or service can be transformed into consumers' inner motivation, thereby influencing shopping intention (Baeshen, 2021; Kasuma *et al.*, 2020).

Past research by Bacay et al. (2022) and Baeshen (2021) found that marketing information significantly predicts online shopping intention. Rakesh and Khare (2012), on the other hand, found that marketing information has no bearing on online shopping intention. Therefore, the relationship between the two variables needs further investigation. Consequently, the succeeding hypothesis is put forward:

H₅: There is a significant relationship between marketing information and intention to shop online.

Online Shopping Intention and Behaviour

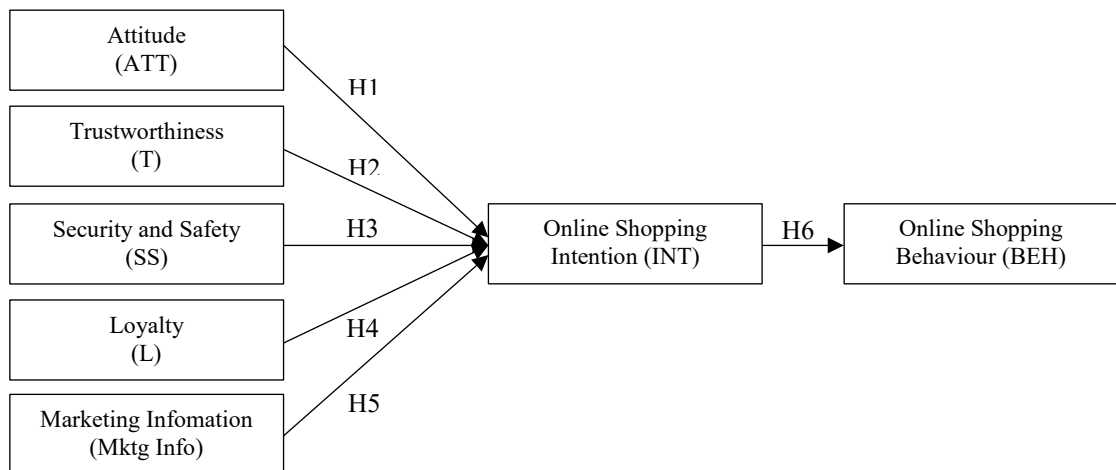
Online shopping behaviour is the frequency with which consumers make purchases over the Internet (Peña-García et al., 2020). To predict consumer behaviour, it is necessary to know the internal and external factors that ultimately trigger the intention to buy and thus cause behaviour. The importance of intention in predicting behaviour in a variety of domains is widely acknowledged (see Ajzen, 1985, 1991; Davis et al., 1989; Ventakesh & Davis, 2000; Venkatesh, Davis et al., 2023). According to Ajzen (1991), intentions are thought to be an indicator of how willing people are to engage in a particular behaviour and the number of attempts they make to perform that behaviour, which in this research would be translated as online shopping behaviour.

Several previous studies suggest that intention has a significant impact on online shopping behaviour (Bhatti, 2018; Bhatti & Rehman, 2019; Lim et al., 2016; Rehman et al., 2019), but other studies have shown that purchase intention does not match actual purchase behaviour (Kim, 2009; Kim & Jones, 2009). As the results of the preceding studies are inconclusive, further investigation of these two variables is deemed necessary. Therefore, the next hypothesis is proposed:

H₆: There is a positive relationship between online shopping intention and the behaviour to shop online.

Conceptual Framework and Hypotheses

Figure 1 shows the research model that was used to achieve the aim of the study and the hypotheses that were put forward. This model and its hypotheses were created and developed in response to the discussions in the literature review section.



Source: Authors

Fig.1. Conceptual framework and hypotheses

RESEARCH METHODOLOGY

A quantitative method was used to conduct this study in order to determine the relationship between attitude (ATT), trustworthiness (T), security and safety (SS), loyalty (L), and marketing information (Mktg Info) in relation to online shopping intention (INT). Also, in determining the relationship between INT and online shopping behaviour (BEH). The questionnaire is divided into two parts, Section A and Section B. Section A included demographic factors. Section B measured independent and dependent variables on a five-point Likert scale, with 1 representing 'strongly disagree' and 5 representing 'strongly agree'. All items for ATT, T, SS, L, and Mktg Info were adapted from Chew and Kim (2021), while items for INT and BEH were adapted from Ajzen (1991) and Davis (1989). The convenience sampling method was used to collect the required data. Respondents were identified as those who have prior experience with online shopping and can provide reliable data for this study.

The questionnaire was distributed online via Google Forms on various social media platforms such as WhatsApp and Facebook. The online questionnaire method enables researchers to gather a great deal of data from a varied group of people in a timely, adjacent, and effective way, while also being inexpensive. Furthermore, the online survey was chosen because it has functional authentication traits that guarantee the respondent has responded all questions completely. The data were analysed using descriptive analysis, reliability analysis, normality analysis, Pearson's correlation analysis, and regression analysis. The descriptive analysis serves as the basis for any further statistical analysis where the counts, ranges, and frequencies as well as the relationships between the variables were examined. The demographic profiles of the respondents were described using a frequency distribution. Reliability analysis measures the stability or consistency of test scores using Cronbach's alpha. Normality analysis ensures that all assumptions are met before running a regression. Pearson correlation analysis is a technique for determining the relationship between independent and dependent variables. Finally, regression analysis is used to estimate the relationships between a dependent variable and one or more independent variables.

FINDING

Demographic Profile of Respondents And Internet Usage

183 young Muslims participated in this study. Male and female respondents were almost equally represented, with 48.7% male and 51.3% female. As the study was targeted at young Muslims, all respondents were Malays and Muslims. The majority of respondents were between 21 and 23 years old (58.9%), followed by 27.8% between 24 years and above, 11.4% between 18 and 20 years, and 1.9% below 18 years. In terms of education, the vast majority of respondents have obtained or are currently pursuing a bachelor's degree.

Respondents were also asked about their use of the Internet. 69.4% said they had more than ten years of experience with the Internet, 67.8% spend more than three hours a day on the Internet, and 60.7% shop online more than five times a month. As the respondents for this study target people with the Internet and online shopping experience, these figures support the selection of respondents.

Normality Analysis

Hair *et al.* (2010) argue that data are considered normal if the skewness is between -2 and +2 and the kurtosis is between -7 and +7. As can be seen from Table 1, all values for skewness and kurtosis in this study met the thresholds of both indices, which means that all univariate items are considered normally distributed. Therefore, multivariate normality can be assumed, and non-normality was not a problem with these data. The regression analysis can therefore be continued.

Table 1. Summary for skewness and kurtosis scores

Construct	N	Skewness		Kurtosis	
		Statistic	Std. Error	Statistic	Std. Error
BEH	183	-1.167	.180	1.724	.357
INT	183	-.647	.180	-.178	.357
ATT	183	-1.190	.180	1.748	.357
T	183	-.913	.180	.487	.357
SS	183	-.865	.180	.225	.357
L	183	-1.252	.180	1.602	.357
Mktg Info	183	-1.087	.180	1.399	.357

Mean, Standard Deviation, Pearson's Correlation Analysis

Table 2 shows the results for the mean, standard deviation, and Pearson's correlation analysis. The mean scores show that the mean is between 4.56 and 4.65, indicating that most responses on the survey are on a scale of 4-5, 'agree' to 'strongly agree'. The highest standard deviation is 0.38 in SS and the lowest standard deviation is 0.31 in BEH.

Pearson's correlation coefficient or as it is denoted by r is used to determine the degree of correlation between variables. If the factors are correlated, a regression analysis can be performed. R can have a value between -1 and +1. A value of -1 represents a strong negative correlation, a value of +1 represents a strong positive correlation and a value of 0 represents no correlation (Cooper & Schindler, 2003). Pallant (2010) has classified the relationship as weak when $r = 0.1 - 0.3$, moderate when $r = 0.3 - 0.5$, and strong when $r = 0.5 - 1.0$. Furthermore, any Pearson correlation coefficient between two variables greater than 0.8 indicates the possibility of multicollinearity (Shrestha, 2020).

In this study, Pearson's correlation analysis is used to investigate the relationship between ATT, T, SS, L, and Mktg Info with INT, as well as between INT and BEH. Table 2 shows the intercorrelation values for each variable in the study. Since the values are smaller than 0.8, there is no evidence of multicollinearity. The intercorrelation analysis shows that all variables are positively related. The values range from 0.390 to 0.688, indicating that there is a moderate to strong relationship between the items. The strongest correlation is between SS and INT with 0.688, i.e., if SS and INT move in the same direction, INT will also increase if SS increases.

Table 2. Mean, standard deviation, Pearson's correlations

Construct	Mean	SD	BEH	INT	ATT	T	SS	L	Mktg Info
BEH	4.6503	.31042	1.000						
INT	4.6098	.37109	.471	1.000					
ATT	4.6153	.33836	-	.403	1.000				
T	4.5672	.35859	-	.453	.544	1.000			
SS	4.5607	.38055	-	.459	.481	.688	1.000		
L	4.6240	.34430	-	.502	.476	.637	.502	1.000	
Mktg Info	4.6372	.32873	-	.390	.530	.581	.523	.487	1.000

Reliability Analysis

To assess the reliability of the internal consistency of the scale, and whether the items that make up the scale measure the same underlying construct, Cronbach's alpha was calculated. Nunally (1978) points out that a Cronbach's alpha value above 0.7 signifies acceptable reliability, while a value below 0.5 indicates low reliability and the factor should be rejected. In addition, according to Sekaran (2003), Cronbach's alpha value must be greater than 0.5 to be considered reliable. Babbie (1992) considers a reliability index of 0.9 - 1.0 as very high, 0.7 - 0.89 as high, 0.3 - 0.69 as moderate, and 0.0 - 0.29 as low. Therefore, in this study, Cronbach's alpha values between 0.530 and 0.621 are considered moderate and acceptable. Table 3 shows a selection of questionnaire items with Cronbach's alpha for each section.

Table 3. Sample of questionnaire items with Cronbach's alpha for each section

Construct	No. of Item	Sample Item	α
BEH	5	I will continue to purchase using online channel as it will save me time.	.530
INT	5	I intend to shop online in the future.	.611
ATT	5	The idea of online shopping is appealing.	.530
T	5	I get my delivery on time when shopping online.	.539
SS	5	I feel safe and secure with the security feature from the website store when shopping online.	.620
L	5	I will continue to purchase from the same website store in the future.	.621
Mktg Info	5	I will buy more when there are discounts and vouchers.	.565

Regression Analysis

The proposed hypotheses were tested in this study using regression analysis. Regression analysis simultaneously determines the strength or degree of relationship between one or more independent variables and the dependent variable. The degree of relationship is indicated by the R-value, which ranges from 0 to 1. A value close to 1 indicates a stronger relationship, while a value close to 0 indicates a weaker relationship. The goodness of fit of the model through regression is determined by R^2 and the adjusted R^2 . The R^2 determines the proportion of the variance in the dependent variable that can be explained by the independent variable. The adjusted R^2 takes into account and tests different independent variables with the model. If the regression model contains multiple variables, the adjusted R^2 predicts the model better than the R^2 because it allows the comparison of models with different numbers of independent variables.

In this study, multiple regression analysis was conducted to examine the effects of ATT, T, SS, L, and Mktg Info on INT, while simple linear regression analysis was carried out to analyse the effects of INT on BEH.

Multiple Regression Analysis

Table 4 shows the results of multiple regression analysis when testing the intended hypotheses in this study. The correlation coefficient R of 0.571 (57.1 %) indicates that SI has a reasonable positive relationship with ATT, T, SS, L, and Mktg Info. Despite this, only 32.6% (R^2 values of 0.326) of the variation of INT is due to ATT, T, SS, L, and Mktg Info. The remaining 67.4 % of the variance in INT was explained by other variables not considered in this study. The adjusted R^2 is 0.307, which means that the five factors explain 30% of the variance in INT. Meanwhile, the results of the ANOVA test showed that the model is significant as the F-statistic ($F = 17.092$) is significant at 5% ($p = 0.000$), confirming the fit of the model. The most important variable influencing INT is L with a t -value of 3.623, followed by SS with a t -value of 2.327.

SS ($\beta = 0.204$, $p = 0.021$), and L ($\beta = 0.299$, $p = 0.000$) show a significant relationship with INT. Therefore, H₃ and H₄ are supported. On the other hand, the relationship between ATT ($\beta = 0.117$, $p = 0.138$), T ($\beta = 0.023$, $p = 0.822$), and Mktg Info ($\beta = 0.062$, $p = 0.450$) with INT is insignificant. Consequently, H₁, H₂, and H₅ are not supported. The standardised coefficient beta value of 0.299 indicates that L is the most influential and strongest predictor of INT, followed by SS ($\beta = 0.204$).

Table 4. Multiple regression results

Hypotheses	Unstandardised Coefficients		Standardized	t-value	Sig.
	β	Std. Error	Coefficients β		
H1 ATT \rightarrow INT	.129	.086	.117	1.490	.138
H2 T \rightarrow INT	.023	.104	.023	.225	.822
H3 SS \rightarrow INT	.199	.086	.204	2.327	.021
H4 L \rightarrow INT	.323	.089	.299	3.623	.000
H5 Mktg Info \rightarrow INT	.070	.092	.062	.757	.450
R	.571				
R ²	.326				
Adjusted R ²	.307				
F statistics	17.092				.000

Simple Linear Regression Analysis

Simple linear regression analysis examined the relationship between INT and BEH and the results are shown in Table 5. The correlation coefficient R of 0.471 (47.1%) indicates a reasonable positive relationship between INT and BEH. Nonetheless, INT only explains 22.2% of the variation in BEH (R² values of 0.222). The remaining 78.3 % of the variance in BEH was explained by other variables not considered in this study. The adjusted R² is 0.217, indicating that INT accounts for 21% of the variation in BEH. The ANOVA test results show that the model is significant for the F-statistic (F = 51.533) is significant at 5% ($p = 0.000$), implying that the model is fit. INT has a significant relationship with BEH, with $\beta = 0.471$, $p = 0.000$. Thus, H₆ is supported.

Table 5. Simple linear regression results

Hypotheses	Unstandardized Coefficients		Standardized	t-value	Sig.
	β	Std. Error	Coefficients β		
H6 INT \rightarrow BEH	.394	.055	.471	7.179	.000
R	.471				
R ²	.222				
Adjusted R ²	.217				
F statistics	51.533				.000

DISCUSSION

The results showed that three hypotheses were confirmed, while three others were not. With regard to H₁, although attitude has been cited in many studies as one of the most important factors in predicting intention, this study surprisingly found that attitude is a non-significant predictor of intention among young Muslims. Attitudes towards online retailers, products, or services are not an important factor and may not lead to online shopping intention. In other words, whether young Malaysians have a favourable or unfavourable attitude does not influence their desire to shop online. This result mirrors the study by Noor *et al.* (2020), which found that attitude does not influence the intention to shop online.

As for H₂, the trustworthiness of online retailers, products, or services is not a necessary condition for young Muslims' online shopping intention, which is consistent with a study by Ru *et al.* (2021). Perhaps because online shopping has been around for some time, consumers have already developed awareness and are able to identify unreliable online retailers.

In relation to H₃, safety and security were found to have a significant direct influence on online shopping intention. It stands to reason that a lack of consumer confidence due to the absence of security features on retailers' websites will become one of the disadvantages of online shopping that will prevent its further development. Online shop retailers should be aware of and strengthen their website's security for online transactions and provide privacy policies to consumers to improve consumers' intention to shop online. This finding is in tandem with previous research showing a significant relationship between safety and security and the intention to shop online (Chew & Kim, 2021; Tran & Nguyen, 2022).

In regard to H₄, the relationship between loyalty and online shopping intention was found to be significant, in line with studies by Chew and Kim (2021) and Savila *et al.* (2019). As loyal customers are considered hugely important in e-commerce, online retailers should always strive to find information that will help them build effective customer loyalty (Al-Adwan *et al.*, 2020) and continuously meet and exceed their customers' expectations. Customer loyalty is crucial and must be maintained and built upon, as it is much easier to retain existing customers than to attract new ones. When loyal customers are taken care of, retailers can benefit from positive feedback and referrals.

In relation to H₅, in line with Rakesh and Khare (2012), this study found that marketing information does not influence online shopping intention. Perhaps the respondents see the marketing information available as not genuine and exaggerated. Coupons and discounts online do not seem to be as attractive as they used to be, at least for the respondents in this study.

Pertaining to H₆ and consistent with previous research by Bhatti (2018), Bhatti and Rehman (2019), Lim *et al.* (2016), and Rehman *et al.* (2019) online shopping intention was a predictor of online shopping behaviour. In this study, online shopping behaviour is more likely to occur when there is a strong desire to shop online.

CONCLUSION

The objective of this study is twofold: first, to examine the effects of attitude, trustworthiness, security, loyalty, and marketing information on online shopping intention among young Muslim consumers in Malaysia; and second, to examine the effects of intention on online shopping behaviour among young Muslims in Malaysia. The findings of this study show that security and safety and loyalty influence the online shopping intentions of young Muslims in Malaysia. However, attitude, trustworthiness and marketing information are not predictors of online shopping intention. The study also found that intention has an impact on online shopping behaviour.

The novel contribution of this study lies in both its theoretical and practical strands. Theoretically, this study contributes to the existing literature by examining the determinants that explain the online shopping intention of young Muslims and the relationship between online shopping intention and actual shopping behaviour. The study leads to the following conclusions: 1) safety and security and loyalty influence online shopping intention, 2) the factor that has the strongest influence on online shopping intention is loyalty as its β -score is the highest, followed by safety and security of online shopping websites, 3) online shopping intention influences actual online shopping behaviour, and 4) as this study replicates the work of Chew and Kim (2021), while attitude, trustworthiness, security, loyalty and marketing information have been reported to influence purchase intention, this study found that only safety and security and loyalty were significant and valued by Muslim respondents.

Practically, a better understanding of Malaysians' online shopping orientations is critical for policymakers, service providers, and industry players, especially as the country aims for e-commerce to be the engine of catalytic business growth in the country from 2021 to 2025. E-commerce is considered a growth accelerator for the digital economy and the backbone of the country's economy. The findings of this study can help online retailers better understand how safety and security and loyalty incentives can help create consumer intent to shop online and ultimately trigger actual online shopping behaviour. To increase customer trustworthiness, online retailers need to be seen as reliable, ethical, and socially responsible. The marketing information provided on the retailer's website must be credible and sound, genuine, and not exaggerated.

LIMITATIONS AND FUTURE RESEARCH

The results of the study, however, should be interpreted with caution due to the limitations of the study: 1) the small number of respondents of only 183, 2) the lack of an innovative research methodology, and 3) the limited factors that influence online shopping intention. There is a need for further research on online shopping in Malaysia to find out more factors that influence online shopping intention and behaviour. Malaysia is a multi-racial and multi-religious country. Therefore, it is suggested that a similar study be repeated with other segments, including all ethnic and religious groups in the country, to obtain more accurate data on online shopping preferences. In addition, structural equation modelling (SEM) is a multivariate technique that is increasingly used in academic research to test and evaluate multivariate causal relationships. Further studies should apply SEM using Analysis of Moment Structures (AMOS) or Smart Partial Least Square (PLS) tools to properly evaluate multivariate causal relationships between factors influencing online shopping intention and actual behaviour. Furthermore, additional research can be conducted to thoroughly examine the aspects of attitude, trustworthiness, and marketing information to determine whether or not these factors influence consumers' intention to shop online. Given that the five factors that influence online shopping intention explained only 30% of the variance in this study, future research should include other variables that explain online shopping intention.

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CONFLICT OF INTEREST STATEMENT

The authors agree that this research was carried out without any self-benefit, commercial, or financial conflicts, and they state that they have no conflicting interests with any other party, and that no financial support was obtained for this study.

AUTHORS' CONTRIBUTIONS

Wan Rasyidah Wan Nawang developed the research concept, wrote, and revised the article. Muhammad Huzairil Syaquir Muhamed Shukri contributed to data gathering and entry.

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