

The Effect of False Advertising on Consumer Online Purchase Behavior with the Mediating Effect of e-WOM: Consumers in Malaysia

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Abstract: Advertising is one of the main contributors to the rising number of online shoppers worldwide. The use of advertising in this digital era has become a powerful tool for the persuasion of consumers. However, some organizations have adopted false advertising as their marketing strategy. The purpose of this study is to analyze the factors that influence consumers' online shopping behavior. The study focuses on the three independent constituent factors of false advertising, namely, unethical advertising, misleading information, and deception. The dependent variable is online purchase behavior. A questionnaire was distributed to 588 individuals who shopped once or more from the top e-commerce platforms in Malaysia. The questionnaire underwent validation and reliability assessments, followed by the collection and analysis of responses using SPSS software. The findings indicate that False advertising can have significant effects on consumer online purchase behavior in Malaysia. Through the use of misleading or false information, companies can manipulate consumer perceptions and ultimately influence their buying decisions. This can lead to several negative consequences for consumers, including financial losses, disappointment with purchased products, and erosion of trust in online shopping.

Keywords: *Online Shopping, Purchase Behavior, False Advertising, Unethical Advertising, Misleading Information, and Deception.*

1. Introduction and Background

In Malaysia, the expansion of Internet services has created a sizable retail market. Online selling has gained popularity in Malaysia in recent years. People began to adapt to the benefits of the online marketplace for both retailers and consumers. Retailers are benefiting from the cost-effective channel to reach their target consumers and consumers are benefiting from saving time, money, and more products to choose from (Alba et al., 1997). Businesses that have made the transition to the Internet are searching for goals beyond simple product or service sales. They aim to increase customer satisfaction and improve turnovers; they are soliciting feedback on their performance. It was reported that businesses all over the world have started to use the internet to lower their marketing expenses, and their product and service costs to maintain a competitive market going forward (Wu, 2013). Malaysia is one of the fastest-growing e-commerce markets in the ASEAN region with 19 million Malaysians using the internet as of the year 2018 (Salameh et al., 2022). Malaysians are the world's biggest users of social media and online shoppers in Malaysia are supporting a business worth 8.7bil and expected to reach 14.40bil by 2027 (eCommerce - Malaysia | Statista Market Forecast, 2023). Online shopping is becoming more and more popular in Malaysia, yet as more people start using computers and mobile devices for online shopping, consumers still worry about payment security, the validity of data protection, inadequate information disclosure, and product quality (Amin & Mohd Nor, 2013).

A product or service's buying choice is influenced by an audience through the use of advertising as a communication tool. An advertisement provides details about a good or service to the public. According to Haider and Shakib (2018), advertising is regarded as a crucial and vital element for the expansion of the economic processes of marketers and enterprises. According to Ahmed and Ashfaq (2013), advertising is a form of exposure or promotion that is paid for by a sponsor and broadcast through a variety of media platforms. Companies are always attempting to sway consumers' opinions, assessments, and purchasing choices (Romaniuk, & Sharp, 2004). The purchasing habits of consumers have long been a crucial component of advertising literature (Ajzen, 2002). The common disadvantage of advertising is the speed with which products can be displayed online, which increases the likelihood of deceptive or misleading acts whereby advertisers manipulate a product's features or a promotional strategy to generate large profits at the expense of consumers' financial stability (Riquelme, et al., 2016). Additionally, advertisers can influence customers by

increasing their susceptibility to illogical decisions. False advertising, according to Svetlana (2014), frequently emphasises the product, price, and promotion.

The unethical, deceptive, and misleading advertising practices that influence customers' purchasing decisions are the main topic of this study. This study looks into how customers' internet buying habits are impacted by false advertising. The primary topics of earlier research were customer happiness and service excellence. The impact of false advertising components on consumer purchasing behavior has not received much attention. False advertising is a problem that has gone unnoticed, which calls for more research. Along with examining future purchases based on fulfilment and pleasure, this study will also look into consumers' knowledge of their prior experiences with service providers. The kinds of false advertising strategies that are employed by marketers will also be examined in this study.

2. Literature Review

Online advertising is already a major global communication channel because of technological advancements. Since advertising boosts sales and boosts profits, an advertiser seeks to raise awareness of a company's brand, website, or event. Scholars who have examined advertising generally concur that marketing is an essential instrument for economic expansion (Dwivedi et al., 2021). Advertising companies' exaggerations, however, are complete fabrications. Agencies tend to make promises about products that they can't fulfil, which makes it easy for customers to be duped. Numerous reports have indicated that the majority of shoppers are credulous and easily influenced by the false claims made in advertisements. The cleverness and smug messaging that advertisers produce and present as authentic mislead customers into making purchases (Fastercapital, 2024).

According to recent studies, businesses frequently employ false advertising to capture or grab customers' attention. Repurchases will be restricted as long as these companies keep deceiving or misleading customers with these tactics. The images, cost, features, and quality of the goods or services are the main areas where deceptive advertising is employed; for some goods, it even extends to the product's expiration date. This study looks into whether viewers of commercials that present conflicting information and make exaggerated claims alter their purchasing behavior. The three components of fraudulent advertising practices—deception, misleading information, and unethical advertising—will also be put to the test in this study. The target audience for this research will be tested based on their knowledge, and experience with online shopping followed by their awareness of the methods used.

Consumer Online Purchase Behavior

Consumer purchasing behaviour is the culmination of their decisions, intents, attitudes, and preferences. The consumer is motivated to make a purchase by these four considerations. Online shopping is defined as the act of making purchases of goods or services via the Internet (Khan et al, 2022). There are several ways that the purchasing process resembles typical shopping habits (Tao et al., 2022). An online transaction typically involves five steps. The first one begins with determining what product or service is needed, and then it looks for information online and using search engines. The assessment and comparison of what is on hand and what meets the necessary requirements come next. Following selection of the desired good or service, the buyer completes a transaction and obtains a post-purchase experience (Niosi, 2021).

Rusnifaezah et al. (2022) state that four important mental factor, inspiration, recognition, convictions, and disposition have an impact on a customer's shopping behaviour. It has been discovered that a consumer's personality, demography, and beliefs about the benefits of online buying influence their online purchasing behaviour. According to Raut et al. (2021), perceived behavioural control influences the frequency of a behaviour by serving as a predictor of behavioural intentions. The purpose of a behaviour is also influenced by an individual's attitude towards partaking in it and their perception of its advantages.

False Advertising

False advertising is a type of advertising when the advertiser withholds any and all information regarding a product's features or other specifics in an effort to mislead, confuse, or attract customers. Most countries have laws against using deceptive advertising. It is against the law to misrepresent a product's origin, maker, quality, specs, makeup, price, or maker (Madhavi & Gudlavelleru, 2020). It is said that there are three ways to advertise

deceptively, and it is these ways that shape customer perception globally. The three tactics are fraud, lying, and deception. The common perspectives of elements of advertising communication include the marketer, the message, and the ensuing consumer views regarding a deceptive commercial (Madhavi & Gudlavelleru, 2020).

False advertising, according to contributors like Radoslav (2023), is a competition among marketers. False advertising, according to Madhavi & Gudlavelleru (2020), is the practice of lying, misleading, and disseminating incorrect information. Customers are seen as susceptible when advertisements recommend something to them. False advertising that commit acts of deceitfulness influence a customer's decision. Customers' decisions are impacted because they were unfairly persuaded and misled by the message that advertisements presented, which influences their perceptions (Juana & Stefan, 2023).

Unethical Advertising

The dissemination of cultural values and norms established by rigid, governmental, or legislative establishments where one looks for moral guidance is known as unethical advertising (Manoj & Sahil, 2023). By creating and misrepresenting inaccurate content in a way that harms a competitor's reputation and makes exaggerated claims that have a detrimental impact on people's lives, unethical advertising materially manipulates customers. Viewers are forced to feel uncomfortable and confused when they watch unethical advertisements (Goo et al., 2021). The foundation of unethical advertising is the discrimination and demonization. When someone is treated differently by advertising because of their race, nationality, gender, age, sexual orientation, religion, or political beliefs, it is discrimination against them. It also demonstrates injustice, intolerance, and biological unfairness. Furthermore, unethical advertising denigrates, threatens, stirs up animosity towards, or parodies a person or group of people due to their political ideas, religion, disability, sex, age, race, ethnicity, or nationality (Goo et al., 2021).

Customers are negatively impacted by unethical advertising because it casts a poor image in their minds and manipulates the environment and values. Sociodemographic and cultural variables are used by unethical advertising to affect customers' purchasing decisions (Rodrigues et al., 2021). Consumer perceptions of unethical advertising are significantly influenced by moral principles and values (Goo et al., 2021). According to Vaishnavi (2023), when a consumer is presented with unrealistic expectations of their potential appearance or level of improvement, unethical advertising fosters unfavourable attitudes, moral principles, values, age, gender, and religion. These factors influence the consumer's purchasing behaviour. Unethical advertising is a dangerous and immoral activity that can cause harm to individuals. Advertising shouldn't deceive, hurt, or transgress moral principles. People's opinions of themselves and their surroundings are influenced by advertising. According to Hanan et al. (2022) unethical advertising consists of erroneous ideas that become established in people's thoughts and lead to needless product use. The unethical behaviour of advertisers means that there will always be unethical problems in the advertising industry.

Misleading information

False statements regarding a good or service, such as data characteristics, nuanced data truths, and development recommendations, constitute misleading information (Balakrishnan et al., 2021). Misleading advertising seeks to highlight a commercial as the greatest on the market in order to boost sales. One of the most popular strategies is exaggerating the product; if the exaggeration was minimal or unenthusiastic, the advertisement would not receive the anticipated attention (García-Nieto et al., 2021). The majority of false statements have been distinguished from puffing. Exaggerated statements made for a product depending on the seller's preference or opinion are known as puffing (Rockcontent, 2021). An example of this would be an advertisement that highlights the positive aspects of a health supplement while downplaying its negative aspects (Iye et al., 2021).

Customers become sensitive to all forms of advertising when they see advertisements as deceptive (García-Nieto et al., 2021). According to Moore & Hancock (2022), young folks are more adept than older ones at recognising false information. According to Ravindran (2023), information can be misrepresented orally or in writing in advertising. False advertising can either promote reckless behaviour or inaccurately portray people. According to Estrellado et al. (2021), the complexity of characteristics and the range of reasons why customers make purchases make it extremely challenging to evaluate the effect of misleading advertising on consumer

behaviour. According to Das & Debroy (2022), ads may attempt to mislead two distinct persons at times, but this will only have an impact on one person's purchasing decisions and have no bearing on the other.

Deceptive advertising

The dishonest practice of false statements and impressions made by advertisers to persuade consumers to make a purchase is known as deceptive advertising. The manipulation of prices and hidden costs, the misuse of phrases like "going out of sale" or "free," inadequate or inconsistent comparisons, false colouring, "angel dusting," bait and switch, and no risk acceptance by default are the main features of deceptive marketing (TorHoerman, 2022). According to Wang et al. (2022), deception in advertising is a widespread phenomenon that arises from various types of unfulfilled expectations, and deception in advertising only happens when expectations introduced by marketers are not met. According to Chen et al. (2022), only the deception outcome would appear to be subjective when a consumer consumes or experiences the performance of a service or product since different consumers have different expectations. According to TorHoerman (2022), deceptive advertising can be defined by three factors: first, it must involve credible claims that are blatantly false or blatantly obvious; second, it must involve encouragement that differs from what consumers believe the advertisement to be and what is true; and third, it must involve a consumer's held belief that is supported by a prior purchase belief from other advertisements. Customers may suffer when they mistakenly perceive an advertisement to be factual when it is not (García-Nieto et al., 2021).

Gardner (1975) defined deceptive advertising as involving lying as well as creating false assumptions that could influence a customer's behaviour. The way that customers strive to match the product's attributes with the claims made in deceptive advertising and identify any differences is demonstrated by their behaviour (Abd el Baki, 2020). According to Nekmahmud et al. (2022), the perception of deceit has an effect on a consumer's behaviour, intentions to make more purchases, and degree of product loyalty. Abd el Baki (2020) asserts that deceptive advertising results in expenses, social disbelief, and psychological distress for the customer.

Unethical advertising influence on consumer's online purchase behavior

Unethical advertising is the distribution of cultural norms and values by political, religious, or governmental groups to people seeking moral and ethical advice. The production of false ideal information and its dissemination to the public via mass media outlets is unethical advertising. Unethical advertising is designed to harm the reputation of rival brands. It's mainly used to mislead and confuse consumers; unethical advertising makes incorrect or exaggerated claims. Advertisements that use minors, exaggeration, puffery, deceptive brand comparisons, surrogate advertising, and exaggerated claims are examples of unethical advertising practices. They are the type of advertisements that have the consequence of making viewers feel bad (Fazle, 2023).

Hanan et al. (2022) stated that advertisers are releasing more exaggerated claims of their products and services, which might result in companies losing their credibility and their competitive position in the market due to unethical advertising. According to Tyagi (2023), unethical advertising can fall into the category of promoting banned products like alcohol and cigarettes, and advertisements of products that are bad for people's health. Sharma & Bumb (2021) noted that unethical advertisements nowadays' focus on stereotyping gender manipulation and exploitation, advertisements that unrealistically show women and men tend to put pressure on how a person should or would look.

Unethical advertising is criticized for hurting society. Unethical advertising creates a negative thought in the minds of consumers and the creation of manipulation negatively affects the values and environment. Unethical advertising influences consumers buying behavior by using socio-demographic and cultural factors (Wang et al., 2022). Moral principles and values have a significant impact on consumers' attitudes toward unethical advertising (Goo et al., 2021).

Vaishnavi (2023) stated that unethical advertising creates negative attitudes, moral principles, values, age, gender, and religion which affects consumers' buying behavior due to the implementation of what a consumer could look like or how better they can be. Unethical advertising is a destructive and immoral action that may harm people's characteristics. According to Qutp et al. (2018), unethical advertising should not be deceptive, harmful, or in violation of moral principles because it shapes people's perceptions both individually and

collectively. It also creates false beliefs in the minds of consumers and encourages needless product consumption. Furthermore, because of the immoral behavior of advertisers, there will always be unethical issues surrounding advertising.

H1: There is a significant influence of unethical advertising on consumer's online purchase behavior.

Misleading Information Influences on Consumer's Online Purchase Behavior

Misleading information is the exaggeration of an advertisement to improve the benefits of a product created by advertisers (García-Nieto et al.,2021). Misleading information in an advertisement is likely to mislead anyone who sees it. Misleading advertising may affect consumer's choices regarding what they buy. Misleading information in an advertisement that creates or exploits a false belief about the expected outcome of a product. The making of false or misleading claims is deliberately illegal (Nuseir, 2018). Additionally, Nuseir emphasized that consumers react negatively to misleading advertising and grow distrustful of claims made about products they do not fully comprehend. According to García-Nieto et al. (2021), firms can create false claims to enhance the perception of their products and services by making unproven assertions about a product that is difficult to establish or refute.

Bermes (2021) mentioned that false promises and misguided information promote wrong values for the audience and people might get threatened by advertisements in the future. Misleading advertisements encourage irresponsible behavior or irresponsibly represent people. Estrellado et al. (2021) claimed that it is very difficult to assess the impact of misleading advertisements on consumer behavior due to the complexity of features and consumers purchase for a variety of reasons. Greenfield (2018) argued that sometimes advertisements may try to mislead two different people, but this will only affect one's economic behavior while the other economic behavior will change.

H2: There is a significant influence of misleading information on consumer's online purchase behavior.

Deceptive advertising influence on consumer's online purchase behavior

Deceptive advertising is based on the acquisition of false impressions or beliefs created by advertisers (Held, 2018). If an advertisement or advertising campaign leaves a consumer with an impression or belief different from what was promised from a product or service and leaves consumers with the impression of an untrue belief, then deception is said to exist. Deception concerns revolve around unfulfilled expectations or false beliefs advertisers (Held, 2018).

According to Xiang & Song (2020), the determination of deception lies in the consumer's ability to recognize an advertisement that presents a distorted or categorized claim. According to Radoslav (2023), deception happens when a customer thinks that an advertising is deliberately trying to mislead them. Ads that alter product information and incite intended behavioral changes in consumers' decision-making are considered immoral, according to Khan et al. (2020). Advertisement deceptiveness was examined by Garbouj & Saied (2019) as a measure of skepticism that gives consumers the impression that a marketer is in charge of attempting to create false views through any kind of marketing communication.

According to Islam (2021), dishonest advertising involves lying and fosters misconceptions that may have an impact on a customer's behavior. When a customer attempts to reconcile the features of the product and any departures from the claims made in advertising, the consumer's actions are affected by the findings. Yang et al. (2019) claim that a consumer's behavior is influenced by their impression of deception, which also has an impact on their desire to repurchase and level of product loyalty.

Golf-Papez et al. (2022) stated that deceptive advertising leaves financial charges, social disbelief, and emotional distress on the consumer. Iqbal & Siddiqui (2019) researched the effect of deceptive advertising on customers' attitudes, behaviour, and psyche, the research found that deceptive advertising affects the customer attitude towards purchasing. A customer's assessment, purchasing attitude, and purpose may all suffer if their perception and the real experience differ. The degree of real or anticipated harm determines how customers will respond to perceived deceit; this response will manifest itself as a desire to buy and repurchase (Timmerman & Piqueras-Fiszman, 2019).

H3: There is a significant influence of deception on consumer's online purchase behavior.

Research Questions

- How much does unethical advertising influence consumers' decisions to make purchases online?
- How much does consumers' behavior when making purchases online get influenced by false information?
- What impact does deceptive advertising have on consumers' internet buying habits?

Research Objectives

- To ascertain how consumers' online purchasing behavior is impacted by unethical advertising.
- To investigate how deceptive information affects consumers' online buying decisions.
- To look into how lying affects customers' internet buying habits.

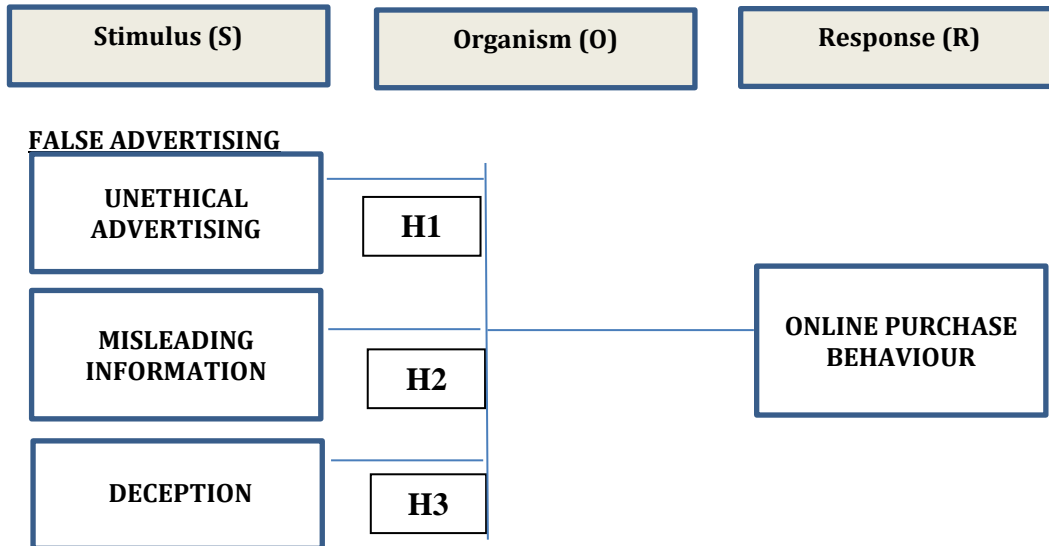
3. Research Methodology

The targeted respondents of this research are consumers who shop online and are between the ages of 21 years old – 60 years old, and consumers who can comprehend the consent form, made a purchase in the last twelve months, and regularly shop through the top five (5) e-marketplaces in Malaysia namely: Shopee, Lazada, Lelong. my, 11street, and Goshop. As of April 2019, the top five (5) e-marketplaces in Malaysia averaged between seven hundred thousand to twenty million visits daily (Mofokeng, 2021). A total of 588 respondents will be an appropriate sample size for this population as it passes the benchmark of power of analysis by Serdar (2021) on a standard effect size of 384 and within the range of 30 to 500 (Roscoe, 1975). In this research, a correlational design was used to examine the relationship among the variables and a survey method was used for data collection, which involves distributing questionnaires personally online to respondents to collect primary data; the survey was used to collect data from daily customers based on the understanding that these customers hold some knowledge in the online shopping sector. SPSS 26.0 was used to capture the data collected and a total of 17 items were created to examine consumers' online purchase behavior. plot testing was performed beforehand to ensure the reliability and validity of the constructs of the research with a minimum of 0.7 Cronbach Alpha.

Framework

The framework examines false advertising practices, methods, and techniques used to manipulate consumers' emotions toward online purchase behavior This research will investigate the relationship between unethical advertising, misleading information, and deception toward consumers' online purchase behavior.

Figure 1: Stimulus, Organism, and Response Model (SOR) - Russell and Mehrabian, 1977.



The Stimulus-Organism-Response Model (S-O-R) and False Advertising effects on Online Shopping behavior

The S-O-R Model applied to false advertising explains how misleading stimuli (stimulus) can lead to cognitive dissonance and emotional responses (organism), which, in turn, influence consumer behaviors and reactions (response). In both cases, the S-O-R Model helps us understand the complex interactions between external stimuli, internal psychological processes, and observable behavioral responses, shedding light on how online shopping and false advertising are intertwined and how they impact consumer decision-making. On the other hand, when addressing false advertising, stimuli encompass dishonest product claims, misleading images and descriptions, unrealistic promises, deceptive pricing tactics, and manipulative data usage. The organism aspect of false advertising relates to cognitive processes, trust, skepticism, and emotional responses. Consumers evaluate misleading advertisements by comparing them with their existing knowledge and expectations (Xie & Boush, 2011). Trust in advertising claims varies among consumers, influenced by prior experiences and attitudes toward marketing.

False advertising can elicit emotions like frustration, disappointment, and anger if consumers feel deceived. Finally, the response to false advertising may involve consumers making purchases based on false claims and subsequently feeling deceived, eroding trust and loyalty, and potentially leading to complaints or negative word-of-mouth that can impact the brand's reputation and sales (Bhandari & Rodgers, 2011).

4. Results

This section provides information on the respondents who belong to the demographic profiles that had been measured using the set of questionnaires in section A. Section A of the questionnaires consists of 10 questions on gender, age, marital status, race, level of education, profession, salary, shopping frequency, average amount spent online, and preferred online shopping platform. A total of 588 questionnaires were distributed and 588 were collected from the respondents, and all 588 responses were used as they fulfilled the data criteria; no missing values and the questionnaire was answered by the right respondents.

Profile of Respondents: Table 1 displays a summary of the characteristics of the total sample of customers who participated in the study.

Table 1: Demographic and Geographic Information About 588 respondents.

VARIABLE	FREQUENCY	PERCENTAGE
GENDER		
Males	203	34.5%
Females	385	65.5%
Total	588	100%
AGE		
21-30	354	60.2%
31-40	155	26.4%
>41	79	13.4%
Total	588	100%
Marital Status		
Single	388	66%
Married	183	31.1%
Other	17	2.9%
Total	588	100%
Race		
Malay	266	45.24%
Chinese	232	39.46%
Indian	58	9.86%
Others	32	5.44%
Total	588	100%
Level of Education		
Secondary School	18	3.06%

Diploma	84	14.28%
Undergraduate	368	62.59%
Postgraduate	114	19.39%
Others	4	0.68%
Total	588	100%
Profession		
Self-employed	82	13.95%
Unemployed	180	30.61%
Employed in the Public Sector	52	8.84%
Employed in the Private Sector	189	32.14%
Others	85	14.46%
Total	588	100%
Salary		
Below RM 1,000	230	39%
RM 1,000 – RM 3,000	110	19%
RM 3,001 – RM 5,000	85	8.84%
RM 5,001 – RM 9,000	163	27%
Total	588	100%
Shopping Frequency		
Daily	45	7.7%
Weekly	145	24.7%
Monthly	342	58.1%
Yearly	56	9.5%
Total	588	100%
Average Amount Spent Online		
RM 0 – RM 250	316	53.2%
RM 251 – RM 500	160	27.2%
RM 501 – RM 1000	60	10.2%
RM 1001 – RM 2500	23	3.9%
RM 2501 – RM 5000	25	4.5%
RM 5001 and above	4	1%
Total	588	100%
Preferred Online Shopping Platform		
Shopee	412	70.1%
Lazada	148	25.2%
Zalora	5	0.9%
Lelong. my	14	2.4%
Others	9	1.2%
Total	588	100%

Descriptive Statistics: The purpose of conducting the mean and standard deviations is to understand the central tendency and dispersion values of the factors

Table 2: Descriptive Statistics

Variable	Descriptive Statistics		
	Factor Name	Mean	Std. Dev.
UA	Unethical Advertising	3.11	1.09
MI	Misleading Information	3.49	0.84
D	Deception	3.31	0.94
OPB	Online Purchase Behavior	5.40	1.50

A descriptive mean analysis was performed on the variables in this study. As presented in the Table above, the results show the mean values and standard deviations of each variable. The mean values range between 3.11

and 5.40 and Standard deviation values range from .84 to 1.50. The highest mean value is for online purchase behavior with a score of 5.40 and the lowest mean value is for unethical advertising with a score of 3.11.

Table 3: Correlation Analysis Table

No.	Variables	Mean	SD	1	2	3	4
1	Unethical advertising	3.11	1.09				
2	Misleading information	3.49	.84	.674**			
3	Deception	3.31	.94	.659**	.789**		
4	Online purchase behavior	5.40	1.50	.642**	.633**	.791**	

** . Correlation is significant at the 0.01 level (1-tailed).

Before conducting a simple or multiple regression analysis on the variables under investigation, it is necessary to establish the association between the independent and dependent variables, as demonstrated by the correlation analysis results between the two variables in the above table. Correlation coefficients between the variables (independent and dependent variables) about online purchasing behavior, deceit, false information, and unethical advertising often fall between .633 and .791. In summary, there exists a spectrum of moderate to high overall correlations between independent and dependent variables.

Table 4: Summary of Variables “Reliability Test

Variables	Cronbach’s Alpha reliability	No. of Items
Unethical Advertising	.666	4
Misleading Information	.792	5
Deception	.856	6
Online purchase behavior	.901	5

By utilizing SPSS reliability analysis, each variable in the questionnaire was tested, and the results ranged from moderate to high. Items measuring unethical advertising (.666) have moderate consistency (< 0.7) whereas items measuring misleading information (0.792), and deception (0.856) have high consistency (> 0.7). Items measuring online purchase behavior (0.901) have very high consistency. The highest reliability is shown for online purchase behavior with a result of above 0.9, which is considered excellent consistency. The table above shows a summary of the reliability test for the variables.

Table 5: ANOVA test results of Independent Variables and Online Purchase Behavior

Model		ANOVA			F	Sig.
		Sum of Squares	df	Mean Square		
1	Regression	864.438	3	288.146	365.514	.000 ^b
	Residual	459.597	583	.788		
	Total	1324.034	586			

a. Dependent Variable: Online_Purchase_Behavior

b. Predictors: (Constant), Deception, Unethical_Advertisement, Misleading_Information

It's time to assess how much each independent variable contributes to explaining the variance in the dependent variable after looking over the regression model's summary. This might be evaluated using the provided coefficients table. Which independent variable helped predict the dependent variable is indicated by the Standardised Coefficient Beta. The dependent variable is better explained by the highest beta values.

Table 6: Coefficient of dependent variable: Online Purchase behavior

Model	Coefficients					Collinearity Statistics	
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF
	B	Std. Error	Beta				
1 (Constant)	1.170	.157		7.461	.000		
Unethical_Advertisement	.318	.047	.232	6.731	.000	.503	1.988
Misleading_Information	-.126	.075	-.071	-1.688	.092	.336	2.978
Deception	1.110	.066	.694	16.776	.000	.347	2.878

a. Dependent Variable: Online_Purchase_Behavior

It is necessary to compare the Standardised Coefficient Beta to identify the model's largest contribution. The greatest Beta in this model is 1.110 for deceit, and its t-value is confirmed to be significant. The model indicates that unethical advertising has the second biggest Beta of 0.318, which is also deemed statistically significant. In this model, misleading information has the third-largest Beta (-0.126), although it is not statistically significant.

The unstandardized coefficient for unethical advertising is equal to .318. This means that with each increase in unethical advertising, there will be an increase in online purchase behavior by 31.8%. Followed by the unstandardized coefficient for misleading information is equal to -.126. This means that with each increase in misleading information, there will be a decrease in online purchase behavior by 12.6%. And the last unstandardized coefficient for deception is equal to 1.110. This means that with each increase in deception, there will be an increase in online purchase behavior by 11%.

Discussion

The percentage of respondents that were willing to participate in the research is 98%. Additionally, the majority of the respondents were Malays or Chinese which could be an indication of the ethnic makeup of the area or region from which the sample was drawn. The respondents were mostly young adults with the majority of them being between 21 to 30 years old. The respondents were also predominantly female, with 65.5% of the sample being women. The majority of the respondents held an undergraduate degree and were employed in the private sector. In terms of online shopping habits, most respondents shopped every month and spent between RM 0 – RM 250 on average and Shopee was the most preferred online shopping platform among the respondents. Furthermore, the data suggests that online shopping activity is popular among the respondents, with a significant portion of them shopping every month. Overall, the information provided about the respondents gives us some insight into their demographic and behavioral characteristics, which may help contextualize the findings of the research on the effects of false advertising on consumer's online purchase behavior.

The results show that all the instruments have a satisfactory value of reliability and validity. This chapter also involves hypothesis testing using a series of multiple regression analyses. This study attempted to examine the effect of the three factors in false advertising namely unethical advertising, misleading information, and deception on consumers' online purchase behavior.

5. Managerial Implications and Recommendations

Several potential areas for research on the effects of advertising on the online shopping behavior of Malaysian consumers have been identified based on the information discussed above. It can start with exploring how false advertising impacts consumer trust in e-commerce platforms. Researchers should investigate the extent to which false advertising affects customers' trust in e-commerce platforms and their likelihood of using them again. Evaluating the effectiveness of Malaysia's regulations on advertising. Researchers should analyze the country's framework and enforcement mechanisms related to false advertising to determine how well they protect consumers from deceptive practices and suggest improvements.

Understanding the role of third-party platforms in combating ads, as well as investigating the influences of it. Researchers should explore how third-party platforms like e-marketplaces can mitigate advertising practices

and strategies employed to safeguard consumers. Researchers could examine how well consumer education and awareness efforts they impact shopping habits. Researchers could create suggestive initiatives aimed at educating consumers about misleading advertising practices in Malaysia.

Conclusion

The study's conclusions highlight the critical role that advertising plays in influencing customer perceptions of products and services and driving consumer purchasing behavior. Industry sectors need to plan their advertising strategies in light of the significant influence innovative commercials have on consumers' decision-making processes. Advertisers can consider using a blend of intellectual and emotional appeals to better engage consumers and meet their psychological, emotional, and social requirements. Furthermore, companies in the sector need to recognize that customer attitudes and the excellence of advertising have an indirect impact on consumer decisions when it comes to online advertising.

Businesses can maximize their impact on consumers by optimizing their online advertising strategy by using the clear correlation between purchasing behavior and online marketing. In light of these findings, we advise industry participants to give top priority to creating marketing efforts that appeal to customers' deeper emotional needs in addition to highlighting the practical benefits of products. This all-encompassing method of advertising has the potential to strengthen the bond between consumers and goods, which will ultimately have a favorable impact on their purchasing decisions. Furthermore, ongoing initiatives to improve the distinction of online advertising and conform to changing consumer sentiments will surely lead to more impactful and successful advertising campaigns, which will be advantageous to the market and to consumers in general.

References

- Abd el Baki, H. (2020). Impact of deceptive advertising on consumer buying decision on social media with mediating word of mouth: an empirical study from University of Tabuk, Saudi Arabia.
- Ahmed, S., & Ashfaq, A. (2013). Impact of advertising on consumers' buying behavior through persuasiveness, brand image, and celebrity endorsement. *Global Media Journal*, 6(2), 149.
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In: Kuhl J., Beckmann J. (eds). *Action control*. SSSP Springer Series in Social Psychology. Springer, Berlin, Heidelberg.
- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior 1. *Journal of Applied Social Psychology*, 32(4), 665-683.
- Ajzen, I., & Fishbein, M. (1980). "Understanding attitudes and predicting social Behaviour". Toronto, Ontario: Prentice-Hall.
- Alba, J.W. & Lynch, John & Weitz, Barton & Janiszewski, Chris & Lutz, R. & Wood, Stacy. (1997). Interactive Home Shopping: Consumer, Retailer, and Manufacturer Incentives to Participate in Electronic Marketplaces. *Journal of Marketing*, 61. 10.2307/1251788.
- Amin, N., & Mohd Nor, R. (2013). Online shopping in Malaysia: Legal Protection for E-consumers. (Online), 5(24). <https://core.ac.uk/download/pdf/234625012.pdf>.
- Balakrishnan, V., Ng, K. S., & Rahim, H. A. (2021). To share or not to share - The underlying motives of sharing fake news amidst the COVID-19 pandemic in Malaysia. *Technology in society*, 66, 101676. <https://doi.org/10.1016/j.techsoc.2021.101676>
- Bermes A. (2021). Information overload and fake news sharing: A transactional stress perspective exploring the mitigating role of consumers' resilience during COVID-19. *Journal of Retailing and Consumer Services*, 61, 102555. <https://doi.org/10.1016/j.jretconser.2021.102555>.
- Bhandari, M. & Rodgers, S. (2017). What does the brand say? Effects of brand feedback to negative eWOM on brand trust and purchase intentions. *International Journal of Advertising*, 37. 1-17. 10.1080/02650487.2017.1349030.
- Chen, J., Wu, Y., & Jiang, X. (2022). Research on Consumer Purchasing Channel Choice Based on Product Tolerance: The Mediating Role of Rationalization. *Frontiers in Psychology*, 13, 823470. <https://doi.org/10.3389/fpsyg.2022.823470>
- Das, D., Sarkar, A., & Debroy, A. (2022). Impact of COVID-19 on changing consumer behavior: Lessons from an emerging economy. *International journal of consumer studies*, 46(3), 692-715. <https://doi.org/10.1111/ijcs.12786>

- Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., & Carlson, J. (2021). Setting the Future of Digital and Social Media Marketing Research: Perspectives and Research Propositions. *International Journal of Information Management*, 59(1), 1–37. ScienceDirect. <https://doi.org/10.1016/j.ijinfomgt.2020.102168>
- Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., & Carlson, J. (2021). Setting the Future of Digital and Social Media Marketing Research: Perspectives and Research Propositions. *International Journal of Information Management*, 59(1), 1–37. ScienceDirect. <https://doi.org/10.1016/j.ijinfomgt.2020.102168>.
- Dwivedi, Y. K., Kshetri, N., Hughes, L., Slade, E. L., Jeyaraj, A., Kar, A. K., Baabdullah, A. M., Koohang, A., Raghavan, V., Ahuja, M., Albanna, H., Albashrawi, M. A., Al-Busaidi, A. S., Balakrishnan, J., Barlette, Y., Basu, S., Bose, I., Brooks, L., Buhalis, D., & Carter, L. (2023). “So, what if ChatGPT wrote it?” Multidisciplinary perspectives on opportunities, challenges, and implications of generative conversational AI for research, practice, and policy. *International Journal of Information Management*, 71(0268-4012), 102642. <https://doi.org/10.1016/j.ijinfomgt.2023.102642>
- Dwivedi, Y. K., Kshetri, N., Hughes, L.(2021). Setting the future of digital and social media marketing research: Perspectives and research propositions. *International Journal of Information Management*, 59. doi:<https://doi.org/10.1016/j.ijinfomgt.2020.102168>.
- Estrellado, J. & Maala, E. & Magnaye, M. & Yazon, A. (2021). Summative Assessment 3 A Study on Identifying the Effect of False Advertisement in the Field of Marketing.
- Estrellado, J., Maala, E., Magnaye, M. & Yazon, A. (2021). Summative Assessment 3 A Study on Identifying the Effect of False Advertisement in the Field of Marketing.
- Garbouj, C., S. & Saied, B. K. (2019). Perceived Deception in Advertising: Antecedents and Consequences. 10.5281/zenodo.2965536.
- García-Nieto, M. T., González-Vallés, J. E., & Viñarás-Abad, M. (2021). Social Responsibility and Misleading Advertising of Health Products on the Radio. The Opinion of the Professionals. *International journal of environmental research and public health*, 18(13), 6912. <https://doi.org/10.3390/ijerph18136912>
- Gardner, P. L. (1975). Attitudes to Science. *Studies in Science Education*, 2, 1-41. <http://dx.doi.org/10.1080/03057267508559818>.
- Golf-Papez, M., Heller, J., Hilken, T., Chylinski, M., de Ruyter, K., Keeling, D. I., & Mahr, D. (2022). Embracing falsity through the metaverse: The case of synthetic customer experiences. *Business Horizons*, 65(6). <https://doi.org/10.1016/j.bushor.2022.07.007>.
- Goo, J., Saraih, U. N., Jaafar, H., Noraini, M., Yusoff, S., Ramish, M., Mohd, Y., Bibi, N. (2021). The Influence of Unethical Marketing Practices on Consumers' Buying Behaviours among Malaysian Tertiary Students. 11. 77-88.
- Greenfield, S. (2018). When Beauty is the Beast: The Effects of Beauty Propaganda on Female Consumers. https://digitalcommons.unomaha.edu/cgi/viewcontent.cgi?article=1028&context=university_honors_program.
- Haider, T., & Shakib, S. (2018). A Study on The Influences of Advertisement On Consumer Buying Behavior. *Business Studies Journal; Allied Business Academies*. <https://www.abacademies.org/articles/a-study-on-the-influences-of-advertisement-on-consumer-buying-behavior-7177.html>.
- Hanan, N., Jafar, M., & Mohd, H. (2022). Tell the Truth or Keep Silent: A Critical Study of Ethical Advertising Through Malaysian Advertising Self-Regulation System. 12, 16. <http://www.gjat.my/gjat2022-Dec/2.pdf>.
- Hanan, N., Jafar, M., & Mohd, H. (2022). Tell the Truth or Keep Silent: A Critical Study of Ethical Advertising Through Malaysian Advertising Self-Regulation System. 12, 16. <http://www.gjat.my/gjat2022-Dec/2.pdf>.
- Held, J. & Germelmann, C. (2018). Deception in consumer behavior research: A literature review on objective and perceived deception. *Projectics / Proy ctica / Projectique*, 21, 119-145. <https://doi.org/10.3917/proj.021.0119>.
- Iqbal, S. & Siddiqui, D. (2019). The Impact of Deceptive Advertising on Customer Loyalty: A Case of Telecommunication Industry in Karachi, Pakistan. *International Journal of Industrial Marketing*. 4. 39. 10.5296/ijim.v4i1.14607.
- Islam, Md. (2021). Impact of Deceptive Advertising on Women Buying Behavior: A Study on Cosmetics Industry of Bangladesh. *Journal of Entrepreneurship and Business Innovation*. 8. 21. 10.5296/jebi.v8i2.19110.
- Iye, R., Okuhara, T., Okada, H., Yokota, R., & Kiuchi, T. (2021). A Content Analysis of Video Advertisements for Dietary Supplements in Japan. *Healthcare (Basel, Switzerland)*, 9(6), 742. <https://doi.org/10.3390/healthcare9060742>

- Juana, C. S., & Stefan, D. (2023). Heuristic processing of green advertising: Review and policy implications, *Ecological Economics*, 206,107760, ISSN 0921-8009,<https://doi.org/10.1016/j.ecolecon.2023.107760>.
- Kamila, M. K., & Jasrotia, S. S. (2023). Ethics and marketing responsibility: A bibliometric analysis and literature review. *Asia Pacific Management Review*, 28(4). <https://doi.org/10.1016/j.apmr.2023.04.002>
- Kamila, M. K. & Jasrotia, S. S. (2023). Ethics in product marketing: a bibliometric analysis. *Asian Journal of Business Ethics* 12 (2):151-174.
- Khan, S., Fatima, H. & Hussain, W. (2020). How Consumers' Skepticism is Derived from Deceptive Advertisements. *International Journal of Experiential Learning & Case Studies*. 5. 10.22555/ijelcs.v5i2.106.
- Khan, Y., Hameed, I. & Akram, U. (2022). What drives attitude, purchase intention, and consumer buying behavior toward organic food? A self-determination theory and theory of planned behavior perspective. *British Food Journal*. 125. 10.1108/BFJ-07-2022-0564.
- Malik, F. (2023). A Literature Review on Ethical Marketing; A Macromarketing Perspective. *Misleading Advertising: Unmasking Misselling in Marketing*. (n.d.). *FasterCapital*. Retrieved March 14, 2024, from:<https://fastercapital.com/content/Misleading-Advertising--Unmasking-Misselling-in-Marketing.html>
- Mofokeng, T. E. (2021). The impact of online shopping attributes on customer satisfaction and loyalty: Moderating effects of e-commerce experience. *Cogent Business & Management*, 8(1), 1968206. *Tandfonline*. <https://doi.org/10.1080/23311975.2021.1968206>.
- Moore, R. & Hancock, J. (2022). A digital media literacy intervention for older adults improves resilience to fake news. *Scientific Reports*. 12. 6008. 10.1038/s41598-022-08437-0.
- Musa, R., Nasaratnam, S., Rethinam, K., Varatharajoo, P. & Shanmugam, A. (2022). A Study of Factors Influenced Online Shopping Behavior in Malaysia: A Structural Approach. *Wseas Transactions on Business and Economics*. 19. 531-541. 10.37394/23207.2022.19.48.
- Nekmahmud, Md., Naz, F., Ramkissoon, H., & Fekete-Farkas, M. (2022). Transforming consumers' intention to purchase green products: Role of social media. *Technological Forecasting and Social Change*, 185, 122067. <https://doi.org/10.1016/j.techfore.2022.122067>.
- Niosi, A. (2021). Consumer Decision-Making Process. *Opentextbc.ca*, 29. <https://opentextbc.ca/introconsumerbehaviour/chapter/consumer-decision-making-process/>
- Nuseir, M. (2018). Impact of misleading/false advertisement on consumer behavior. *International Journal of Economics and Business Research*, 2018 Vol.16 No.4, pp.453 - 465. *International Journal of Economics and Business Research*. 16. pp.453 - 465. 10.1504/IJEER.2018.095343.
- Pandey, A. and Parmar, J. (2019). Factors Affecting Consumer's Online Shopping Buying Behavior. *Proceedings of 10th International Conference on Digital Strategies for Organizational Success*. <http://dx.doi.org/10.2139/ssrn.3308689>
- Qutp, M., Sayouh, M., & abdo, A. (2018). Advertising ethics as ruling standards in competitive advertising. *International Design Journal*, 8(4), 389-402. <https://doi.org/10.21608/idj.2018.84726>.
- Raut, R.K., Das, N., & Kumar, R.V. (2018). Extending the Theory of Planned Behaviour: Impact of Past Behavioural Biases on the Investment Decision of Indian Investors. *Asian Journal of Business and Accounting*.
- Ravindran, R. (2023). Attitudes and Values for Promoting Well-being and Harmony of Individuals and Society. 10. 495-500.
- Riquelme, I. P., Román, S., & Iacobucci D. (2016). Consumers' perceptions of online and offline retailer deception: A moderated mediation analysis journal of research in interactive marketing. *Journal of Interactive Marketing*, 16-26 71-89. DOI 10.1108/17505931111121534.
- Rockcontent (2021). What's Puffery in Advertising? [Examples to Avoid in Your Brand]. *Rock Content*. <https://rockcontent.com/blog/puffery-advertising-examples/>
- Rodrigues, R. I., Lopes, P. & Varela, M. (2021). Factors Affecting Impulse Buying Behavior of Consumers. *Journal of Frontiers in Psychology*, 12 DOI=10.3389/fpsyg.2021.697080
- Romaniuk, J., & Sharp, B. (2004). Conceptualizing and measuring brand salience. *Marketing Theory*,4(4), 327-342.
- Roscoe, J. T. (1975). *Fundamental research statistics for the behavioral sciences* (Second ed.). New York: Holt Rinehart and Winston.

- Russell, J.A., & Mehrabian, A. (1977). Evidence for a Three-Factor Theory of Emotions. *Journal of Research in Personality*, 11, 273-294.
- Salameh, A. A., Ijaz, M., Omar, A. B., & Zia Ul Haq, H. M. (2022). Impact of Online Advertisement on Customer Satisfaction with the Mediating Effect of Brand Knowledge. *Frontiers in Psychology*, 13, 919656. <https://doi.org/10.3389/fpsyg.2022.919656>.
- Serdar, C. C., Cihan, M., Yücel, D., & Serdar, M. A. (2021). Sample size, power, and effect size revisited: simplified and practical approaches in pre-clinical, clinical and laboratory studies. *Biochemia medica*, 31(1), 010502. <https://doi.org/10.11613/BM.2021.010502>
- Sharma, S. and Bumb, A. (2021). Role Portrayal of Women in Advertising: An Empirical Study. *Journal of International Women's Studies*, 22(9), 236-255. Available at: <https://vc.bridgew.edu/jiws/vol22/iss9/16>.
- Sripathi, M. & Engineering, G. (2020). A Study on Impact of False Advertising on the Consumer Buying Behaviour. *Journal of interdisciplinary cycle research*. XII. 1066.
- Svetlana, F. (2014). The role of advertising in promoting a product. *Industrial Management*.
- Tao, H., Sun, X., Liu, X., Tian, J., & Zhang, D. (2022). The Impact of Consumer Purchase Behavior Changes on the Business Model Design of Consumer Services Companies Throughout COVID-19. *Journal of Frontiers in Psychology*, 13, ISSN=1664-1078. DOI=10.3389/fpsyg.2022.818845
- Timmerman, N., & Piqueras-Fiszman, B. (2019). The Effect of Ingredient Item Depiction on the Packaging Frontal View on Pre- and Post-Consumption Product Evaluations. *Foods (Basel, Switzerland)*, 8(8), 354. <https://doi.org/10.3390/foods8080354>.
- TorHoerman, L. (2022). Deceptive Advertising: Definition, Types, And Examples | TorHoerman Law. www.torhoermanlaw.com. <https://www.torhoermanlaw.com/false-or-misleading-marketing/>
- Tyagi, I. & Tyagi, P. (2023). Surrogate Advertisement and its impact. *Global Journal of Management and Sustainability (MAS)* [ISSN: 2583-4460]. 1. 19-28. 10.58260/j.mas.2202.0109.
- Vaishnavi, G. (2023). Effects of Deceptive and unethical marketing on consumer behavior Student. <https://norma.ncirl.ie/6783/1/vaishnavigourkar.pdf>
- Wang, J., Yang, X., He, Z., Wang, J., Bao, J., & Gao, J. (2022). The Impact of Positive Emotional Appeals on the Green Purchase Behavior. *Frontiers in Psychology*, 13, 716027. <https://doi.org/10.3389/fpsyg.2022.716027>.
- Wang, X., Ashraf, A. R., Thongpapanl, N., & Wang, K.-Y. (2022). Perceived deception and online repurchase intention: The moderating effect of product type and consumer regulatory orientation. *Journal of Consumer Behaviour*, 21(6), 1522-1539. <https://doi.org/10.1002/cb.2109>.
- Wang, X., Program, G., & Catharines, S. (2024). The Effect of Perceived Deception on Consumer Repurchase Intention. Retrieved March 14, 2024, from https://dr.library.brocku.ca/bitstream/handle/10464/15490/Brock_Wang_Xinyue_2021.pdf?sequence=1&isAllowed=y
- Worthington, A. K., & Ryan, M. J. (2021). *Theory of Planned Behavior*. Ua.pressbooks.pub. <https://ua.pressbooks.pub/persuasiontheoryinaction/chapter/theory-of-planned-behavior/>
- Wu, S. (2013). The relationship between consumer characteristics and attitude toward online shopping. *Marketing Intelligence & Planning*, 21, 37-44. 10.1108/02634500310458135.
- Xiang, Y., & Song, I. (2020). Deceptive Advertising and Consumer Verification. https://www.ceibs.edu/files/2021-02/007-xiang-yi_mar-2020.pdf.
- Xie, G. X. & Boush, D. M. (2011). How susceptible are consumers to deceptive advertising claims? A retrospective look at the experimental research literature, *The Marketing Review*, 11(3), 293-314.
- Yang, Z., Van Ngo, Q., Chen, Y., Nguyen, C. X.-T., & Hoang, H. T. (2019). Does Ethics Perception Foster Consumer Repurchase Intention? Role of Trust, Perceived Uncertainty, and Shopping Habit. *SAGE Open*, 9(2), 215824401984884. <https://doi.org/10.1177/2158244019848844>.