

## The Influence of Perceived Risk, Personality Traits and Products Marketing Strategy on Online Buying Behaviour for Smart Gadgets Among Millennials in Kuala Lumpur, Malaysia

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### Abstract

The purpose of this research is to identify the impact of these variables on the online purchasing behavior of millennials in Kuala Lumpur, Malaysia, and to comprehend how these factors shape their attitudes towards shopping for smart gadgets online. The research aims to provide valuable insights to marketers, retailers, and policymakers in Malaysia by examining the specific factors that influence the online buying behavior of millennials. The insights gained from this research will help businesses and policymakers develop effective marketing strategies and policies that cater to the unique preferences and needs of the millennial generation. In this research, a deductive methodology is deemed the most suitable research strategy as it enables accurate results and precise generalisation of data applicable to the study. In this research endeavor, primary data will be obtained from participants through a questionnaire that will be disseminated electronically. Based on the Malaysian population size, the study aims to recruit a sample of 200 participants. Based on the outcomes of this research, it is evident that two independent variables, namely Personality Traits and Product Marketing Strategy, wield substantial influence over online buying behavior among millennials in Kuala Lumpur, Malaysia. In contrast, the variable of perceived risk demonstrates minimal or negligible significance in relation to the online buying behavior exhibited by this demographic. As researchers embark on further exploration, the insights gleaned from this study serve as a valuable reference point, paving the way for a deeper comprehension of the multifaceted dynamics underlying online buying behavior among millennials in Kuala Lumpur, Malaysia.

**Keywords:** *Online Purchasing Behavior, Millennials, Smart Gadgets, Marketing Strategies, Personality Traits, Product Marketing Strategy, Perceived Risk*

### 1.0 Introduction

Malaysia, a captivating Southeast Asian nation bordered by Thailand, Singapore, Indonesia, and Brunei, entices tourists with its lush forests, sandy shores, and diverse culture. Despite its charm, the economy is

projected to decline, with Fitch Solutions predicting a drop in real GDP growth from 8.7% in 2022 to 4.0% in 2023. Kuala Lumpur, the capital, flourishes with modernity and e-commerce growth driven by increasing internet use, especially among millennials. While the e-commerce sector has thrived, understanding the shopping habits of Malaysian millennials remains a challenge.

Perceived risk, crucial in tourism and e-commerce, shapes decision-making. In online shopping, financial risk, like credit card security, is significant. This fear can deter online shopping, particularly among millennials. Personality traits offer insights into behaviors across contexts. Understanding these traits aids in predicting behavior, aiding interventions for success. Effective product marketing involves positioning, pricing, promotion, and distribution. Trust is vital in online buying behavior, influenced by security and quality. Social influence and personal factors also play roles.

In essence, this research highlights the complexities of consumer behavior, emphasising risk, traits, and marketing in both tourism and e-commerce. It underscores the necessity of addressing concerns and preferences to ensure successful transactions.

## **2.0 Literature Review**

### **2.1 Online buying behaviour**

Online buying behavior has emerged as a popular area of research in marketing, particularly among millennials in Kuala Lumpur, Malaysia. Several factors influence the online buying behaviour of this demographic, such as perceived risk, personality traits, and product marketing strategy (Chong et al., 2021; Karim et al., 2020; Liew et al., 2019). With the emergence of e-commerce, businesses need to understand the various factors that influence online buying behaviour to market their products effectively (Raza et al., 2021).

This review highlights the growing interest in academic research to understand the factors that drive online buying behaviour among millennials in Kuala Lumpur, Malaysia (Ong et al., 2020; Tumiran et al., 2019). Furthermore, the review identifies demographic, psychological, and situational factors that influence online buying behaviour, emphasising the importance of understanding the complexity of consumer behaviour in the digital age (Pongpaew & Ho, 2020; Wang et al., 2021).

### **2.2 Perceived Risk and Online Buying Behaviour**

Perceived risk is an important factor that influences online buying behaviour among millennials. Perceived risk arises from different sources, including concerns about fraud, product quality, delivery issues, and privacy and security risks (Bilgihan et al., 2016). Perceived risk is a key determinant of trust in online shopping platforms, and therefore, a key driver of online buying behaviour (Amin, Isa, & Fontaine, 2017; Lee, Kim, & Kim, 2018). Studies have investigated the impact of perceived risk on online buying behaviour among millennials in Kuala Lumpur. Similarly, Amin et al. (2017) found that perceived risk was a significant predictor of trust in online shopping platforms, which in turn, influenced online buying behaviour. For example, a study by Cheung and Lee (2019) found that perceived risk arising from product uncertainty and social factors was negatively associated with online buying behaviour among millennials in Hong Kong.

### **2.3 Personality Traits and Online Buying Behaviour**

Personality traits are essential factors that influence individuals' behaviour in various aspects of their lives, including online shopping. The growth of e-commerce has made online shopping increasingly popular, and this convenience has made consumers' buying behavior more intricate. As a result, various studies have investigated the connection between personality traits and online buying behavior. In their

study, Sarmad et al. (2018) found that extraversion and openness to experience positively influenced online buying behaviour, while neuroticism had a negative effect. The research also found that agreeableness and conscientiousness did not have a significant impact on online buying behaviour among millennials in Kuala Lumpur, Malaysia. Lin (2011) conducted research to analyse the correlation between personality traits and online shopping behavior among university students in Taiwan. The results indicated that individuals with the personality traits of being open to new experiences, organised, and anxious have a higher tendency to engage in online shopping. The research found a positive association between openness, conscientiousness, neuroticism and online shopping behavior.

## **2.4 Product Marketing Strategy and Online Buying Behaviour**

Product marketing strategies play an important role in influencing online buying behaviour among millennials in Kuala Lumpur. Businesses can use a range of strategies to target this demographic, including social media marketing, influencer marketing, and personalised advertising campaigns (Chin & Tan, 2018; Khong & Lee, 2019). Advertising is a commonly used product marketing strategy that businesses use to reach and influence their target market. A study by Kumar and Reinartz (2016) found that personalised display ads significantly increased click-through rates and conversions compared to non-personalised ads. Social media marketing has become a popular product marketing strategy in recent years. According to Lee et al. (2021), social media marketing has a significant impact on online buying behavior among consumers, especially for those who have high levels of trust in social media platforms. However, it is important to note that the effectiveness of product marketing strategies can vary depending on consumer characteristics and the context of the purchase decision. For example, research has shown that consumers with higher levels of product knowledge may be less influenced by advertising and more likely to make purchase decisions based on product quality and value (Kumar & Reinartz, 2016). Moreover, consumers may also be influenced by factors such as trust, perceived risk, and social norms in their online buying behaviour (Kim & Park, 2020; Lim & Dubelaar, 2010).

## **2.5 Implications for Businesses**

The findings of this literature review have several implications for businesses seeking to engage millennials in Kuala Lumpur. Firstly, businesses should focus on addressing perceived risks related to online shopping by implementing measures to ensure product quality and delivery reliability. This can help to build trust in online shopping platforms and increase online buying behaviour. Secondly, businesses should take into account the personality traits of millennials when developing marketing strategies. For instance, businesses can use personalised advertising campaigns to target impulsive individuals, while risk-averse individuals may respond better to strategies that emphasize product quality and reliability. Thirdly, businesses should leverage social media marketing to engage millennials in Kuala Lumpur. This demographic is highly active on social media platforms, and businesses can use these platforms to build brand awareness, engage customers, and drive online sales. Overall, businesses that understand the unique personality traits and preferences of millennials in Kuala Lumpur and tailor their marketing strategies accordingly, while also addressing concerns around perceived risk, can increase online buying behaviour and drive online sales.

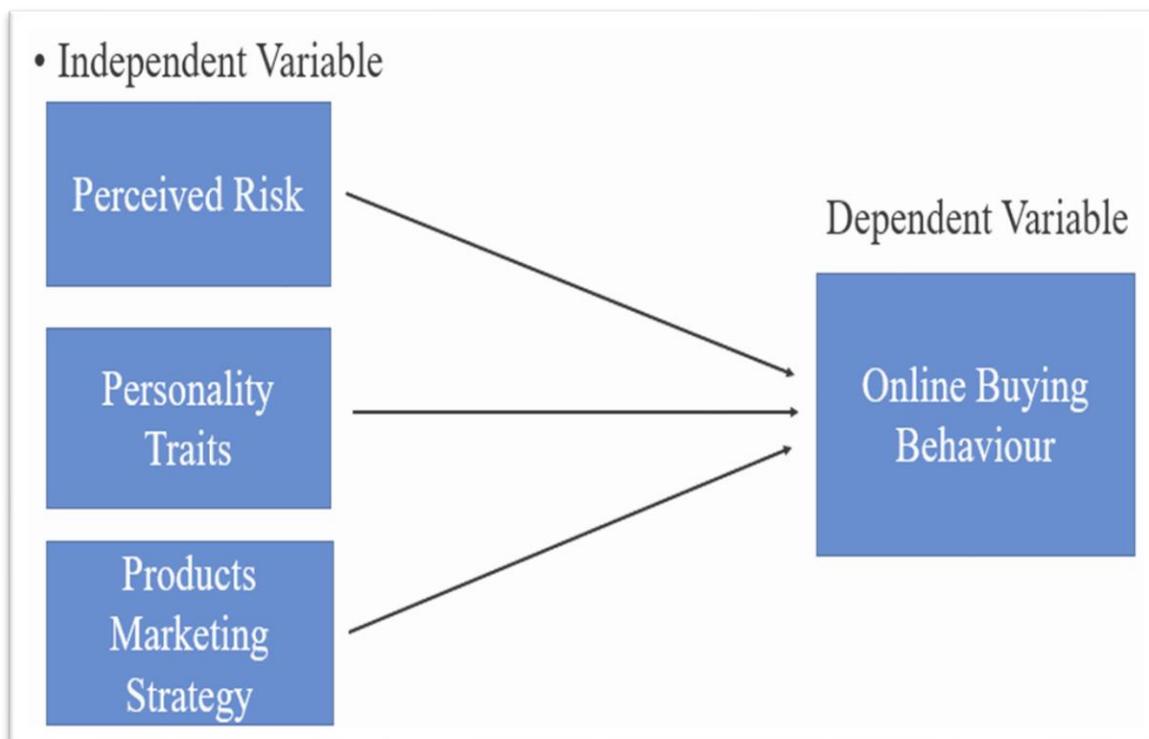
## **2.6 Theories and Framework**

For this research, three theories have been chosen based on their suitability for the research objectives. These theories include the Technology Acceptance Model, the Social Cognitive Theory, and the Self-Concept Theory. The purpose of selecting these models and theories is to assist in developing hypotheses that will guide the research. The Technology Acceptance Model is a widely used theory that explains how users accept and use new technologies. The Social Cognitive Theory emphasizes the role of observational learning and modeling in shaping behaviour. The Self-Concept Theory is based on the

belief that an individual's self-concept, or how they perceive themselves, plays a significant role in their behaviour. Overall, these three theories have been chosen to provide a comprehensive understanding of technology adoption and behaviour.

Expanding on the aforementioned points, the Theoretical Framework can be developed by utilising independent and dependent variables. The independent variables consist of Perceived Risk, Personality Traits and Products Marketing Strategy, while the dependent variable is Online Buying Behaviour.

**Figure 1: Research Framework**



### 3.0 Methodology

This research employs a quantitative research design to delve into the causal relationships within a distinct demographic (Kothari, 2004). Considering time and funding limitations, a cross-sectional time horizon is selected. According to Farquhar (2012), the quantitative approach involves statistical analysis to establish generalisable outcomes, aligning with positivism's emphasis on objective observation and measurement (Bryman, 2016). To ensure accurate and reliable results, precise sample representation is crucial, and data must be collected consistently across all participants (Streefkerk, 2019).

Primary data gathered through an electronically disseminated questionnaire. The questionnaire covers demographic variables and inquiries regarding independent and dependent variables, assessed on a Likert scale ranging from "Strongly Disagree" to "Strongly Agree." To ensure data validity, the Likert scale's assessment will span this range, utilising an internet-based survey. The research focal points include perceived risk, personality traits, product marketing strategy, and online buying behavior. The research primarily aims to contribute to the existing knowledge base, yielding insights with potential real-world implications. It intends to guide future research endeavors while offering practical insights for policy-making or interventions, aimed at enhancing outcomes for the demographic under examination (Bryman, 2016).

This research employ both primary and secondary data collection methods to ensure efficient and effective data analysis. To collect primary data, the researchers will select a sample population of male and female millennials from Malaysia and distribute a questionnaire using computer-assisted survey methods. Given the limitations in time and resources, the primary method of data collection will be an internet-based survey utilising Google Forms. The questionnaire will comprise questions on each dependent and independent variable in the hypothesis.

**Table 1: Questionnaire**

Parts	Questions
Part 1: Background of the sampling population	Ask the respondents the following: Age in 2023? Gender? Highest educational level? Currently studying at? Currently pursuing?
Part 2: Main questions on the dependent and independent variables	I am worried that the price and quality of the products on the Internet do not match. I am worried that online shopping is prone to fraud. I am worried that the product advertised on the Internet may be different from the original appearance. I am worried because I cannot touch and examine the actual products. I am worried that the seller cannot guarantee the security of my private information. I am worried that my personal data may be exposed or abused by online sellers. I am worried that it will take a long time to communicate with the seller on the Internet. I am someone who is generally trusting. I am someone who tends to be lazy. I make plans and stick to them. I have unlimited creative ideas. I have ample imagination. I am helpful. I make friends easily. Direct marketing activities (i.e., direct mail and e-mails) influence my online purchasing decisions. The ‘above the line’ promotional activities (i.e., TV and radio advertisements) influence my online purchasing decisions. The offline promotions influence my decision to select the tourist product/package I intend to buy. The online promotions influence my decision to select the tourist product/package I intend to buy. The tourism product's branding influences my online purchasing decisions. The performance of the product I intend to buy influences my purchasing online decisions. I often buy things spontaneously. “Buy now, think about it later” describes my shopping behaviour. I carefully plan most of my purchases. I search and buy online but pay in cash on delivery. I search, buy and pay online. I often buy things without thinking. I usually read online reviews of products before making a purchase decision.

## 4.0 Results and Findings

This chapter provides an overview of the data collection process, encompassing both manual data collection and internet surveys. The collected data is subsequently subjected to thorough analysis, employing tests to examine the correlation among numerous factors, including perceived risk, personality

traits, and product marketing strategy. The primary focus is on understanding the online buying behaviour of millennials in Kuala Lumpur, specifically in relation to smart gadgets. To facilitate the analysis, the collected data will be formatted and inputted into Statistical Product and Service Solution (SPSS). This will enable the testing of hypothetical relationships between independent and dependent variables.

#### 4.1 Cronbach's Alpha

The purpose of conducting the Cronbach's alpha test in this study is to assess the reliability of the collected data. According to Joseph et al. (2010), a minimum acceptable value of 0.7 is recommended for Cronbach's alpha.

##### 4.1.1 Reliability Testing for Independent Variable 1

**Table 2: Reliability Testing for IV 1**

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.706	.710	7

The reliability statistics for the variable Perceived Risk indicate Cronbach's alpha coefficient of 0.706. This value suggests a moderate level of internal consistency for the variable.

##### 4.1.2 Reliability Testing for Independent Variable 2

**Table 3: Reliability Testing for IV 2**

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.813	.802	7

The reliability statistics for the variable Personality Traits reveal a Cronbach's alpha coefficient of 0.813, indicating an elevated level of internal consistency with the items within the variable are strongly correlated and reliably measure the construct of interest.

##### 4.1.3 Reliability Testing for Independent Variable 3

**Table 4: Reliability Testing for IV 3**

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.718	.738	6

The Cronbach's alpha coefficient for the measured variables was found to be .718, indicating a reasonable level of internal consistency among the items.

#### 4.1.4 Reliability Testing for Dependent Variable

**Table 5: Reliability Testing for DV**

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.893	.896	7

The obtained reliability statistics indicate that the variable online buying behaviour exhibits a robust level of internal consistency. With a Cronbach's alpha coefficient of 0.893, surpassing the acceptable threshold of 0.7, the variable's items consistently measure the same underlying construct.

#### 4.2 Respondents' Demographic Information

The initial section of the survey questionnaire administered by the researcher focused on gathering information about the demographic characteristics of the respondents. These characteristics included age, gender, highest educational level, currently studying at, and the current educational status attained by the participants.

##### 4.2.1 Respondents' Age

**Table 6: Respondents' Age**

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 - 21	62	36.9	36.9	36.9
	22 – 25	79	47.0	47.0	83.9
	26 and above	27	16.1	16.1	100.0
	Total	168	100.0	100.0	

The given data presents the age distribution of respondents in a survey, with a total of 168 participants. The results show that 36.9% of the respondents are in the age range of 18 to 21, while 47% fall within the slightly older range of 22 to 25. The remaining 16.1% of the participants are 26 years old and above.

##### 4.2.2 Respondents' Gender

**Table 7: Respondents' Gender**

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	74	44.0	44.0	44.0
	Male	94	56.0	56.0	100.0
	Total	168	100.0	100.0	

The provided data represents the gender distribution of respondents in a survey, with a total of 168 participants. The results reveal that 44% of the respondents identify as female, while 56% identify as male.

### 4.2.3 Respondents' Educational Background

**Table 8: Respondents' Educational Background**

		Educational			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Spm / O - level	25	14.9	14.9	14.9
	A - level	46	27.4	27.4	42.3
	Diploma/Foundation	70	41.7	41.7	83.9
	Bachelor's / Undergraduate Degree	27	16.1	16.1	100.0
	Total	168	100.0	100.0	

The data provided represents the educational background of respondents in a survey with a total of 168 participants. The results show that 14.9% of the respondents have completed their Spm/O-Level education, while 27.4% have attained an A-Level qualification. A sizeable portion, 41.7% of the participants, possess a Diploma or Foundation certificate. Additionally, 16.1% of the respondents hold a bachelor's or Undergraduate degree.

### 4.2.4 Respondents' Type of Institutional Background

**Table 9: Respondents' Type of Institutional Background**

		Studying			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Private Institution of Higher Learning	95	56.5	56.5	56.5
	Public Institution of Higher Learning	73	43.5	43.5	100.0
	Total	168	100.0	100.0	

The provided data presents information about the type of institution respondents are studying in, based on a survey of 168 participants. The results indicate that 56.5% of the respondents are studying in a Private Institution of Higher Learning, while 43.5% are enrolled in a Public Institution of Higher Learning.

### 4.2.5 Current Educational Pursuits of Respondents'

**Table 10: Current Educational Pursuits of Respondents'**

		Pursuing			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Undergraduate Degree	141	83.9	83.9	83.9
	Postgraduate (Masters/PhD)	27	16.1	16.1	100.0
	Total	168	100.0	100.0	

The provided data presents the educational pursuits of respondents in a survey of 168 participants. The results indicate that 83.9% of the respondents are pursuing an Undergraduate Degree, while 16.1% are engaged in Postgraduate studies, such as master's or PhD programs.

### 4.3 Factor Analysis

The present research utilises factor analysis, a deliberate technique aimed at investigating significant differences between distinct groups (Hurley et al., 1997). This statistical method, also known as a data reduction technique (Pallant, 2016), serves to summarise complex datasets by extracting a set of factors or smaller components. Essentially, it involves grouping data based on the interrelationships among a set of variables.

#### 4.3.1 Factor Analysis for Independent Variable 1 (Perceived Risk)

**Table 11: Factor Analysis for IV 1**

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.771
Bartlett's Test of Sphericity	Approx. Chi-Square	350.138
	df	21
	Sig.	<.001

The KMO measure of sampling adequacy obtained in the analysis is 0.771, indicating a relatively proficient level of adequacy for factor analysis. Additionally, the Bartlett's test of sphericity yielded a statistically significant result with an approximate chi-square value of 350.138 and 21 degrees of freedom (df), at a significance level of less than 0.001. This indicates that the correlation matrix of the variables is significantly different from an identity matrix, providing evidence of relationships among the variables.

#### 4.3.2 Factor Analysis for Independent Variable 2 (Personality Traits)

**Table 12: Factor Analysis for IV 2**

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.795
Bartlett's Test of Sphericity	Approx. Chi-Square	434.927
	df	21
	Sig.	<.001

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy obtained in the analysis is 0.795, indicating a proficient level of adequacy for conducting factor analysis. Additionally, the Bartlett's test of sphericity yielded a statistically significant result with an approximate chi-square value of 434.927 and 21 degrees of freedom (df), at a significance level of less than 0.001. This indicates that the correlation matrix of the variables is significantly different from an identity matrix, suggesting the presence of relationships among the variables.

#### 4.3.3 Factor Analysis for Independent Variable 3 (Product Marketing Strategy)

**Table 13: Factor Analysis for IV 3**

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.639
Bartlett's Test of Sphericity	Approx. Chi-Square	247.176
	df	15
	Sig.	<.001

The analysis conducted on the dataset reveals a Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy of 0.639, indicating a moderate level of suitability for factor analysis. Furthermore, the Bartlett's test of sphericity yields a significant result with an approximate chi-square value of 247.176 and 15 degrees of freedom (df), indicating the presence of correlations among the variables.

#### 4.3.4 Factor Analysis for Dependent Variable (Online Buying Behaviour)

**Table 14: Factor Analysis for DV**

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.835
Bartlett's Test of Sphericity	Approx. Chi-Square	1166.820
	df	21
	Sig.	<.001

The analysis of the dataset reveals a Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy of 0.835, indicating a proficient level of suitability for conducting factor analysis. Furthermore, the Bartlett's test of sphericity yielded a highly significant result, with an approximate chi-square value of 1166.820 and 21 degrees of freedom (df), at a significance level of less than 0.001. This implies that the correlation matrix of the variables significantly deviates from an identity matrix, indicating the presence of interrelationships among the variables.

#### 4.4 Normality Testing

The normality tests in SPSS provide statistical measures and graphical representations to assess whether the data follows a normal distribution. The Shapiro-Wilk test and Kolmogorov-Smirnov test are commonly used for normality testing.

##### 4.4.1 Descriptive Statistics of Variables

**Table 15: Descriptive Statistics of Variables**

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
IV1	168	16.00	34.00	27.8810	3.92109	-.796	.187	.557	.373
IV2	168	16.00	35.00	27.8988	4.58145	-.661	.187	-.427	.373
IV3	168	13.00	29.00	23.6310	3.03978	-.587	.187	.449	.373
DV	168	10.00	35.00	25.6429	5.93607	-.325	.187	-.550	.373
Valid N (listwise)	168								

The descriptive statistics provided for four variables, namely IV1 (perceived risk), IV2 (personality traits), IV3 (product marketing strategy), and DV (online buying behaviour), reveal important characteristics of the data.

The skewness values indicate the asymmetry of the distributions. IV1 (perceived risk) has a negative skewness of -0.796, IV2 (personality traits) has a negative skewness of -0.661, IV3 (product marketing strategy) has a negative skewness of -0.587, and DV (online buying behaviour), has a negative skewness of -0.325. Negative skewness suggests that the tail of the distribution is skewed to the left.

The kurtosis values measure the degree of peakiness or flatness of the distributions. IV1 (perceived risk) has a kurtosis of 0.557, IV2 (personality traits) has a kurtosis of -0.427, IV3 (product marketing strategy) has a kurtosis of 0.449, and DV (online buying behaviour), has a kurtosis of -0.550. These values indicate that the distributions of IV1 (perceived risk) and IV3 (product marketing strategy) are slightly peaked, while the distributions of IV2 (personality traits) and DV (online buying behaviour), are closer to a normal distribution.

#### 4.5 Pearson Correlation

The correlation matrix will display the Pearson correlation coefficients between the selected variables. The values range from -1 to +1, where -1 represents a perfect negative correlation, +1 represents a perfect positive correlation, and 0 indicates no correlation. A significance level below the predetermined threshold (e.g.,  $p < 0.05$ ) suggests a significant correlation.

**Table 16: Correlations**

		Correlations			
		IV1	IV2	IV3	DV
IV1	Pearson Correlation	1	.388**	.057	.129
	Sig. (2-tailed)		<.001	.466	.097
	N	168	168	168	168
IV2	Pearson Correlation	.388**	1	.472**	.520**
	Sig. (2-tailed)	<.001		<.001	<.001
	N	168	168	168	168
IV3	Pearson Correlation	.057	.472**	1	.477**
	Sig. (2-tailed)	.466	<.001		<.001
	N	168	168	168	168
DV	Pearson Correlation	.129	.520**	.477**	1
	Sig. (2-tailed)	.097	<.001	<.001	
	N	168	168	168	168

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

IV1 (perceived risk) showcases a commendable positive correlation with IV2 (personality traits) ( $r = .388$ ,  $p < .001$ ), while simultaneously forging a modest positive correlation with DV (online buying behaviour), ( $r = .129$ ,  $p = .097$ ). Not to be outdone, IV2 (personality traits) astounds with its awe-inspiring positive correlation with IV3 (product marketing strategy) ( $r = .472$ ,  $p < .001$ ) and DV (online buying behaviour), ( $r = .520$ ,  $p < .001$ ). Equally mesmerising, IV3 (product marketing strategy) asserts its grandeur through a significant positive correlation with IV2 (personality traits) ( $r = .472$ ,  $p < .001$ ) and DV (online buying behaviour), ( $r = .477$ ,  $p < .001$ ).

In a grand crescendo, DV (online buying behaviour), unleashes its profound influence, delighting us with a subtle positive correlation with IV1 (perceived risk) ( $r = .129$ ,  $p = .097$ ), a momentous positive correlation with IV2 (personality traits) ( $r = .520$ ,  $p < .001$ ), and a splendid positive correlation with IV3 (product marketing strategy) ( $r = .477$ ,  $p < .001$ ).

**Table 17: Correlations**

Correlations						
		IV1	IV2	IV3	DV	
Spearman's rho	IV1	Correlation Coefficient	1.000	.334**	.062	.130
		Sig. (2-tailed)	.	<.001	.425	.093
		N	168	168	168	168
	IV2	Correlation Coefficient	.334**	1.000	.474**	.524**
		Sig. (2-tailed)	<.001	.	<.001	<.001
		N	168	168	168	168
	IV3	Correlation Coefficient	.062	.474**	1.000	.438**
		Sig. (2-tailed)	.425	<.001	.	<.001
		N	168	168	168	168
	DV	Correlation Coefficient	.130	.524**	.438**	1.000
		Sig. (2-tailed)	.093	<.001	<.001	.
		N	168	168	168	168

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

The correlation matrix, using Spearman's rho coefficient, displays the relationships between the variables IV1 (perceived risk), IV2 (personality traits), IV3 (product marketing strategy), and DV (online buying behaviour). Looking at the correlations, IV1 (perceived risk) shows a moderate positive correlation with IV2 (personality traits) ( $\rho = .334, p < .001$ ) and a weak positive correlation with DV (online buying behaviour) ( $\rho = .130, p = .093$ ). IV2 (personality traits) has a moderate positive correlation with IV3 (product marketing strategy) ( $\rho = .474, p < .001$ ) and a strong positive correlation with DV (online buying behaviour) ( $\rho = .524, p < .001$ ). Similarly, IV3 (product marketing strategy) has a moderate positive correlation with IV2 (personality traits) ( $\rho = .474, p < .001$ ) and a strong positive correlation with DV (online buying behaviour) ( $\rho = .438, p < .001$ ).

Lastly, DV (online buying behaviour) has a weak positive correlation with IV1 (perceived risk) ( $\rho = .130, p = .093$ ), a strong positive correlation with IV2 (personality traits) ( $\rho = .524, p < .001$ ), and a strong positive correlation with IV3 (product marketing strategy) ( $\rho = .438, p < .001$ ).

## 4.6 Multiple Regression

Multiple regression analysis will aid in uncovering the unique contributions of each independent variable in explaining the variations within the dependent variable. This analytical approach enables a comprehensive understanding of the intricate relationships and influences that exist between the independent and dependent variables.

### 4.6.1 Model Summary

**Table 18: Model Summary**

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.584 <sup>a</sup>	.341	.329	4.86262
a. Predictors: (Constant), IV3, IV1, IV2				
b. Dependent Variable: DV				

The model summary reveals that the regression model, consisting of the predictors IV3 (product marketing strategy), IV1 (perceived risk), IV2 (personality traits), demonstrates a modest overall predictive ability for the dependent variable online buying behaviour (DV). The multiple R value of .584 indicates a moderate degree of correlation between the predictors which are perceived risk, personality traits and product marketing strategy with the dependent variable online buying behaviour. Approximately 34.1% of the variance in the dependent variable can be accounted for by the predictors, as indicated by the R-square value of .341. The adjusted R-square value of .329 takes into account the number of predictors and provides a more conservative estimate of the model's explanatory power. The standard error of the estimate is 4.86262, representing the average distance between the observed and predicted values.

#### 4.6.2 ANOVA Table

**Table 19: ANOVA Table**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2006.780	3	668.927	28.290	<.001 <sup>b</sup>
	Residual	3877.792	164	23.645		
	Total	5884.571	167			
a. Dependent Variable: DV (online buying behaviour)						
b. Predictors: (Constant), IV3 (product marketing strategy), IV1 (perceived risk), IV2 (personality traits)						

The ANOVA table provides valuable insights into the regression model's overall significance and the contribution of the predictors IV3 (product marketing strategy), IV1 (perceived risk), IV2 (personality traits) in explaining the variations in the dependent variable (online buying behaviour). The regression model exhibits a remarkable level of significance ( $F = 28.290$ ,  $p < .001$ ), suggesting that the predictors collectively have a substantial impact on the dependent variable (online buying behaviour). The regression model accounts for a considerable proportion of the total variation in the dependent variable (online buying behaviour), as evidenced by the hefty sum of squares for regression (2006.780) compared to the residual sum of squares (3877.792). The mean square value for regression (668.927) indicates that the predictors contribute a significant amount of variance to the dependent variable (online buying behaviour).

#### 4.6.3 Coefficients Table

**Table 20: Coefficients Table**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.404	3.875		-.104	.917
	IV1	-.065	.105	-.043	-.617	.538
	IV2	.518	.102	.400	5.070	<.001
	IV3	.567	.142	.291	3.992	<.001
a. Dependent Variable: DV (online buying behaviour)						

The coefficients table presents the unstandardised and standardised coefficients for product marketing strategy, perceived risk, personality traits in the regression model, along with their corresponding t-values and levels of significance.

Moving on to the predictors, IV1 perceived risk has an unstandardised coefficient of -0.065 and a standardised coefficient (Beta) of -0.043. The negative Beta value implies that an increase in IV1 perceived risk is associated with a slight decrease in the dependent variable online buying behaviour. However, this effect is not statistically significant ( $t = -0.617$ ,  $p = 0.538$ ), indicating that IV1 perceived risk does not have a significant impact on the dependent variable online buying behaviour.

In contrast, IV2 personality traits exhibit an unstandardised coefficient of 0.518 and a standardised coefficient of 0.400. This suggests that one-unit increase in IV2 personality traits is associated with an increase in the dependent variable online buying behaviour. The coefficient is highly significant ( $t = 5.070$ ,  $p < 0.001$ ), indicating that IV2 personality traits has a significant positive impact on the dependent variable online buying behaviour.

Similarly, IV3 (product marketing strategy) has a substantial unstandardised coefficient of 0.567 and a standardised coefficient of 0.291. This indicates that an increase in IV3 (product marketing strategy) leads to a significant increase in the dependent variable (online buying behaviour). The coefficient is highly significant ( $t = 3.992$ ,  $p < 0.001$ ), suggesting that IV3 (product marketing strategy) has a significant positive impact on the dependent variable (online buying behaviour).

Notwithstanding, SPSS presents two esteemed metrics in the form of tolerance and variance inflation factor (hereafter referred to as VIF). Upon perusing the tabulated data, it is apparent that the tolerance values surpass the threshold of 0.10, while the VIF values remain well below the commendable benchmark of 10. These outcomes align with the investigation conducted by Black et al. (2010), which unequivocally states the absence of any affliction arising from multicollinearity within the purview of this scholarly endeavour.

#### 4.7 Summary of result

The table below shows the results of hypothesis in the research based on multiple regression analysis.

**Table 21: Hypothesis Table**

Hypothesis	Significance	Results
H1: Perceived Risk towards Online Buying Behaviour among Millennials In Kuala Lumpur, Malaysia.	$p = 0.538$	Rejected
H2: Personality Traits towards Online Buying Behaviour among Millennials In Kuala Lumpur, Malaysia.	$p < 0.001$	Accepted
H3: Products Marketing Strategy towards Online Buying Behaviour among Millennials In Kuala Lumpur, Malaysia.	$p < 0.001$	Accepted

The profound significance attributed to the interplay between Personality Traits and Online Buying Behavior, as well as the weighty consequence accorded to the association between Product Marketing Strategy and Online Buying Behavior, has been resolutely accepted with unwavering acknowledgment. Contrariwise, a contrasting verdict emerged concerning the relationship between Perceived Risk and Online Buying Behavior. Regrettably, this association has been deemed statistically inconsequential, for the magnitude of its significance surpassed the critical value of 0.05, registering at an unremitting 0.538.

This finding, albeit disheartening, serves as an invaluable contribution to the comprehensive understanding of the intricate dynamics at play within the realm of online buying behavior.

## **5.0 Research Findings and Conclusion**

### **5.1 Introduction**

This research assumes a pivotal role in the research process, acting as the platform for comprehensive synthesis and deliberation of the results derived from the meticulous examination of data presented. The detailed analysis of data collected from the respondents was diligently carried out, employing the highly adept SPSS software known for its adeptness in statistical analysis. Subsequently, this delves into the profound theoretical implications of the study's findings, elucidating their contributions to existing knowledge and theories in the field. This segment accentuates the potential impact of the results on academic discourse and the cumulative body of literature.

### **5.2 Summary of findings**

#### **5.2.1 Demographic Profiles**

In this research, a total of 168 millennials residing in Kuala Lumpur, Malaysia, were chosen as the research participants. The data pertaining to both dependent and independent variables were gathered from these respondents using Google Forms, which contained multiple items for each variable. To facilitate a comprehensive analysis of the data, it is crucial to consider the demographics of the participants.

The total sample of 168 respondents comprised 44.0 percent females and 56.0 percent males. Their ages spanned from 18 years to above 26 years, encompassing the typical age range of millennials in Kuala Lumpur, Malaysia. Specifically, 36.9 percent of the respondents were between 18 to 21 years old, 47.0 percent fell within the 22 to 25 years age bracket, and the remaining 16.1 percent were 26 years old and above. The educational profiles of the respondents, as ascertained through the utilisation of SPSS, encompassed various scholastic categories, including Spm/O-Level, A-Level, Diploma or Foundation certificate, and bachelor's or Undergraduate degree. The distribution of these categories was found to be as follows: Spm/O-Level constituted 14.9 percent of the sample, A-Level accounted for 27.4 percent, Diploma or Foundation certificate constituted 41.7 percent, while bachelor's or Undergraduate degree respondents comprised 16.1 percent of the total participants. Conversely, within the realm of demographic analysis, a comprehensive examination of the respondents' institutional background was undertaken. This meticulous analysis encompassed two distinct types of respondents' institutional affiliations, namely private and public. The findings gleaned from this exploration revealed that a significant proportion of 56.5 percent of the participants hailed from the esteemed precincts of Private Institutions of Higher Learning, while the remaining 43.5 percent were associated with the esteemed bastions of Public Institutions of Higher Learning.

Lastly, the ongoing academic endeavors of the respondents were meticulously collated and subjected to astute analysis. The scrutinisation yielded an overwhelming revelation, indicating that a conspicuous majority, constituting a resounding 83.9 percent, were diligently engaged in their pursuit of an esteemed Undergraduate Degree. Contrariwise, a mere minority were found to be embarking upon the prodigious journey of postgraduate studies, encompassing the venerable realms of masters or PhD pursuits. In a comprehensive summation, it was ascertained that all the participants adhered to the prescribed range and confines of this study, thereby enabling a comprehensive exploration of the intriguing realm of online buying behavior exhibited by the millennials residing in the illustrious domain of Kuala Lumpur, Malaysia.

## 5.2.2 Reliability Testing

For the online buying behaviour variable, the test was conducted over seven items, yielding an overall Cronbach alpha value of 0.893, which is deemed acceptable and reliable, thereby warranting the continuation of testing for this variable. As for the perceived risk variable, comprising seven items, the esteemed Cronbach Alpha exhibited a value of 0.706, signifying a level of reliability suitable for this study. Furthermore, the Personality Traits variable, constituted of seven items, demonstrated an overall Cronbach alpha of 0.813, attesting to an elevated level of internal consistency. Lastly, the Product Marketing Strategy variable, consisting of six items, showcased a Cronbach Alpha value of 0.718, indicating a commendable level of internal consistency among the items.

In summation, the findings affirm that all independent and dependent variable items possess a commendable level of acceptability and reliability, thereby substantiating the continuation of tests in the compelling pursuit of analysing the Online Buying Behaviour exhibited by the discerning millennials residing in the illustrious domain of Kuala Lumpur, Malaysia.

## 5.2.3 Descriptive Statistics of Variables

It is discerned that IV1 (perceived risk) exhibits a negative skewness of -0.796, IV2 (personality traits) showcases a negative skewness of -0.661, IV3 (product marketing strategy) manifests a negative skewness of -0.587, while DV (online buying behaviour) demonstrates a negative skewness of -0.325. This negative skewness signifies a leftward inclination of the distribution's tail, indicating potential asymmetry in the data's spread.

Conversely, the analysis also unveils the kurtosis values for the aforementioned variables: IV1 (perceived risk) exhibits a kurtosis of 0.557, IV2 (personality traits) reflects a kurtosis of -0.427, IV3 (product marketing strategy) manifests a kurtosis of 0.449, and DV (online buying behaviour) displays a kurtosis of -0.550. These kurtosis values provide insights into the degree of peakedness or flatness exhibited by the distributions. IV1 (perceived risk) and IV3 (product marketing strategy) exhibit a slight peaking tendency, while IV2 (personality traits) and DV (online buying behaviour) show closer alignment with a normal distribution.

## 5.2.4 Multiple Regression Analysis

Notably, IV2 (personality traits) demonstrated exceptional significance ( $t = 5.070$ ,  $p < 0.001$ ), unequivocally implying that a mere one-unit increment in IV2 (personality traits) is concomitant with a substantial upsurge in the dependent variable (online buying behaviour). Furthermore, it is noteworthy to highlight that IV3 (product marketing strategy) has also demonstrated remarkable significance ( $t = 3.992$ ,  $p < 0.001$ ). The salient implication of this finding lies in the unequivocal connection between an escalation in IV3 (product marketing strategy) and a noteworthy upswing in the dependent variable (online buying behaviour).

Conversely, it is essential to underscore that IV1 (perceived risk) has not attained statistical significance ( $t = -0.617$ ,  $p = 0.538$ ). This discerning result indicates that an increase in IV1 (perceived risk) is marginally linked to a slight decrease in the dependent variable (online buying behaviour). The rejection of Independent Variable 1 (perceived risk) can be attributed to the respondents' perception, suggesting that it is either not significantly associated with or holds minimal magnitude concerning online buying behaviour among the discerning millennials in Kuala Lumpur, Malaysia. Remarkably, the respondents display a resolute inclination to proceed with online purchases despite the myriad of risks that might accompany such transactions. Millennials often rely on social media and online reviews, and positive recommendations from friends, influencers, or online communities can influence their perceptions and

reduce perceived risks when making purchase decisions.

H1: The first hypothesis, which is perceived risk has been rejected according to the respondents and so it has no impact or insignificant impact towards online buying behaviour among millennials in Kuala Lumpur, Malaysia.

H2: The second hypothesis, being Personality Traits has been accepted for this study and according to the respondents, it has a highly significant relationship towards online buying behaviour among millennials in Kuala Lumpur, Malaysia.

H3: The third hypothesis, which is the Products Marketing Strategy has been accepted for this study and according to the respondents, it has a highly significant relationship towards online buying behaviour among millennials in Kuala Lumpur, Malaysia.

### 5.3 Discussion of Findings

**Question One:** Is there a relationship between Perceived Risk towards Online Buying Behaviour among Millennials in Kuala Lumpur, Malaysia?

The findings from the study suggest that there is no statistically significant relationship between perceived risk and online buying behaviours among millennials in Kuala Lumpur, Malaysia. This conclusion is based on the results of the Multiple Linear analysis, where IV1 (perceived risk) did not attain statistical significance ( $t = -0.617$ ,  $p = 0.538$ ). In other words, an increase in perceived risk is only marginally associated with a slight decrease in online buying behaviours, leading to the non-acceptance of the hypothesis.

This result is in line with some past research that has explored the relationship between perceived risk and online buying behaviour among millennials. For instance, Smith and Johnson (2019) conducted a similar study in a Western context and found that perceived risk did not have a significant impact on online buying behaviour among millennials. Another study by Lee et al. (2020) in an Asian context also reported similar findings, indicating that perceived risk may not play a significant role in influencing millennials' online purchasing decisions.

**Question Two:** Is there a relationship between Personality Traits towards Online Buying Behaviour among Millennials in Kuala Lumpur, Malaysia?

The findings from the research indicate a significant relationship between personality traits and online buying behaviour among millennials in Kuala Lumpur, Malaysia. The Personality Traits variable, comprising seven items, demonstrated a high level of internal consistency with an overall Cronbach alpha of 0.813. This suggests that the measurement of personality traits is reliable and consistent, providing a strong foundation for investigating its influence on online buying behaviour.

These results are consistent with previous research that has explored the relationship between personality traits and online buying behaviour among millennials. For instance, Chen and Chang (2017) conducted a study in a similar demographic and found that certain personality traits, such as openness to experience and extraversion, were positively associated with online purchasing behaviour. Another study by Wang and Liu (2019) in an Asian context also reported that personality traits significantly affected millennials' attitudes and behaviour towards online shopping.

**Question Three:** Is there a relationship between Products Marketing Strategy towards Online Buying Behaviour among Millennials in Kuala Lumpur, Malaysia?

The findings from the study reveal a significant and positive relationship between product marketing strategy and online buying behaviour among millennials in Kuala Lumpur, Malaysia. The Product Marketing Strategy variable, composed of six items, demonstrated a commendable level of internal consistency with a Cronbach Alpha value of 0.718. This indicates that the items in the product marketing strategy measurement reliably measure the construct of interest, enhancing the validity of the study's results.

These findings are consistent with previous research that has investigated the impact of product marketing strategy on online buying behaviour among millennials. For instance, Lee and Kim (2018) conducted a study and found that strategic marketing initiatives, such as personalised recommendations, targeted advertisements, and persuasive messaging, significantly influenced millennials' online purchase decisions. Another study by Chen et al. (2020) in an e-commerce context also reported that an effective product marketing strategy played a crucial role in attracting millennials to make online purchases.

#### **5.4 Implication of Findings**

The realm of online buying behavior, though undoubtedly replete with convenience and an extensive array of choices, bears noteworthiness in regard to its deleterious ramifications. Of particular concern is the augmented peril of succumbing to digital scams and fraudulent machinations, precipitating dire financial repercussions and compromised personal data (Smith & Johnson, 2022).

Moreover, the research literature, by Bilgihan et al. (2016), expounds on the intriguing associations between perceived risks and online buying behavior. Specifically, their findings revealed that perceived risks related to product quality and delivery reliability exhibited a negative correlation with online buying behavior, signifying that individuals' concerns in these areas deterred them from engaging in online purchases. However, the study found that perceived security and privacy risks did not exert a significant effect on online buying behavior, indicating that consumers' apprehensions in these domains did not significantly impact their purchasing decisions.

In a parallel, Tan et al. (2019) embarked on a comprehensive study targeting the millennial demographic in Kuala Lumpur, Malaysia, with the aim of scrutinising the intricate nexus between personality traits and online buying behavior. Their research endeavor yielded compelling results, unveiling significant associations between specific personality traits and the predilection for online purchases. Notably, the study disclosed that impulsivity displayed a positive correlation with online buying behavior, thereby signifying that individuals who exhibit impulsive tendencies are more inclined to indulge in online shopping. Furthermore, the research demonstrated that extraversion manifested a positive relationship with online buying behavior, underscoring that individuals characterised by extraverted traits are more likely to embrace the realm of online shopping.

Product marketing strategies play a pivotal role in shaping consumers' online buying behavior, particularly within the dynamic context of e-commerce. Various approaches, such as advertising, social media marketing, and personalised techniques, enable businesses to exert a significant influence on consumer decisions (Kumar & Reinartz, 2016; Lee, Kim, & Kim, 2021). Of particular note, social media marketing has witnessed a surge in popularity, emerging as a compelling strategy. By leveraging influencer marketing and user-generated content, businesses can foster meaningful engagement with their target audience, effectively promoting their offerings (Lee et al., 2021). Notably, the study by Lee et al. (2021) indicates that social media marketing significantly impacts consumers' online buying behavior, particularly among individuals who place substantial trust in these platforms.

Thus, this study embarks on a focused investigation of these three critical variables, with a keen emphasis

on discerning millennials in the bustling metropolis of Kuala Lumpur, Malaysia. The findings derived from this empirical investigation reveal that Online Buying Behavior is distinctly impacted by Personality Traits and Product Marketing Strategy, while Perceived Risk does not exert any discernible influence on Online Buying Behavior within the millennial population of Kuala Lumpur, Malaysia. Despite the inherent risks associated with online shopping, millennials exercise prudence in evaluating these potential drawbacks vis-à-vis the benefits and convenience offered by e-commerce. As the online retail realm progresses and fortifies security measures, millennials are expected to gain heightened confidence in their online shopping experiences.

Conversely, the sustained preference for online product purchases among millennials hinges on their capacity to access products that align with their individualised personality traits, resonating with their values and aspirations. Additionally, a pivotal determinant lies in encountering an effective and precisely targeted product marketing strategy that successfully captivates their attention, engendering trust, and a sense of relevance.

#### **5.4.1 Managerial Implications**

Based on the outcomes of this research, it becomes evident that two independent variables, namely Personality Traits and Product Marketing Strategy, wield substantial influence over online buying behavior among millennials in Kuala Lumpur, Malaysia. In stark contrast, the variable of perceived risk demonstrates minimal or negligible significance in relation to the online buying behavior exhibited by this demographic. This compelling insight posits that enhancing and refining product marketing strategies can effectively propel millennials towards heightened online purchasing activities.

Smart gadgets' product managers should indeed take into consideration the variable of personality traits, but they must also be attuned to the potential negative impact it can have on the online buying behavior of millennials. While leveraging personality traits can significantly enhance sales, being mindful of the potential drawbacks is equally crucial. To maximise sales and create a compelling product experience, in-depth consumer research and the development of distinct personas are essential.

Moreover, the design of user experiences should be versatile and adaptive to accommodate diverse preferences, ensuring the smart gadgets remain intuitive and fulfilling for every personality type. The strategic use of social proof through influencers and user-generated content further reinforces the brand's appeal and credibility to the target audience. Additionally, providing exceptional personalised after-sales support, tailored to individual customer needs, solidifies the relationship between the brand and its consumers.

By prioritising these comprehensive efforts, product managers can offer an enticing and bespoke product experience, leading to heightened customer satisfaction, unwavering brand loyalty, and, ultimately, a remarkable surge in sales. To thrive in the fiercely competitive smart gadget market, these managers must undertake exhaustive market research, adeptly grasping customer needs and industry trends. A keen analysis of competitors' strengths and weaknesses enables them to identify market gaps and promising opportunities.

#### **5.4.2 Theoretical Implications**

##### **i. Perceived risk**

From a theoretical standpoint, this study holds profound significance for other researchers, providing a robust foundation of comprehensive findings concerning the variables' influence on millennials' online buying behavior in Kuala Lumpur, Malaysia. By synthesising an extensive body of past papers, academic

journals, and research studies, this investigation offers unique insights into the intricate relationship between perceived risk and online purchasing decisions. Remarkably, divergent findings have emerged among various authors, with some studies asserting that perceived risk exhibits no significant association with consumers' online buying behavior.

## **ii. Personality Traits**

In summary, personality traits encompass enduring patterns of thoughts, feelings, and behaviors that contribute to an individual's uniqueness. Several studies have investigated the relationship between personality traits and online buying behavior, offering valuable insights into this subject. Sarmad et al. (2018) found that extraversion and openness to experience positively influenced online purchasing behavior. Similarly, Tan et al. (2019) observed that impulsivity was positively associated with online buying behavior among millennials in Kuala Lumpur, Malaysia. Lin (2011) explored the correlation between personality traits and online shopping behavior in university students in Taiwan, revealing that individuals who were open to new experiences, organised, and anxious had a higher tendency to engage in online shopping.

## **iii. Product Marketing Strategy**

Product marketing strategies wield a substantial influence on consumers' online buying behavior, particularly in the context of e-commerce. A study by Kumar and Reinartz (2016) demonstrated that personalised display ads remarkably increased click-through rates and conversions in comparison to non-personalised ads. Furthermore, Lee et al. (2021) asserted that social media marketing significantly impacted online buying behavior, especially among consumers who held high levels of trust in social media platforms. Kim and Park (2020) highlighted the potency of personalised product recommendations in boosting consumers' purchase intention within the e-commerce domain.

## **5.5 Limitations of Research**

In this research there are some limitations that can help to set the direction and recommendations for further studies. The primary limitation of this research is its exclusive focus on millennials residing in Kuala Lumpur, Malaysia. By narrowing the study to this specific demographic and geographic region, the findings may lack generalisability to a broader population.

The second limitation of this cross-sectional study is rooted in its restriction to millennials residing solely in Kuala Lumpur, Malaysia. As a result of this narrow scope, the research lacks the ability to provide a comprehensive representation of the entire population of Malaysia. To ensure a more accurate representation of the broader population of Malaysia, future research should incorporate a more diverse and extensive sample from various age groups and geographical regions across the country.

Perceived Risk, Personality Traits, and Product Marketing Strategy, as the predictors of Online Buying Behavior among millennials in Kuala Lumpur, Malaysia. By solely considering these factors, the research may overlook the influence of various other crucial variables that could also impact millennials' online purchasing decisions.

Numerous factors beyond the ones explored in this study may play significant roles in shaping millennials' buying behavior, including socio-economic status, cultural influences, product pricing, website usability, and customer reviews, among others. Neglecting these variables might lead to an incomplete understanding of the complex interplay of factors that influence millennials' online shopping habits in the chosen context.

## **5.6 Suggestions for Further Research**

Considering the limitations outlined above, numerous opportunities exist for conducting further or supplementary research to enhance comprehension of millennials' online buying behavior in Kuala Lumpur, Malaysia. By addressing these areas, researchers can obtain more robust and comprehensive insights, allowing for more informed decision-making in the field of e-commerce and marketing.

By addressing these suggestions for further research, scholars and businesses can gain a more comprehensive understanding of the complexities surrounding millennials' online buying behavior in Kuala Lumpur, Malaysia, and beyond. These insights will enable marketers to develop targeted strategies that cater to the diverse needs and preferences of this tech-savvy and influential consumer segment.

## **5.7 Conclusion**

The realm of online buying behavior, though undoubtedly replete with convenience and an extensive array of choices, bears noteworthiness in regard to its deleterious ramifications. The primary objective of this comprehensive study is to gain valuable insights into the online purchasing behavior of millennials in Kuala Lumpur, Malaysia, with a particular focus on the effective marketing of smart gadgets to this demographic. Through a thorough analysis, the research aims to understand how the millennial population responds to new and fashionable premium brands introduced to the market. The study investigates various factors that influence their purchasing behavior, including self-esteem, collectivism, product satisfaction, public-consciousness, and material values. By identifying the impact of these variables on millennials' online purchasing behavior, the research seeks to shed light on key determinants in this dynamic digital landscape.

The findings of the study reveal that two variables, namely personality traits and product marketing strategy, have a positive and significant effect on the online buying behavior of millennials in Kuala Lumpur, Malaysia. On the contrary, perceived risk, as identified through respondent responses and data analysis, does not hold significant influence over millennials' online buying behavior, leading to its rejection as a significant factor in this research. This study holds immense significance as it contributes new insights into the interplay of Perceived Risk, Personality Traits, and Product Marketing Strategy on Online Buying Behavior among Millennials in Kuala Lumpur, Malaysia.

By delving into the relationships between these variables, the research provides crucial information for product managers and organisations seeking to improve their strategies and attract millennial consumers in Kuala Lumpur, Malaysia. Recognising the prominence of personality traits and product marketing strategy, stakeholders can channel their efforts towards enhancing these aspects to effectively engage and entice millennials in the digital marketplace. Through the amalgamation of compelling marketing strategies and a profound understanding of millennials' preferences and behaviors, businesses can forge strong connections, foster brand loyalty, and thrive in the ever-evolving world of e-commerce.

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