

Role of E-trust, E-loyalty, and E-satisfaction on Online Buying Behaviour among Millennials in Kuala Lumpur, Malaysia

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Abstract

The number of internet users in Malaysia is growing, and millennials are becoming the strongest in buying power. This research aimed was to investigate the influence of e-trust, e-loyalty, and e-satisfaction on online buying behaviour among millennials. Despite the growth of e-commerce and the high engagement of millennials in technology, there is a shortage of empirical research covering the determinants of online buying behaviour among millennials in Malaysia. This quantitative study collected primary data through a self-completed questionnaire that was sent through a survey method to millennials online shoppers in Malaysia. The target population was millennials engaged in online shopping. The research results revealed that e-loyalty and e-satisfaction are determinants of online buying behaviour among millennials. Surprisingly, this study found that e-trust was not a significant determinant of online buying behaviour. There are several practical implications of this study on marketeers and web-retailers. This research will provide a better understanding to enable the web-retailers and marketers to develop their strategies to improve the online shopping experience of millennials. This is the first study that examined the relationship between e-trust, e-loyalty, and e-satisfaction with millennials' online shopping behaviour in the Malaysian context.

Keywords: Online buying behaviour, E- Trust, E-Loyalty, E-Satisfaction, Millennials

Introduction

Malaysia is located in Southeast Asia and has an estimated population of about 33 million in 2020 (Department of Statistics Malaysia, 2020). Currently, the Malaysian GDP growth of 2019 is 4.6 % and a GDP per capita of about \$365.303 billion. The Malaysian e-commerce industry has shown phenomenal growth and contributed about RM85.8 billion (6.3%) to the Malaysian GDP in 2019 (Statista, 2019). According to a survey of internet users by MCMC (2018), the percentage of internet users continued to rise from 76.9% in 2016 to 87.4% in 2018. The number of internet users in Malaysia is projected to grow from 25.3 million people in 2017 to 29.4 million in 2023 (Statista, 2019). Statistics show the mean age of internet users in 2018 increased to 36.2 years, compared to 33.0 years in 2016. Henceforth indicated that a higher age group are joining the online community. However, as reported by MCMC (2018), internet users were mainly comprised of adults in their 20's, and they accounted for 30.0% of internet users.



The smartphone is the most common device used to access the Internet, and around 93% used a smartphone to go online. The e-commerce market is growing with gross value added contributed 6.3% to the nation's gross domestic product (GDP) in 2017. Furthermore, value-added for e-commerce increased to RM85.8 billion in 2017 (MCMC, 2018). However, although 71% of Malaysians are active on the Internet, only 35% of them were very keen to make online purchases frequently (Statista, 2019).

Retailers and marketers are using several strategies to attract online shoppers. Strategies such

as discount vouchers, cash rebates, and member privileges are commonly used (Digital News Asia, 2019). Furthermore, new technologies such as e-wallet and virtual reality provide more convenience to customers. The new technologies enable customers to browse catalogues and make online purchases instead of queuing in-store (Foroudi et al., 2018). In addition, for customers below 30 years of age, online purchasing and use e-commerce platforms are the most preferred choices of shopping (Digital News Asia, 2019). In addition, Gen Y or millennials are becoming the most potent force in terms of buying power. The growth of the Internet has a very strong influence on millennials' lives (Nusair et al., 2013). The millennials are highly engaged in online activities that encompass online buying and e-commerce, and their behaviour to buy online is different from other generations (Lester, Forman, & Loyd, 2006). Therefore, to influence and develop a relationship with millennial customers, marketers must review their current strategies. In addition, the changes in the external environment and changes in the preferences and needs of millennial customers, it is important to understand their purchasing behaviour (Drake-Bridges and Burgess, 2010). There is also a dearth of empirical research covering the determinants of buying behaviours of millennials in Malaysia. Online buying is gaining momentum, and studies have identified several determinants of purchasing behaviour that encompasses price, security, perceived usefulness, compatibility and attitude (e.g., Eri, Aminul Islam, Md., and Ku Daud, 2011; Bashir, 2013). A study by Eri, Aminul Islam, Md., and Ku Daud (2011) revealed that perceived usefulness, perceived ease of use, security, and the compatibility significantly influenced the attitude towards online buying. In a different study, Bashir (2013) found that price, time-saving, and convenience were the positive determinants of online buying behaviour. Another study by Salehi (2011) found that appearance, quick loading, security, sitemap, and validity were positive predictors of buying behaviour and security had the highest impact. Cheung et al. (2005) pointed out that the factors that influence online buying can be classified as the individual characteristics of customers, product or service characteristics, characteristics of the online environment, and organization characteristics. This shows that there is no consistency among researchers on what are the determinants of online buying behaviour. In today's virtual world, customers are being exposed to several heterogeneous factors that affect their attitude and buying behaviour. Therefore, with the advances in technology and the Internet, marketers need to know the current factors that they must focus on to understand millennials' online buying behaviour. Trust, loyalty and satisfaction are also some of the factors that influence buying behavior (Shiau and Luo, 2012; Sahney, Ghosh, and Shrivastava, 2013). Trust by customers towards online transactions has been identified as one of the crucial determinants of buying behaviour (Sahney, Ghosh, and Shrivastava, 2013). They stressed that the trust of consumers was a key determinant of online buying behaviour in the Indian context. Muda et al. (2016) added that higher perceived trust in marketers was an antecedent to the intention to purchase online. A study by Shiau and Luo (2012) revealed that trust was the most important predictor of online group buying. The study also found that satisfaction was one of the predictors of buying behavior. Hsu et al. (2014) further confirmed that trust in the website had a positive relationship with the perceived quality of the website and satisfaction. Besides, fostering millennial loyalty is one of the key priorities of marketers and retailers (Kandampully et al.,



2015). Moreno et al. (2017) added that millennials' purchasing behaviour is a time of enjoyment, and loyalty to the brands they purchase is relative. This study will focus on the influence of e-trust, e-loyalty, and e-satisfaction towards millennials' buying behaviour. Despite the important role of trust, loyalty, and satisfaction, there is a dearth of studies that have empirically tested the impact of e-trust, e-satisfaction, and e-loyalty towards millennials' online buying behaviour Malaysia. The results of this study will add to the current body of knowledge and enable marketers to better phenomenology of understandings on the determinants of the buying behaviour.

Literature Review

Consumer Online Buying Behaviour

Consumer buying behaviour is a construct of very high interest to marketers and retailers (Madhavan and Kaliyaperumal, 2015). It refers to what drives customers towards deciding to purchase a product or service. Online purchasing behaviour refers to situations when a customer intends to participate in online transactions (Pavlou, 2003). According to Anderson & Golden (1984) consumer behaviour refers to several steps that a customer goes through to purchase a product. This includes recognition of their needs, ways to solve the needs identified, making decisions on a purchase, interpreting information, making plans, and implementing the plans. This process enables marketers to understand how consumers make buying decisions and the factors that affect the decision process. There are several theories and models that can be used to explain consumer behaviour. Based on the Engel Kollat Blackwell Model, consumer behaviour has four stages, namely the decision process stage, information input stage, information-processing stage, and factors that influence the decision process (Madhavan and Kaliyaperumal, 2015). The Theory of Planned Behavior (TPB) can be used to explain consumer buying behaviour (Ajzen, 1991). According to the Theory of Planned Behaviour, the determinants of a customer's intention to purchase are attitude, subjective norm, and perceived behavioural control. However, as stated by Cheng and Huang (2013), the TPB model is a general model that does not specify beliefs about a specific behaviour of a customer. Several past researchers have used the TPB model to study customers' online purchasing behaviour (e.g., Liang and Lim, 2011). Researchers have also identified several antecedents of online purchasing behaviour (e.g., Ling, Chai and Piew, 2010; Escobar-Rodríguez and Carvajal-Trujillo, 2014). A study by Ling, Chai and Piew (2010) found that the determinants of online purchase intention were impulse purchase intention, quality orientation, brand orientation, online trust, and, prior online purchase experience. Another study by Escobar-Rodríguez, and Carvajal-Trujillo (2014) revealed that trust, habit, cost-saving, ease of use, performance, and expended effort were some of the determinants of online buying behaviour. This shows that there are several determinants of online buying behaviour.

E-Trust and Online Buying Behaviour

Several studies have examined the concept of trust (Kim, 2008; Gefen et al., 2003). Trust is also applicable in several fields that include management, psychology, consumer behaviour and economics (Kim, 2008). According to Gefen et al. (2003), trust refers to the buyer's confidence that a seller will not take advantage of a transaction. The seller is expected to be ethical, dependable, and fulfils his or her commitment. Trust has also been referred to as the expectation or confidence of one party (the buyer in this study) that he or she can rely on another party (the seller in this study) (Lewicki et al., 1998). Komiak and Bembasat (2006) looked at trust from the cognitive and emotional perspective. Cognitive trust refers to the buyer's expectations of online sellers. The emotional aspect of trust refers to the buyer's feelings and emotions. This implies that trust is a multi-faceted construct that encompasses



cognitive, emotional, and behavioural dimensions. The buyer's decision to purchase a product depends on the level of trust (Gupta et al., 2009). Furthermore, trust plays a more significant role in online purchases due to the higher level of perceived risk in online transactions (Li et al., 2014). The perceived risk is higher because the buyer cannot inspect the product or see the store. E-trust refers to the cognitive trust and trustworthiness attitude that a buyer has over a seller in a virtual environment (Beldad, De Jong, and Steehouder, 2010). Sahney, Ghosh, and Shrivastav (2013) stressed that online trust refers to a belief that the buyer can trust the seller. The buyer in online transactions has a feeling of confidence. In short, online trust is a belief that the online seller can be trusted. It is a feeling of confidence and security towards online transactions. Therefore, it can be implied that online purchasing behaviour is influenced by the level of trust the buyer has in the seller (Hong and Cho, 2011).

Past studied have revealed that trust is one of the key determinants of purchasing intentions by consumers (Wu, 2013; Pappas, 2016; Bilgihan et al., 2015). Sahney, Ghosh, and Shrivastav (2013) stated that in online buying decisions by buyers, trust is a prerequisite. The concept of trust includes the website content, company image and the process of online purchasing. As stressed by Wu (2013), trust plays a highly important role in the buyer's decision making or intention to purchase products and services. A study by Shiau and Luo (2012) revealed that trust was the key determinant of online purchasing behaviour. This study confirmed that trust and reciprocity influenced customers to engage in online buying behaviour. A study by Pappas (2016) further confirmed that the customer's trust in the product and web-vendor influenced customers' online purchasing behavior. A study by Tingchi et al. (2013) examined the three factors that represent trust, namely perceived reputation, structural assurance, and website trustworthiness. The findings of the study revealed that the buyer's attitude towards online purchasing was positively and significantly influenced by all three dimensions. Rahman (2015) also stressed that trust is a critical factor in the e-tailing brand. Hsu, Chuang, and Hsu (2014) examine trust in the web site, trust in-group members, trust in the vendor, and trust in the auction's initiator. The study confirmed that trust in the web site, trust in-group members, trust in the vendor had a significant influence on attitude, which subsequently affects buying intention. Trust in the auction initiator was found to have an insignificant influence on attitude. Loyalty by millennials depends on the level of trust. Millennials are aware of their purchasing power and use they possess the knowledge of their brand names and the reputation of products. Millennials' loyalty to a product will be established if they trust the product (Ordun, 2015). Further to the review of past research findings, the following hypothesis was developed for further empirical testing:

H1: E-Trust affects online buying behaviour among millennials in Kuala Lumpur, Malaysia.

E- Loyalty and Online Buying Behaviour

Customer loyalty has been defined by various scholars, and there is no uniformity in its definition (e.g., Reichheld and Schefter, 2000; Oliver, 1999). Oliver (1999) defined customer loyalty as a commitment by a buyer to repetitively buy or re-patronize a particular product or service in the future. Kumar and Shah (2004) stated that customer loyalty refers to retaining customers and increasing sales or business through the development of relationships with customers. According to Reichheld & Schefter (2000), customer loyalty refers to an aspect of managing a successful business and securing customers for a longer time. Uncles, Dowling, and Hammond (2003) see customer loyalty as an attitude-based phenomenon where customer relationship programs can influence customers' attitudes. The study by Uncles, Dowling, and Hammond (2003) conceptualized loyalty as a customer's attitude that leads to a relationship with the brand or loyalty is conveyed in terms of revealed behaviour. Gefen (2002) added that customer loyalty is the outcome of trust, and customer service and customer loyalty can be



increased with better trust and service quality. E-loyalty, on the other hand, is the customers' willingness to return to internet business sites based on their past purchasing experience and future desire (Anderson, and Ponnavolu (2002). However, studies have found that millennials spend more on online purchasing, but compared to preceding generations, they show lower levels of loyalty. Therefore, for millennials, online purchasing is a time of enjoyment, and their loyalty to brands is relative. There are also several measures of customer loyalty, and the prominent measures include a proportion of purchase of product (Cunningham, 1966), and the probability of product repurchase (Kuehn, 1962).

Studies have also shown that loyalty is a determinant of purchasing behaviour (Safa and Ismail, 2013; Evanschitzky et al., 2012). A study by Salim Khraim (2011) revealed that consumer brand loyalty is positively influenced by several factors such as brand name, product quality, price, promotion, and store environment. These brand loyalty factors lead to positive buying behavior among customers. A study by Safa and Ismail (2013), revealed that e-loyalty was a significant and positive predictor of online shopping behavior. Evanschitzky et al. (2012) examined the consequences of customer loyalty and program loyalty. The study confirmed that program loyalty was a positive predictor of buying behavior. However, the study revealed that company loyalty was not a positive predictor of consumers' choice of a seller nor its preference compared to other competitors. It should also be noted that the brand loyalty of millennials can be temporary because of changes in lifestyle, trends, and brand popularity (Lissitsa and Kol, 2016). Similarly, Bilgihan (2016) added that for millennials, brand loyalty only lasts between six to eight months. Bilgihan (2016) further pointed out that for millennials, hedonic and utilitarian features such as price comparison and visually appealing website designs positively affect the consumers' online experience and loyalty. Therefore, marketers and retailers need to emphasize that loyalty is one of the key strategies to attract millennials and increase online purchasing (Küster, Vila, & Canales, 2016). Further to the review of past research findings, the following hypothesis was developed for further empirical testing:

H2: E-loyalty affects online buying behaviour among millennials in Kuala Lumpur, Malaysia.

E-Satisfaction and Online buying behaviour

There are several definitions of customer satisfaction, and there is no one universally accepted definition. Researchers and scholars have viewed customer satisfaction as a process where customer assesses or gauges what was expected and what was achieved (Oliver, 1981; Tse and Wilton, 1988). Poisz and Van Grumbkow (1988), had viewed about customer satisfaction as a difference between what was observed and what was desired by the customer. As stated by Johnson (2015), customer satisfaction refers to a customer's assessment of his or her purchase and consumption experience of a product or service. Johnson (2015) added that a customer's satisfaction originates from its influence on repeat purchase decisions. There are also two categories of satisfaction, namely transaction satisfaction and the cumulative satisfaction received (Johnson, 2015). As explained by Oliver (1997), transaction-specific satisfaction is related to cognitive-psychological determinants of satisfaction, while cumulative satisfaction is related to the effects of emotions on satisfaction. Oliver (1997) further clarified that customer satisfaction would increase when the product's performance exceeded their expectations. Similarly, Haniff, Hafeez and Riaz (2010) stated that customer satisfaction is entrenched when a brand answers the needs of customers. Similar to customer satisfaction, Anderson and Srinvasan (2003) stated that e-satisfaction refers to the customers' gratification with his or her prior purchasing experience. The definition of e-satisfaction by Anderson and Srinvasan (2003) refers to experiences that are based on feelings or emotions of customers. Therefore, generally, customer satisfaction revolves around what is expected and what was actually received. In this aspect, the equity theory is appropriate because, as posited in the equity theory,



customers will compare their input/output ratios with those of others (Parker and Mathews, 2001).

Past research has identified a relationship between customer satisfaction and buying behaviour (Shiau and Luo, 2012; Liao, Palvia and Lin, 2010). Shiau and Luo (2012) study revealed that customer satisfaction was a positive predictor of online purchasing behaviour. This study further indicated that online buying behaviour was strongly predicted by consumer trust and satisfaction. Liao, Palvia, and Lin (2010) examined two stages of online buying, namely the ordering and fulfillment process. This study revealed that customer satisfaction with the ordering and fulfillment contributed positively and significantly towards their intention to continue with online purchasing. The positive relationship between customer satisfaction and purchase or repurchase intention is evident in the online and e-commerce environment (Anderson and Srinivssan, 2003; Bai, Law and Wen, 2008). Bai, Law, and Wen (2008) examined the website quality as a source of satisfaction and found that customer satisfaction had a positive and significant impact on intention to purchase. Claudia (2012) reviewed the three stages of the online buying process, namely the pre-purchase stage, purchase stage, and post-purchase stage. The study found that post-purchase stage satisfaction and perceived usefulness were the critical determinants of consumers intend to purchase. However, Satinover, Raska, and Flint (2015) pointed out that millennials prefer to shop at convenience stores despite being technologically savvy. They argued that there is a need for reciprocity between them and the sellers. According to them, the key determinants of satisfaction are sincerity, trust, and mutual respect. Further to the review of past research findings, the following hypothesis was developed for further empirical testing:

H3: E-satisfaction affects online buying behaviour among millennials in Kuala Lumpur, Malaysia.

Methodology and Research Design Research Design

Firstly, the research philosophy was established based on assumptions, namely the ontology and epistemology. The research philosophy refers to a system of beliefs and assumptions about the development of knowledge (Saunders et al., 2016). Assumptions were made about the realities that were encountered in this study and about knowledge. Based on the assumptions, this study was classified as positivism. Positivism, which relates to the philosophical stance of the natural scientist, was chosen because the reality is observable. The facts are observable and measurable and law-like generalizations can be produced. Data can be collected in numbers, and causal explanations and predictions can be made (Saunders et al., 2016). In this study, the existing theory was the basis to develop hypotheses that were tested based on data collected. This study was based on deductive reasoning because the hypotheses were developed and tested, and the findings were derived logically from a set of theory-derived for this study (Saunders et al., 2016). The deductive process assisted in explaining the relationship between the variables. The survey method was used to collect data to test the hypotheses, as this research required a collection of data from a large number of respondents. In a deductive approach, the survey strategy is commonly used for business research (Saunders et al., 2016). This was a cross-sectional study, and a snapshot of data was collected.

Sampling Technique and Sample Size

The target population of this study was millennials, who are involved in online shopping. The millennials were between the age range of 20-33 years. Nonprobability sampling was utilized as this method can assess respondents who were willing to participate in the survey (Saunders et al., 2016). The sampling frame was not readily available, and therefore the convenience



sampling method was used to reach the respondents. The calculation of the sample size was based on the formula by Tabachnick and Fidell, (2007). The formula is '50+8m', where m is the number of variables. Therefore, the minimum sample size was 82 respondents. However, to get better results, the target sample size was 100 respondents.

Instrumentation

The self-completed questionnaire with closed-ended questions was developed for this study. For this study, the questionnaire method was selected due to the convenience and collection of data in bulk from many respondents (Saunders, et al., 2016). The questionnaires were distributed through the Internet. Two qualifying questions to confirm the age and past online shopping experience were included. The questionnaire consisted of two sections. The first section focused on the demographic variables (Gender, Age, time spent on online shopping). The second section focused on the dependent (Online Shopping Behaviour) and independent variables, which are E-Trust, E-Loyalty, E-Satisfaction. A five-point Likert scale was used to enable the respondents to choose the best answers to the questions. The questions were adapted from past studies. For online shopping behaviour the questions were adapted from a study by Panda and Swar (2014). For e-satisfaction, the questions were adapted from past studies by Anderson and Srinivasan (2003) and Ting, et al, 2016). For e-Loyalty, the questions were adapted from past studies by (Anderson and Srinivasan (2003) and Ting et al, 2016). The questions on trust were adapted from studies by Morgan and Hunt (1994).

Data Collection

Self-administered questionnaires were sent through the Internet because this method can reach a large number of respondents. Due to slow response, the process of data collection has taken about three months. Follow up was done, and finally, 140 responses were received. Initial checking to get a feel of data was done. Missing values were checked. A total of 5 questionnaires were removed for this study, due to omission and errors. Finally, only 135 questionnaires were usable.

Data Analyses

Once the data collection process was over, all the completed questionnaires were being edited, and coding was done. The data was uploaded into the SPSS software system to generate descriptive and inferential statistics. The three main purposes of data analysis were to get a feel for the data, test the goodness of data, and test the hypotheses developed for the research (Sekaran and Bougie 2010). The feel of the data was based on physical viewing and descriptive statistics. The feel of data established the normality of data distribution, reliability or consistency of data and validity checking based on exploratory data analysis (EFA). Multiple regression analysis was done to check the relationship between the variables.

Results

Demographic Profiles of the Respondents

Most of the respondents in this study were males (55.6%). The balance (44.4% were females. Additionally, most of the respondents were between 20-22 years old (45%). Next were the respondents in the 23-27 years old range (26.7%). The rest were above 27 years old. All the respondents were millennials. Data were obtained at the time spent per week on internet surfing. Most of them (43%) spend up to 16 hours per week. Another 26 percent spent 11-15 hours. The rest spent 10 hours and below. Therefore, this indicates that millennials spend a considerable time surfing the net.



Reliability Test

A reliability test was done to measure internal consistency. The Cronbach alpha value was checked to establish reliability (Sekaran and Bougie, 2010). The closer the Cronbach alpha coefficient is to 1, the higher is the reliability. For the dependent variable that is online buying behavior, the Cronbach alpha was 0.693. For the independent variables, the Cronbach alpha was 0.808, 0.790, and 0.885 for E-Trust, E-Loyalty, and E-Satisfaction, respectively. All the above values were above 0.6. Thus, the reliability was acceptable for this study. This shows a high level of internal consistency for all the items on the scale in this study. According to Nunally (1978), Cronbach's alpha of 0.70 or above is acceptable.

Table1: Reliability Testing

Variable	Cronbach Alpha value
Online Buying Behaviour	0.693
E-Trust	0.808
E-Loyalty	0.790
E-Satisfaction	0.885

Normality Test

The normality test was conducted based on the skewness and kurtosis of data distribution. The value of skewness in this study was between -0.930 and 0.167 and indicated negative skewness. The kurtosis values were between 1.475 and -873. As stated by George and Mallery (2010), the kurtosis and skewness values between -2 to +2 are acceptable. It can be noted from the table below that the values of skewness and kurtosis fall within the acceptable range of -2 to +2. This indicates normality in the distribution of data.

Table 2: Kurtosis and Skewness

	Minimum	Maximum	Mean	Std. D	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std.	Statisti	Std.
						Error	c	Error
Online Buying	1.00	4.33	3.2210	.53865	930	.209	1.475	.414
Behaviour								
E-trust	2.17	5.00	3.8926	.70372	167	.209	873	.414
E-Loyalty	2.00	5.00	3.7531	.75224	214	.209	596	.414
E- Satisfaction	1.33	5.00	3.7333	.84573	393	.209	536	.414

Validity Testing

Exploratory factor analysis was done. As stated by Field (2009), the Kaiser-Meyer-Olkin (KMO) was used to measure the sample adequacy (Field, 2009). According to Field (2009), the KMO values closer to 1 indicate that patterns of correlations will yield reliable factors. The KMO values between 0.5 and 0.7 are mediocre, between 0.7 and 0.8 are acceptable, values between 0.8 and 0.9 are great, and above 0.9 are excellent (Hutcheson and Sofroniou, 1999). In this study, the KMO value of 0.820 is considered outstanding. Barlett's test indicates the strength of the relationship among variables (Barlett, 1954). The data in this study show a Chisquare statistic of 234.972. The significance is also less than 0.001, and this indicates that this is not an identity matrix. The results of the Barlett's test indicate that the correlation matrix is sufficiently different. This study also checked the values of each commonality, which is the extent to which an item correlates with all other items. All the commonalities were above 0.5.



A high communality explains that a more considerable amount of the variance in the variable has been extracted by the factor solution (Kline, 1994).

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin	Measure of Sampling Adequacy.	.820
Bartlett's Test of Sphericity	Approx. Chi-Square	234.972
	df	6
	Sig.	.000

Pearson Correlation Test

Bivariate Pearson correlation test was conducted to identify the strength of the relationship between the variables. The correlation values range from -1.0 to +1.0, and values closer to one indicate a stronger relationship (Hair et al., 2006). The table below shows that all the Bivariate Correlation between the variables are positive and statistically significant.

Table 4: Pearson Correlation Coefficient

		Online Shopping Behaviour	E-Trust	E-Loyalty	E-Satisfaction
Online Buying	Pearson	1			
Behaviour	Correlation	.000			
	Sig. (2-tailed)				
E-Trust	Pearson	.498**	1		
	Correlation	.000	.000		
	Sig. (2-tailed)				
E-Loyalty	Pearson	.552**	.645**	1	
	Correlation	.000	.000	.000	
	Sig. (2-tailed)				
E-Satisfaction	Pearson	.552**	.677**	.652**	1
	Correlation	.000	.000	.000	.000
	Sig. (2-tailed)				

^{**} Correlation is significant at the 0.01 level (2-tailed).

Multiple Regression Test and Model Fit Summary

The overall model fit summary shown in the table below. In this research, multiple regression analysis was used to determine the overall fit of the model. Further to that, the relative contribution of each one of the independent variables to the total variance was determined through the multiple regression testing.

Table 5: Model Fit Summary

1 4010 0 1 112 0 0 1 1 1 1 2 0 1 1 1 1 1 1	
Multiple R	.613
Coefficient of Determination (R Square)	.375
Adjusted R square	.361
F Value	26.239
Sig	.000
Durbin Watson	2.022

The model fit summary indicates a good model fit. The r-square value explains the proportion of variance in the dependent variable (online buying behaviour), which is explained by the



three independent variables. In this study, a value of .375 explains that 37.5 of the variances in the dependent variable is explained by the three independent variables (Field, 2009). The F-value is 26.330, and the significance value associated with the F-value is small (0.000). The p-value associated with this F value is very small (0.000). The multicollinearity was checked to establish that two or more independent variables are not highly correlated (Hair et al., 2006). To confirm that multicollinearity is not a problem, the 'VIF' should not exceed ten, and tolerance value must be 0.10 or lower (Hair et al., 2006). The values for VIF and 'Tolerance' were within the acceptable range (Hair et al., 2006). Therefore, the data is not contaminated by multicollinearity.

Table 6: Coefficients

	Coefficients							
Model		Unstandardized		Standardized	t	Sig.	Collinearity Statistics	
		Coef	ficients	Coefficients				
		В	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.389	.220		6.301	.000		_
	e-Trust	.134	.077	.175	1.740	.084	.470	2.128
	e-loyalty	.170	.070	.238	2.432	.016	.498	2.009
	e-Satisfaction	.180	.065	.282	2.773	.006	.461	2.170

a. Dependent Variable: Online Buying Behaviour

As shown in the table, all the beta values are positive, indicating a positive relationship between the independent variables and the dependent variable. Only two variables, namely e-loyalty and e-satisfaction, had t-Values exceeding 1.96, and the p-value is lower than 0.05. This indicates a significant relationship between all three independent variables on the dependent variable. Therefore, the hypotheses H2 and H3 were accepted. However, the T-value of the e-trust variable was below 1.96, and the p-value was higher than 0.05 (p>0.05). Therefore, hypothesis H1 was rejected.

Discussion, Implications and Recommendations

The first hypothesis was to test the impact of e-trust on the online buying behaviour of millennials. The results of this study rejected the prediction that e-trust is a positive and significant predictor of online buying behaviour among millennials. The results deviated from past studies that found the crucial role of trust in online transactions. Past studies have confirmed that trust is a determinant of the buyers' decision to purchase a product (Gupta et al., 2009; Wu, 2013) and trust plays a more significant role in online purchases due to the higher level of risk that is perceived in online transactions (Li et al., 2014; Shiau and Luo, 2012). Shiau and Luo (2012) study revealed that trust was the key determinant of online purchasing behaviour. Ordun (2015) also stated that millennials' loyalty to a product would establish if the trust the product, and this will lead to higher purchasing behaviour. The deviation of the results of this study from past studies can be attributed to several reasons. Firstly, all the respondents to this study were highly educated and technology savvy with a high level of experience using the Internet in their daily lives (Maldifassi and Canessa, 2010). The respondents are more educated and sophisticated in terms of their proclivity to e-trust. Another possible explanation is that millennials are attracted to strong brands and reputable websites. The millennials are digitally active and active online buying customers. They are attracted to retailers with distinctive brands and social ethics and values (Weyland, 2011). Therefore, big and branded websites are perceived as trustworthy, and millennials develop a good level of experience in online shopping experience (Hernández et al., 2010). The results of this study were consistent with past studies by Bourlakis et al., (2008); Drennan et al., (2006), and Mccole



et al., (2010) that also revealed that trust was not a significant predictor of online shopping behaviour

The second hypothesis stated that e-loyalty would increase online purchasing behaviour among millennials. This study's results showed that e-loyalty was a positive and significant predictor of online buying behaviour among millennials. A study by Safa and Ismail (2013) also showed that revealed that e-loyalty was a significant and positive predictor of online shopping behaviour. Evanschitzky et al. (2012) further confirmed that program loyalty was a positive predictor of buying behavior. However, it must be noted that millennials' brand loyalty can be temporary because of changes in lifestyle, trends, and brand popularity (Lissitsa and Kol, 2016) and can last between six and eight months (Ordun, 2015). Based on the results of this study, it can also be implied that trust and loyalty complement each other. As stated by Ordun (2015), millennials will be loyal to a product or service if they trust it.

It was also hypothesized that the e-satisfaction would affect the online buying behaviour of millennials. The results of this study confirmed this hypothesis. Also, besides, the results revealed that customer satisfaction was the strongest predictor of online purchasing behaviour among millennials. The results were consistent with the findings from past studies. Past studied have also revealed that customer satisfaction was a positive predictor of online purchasing behaviour (Shiau and Luo, 2012; Liao, Palvia, and Lin, 2010). Past studies also predicted that online buying behaviour was strongly predicted by consumer trust and satisfaction. Therefore, trust and satisfaction can complement each other, where higher levels of trust can result in higher satisfaction. Liao, Palvia and Lin (2010) also found out that customer satisfaction with the ordering and fulfillment process increases their buying behavior. The positive relationship between customer satisfaction and purchase intention is evident in the online and e-commerce environment (Anderson and Srinivssan, 2003; Law and Bai, 2008).

There are several important implications of this study. The study revealed that only e-loyalty and e-satisfaction were significant predictors of online purchasing behaviour by millennials. Besides, both constructs play an almost equally important role in influencing the online buying behaviour of millennials. There, e-marketers and retailers should focus on e-loyalty an e-satisfaction of millennials. This will enable them to understand the needs of generation Y consumers and the determinants of online purchasing behaviour. The results revealed that e-satisfaction is a critical factor in enhancing the online buying behaviour of millennials. Therefore, effort must be made to sustain satisfaction among millennials. This study also revealed that trust is not an as significant factor in improving online buying behaviour.

However, marketers must understand that trust is essential, and trust is closely related to loyalty and satisfaction. The study also revealed that e- loyalty is essential. However, past studies have revealed that millennials' loyalty is temporary and can last from six to eight months (Oedun, 2015). Therefore, steps must be taken by marketers to sustain loyalty among millennials. This can be accomplished through promotions, loyalty programs, and providing feedback to the consumers. Marketers and retailers must also understand that millennials form the largest group of online purchasers. The retailers need to build satisfaction and loyalty with millennials through various customer relationship programs and continuously create links with them. In short, millennial consumers should be satisfied with their online shopping experience.

There are also some theoretical and academic implications of this study. Academicians and future researchers can use the results of this study and further examine the antecedents of online purchasing behaviour among millennials. The results of this study provided some new insights into the role of e-trust, e-loyalty, and e-satisfaction towards the online buying behaviour of millennials. The results will add to the existing body of knowledge and further enrich the existing literature on online buying behaviour. This study focused on online buying behaviour



among millennials in Malaysia, and this aspect of the study differentiates it from other similar studies

There were also some shortcomings and limitations of this study. The first limitation is on the time horizon of this study. This research was a cross-sectional study, where a snapshot of the data was collected. The behaviour of millennials can change over time. Therefore, a longitudinal study would be more appropriate and provide better results. The second limitation is that there were only three determinants of buying behaviour. There are other factors, such as customer experience and the role of influencers that were not included. A more comprehensive study should include other variables. The third limitation was that demographic information was not examined. The age or income of millennials may affect their behaviour. Therefore, future studies should examine the role of categorical variables such as income as moderators. Lastly, an in-depth study based on a qualitative approach is recommended. A qualitative study using open-ended questions can obtain richer information from the respondents.

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