

Original Paper

Predicting Generation Y's Purchase Intention towards Brands Advertised on Social Media: A PLS-SEM Analysis

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Abstract

Social media advertising has become an integral part of product promotion by many companies. This strategy has impacted the sales and revenue departments of many advertisers. Hence, a strategically targeted advertising is needed to maximise return on investment on advertising in the form of sales, revenue, and profit. Although most businesses recognise the value of social media advertising opportunities, not many have figured out how to execute this strategy accordingly. With many western corporations embracing social media advertising, it is high time for Malaysian businesses to delve into this advertising territory. In order to familiarise them to the attitude of customers' towards social media advertising, this study is timely to provide useful insights to guide Malaysian businesses.

Findings from this study will help advertising managers to ensure efficient utilisation of their budget and development of more effective advertising strategy, especially when formulating strategies to cater to Gen Y in Malaysia. Based on the data collected from 1,087 Gen Y consumers in Malaysia, the effect of belief factors (lifestyle, privacy and security concern, entertainment and credibility) on attitude towards social media advertising was examined. Partial Least Squares-Structural Equation Modelling (PLS-SEM) was employed to assess the hypothetical relationships between the belief factors and attitude towards social media advertising, purchase intention and actual purchase. The results revealed that the belief factors (lifestyle, privacy and security concern, entertainment and credibility) manifested a positive influence on attitude towards social media advertising.

Keywords

attitude, social media advertising, generation Y, purchase intention

1. Introduction

In the year 2012, the use of social media among the Fortune 500 companies grew dramatically (Okazaki & Taylor, 2013). Based on a study conducted by the University of Massachusetts Dartmouth, approximately seventy percent of these corporations were identified to have an official company account on Twitter, while sixty-six percent opened corporate Facebook accounts. Comparatively, in the year 2011 twenty-eight percent of the corporations had blogs at the corporate level signifying a good growth since 2008 (Barnes et al., 2012). This growth is an indication of a long-term trend towards the integration of social media among corporations (as well as individual brands). The incorporation of social media advertising is being explored by almost every business around the globe. Several years ago, business operators were uncertain about the impact of social media; now, it is here to stay where companies are rapidly adopting social media advertising (The Nielsen Social Media Advertising Report, 2013). Advertisers nowadays use different platforms of social media to enhance their corporate and brand images. They use social media advertising (e.g., display ads on social networking sites) to promote their products in order to persuade users to buy their products (Neti, 2011). Moreover, an increasing number of companies are using social technologies to improve interaction with external stakeholders in order to increase business values such as improving customer satisfaction and supplier loyalty, increasing sales and revenues, supporting marketing and advertising initiatives, creating brand awareness and reputation, enforcing loyalty performance (Culnan et al., 2010; Kietzmann et al., 2011; Sinderen & Almeida, 2011).

Although social media applications have witnessed unprecedented growth in human interaction in modern times; a limited number of cross-national or cross-cultural studies and research is available on the usage of social media for advertising (Okazaki & Taylor, 2013; Wendy & Statia, 2012). This study provides an overview of the attitude of Generation Y towards social media advertising and the effect on purchasing behaviour. The two key research objectives are:

RO1: To understand the key factors that affect attitude toward social media advertising among Generation Y consumers in Malaysia.

RO2: To determine how attitude mediates the relationship between beliefs and consumer purchase intention towards the brands advertised on social media.

2. Literature Review

Social media is a group of Internet-based applications that are built on the ideological and technological foundations of Web 2.0 which allows the creation and exchange of User Generated Content. It consists of collaborative projects, for instance blogs, user-generated content communities (e.g., Flickr; YouTube; Youku/Tudou), social networking sites (e.g., Facebook; Twitter, Cyworld), virtual game worlds (e.g., EverQuest), and virtual social worlds (e.g., Second Life) (Kaplan & Haenlein, 2010). Whereby social media advertising is the practice involving the use of paid adverts on Social Networking Sites (SNS) like Facebook, Twitter, YouTube, blogs and other content (The Social Media Advertising Industry Report, 2013). The Interactive Advertising Bureau defined Social Media Advertising “as an online advertisement that incorporates user interactions that the consumer has agreed to display and be shared. The resulting ad displays these interactions along with the user’s picture and or name within the ad content” (IAB Social Advertising Best Practices, 2009).

2.1 Social Media and Advertising

Statistically, one out of every seven people in the world has a Facebook page and nearly four in five active internet users visit social networks and blogs (Alex, 2013). As a result, marketers now prefer the use of social media to stay in touch with their customers. Businesses are increasing their budgets and favour the use of social media to reach out to their customers apart from the use of other advertising channels. Although television is the dominant advertisement platform in the Asia-Pacific, the reach and influence of social media have grown rapidly in the last decade. Based on an online survey in the Asia-Pacific region, almost 40 percent of online consumers prefer to view online product reviews for purchase decisions. A more intriguing scenario in the developing markets is the strong influence of social media among consumers in Vietnam, China, Thailand, Philippines and Indonesia, where more than 60 percent of respondents profess to the influence of social media—a much higher ratio than in mature markets like Japan, Australia and New Zealand (The Nielsen Report, 2010). Remarkably, on the other hand, a survey of 500 U.S. digital marketing and media professionals indicated that they use social media channels for advertising. Sixty-four percent of the advertisers claimed that they increased their paid social media advertising budgets in 2013, though for the most part, the increase was modest (The Nielsen Report, 2013). In order to fund this increase, advertisers shifted the online and offline budgets into paid social media advertising. This is because advertisers view paid social media advertising as an integrated, cross-platform tactic which is run in conjunction with other online and offline media. Moreover, US marketers spent approximately \$3 billion for social media advertising in 2011, demonstrating a fifty-five percent increase in expenditure compared to 2010. A forecast in the same year indicated that advertising expenditure on social media will more than triple over the coming years (Hof, 2011). In addition, the Nielsen Paid Social Media Advertising Report (2013) forecasted that social media advertising will rise from \$4.7b in 2012 to \$11b in 2017. These forecasts confirm that the

internet, as an advertising medium, is enjoying a rise in popularity, hence, delivering greater revenues to the advertising companies.

2.2 Generation Y

Gen Y is a unique and influential consumer group whose behaviour is often discussed but not fully understood (Drake-Bridges & Burgess, 2010; Racotta-Paina & Luca, 2010; Smith, 2012). Also, Gen Y is an important segment for businesses as they represent around 26% to 30% of the total global customer market. However, there is not yet an agreement on the start and end points for Generation Y (Ruth et al., 2013). The exact period defining Gen Y vary among researchers with some using the time frame from 1977 and 1996 (Dawn & Thomas, 2013; Lancaster & Stillman, 2003), while some from 1981 to 1995 (Solka et al., 2011). Generation Y represents not only the most recently defined generation but also the largest ever to enter the workforce (Jenna et al., 2013; Broadbridge et al., 2007b; Martin, 2005; Shaw & Fairhurst, 2008). Regardless to the debates in the literature regarding the range defining Gen Y, this study, similar to others (e.g., Jenna et al., 2013; Noble et al., 2009; Broadbridge et al., 2007b; Morton, 2002), and mostly for practical reasons, defined Gen Y as those who were born between 1977 and 1994. The selection of this age group was to include graduates from college who will soon join the workforce and have earning potential making them as a powerful consumer group. In Malaysia, based on the 2010 Population and Housing Census, Gen Y accounted for approximately 6.2 million or 27% of the total Malaysian population which makes up approximately 62% of the Malaysian workforce in 2009 (Economic Planning Unit Malaysia, 2010). This age group (consumer group) holds more potential for businesses in Malaysia because it is a large group consisting mostly of the emerging working class and a crop of young professionals in Malaysia which implies that this is a highly profitable and fast-growing group.

3. Research Hypotheses and Conceptual Framework

Understanding advertising beliefs and attitudes are important because they affect consumers' brand attitudes and purchase intentions (Durvasula et al., 1997; Mehta, 2000). Fishbein and Ajzen contend that beliefs (beliefs about consequences of behaviour or normative beliefs about behaviour) are the fundamental bedrock from which attitudes, and behaviours are determined. Despite the advances in our knowledge, Pollay and Mittal (1993) asserted that previous work had not yet completely considered "the range of specific beliefs held by consumers and their relative importance in relation to a global attitude towards advertising and other consumer behaviours" (p. 100). They concluded that a more comprehensive model should be developed using additional belief dimensions as determinants of attitudes towards advertising. Hence, they proposed that attitudes could be explained by beliefs, "being the integration of weighted evaluations of perceived attributes and consequences" (p. 101), based on Fishbein's (1963) theory of reasoned action. The seed of Fishbein's theory is that beliefs and attitudes

are distinct, and beliefs usually function as indicants of attitudes (e.g., Dillon & Kumar, 1985; Fishbein, 1967a; Fishbein & Ajzen, 1974; Fishbein & Raven, 1962). The theory of Reasoned Behaviour asserts that there are specific reasons behind why people (customers) behave in certain ways, where these reasons are the factors which influence customers' purchase intention for certain products or brands advertised on the social media. This study defined each of these constructs and developed the theoretical basis for the causal relationships of the model. Each of the factor studied are discussed below.

3.1 Lifestyle

The lifestyle concept was introduced by Bell (1958) and Havinhurst and Feigenbaum (1959) in the 1950s, pointing to its potential significance in understanding, explaining and predicting consumer behaviour. Lifestyle refers to a distinctive or characteristic mode of living, in its aggregate and broadest sense of a whole society or segment thereof (William, 1963). Product decisions are influenced by lifestyle patterns. Besides, Jayasree (2011) emphasised the importance of lifestyle and its influence on consumer purchase behaviour. Profiling the consumers' psychological attributes along with the evaluation of their attitudes, interests and opinions are related to their purchasing and consumption patterns. Hence, with regards to the market, lifestyle serves as an excellent segmentation variable (Li, 2009) because it is a way of living by a person or a group that includes social relationships, consumption, entertainment, and clothing patterns. Likewise, Blackwell et al. (2001) see lifestyle as a simple concept for understanding consumer behaviour because it reveals the characteristics that are more modernised than personality and more comprehensive than personal values. Lifestyle usually reflects a person's attitudes, values or worldview, and their personal taste (Hung, 2009). Consequently, the differences in lifestyle will lead to variations in the behaviours and thoughts of people (Long-Yi & Hsing, 2012). As a result, different lifestyles will create varied preferences and behaviours when making purchase decisions. Therefore, the following hypothesis is proposed:

H1: Lifestyle positively affects attitude towards social media advertising.

3.2 Privacy and Security Concerns

Studies have found that the single greatest factor influencing online purchase behaviour is the concern over the control of private information (Milne, 2000; Ashworth & Free, 2006; Dolnicar & Jordaan, 2007). The internet has increased concerns over privacy because of the perceived risks in exposure to private information (Milne, 2000). There are advantages and disadvantages over searching for information over the internet. Due to the abundance of information on the internet, online searching became more convenient as it saves a great deal of time. To the contrary, the internet is a double-edged sword because of the disadvantages, which includes privacy infringement. As privacy breaching cases occur progressively, social media users are more worried about the privacy of their profiles on social media. They are afraid that their personal data may possibly be stolen and used by others without their

permission (Hoy & Milne, 2010). As such, if customers are not sure of the protection of privacy, they will be unwilling to repurchase on sites advertised on social media. However, if privacy is assured online repurchases will not be affected. Hence the following hypothesis:

H2: Privacy and security concern positively affects consumers' purchase intention towards brands advertised on social media.

3.3 Entertainment

Another factor affecting consumer attitudes toward advertising is entertainment. The advertisement is considered entertaining if it is eye-catching, offer sensory pleasure and please consumers/audiences' sentiments (Pollay & Mittal, 1993). Therefore, entertainment affects the consumer's attitude towards online advertising by establishing an emotional link between consumers and online advertising (Wang & Sun, 2010). Moreover, Hoffman and Novak (1996) argued that "a great deal of pleasure and participation during interaction with computer-based media leads to concurrent subjective perceptions of positive affect and mood of the consumer". Customers' feeling of enjoyment is related to the advertisements holds a positive impact on their general attitudes toward online purchasing (Shavitt et al., 1998; Chen & Wells, 1999). Consequently, an entertaining advertisement message influences a consumer's preferences for online purchasing. Therefore, the following hypothesis was proposed:

H3: Entertainment positively affects consumer's attitude towards social media advertising.

3.4 Credibility

Generally, online news is perceived as a credible source (Johnson & Kaye, 1998). Although the internet has been widely accepted as a source for advertising, it is still regarded with scepticism by consumers as it was found to be the least credible medium to advertise in. Moore and Rodgers (2005) found that the consumers did not feel comfortable surfing online advertisements, although they are in the same demographic as college students who shop online the most. This is because they did not find internet advertising trustworthy. Additionally, they were also hesitant when required to provide credit card details or personal information when performing online purchases on new sites, hence, only purchased from the sites they knew and trusted (Moore & Rodgers, 2005). The credibility of an advertisement or commercial is brought about by a lot of factors, particularly by the company's credibility and the conveyer of the message (Goldsmith et al., 2000); nevertheless, it is likewise influenced by the advertising medium. It has also been observed that a message on the internet has less credibility than a printed message except if the message is connected to a strong brand (Goldsmith et al., 2000). Having considered the assessment above, it could be said that the credibility of an advertising message influences consumers' attitude towards social media advertising. Therefore, the following hypothesis was proposed:

H4: Credibility positively affects attitude towards social media advertising.

3.5 The Mediating Role of Attitude towards Social Media Advertising

Consumers' attitude towards advertising is one of the important pointers of advertising effectiveness since consumer's perception of the advertising is reflected in their thoughts and feelings which will consequently influence their attitude towards advertising (Mackenzie & Lutz, 1989; Mehta, 2000). The consumers' positive attitude towards social media advertising holds a positive effect on their behavioural response. The behavioural response consists of two outcome variables, which are the number of time consumers click on the banner ads to watch/read them and purchasing the products/brands displayed in those ads. According to Dreze and Zufryden (1998), ad clicking is an important tool to measure the effectiveness of online advertising. The same technique can be applied to measure the effectiveness of social media advertising because most of the social media advertising is similar to online advertising (especially banner ads/display ads on Facebook, YouTube, etc.). However, the environment in which these advertisements are presented is different. Consumers' positive attitude towards advertising is expected to help them recall the brands displayed in the ads which indirectly influences their behavioural intentions (Mehta, 2000).

On the other hand, some belief factors are related to the attitude towards web advertising, which in turn impacts on ad clicking and purchasing (Wang & Sun, 2010). The beliefs about advertising influencing consumer attitudes toward advertising were evidenced in the context of online social network advertising. For instance, Wang and Sun (2010) identified that belief was an important predictor of consumer attitudes toward online advertising. Similarly, Suh and Yi (2006) discovered that the attitude towards advertisements directly affected consumers' attitudes towards brands and in turn their purchase intention. Consequently, with the formation of consumers' attitudes towards objects (Wolin et al., 2002), the beliefs and attitudes will influence their online shopping behaviour. Understanding these beliefs and attitudes are important because these affect consumers' brand attitudes and purchase intentions (Durvasula et al., 1993; Mehta, 2000). Hence, the authors contended that:

H5: Attitude towards social media advertising mediates the relationship between privacy and security concern, entertainment, credibility and consumers' purchase intention towards brands advertised on social media.

Figure 1 describes the proposed model of hypothesised relationships which was drawn from the literature reviewed.

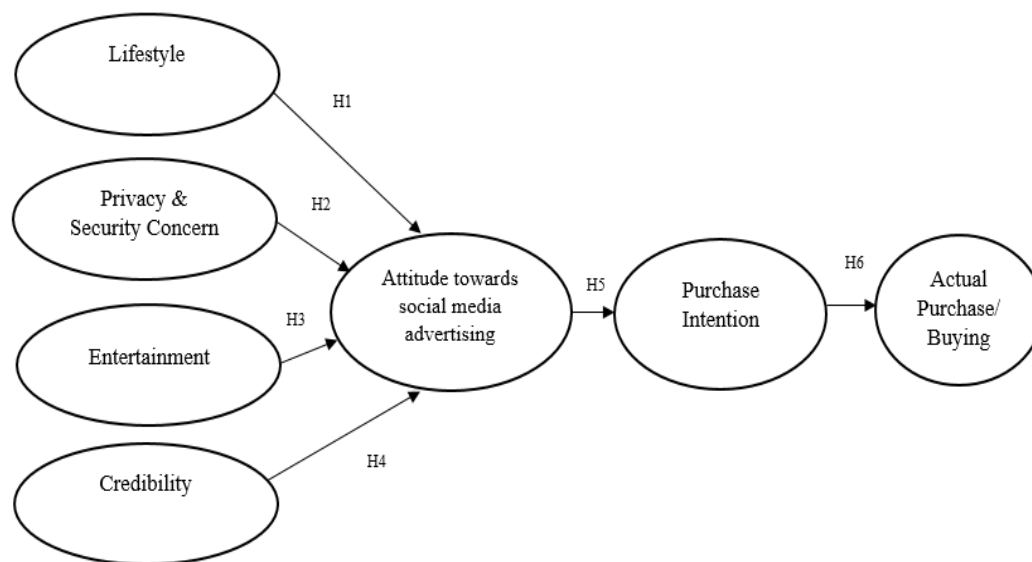


Figure 1. Research Model and Hypotheses

4. Methodology

4.1 Sample

A self-administered survey was distributed to a proportionate stratified random sampling of Gen Y consumers in selected malls in the Northern, Central and Southern regions of Malaysia. The consumers were not required to reveal their identities as it will restrict the opportunity to express their views freely without prejudice. The targeted Malaysian Gen Y must be social media users (from 21 to 38 years of age). This group was chosen based on the most recent census in 2010 which placed the population of Malaysian Gen Y at 6,475,049 of the total population of twenty-eight million (Department of Statistics Malaysia, 2010). Of this number, 1,824,190 resided in the Northern region, 3,244,376 in the Central region, and 1,406,483 in the Southern region.

Based on the total, the sample size was calculated using Raosoft Inc. (2004). A total of 385 respondents were surveyed from each of the regions, bringing the total number to 1,155 respondents. The researcher rounded this number to 1,200 respondents which are believed to be sufficient to achieve the objectives of this study. Prior to the distribution of questionnaires, the respondents were asked if they have had experience in purchasing products and services over social media. Only those who had the experience were allowed to participate in the survey. Data were collected between May and June 2015. Based on the total number of questionnaires that were completed during the interviews, essential information was missing from 113 that related to the variables required for the structural equation model. The incomplete questionnaires were discarded, leaving a total of 1,087 usable questionnaires for the analysis. Table 1 summarizes the demographic data of the recruited for the survey.

Table 1. Summary of Respondents Demographic Data

Demographics	Classification	Frequency	Percentage %
Gender	Male	572	52.6
	Female	515	47.4
Age	21-24	411	37.8
	25-28	212	19.5
	29-32	178	16.4
	33-35	165	15.2
	36-38	121	11.1
Ethnicity	Malay	459	42.2
	Chinese	363	33.4
	Indian	159	14.6
	Others	106	9.8
Region	Northern (Kedah, Penang, Perak & Perlis)	349	32.1
	Central (Kuala Lumpur, Selangor, Negeri Sembilan & Putrajaya)	377	34.7
	Southern (Melaka & Johor)	361	33.2
Education	Diploma	35	3.2
	Undergraduate	549	50.5
	Post graduate	448	41.2
	Doctorate	55	5.1
Monthly Income	Less than RM1,000	358	32.9
	RM1,001 - RM5,000	542	49.9
	RM5,001 - RM10,000	143	13.2
	RM10,001 - 20,000	44	4.0
Occupation	Student	536	49.3
	Self employed	44	4.0
	Employed	507	46.6

Of the total 1,087 literate respondents, 52.6% were males while 47.4% were females. Of which 42.2% of the respondents were Malays, 33.4 were Chinese, with 14.6% Indians. The largest demographic was the age group between 21-24 years (37.8%). More respondents were recruited in the central region compared to the other two. Besides, all responded were financially able.

Table 2 summarizes the shopping characteristics of the respondents. Based on the frequency of buying products ratio, a majority of the respondent's purchased products at least once a month (36.5%) while 10.1% perform online purchasing at least once a week. Majority of the respondents spend nearly 2-4 hours on social media every day while a minority spend less than an hour.

Table 2. Shopping Characteristics of Respondents

Demographics	Classification	Frequency
Frequency of buying products online	1 per week	110
	1 per month	397
	1 per three months	324
	1 per year	256
Hours spent on social media per day	Less than 1 hour	111
	1-2 hours	301
	2-4 hours	396
	4-6 hours	158
	6 hours and above	121
Purchases on sites advertised on social media in the last 12 months	Less than RM100	314
	RM101- RM 300	275
	RM301- RM 501	133
	RM501-RM1, 000	198
	RM1, 000 and above	167
Types of products frequently purchased on sites advertised on social media	Clothes	355
	Shoes	45
	Jewelry	22
	Sporting equipment	34
	Entertainment	144
	Health	33
	Beauty aids	65
	Food	89

Holidays	146
Electronics	44
Others	110

4.2 Measurement Instrument

The constructs used in this study was an already validated scale adapted from previous studies. All the variables were measured on a five-point Likert-type scales with 1 for “strongly disagree”; 2 for “disagree”; 3 for “neutral”; 4 for “agree”; and 5 for “strongly agree”.

4.3 Data Analysis

The research model for this study was tested using Partial Least Squares (PLS), a variance-based structural equation modeling method (Reinartz, Haenlein, & Henseler, 2009). The PLS method is most suitable for this study because it simultaneously permits the calculation of the reliability and validity of the theoretical constructs (outer or measurement model) as well as the estimation of the relationships between these constructs (inner or structural model) (Barroso, Cepeda, & Roldán, 2010). It uses available data to estimate the path relationships in the model with the objective of minimising the error terms of the endogenous constructs. PLS also concentrates on the prediction of dependent variables (Roldán & Sánchez-Franco, 2012). This study was carried out with the use of Smart PLS 3.0 (v.3.1.2) software (Ringle et al., 2014).

5. Results

5.1 Measurement Model

PLS evaluates the reflective measurement models by examining individual items; reliability, construct reliability, convergent validity, and discriminant validity (Hair, Sarstedt, Ringle, & Mena, 2012). It permits an instantaneous evaluation of the many regression equations modeled in Figure 1. However, the Confirmatory Factor Analysis (CFA) indicated items which did not fit the measurement model. The CFA was used to determine how well the model matches the observed data. It begins with the estimation of the measurement model using Smart PLS 3.0 (v.3.1.2) software (Ringle et al., 2014), followed by the examination of discriminate validity and composite reliability. Based on these examinations, a model of improved fit was then developed and analysed for overall fit statistics. The fitted model of the latent constructs was then combined with measured variables to form a structural model to test the hypotheses. The initial measurement model resulted in path diagrams shown in Figure 2. An examination of the path diagrams illustrated that some factor loadings and explained variances (R^2) for each observed variable were within acceptable ranges. The first criterion to be evaluated in CFA is the internal consistency reliability. The traditional criterion for internal consistency is Cronbach's Alpha, which provides an estimate of the reliability based on the inter-correlations of the

observed indicator variables (Hair et al., 2014). It is also appropriate to apply a different measure of internal consistency reliability known as composite reliability as this takes into account the different outer loadings of the indicator variables.

As depicted in Figure 2, certain unstandardised regression weights for the pooled constructs do not meet the required level. The individual item reliability is considered suitable when an item has a factor loading that is greater than 0.708 for its construct (Hair et al., 2014). Besides, composite reliability values of 0.60 to 0.70 are acceptable in exploratory research, while in advanced research, values between 0.70 and 0.90 are regarded as satisfactory (Nunnally & Bernstein, 1994). Researchers frequently observe weaker outer loadings in social science studies, especially when newly developed scales are used (Hulland, 1999). Rather than automatically eliminating indicators when their outer loading is below 0.70, researchers should carefully examine the effects of item removal on the composite reliability, as well as on the construct's content validity.

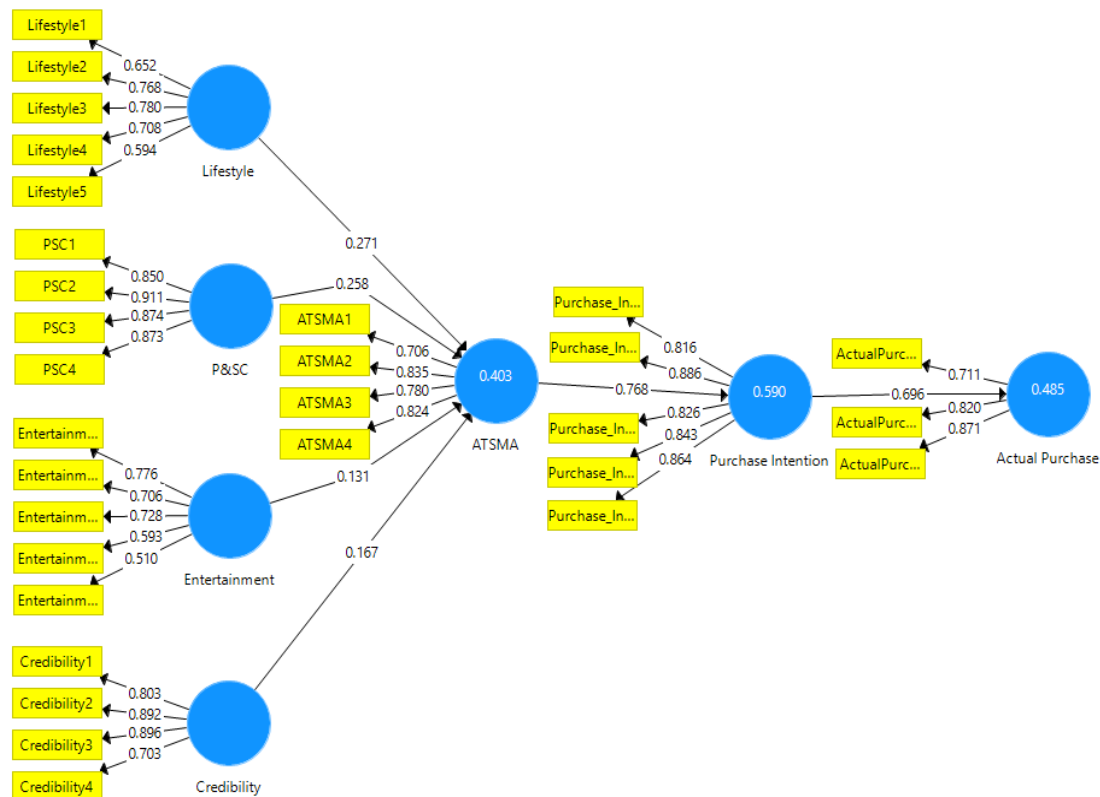


Figure 2. Initial Measurement Model

Generally, indicators with outer loadings between 0.40 and 0.70 should be considered for removal from the scale only when deleting the indicator leads to an increase in the composite reliability or the Average Variance Extracted (AVE) above the suggested threshold value (Hulland, 1999, as cited in Hair et al., 2014). Another consideration in the decision of whether to delete an indicator is the extent to which its removal affects content validity. Indicators with weaker loadings are sometimes retained on the basis of their contribution to content validity. Indicators with very low outer loadings (below 0.40) should, however, always be eliminated from the scale (Hair, Ringle, & Sarstedt, 2011). In this study, three reflective indicators “Sites that provide a transparent pricing policy would be an added value to attract me to repurchase (L5)”, “Social media advertising is interesting (E4)” and “Social media advertising is exciting (E5)” with outer loadings of 0.594, 0.593 and 0.510 respectively were subsequently deleted. These indicators were removed, especially as the removal increased the AVE of the Lifestyle and Entertainment variables from 0.495 and 0.449 to the acceptable value of 0.562 and 0.565, respectively (See Figure 3 and Table 3).

Upon deleting the problematic items based on the results of the first CFA, a second CFA was employed to test the modified measurement model with the reduced item pool. The same procedures and techniques used for the first CFA were re-employed for the second CFA. The composite reliability of all the constructs was satisfactory as the composite reliability of more than 0.8 (above the acceptable threshold) was observed. Thus, they meet the requirements of construct reliability since the composite reliabilities were greater than 0.7 (Table 3). Furthermore, to establish convergent validity, the outer loadings of the indicators as well as the Average Variance Extracted (AVE) are considered. The AVE is defined as the grand mean value of squared loadings of the indicators associated with the construct; that is, the sum of the squared loadings divided by the number of indicators (Hair et al., 2014). Hence, the AVE is equivalent to the commonality of a construct. An AVE value of 0.50 or higher indicates that on average, the construct explains more than half of the variance of its indicators while an AVE of less than 0.5 indicates that, on average, more error remains in the items than the variance explained by the construct (p. 103). After deletions and the multicollinearity between some items in the constructs, factor loading and AVE improved as shown in Figure 3.

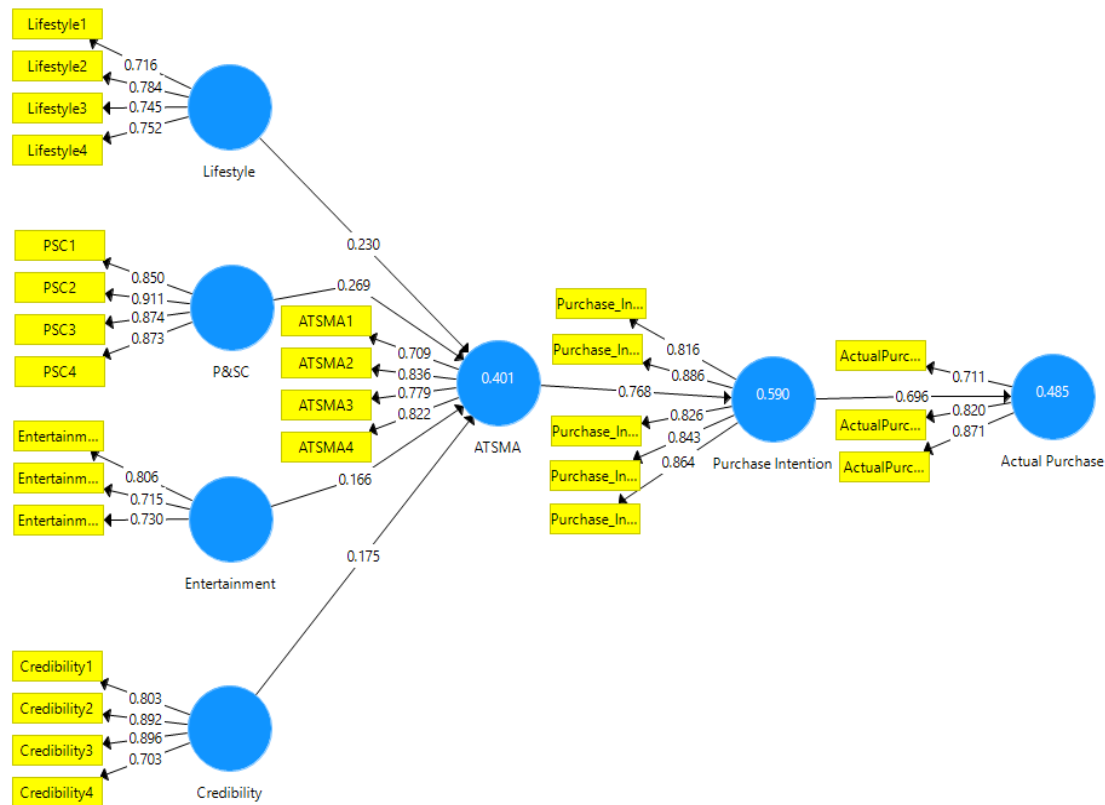


Figure 3. The New Factor Loading after Deletion

The AVE for all reflective constructs and dimensions achieved convergent validity, because they ranged between 0.562 and 0.770 (Table 3) (Hair et al., 2014; Roldán & Sánchez-Franco, 2012), hence, are reliable for this research.

Table 3. Measurement Model for the Factors

Construct/dimension/indicator	Loading	Composite Reliability	AVE	Cronbach's Alpha (>0.7)
<i>Lifestyle</i>		0.837	0.562	0.744
I will purchase products or services advertised on social media if it enhances my lifestyle (L1).	0.716			
I will repurchase on social media provided the website offers good value for money (L2).	0.784			
I will repurchase products/services on social media, if the firm has partners and suppliers that have a strong brand in the market (L3).	0.745			

Adverts on social media help me know which products will or will not reflect the sort of person I am (L4).	0.752		
<i>Privacy and Security Concern</i>	0.930	0.770	0.900
Social media sites that will not share my online shopping behaviour will attract me to repurchase (PSC1).	0.850		
I will only repurchase from a website that keeps my entire personal information private (PSC2).	0.911		
I will repurchase products and services advertised on social media, if the firm assures that my financial details will not be accessible by a third party (PS0C3).	0.874		
I fear that information has not been stored safely (PSC4).	0.873		
<i>Entertainment</i>	0.795	0.565	0.632
Social media advertising is entertaining (E1).	0.806		
Social media advertising is enjoyable (E2).	0.715		
Social media advertising is pleasing (E3).	0.730		
<i>Credibility</i>	0.896	0.685	0.846
Social media advertising is credible (C1).	0.803		
Social media advertising is trustworthy (C2).	0.892		
Social media advertising is believable (C3).	0.896		
Social media advertising delivers what they promise (C4).	0.703		
<i>Attitude towards social media advertising</i>	0.867	0.621	0.796
I will repurchase on sites advertised on social media if the online store provides a promise to refund, or exchange policy (ATSMA1).	0.709		
I prefer that social media sites show ads that are targeted to my interests (ATSMA2).	0.836		
I refer to advertising because it allows me to enjoy the best deal out of the competing products advertised. (ATSMA3).	0.779		

I support advertising because it plays an important part in my buying decision. (AT SMA4).	0.822			
<i>Purchase Intention</i>	0.927	0.718	0.902	
I intend to continue purchasing on sites advertised on social media in the future (PI1).	0.816			
The likelihood of purchasing on sites advertised on social media is high (PI2).	0.886			
I am willing to recommend my friends to buy brands advertised on social media (PI3).	0.826			
I plan to continue purchasing on sites advertised on social media frequently (PI4).	0.843			
My willingness to purchase on sites advertised on social media is high (PI5).	0.864			
<i>Actual purchase</i>	0.845	0.646	0.721	
I have purchased on sites advertised on social media at least once (AP1).	0.711			
I have purchased on sites advertised on social media in the past 4 weeks (AP2).	0.820			
I purchase on sites advertised on social media frequently (AP3).	0.871			

Source: Primary data.

In addition, discriminant validity was tested by comparing the square root of AVE with the correlations between constructs (Table 4). This was examined using the Fornell and Larcker (1981) standard, which calls for a construct's AVE to be larger than the square of its largest correlation with any construct. Table 4 highlighted that each construct was strongly related to its own measures than to others. Combined together, all the values provided satisfactory confidence that the reflective measurement model fitted the data well.

Table 4. Discriminant Validity

	ATSMA	AP	CR	EN	LI	P&SC	PI
ATSMA	0.788						
Actual purchase	0.535	0.804					
Credibility	0.467	0.570	0.827				
Entertainment	0.354	0.207	0.212	0.752			
Lifestyle	0.546	0.620	0.515	0.499	0.750		
Privacy & security concern	0.503	0.343	0.513	0.132	0.531	0.877	
Purchase intention	0.768	0.696	0.456	0.341	0.659	0.496	0.847

5.2 Structural Model (Hypotheses Testing)

Upon evaluating the proposed measurement model using a series of CFAs, a structural model was employed to assess the hypothetical relationships between four belief dimensions and attitude towards social media advertising, purchase intention and actual purchase. The overall model fit as well as path estimates for the four hypothetical relationships among latent variables were measured in the structural model. The structural model was tested using mediation analysis and regression to check the path coefficients and the effects of the mediating variables. Henseler et al. (2009) stated that the use of bootstrapping (5000 resamples) generates standard errors and t-statistics to evaluate the statistical significance of the path coefficients. As the calculation of the bootstrapping confidence intervals of standardised regression coefficients forms part of the analysis, the bootstrap samples (5000 resamples) were used to estimate the PLS path model to generate standard errors and t-statistics which is consistent with Hair et al. (2014). Based on the bootstrap distribution, it is possible to determine the standard error and standard deviation of the estimated coefficients. This was achieved using the percentile bootstrap regression 95% confidence interval. Hayes (2009) found that when an interval for a mediating effect does not contain zero, the indirect effect is significantly different from zero with a 95% confidence level.

Following the research framework, the study tested the relationship between purchase intention and the independent variables (lifestyle, privacy and security concern, entertainment and credibility) in order to justify the existing relationship before analysing the mediating effect between the constructs. The direct effect should be significant if the mediator is not included in the model (Hair et al., 2014). Even though this is not a necessary condition (Zhao, Lynch, & Chen, 2010), this makes the mediator analysis much easier to understand and interpret. Figure 4 and Table 5 summarise the relationship or the direct effects of the independent constructs on the dependent variable. The standardised estimates for lifestyle (0.475; 0.000), privacy and security concern (0.185; 0.000), entertainment (0.065; 0.005) and credibility (0.111; 0.000) indicated a significantly direct relationship between the independent variables and the purchase

intention.

5.2.1 Model with Direct Effects

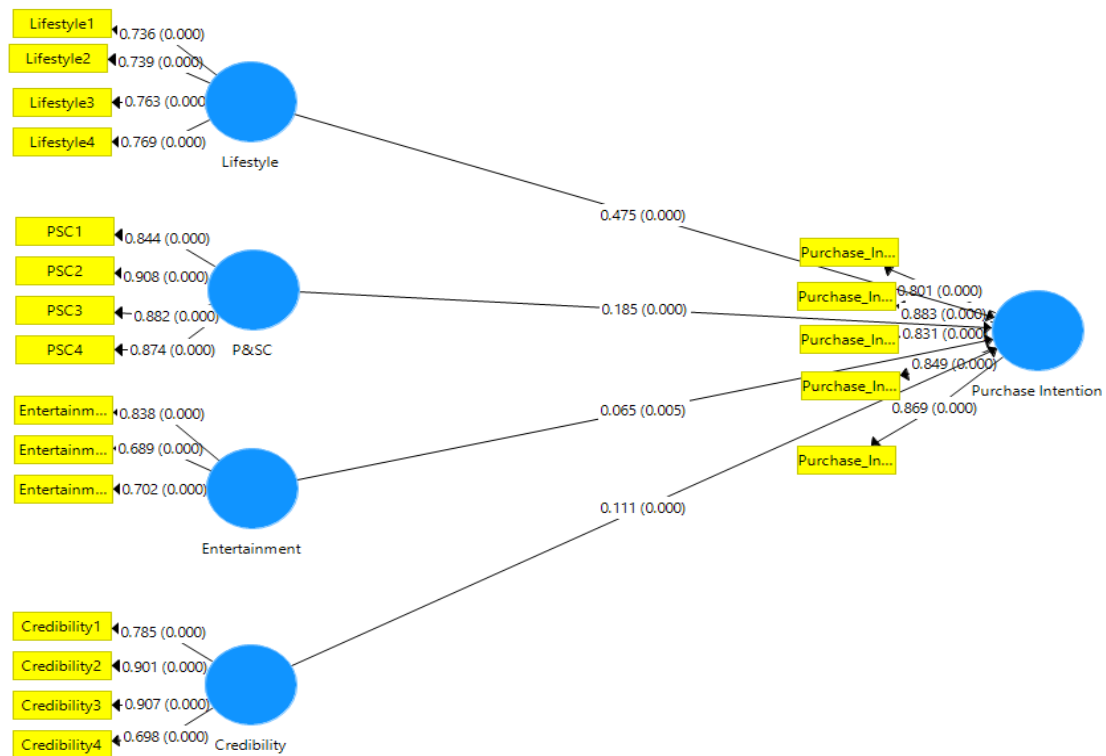


Figure 4. Summary of Direct Effect Tests

Table 5. Total Effects Test

Total Effects					
	Original Sample	Sample Mean	Std. Deviation	T Statistics	P Values
Credibility-PI	0.111	0.112	0.027	4.051	0.000
Entertainment- PI	0.065	0.066	0.023	2.814	0.005
Lifestyle- PI	0.457	0.476	0.030	15.666	0.000
Privacy and security concern-PI	0.185	0.183	0.035	5.337	0.000

PI indicates purchase intention.

In a PLS path model, a positive direct effect (without a mediator variable) would become smaller upon the inclusion of a mediator variable. When the Variance Accounted For (VAF) has very large outcomes of above 80%, a full mediation can be assumed (Hair et al., 2014). Thence, Figure 5 and Table 6 illustrate the mediated effects of lifestyle, privacy and security concern, entertainment and credibility on purchase intention.

5.2.2 Model with Mediated Effects

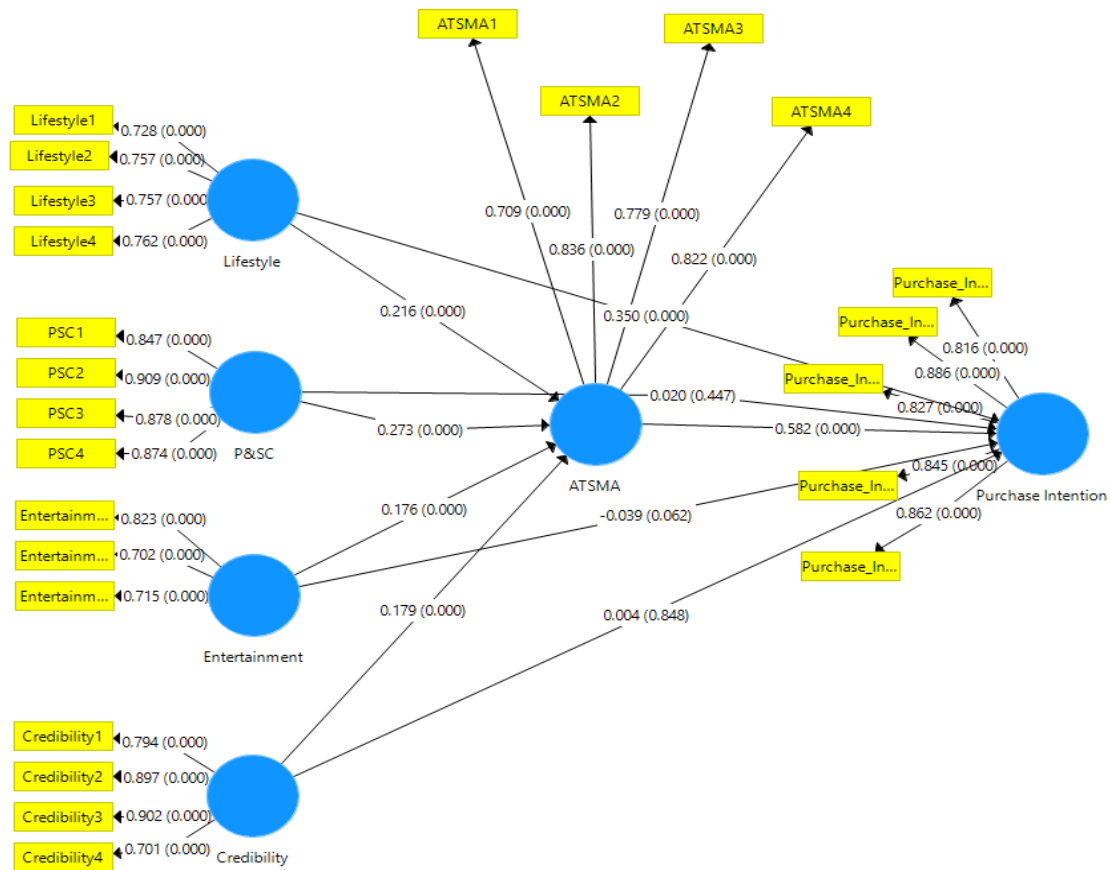


Figure 5. Summary of Mediating Effects

Table 6. Indirect Effects Test

Indirect Effects					
	Original Sample	Sample Mean	Std. Deviation	T Statistics	P Values
Credibility-ATSMA					
Credibility-PI	0.104	0.104	0.015	7.067	0.000
Entertainment- ATSMA					
Entertainment-PI	0.102	0.103	0.014	7.331	0.000
Lifestyle- ATSMA					
Lifestyle-PI	0.126	0.126	0.020	6.316	0.000
Privacy and security concern- ATSMA					
Privacy and security concern-PI	0.159	0.158	0.018	8.951	0.000

ATSMA indicates the attitude towards social media advertising.

PI indicates purchase intention.

Based on Figure 5 and Table 6, lifestyle garnered strong support. The direct effect of lifestyle was significant (0.475; sig=0.000, see Figure 4); however, when the mediator was included in the model, the significance of lifestyle to purchase intention reduced (0.350; sig=0.000, Figure 5). The indirect effect of lifestyle on purchase intention (0.126; t=6.316; p<0.000) indicated that the attitude towards social media advertising partially mediates the relationship between lifestyle and purchase intention. This hypothesis was consistent with Hung's (2009) belief that lifestyle usually reflects a person's attitudes, values or worldview, and reflects their personal taste. The result indicated that a positive lifestyle affects attitude towards products and services advertised on social media. So, understanding the relationship between lifestyle and attitude will definitely lead to positive outcomes for advertisers, especially when targeting Gen Y consumers in Malaysia. Hypothesis 1 was accepted.

Based on the findings from this study, Gen Y in Malaysia will repurchase on sites advertised on social media if the website offers good value for money, the products or services advertised enhance their lifestyle, or if the firm has partners and suppliers that have a strong brand in the market. Advertisers can use promotional appeals, discount periods and the like to motivate the consumers. This in turn interests the consumers to try new products and styles because they most often want to be the trendsetters. This would consequently lead them to become opinion leaders who in turn could influence the buying patterns of their peers, friends and relatives. Therefore, advertisers must always keep Gen Y consumers' in Malaysia up-to-date of newly introduced products to try to motivate them to try and spread a positive

word of mouth of their products and brands to friends and followers.

Similarly, privacy and security concern has a positive significance to purchase intention (0.185; sig=0.000, Figure 4). When attitude towards social media advertising is added as the mediator, privacy and security concern ceases to have any significance to purchase intention (0.020; sig=0.447; t=8.951, see Figure 5 and Table 6). This indicated that attitude towards social media advertising mediates the relationship between privacy, security concern and purchase intention. The finding is similar to Udo (2001) and Flavián and Guinalfú, (2006) who pointed out the importance of protection of privacy which is the greatest concern of internet purchasers. Also, Adam et al. (2007) added that consumers' perceptions of privacy and security affect their willingness to purchase from online retailers. Hence, hypothesis 2 was accepted. Besides, findings from the study indicated that consumers will repurchase products and services advertised on social media, if the firm assures that their financial details will not be accessible by a third party. They also worry about receiving ads which they are not interested in as a result of their shopping behaviour being monitored. Therefore, advertising managers need to understand the fears of Gen Y in Malaysia when it comes to protecting their private information. They should pay more attention to how Gen Y perceives the advertisement when making advertising decisions. Respondents or consumers have the right to have control over who can see their information, hence, strongly imply that sites advertised on social media should create a stricter and a more comprehensive level of privacy policies. For that reason, advertisers on social media should create a secure site and inform their potential consumers in Malaysia that necessary security measures have been implemented as the consumers' privacy and security is of their utmost importance. They should also clearly state that they will do their best to minimise risks related to using social media as they respect and protect consumer's privacy.

On the other hand, entertainment and purchase intention also gained strong support (0.065; sig=0.005, Figure 4). This, however changes as the mediator (attitude) is incorporated into the model. With the inclusion of the mediator, entertainment indicated a negative significance to purchase intention (-0.039; sig=0.062). This implies that attitude towards social media mediates the relationship between entertainment and purchase intention. Entertainment is an essential factor influencing consumer attitude towards online advertising (Wang & Sun, 2010). This implies that in Malaysia, entertainment may form an emotional link between Gen Y consumers and social media advertising. Thus, hypothesis 3 was accepted.

Finally, the direct relationship between credibility and purchase intention was significant (0.111; sig=0.000; Figure 4). Nevertheless, when attitude towards social media advertising is added as the mediator, credibility ceases to have any significance to purchase intention. Based on Figure 5, attitude towards social media advertising fully mediates the relationship between credibility and purchase intention. Although the internet was found to be the least credible medium to advertise in (Moore &

Rodgers, 2005), Gen Y consumers in Malaysia feel differently about it as they believe the advertisements by strong brands or recommendations by friends (e-word of mouth). This supported Goldsmith et al. (2000) findings, where a message on the internet has less credibility than a printed message except the message is connected to a strong brand and the person who brings the message. Thence, hypothesis 4 was supported. This is because, when consumers are in doubt about the advertising messages that they receive or are uncertain of the media source of the message, they will not be interested to proceed with the product. This may result in them researching the product for more information or to completely avoid the advertising message. Therefore, advertiser and managers need to establish a business relationship with already strong brands in the market to ensure the reach of their advertisements to Gen Y consumers in Malaysia as they only correspond to advertising on social media if they deem it credible, trustworthy, and believable and receive what was promised.

The results strongly indicated that attitude towards social media advertising fully mediates the relationship between belief factors (lifestyle, privacy and security concern, entertainment and credibility) and purchase intention. Therefore, hypothesis 5 was accepted. The effects of the belief factors on the endogenous variables are listed in Table 7.

Table 7. Effects on Endogenous Variables

Effects on endogenous variables	Direct effect	t-Value (bootstrap)	P-value
<i>Attitude towards social media advertising</i> ($R^2=0.401$; $Q^2=0.209$)			
• Lifestyle	0.230***	7.339	0.000
• Privacy & security concern	0.269***	9.478	0.000
• Entertainment	0.166**	6.953	0.000
• Credibility	0.175**	0.075	0.000
<i>Purchase Intention</i> ($R^2=0.590$ / $Q^2=0.418$)			
• Attitude towards SMA	0.768***	55.720	0.000
• Lifestyle	0.177**	6.978	0.000
• Privacy & security concern	0.206***	9.145	0.000
• Entertainment	0.128**	6.969	0.000
• Credibility	0.135**	7.052	0.000
<i>Actual Purchase/Buying</i> ($R^2=0.485$ / $Q^2=0.292$)			
• Purchase Intention	0.696***	36.983	0.001
• Attitude towards SMA	0.535***	26.327	0.000

• Lifestyle	0.123**	6.579	0.000
• Privacy & security concern	0.144**	8.583	0.000
• Entertainment	0.089 ns	6.801	0.000
• Credibility	0.094 ns	6.942	0.000

Sig. denotes a significant direct effect at 0.05. Nsig. denotes a non-significant direct effect at 0.05.

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

Based on Table 7, the highest effect on attitude towards social media advertising comes from privacy and security concern, followed by credibility and lifestyle. This implies that Gen Y consumers' in Malaysia are concerned about the privacy of their profiles on social media which greatly influences their attitude towards products and services advertised on social media. In terms of the impact of the exogenous variables on purchase intention, lifestyle was found to have the greatest total impact, followed by credibility and privacy and security concern. In a nutshell, the decision to purchase or not to on sites advertised on social media are influenced by lifestyle patterns in Malaysia.

6. Implications, Limitations and Future Research

6.1 Academic Implications

The academic contribution of this study lies in outlining the key belief factors that influence consumers' attitudes towards social media advertising. This study provided a framework to guide social media advertising, which can be potential research topics for future investigation. The findings may also help academic researchers to have a better understanding of the complex and ever-changing world of social media advertising and what affects the attitude, purchase intention and buying behaviour of consumers.

This study provided an insight into the understanding of consumers' attitudes and purchasing behaviours in the context of social media advertising, which is currently lacking. It further contributed to understanding the existing theories by focusing on consumers' attitudes and behaviours toward brands advertised on social media. The understanding of consumers' attitude will allow researchers to identify other key factors that could eventually contribute to the effectiveness of social media advertising.

6.2 Practical Implications

This research can also be used as a guideline for advertisers who are developing new advertisements and marketing mix for social media advertising or who are considering the use of a current format of social media advertising. Consumers' attitudes are closely related to brand preference and purchasing behaviours, which eventually promote sales. Since the ultimate goal for advertisers is to increase brand images and product sales, a better understanding of the relationships between consumers' attitudes and

purchasing behaviours will benefit them to achieve their goals. As social media advertising is becoming more integrated with marketing plans, the current study may provide insight advertising strategies.

The current study provides advertisers with elements that will stimulate responses and values that may encourage consumers to respond positively to products and services advertised on social media. It can also offer better information for corporate advertisers in applying social media advertising to differentiate themselves from their competitors. By doing so, Malaysian businesses can implement successful advertising campaigns. The insight provided by this study can be used in marketing strategy as it indicated which belief factors should be given more attention based on the positive outcomes. For example, lifestyle, privacy and security concern and credibility positively affected Gen Y's attitude towards social media advertising. Therefore, advertisers and managers need to understand the different lifestyle segments of the consumers. Such understandings appear particularly important for efficient and effective management of the promotion mix like advertising, public relations, sales and promotion in order to engage social media users and increase purchase.

6.3 Limitations and Future Research

The target population for this study was the Gen Y social media users located in the Northern, Central and Southern regions of Malaysia. The sample size may not necessarily be a good representation of the total population of the country. However, the results can be accepted as a representative of the area that participated in this research, which is Northern, Central and Southern regions. It would also be useful to study consumers from other demographics to engage more Malaysian consumers by determining their attitude towards social media advertising and integrating these into advertising plans and promotion mixes.

The model developed in this study to measure Gen Y's attitude and purchase intention could be tested with a different demographic profile in order to validate, generalise, or modify the model. Future research should consider other demographics or move into a cross-cultural study. This direction may shed some light on the influence of cultural factors on social media advertising and how culture affects consumers' motivation to create, exchange, and actively engage in news feeds or posts. Another related issue is the degree to which cultural factors affect consumer responsiveness to social media advertising and promotion. Cultural dimension needs to be explored to examine whether and how they affect consumer response to social media advertising in various cultures. Such research has implications for homing in on what needs to be adapted even when a standardised strategy is used. Alternatively, a cross-cultural study can be conducted to compare Malaysian and non-Malaysian social media users, as well as expanding the study to cover generational differences in purchase behaviour. This will help to understand the effects of the online advertising strategy to a larger extent.

References

- Adam, A. M., Aderet, A., & Sadeh, A. (2007). Does ethics matter to e-consumers. *Journal of Internet Commerce*, 6(2), 19-34. https://doi.org/10.1300/J179v06n02_03
- Alex, C. (2013). *BI Intelligence Report: The State Of Social Media Advertising, And Where It's Headed*.
- Ashworth, L., & Free, C. (2006). Marketing dataveillance and digital privacy: Using theories of justice to understand consumers' online privacy concerns. *Journal of Business Ethics*, 67, 107. <https://doi.org/10.1007/s10551-006-9007-7>
- Barnes, N. G., Lescault, A. M., & Andonian, J. (2012). *Social media surge by the 2012 Fortune 500: Increase use of blogs, Facebook, Twitter and more*. Charlton College of Business Center for Marketing Research, University of Massachusetts Dartmouth, North Dartmouth, MA. Retrieved November 5, 2013, from <http://www.umassd.edu/cmr/socialmedia/2012fortune500/>
- Barroso, C., Cepeda, G., & Roldán, J. L. (2010). Applying maximum likelihood and PLS on different sample sizes: Studies on SERVQUAL model and employee behaviour model. In V. Esposito Vinzi, W. W. Chin, J. Henseler, & H. Wang (Eds.), *Handbook of partial least squares: Concepts, methods and applications* (pp. 427-447). Berlin: Springer-Verlag.
- Bell, W. (1958). In M. William, & G. P. Dobriner (Eds.), *Social Choice, Life Style, and Suburban Residence, in Rhe Suburban Community* (pp. 225-242). Putnam's Sons, New York.
- Blackwell, R. D., Miniard, P. W., & Engel, J. F. (2001). *Consumer Behavior*. TX: Harcourt College Publisher.
- Broadbridge, A. M., Maxwell, G. A., & Ogden, S. M. (2007b). Students' views of retail employment—Key findings from generation Ys. *International Journal of Retail and Distribution Management*, 35(12), 982-992. <https://doi.org/10.1108/09590550710835210>
- Chen, Q., & Wells, W. D. (1999). Attitude toward the Site. *Journal of Advertising Research*, 39(5), 27-54.
- Culnan, M., McHugh, P., & Zubillaga, J. (2010). How large US companies can use twitter and other social media to gain business value. *MIS Quarterly Executive*, 9(4), 243-259.
- Dawn, B. V., & Thomas, L. P. (2013). Generation Y values and lifestyle segments. *Journal of Consumer Marketing*, 30(7), 597-606. <https://doi.org/10.1108/JCM-07-2013-0650>
- Department of Statistics Malaysia. (2010). Retrieved September 24, 2014, from http://www.statistics.gov.my/portal/index.php?option=com_content&view=article&id=259&Itemid=138&lang=en
- Dillon, W. R., & Kumar, A. (1985). Attitude organization and the attitude-behavior relation: A critique of Bagozzi and Burnkrant's reanalysis of Fishbein and Ajzen. *Journal of Personality and Social Psychology*, 49(1), 33-46. <https://doi.org/10.1037/0022-3514.49.1.33>

- Dolnicar, S., & Jordaan, Y. (2007). A market-oriented approach to responsibly managing information privacy concerns in direct marketing. *Journal of Advertising*, 36(2), 123. <https://doi.org/10.2753/JOA0091-3367360209>
- Drake-Bridges, E., & Burgess, B. (2010). Personal preferences of tween shoppers. *Journal of Fashion Marketing and Management*, 14(4), 624-633. <https://doi.org/10.1108/13612021011081788>
- Dreze, X., & Zufryden, F. (1998). Is internet advertising ready for prime time? *Journal of Advertising Research*, 38(3), 7-18.
- Durvasula, S., Andrews, J. C., Lysonski, S., & Netemeyer, R. G. (1993). Assessing the Cross-national Applicability of Consumer Behavior Models: A Model of Attitude toward Advertising in General. *Journal of Consumer Research*, 19(4), 626-636. <https://doi.org/10.1086/209327>
- Durvasula, S., Mehta, S. C., Andrewst, C. J., & Lysonski, S. (1997). Advertising Beliefs and Attitudes: Are Students and General Consumers Indeed Different. *Journal of Asian Business*, 13(1), 71-84.
- Economic Planning Unit Malaysia. (2010). Retrieved October 15, 2014, from <http://www.epu.gov.my/>
- Fishbein, M., & Ajzen, I. (1974). Attitudes towards objects as predictors of single and multiple behavioral criteria. *Psychological Review*, 81(1), 59-74. <https://doi.org/10.1037/h0035872>
- Fishbein, M. (1967a). A consideration of beliefs, and their role in attitude measurement. In M. Fishbein (Ed.), *Readings in attitude theory and measurement*. New York: John Wiley & Sons, Inc.
- Fishbein, M., & Raven, B. H. (1962). The AB scales: An operational definition of belief and attitude. *Human Relations*, 15, 35-44. <https://doi.org/10.1177/001872676201500104>
- Flaviaa'n, C., & Guinali'u, M. (2006). Consumer trust, perceived security and privacy policy: Three basic elements of loyalty to a web site. *Industrial Management & Data Systems*, 106(5), 601-620. <https://doi.org/10.1108/02635570610666403>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* (Pre-1986), 18(1), 39. <https://doi.org/10.1177/002224378101800104>
- Goldsmith, R. E., Lafferty, B. A., & Newell, S. J. (2000). The impact of corporate credibility and celebrity credibility on consumer reaction to advertisements and brands. *Journal of Advertising*, 29(3), 43-54. <https://doi.org/10.1080/00913367.2000.10673616>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications, Inc. Thousand Oaks, California.
- Hair, J. F., Ringle, C., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-152. <https://doi.org/10.2753/MTP1069-6679190202>
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40, 414-433. <https://doi.org/10.1007/s11747-011-0261-6>

- Havihurst, R. J., & Feigenbaum, K. (1959). *Leisure and Life Style*, *American Sociologist*, 64, 396-404.
<https://doi.org/10.1086/222500>
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76(4), 408-420. <https://doi.org/10.1080/03637750903310360>
- Henseler, J., Christian, M. R., & Rudolf R. S. (2009). The Use of Partial Least Squares Path Modeling in International Marketing. In R. R. Sinkovics, & P. N. Ghauri (Eds.), *Advances in International Marketing* (Vol. 20, pp. 277-320). Bingley, UK: Emerald Group.
- Hof, R. (2011). *Online ad spend to overtake TV by 2016*. Retrieved February 25, 2014, from <http://www.forbes.com/sites/roberthof/2011/08/26/online-ad-spend-to-overtake-tv/>
- Hoffman, D. L., & T. Novak, P. (1996). Marketing in Hypermedia Computer-Mediated Environments: Conceptual Foundations. *Journal of Marketing*, 50-68. <https://doi.org/10.2307/1251841>
- Hoy, M. G., & Milne, G. (2010). Gender differences in privacy-related measures for young adult Facebook users. *Journal of Interactive Advertising*, 10(2), 28-45.
<https://doi.org/10.1080/15252019.2010.10722168>
- Hung, Y. S. (2009). *A Study on Consumer Behavior to Lifestyles and Product Attributes: A Case on Wine Products in Erlin Township at Changhua County* (Master's Thesis). Master's Program of Landscape & Recreation, Feng Chia University.
- IAB Social Advertising Best Practices. (2009). Retrieved February 26, 2014, from <http://www.iab.net>
- Jayasree, K. (2011). Lifestyle—A Tool for Understanding Buyer Behavior. *Int. Journal of Economics and Management*, 5(1), 283-298.
- Jenna, L., Ioni, L., & Herbert, C. B. (2013). Essential elements for recruitment and retention: Generation Y. *Education+Training*, 55(3), 272-290. <https://doi.org/10.1108/00400911311309323>
- Johnson, T., & Kaye, B. (1998). Cruising is Believing? Comparing Internet and Traditional News Sources on Media Credibility Measures. *Journalism and Mass Communication Quarterly*, 75(2), 325-340. <https://doi.org/10.1177/107769909807500208>
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, 53(1), 59-68. <https://doi.org/10.1016/j.bushor.2009.09.003>
- Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*, 54(3), 241-251.
- Lancaster, L. C., & Stillman, D. (2003). *When Generations Collide: Who They Are. Why They Clash. How to Solve the Generational Puzzle at Work*. Harperbusiness, New York, NY.
<https://doi.org/10.1016/j.bushor.2011.01.005>
- Li, M. J. (2009). *A Study on the Students' Cultural Consumption and Lifestyle in National Taiwan University of Science and Technology* (Master's Thesis). Arts Administration and Management, Department of Fine Arts, College of Arts, NTNU.

- Long-Yi, L., & Hsing-Yu, S. (2012). The Relationship of University Student's Lifestyle, Money Attitude, Personal Value and their Purchase Decision. *International Journal of Research in Management*, 1(1), 19.
- MacKenzie, S. B., & Lutz, R. J. (1989). An Empirical Examination of the Structural Antecedents of Attitude Toward the Ad in an Advertising Pretesting Context. *Journal of Marketing*, 53(2), 48-65. <https://doi.org/10.1177/002224298905300204>
- Martin, C. A. (2005). From high maintenance to high productivity. *Industry and Commercial Training*, 37(1), 39-44. <https://doi.org/10.1108/00197850510699965>
- Mehta, A. (2000). Advertising Attitudes and Advertising Effectiveness. *Journal of Advertising Research*, 40(3), 67-72. <https://doi.org/10.2501/JAR-40-3-67-72>
- Milne, G. R. (2000). Privacy and ethical issues in database/interactive marketing and public policy: A research framework and overview of the special issue. *Journal of Public Policy & Marketing*, 19(1), 1. <https://doi.org/10.1509/jppm.19.1.1.16934>
- Moore, J. J., & Rodgers, L. R. (2005). An Examination of Advertising Credibility and Skepticism in Five Different Media Using the Persuasion Knowledge Model. *American Academy of Advertising Conference Proceedings, Januari 1*, 10.
- Morton, L. P. (2002). Targeting generation y. *Public Relations Quarterly*, 47(2), 46-48.
- Neti, S. (2011). Social Media and its Role in Marketing. *International Journal of Enterprise Computing and Business Systems*, 1(2), 1-15.
- Noble, S. M., Haytko, D. L., & Phillips, J. (2009). What drives college-age Generation Y consumers? *Journal of Business Research*, 62(6), 617-628. <https://doi.org/10.1016/j.jbusres.2008.01.020>
- Nunnally, J. (1978). *Psychometric Theory*. New York: McGraw-Hill.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York.
- Okazaki, S., & Charles R. T. (2013). Social media and international advertising: Theoretical challenges and future directions. *International Marketing Review*, 30(1), 56-71. <https://doi.org/10.1108/02651331311298573>
- Pollay, R. W., & Mittal, B. (1993). Here's the beef: Factors, determinants and segments in consumer criticism of advertising. *Journal of Marketing*, 57(7), 99-114. <https://doi.org/10.1177/002224299305700307>
- Racolta-Paina, N. D., & Luca, T. A. (2010). Several considerations regarding the online consumer in the 21st century—A theoretical approach. *Management & Marketing*, 5(2), 85-100.
- Raosoft Inc. (2004). Retrieved September 24, 2017, from <http://www.raosoft.com/samplesize.html>
- Reinartz, W. J., Michael, H., & Jörg, H. (2009). An Empirical Comparison of the Efficacy of Covariance Based and Variance-Based SEM. *International Journal of Market Research*, 26(4), 332-344. <https://doi.org/10.1016/j.ijresmar.2009.08.001>

- Ringle, C. M., Wende, S., & Becker, J.-M. (2014). *Smartpls 3.0. Hamburg: SmartPLS*. Retrieved from <http://www.smartpls.com>
- Roldán, J. L., & Sánchez-Franco, M. J. (2012). In M. Mora, & O. A. Gelman (Eds.), *Variance based structural equation modeling: Guidelines for using partial least squares in information systems research* (p. 296). <https://doi.org/10.4018/978-1-4666-0179-6.ch010>
- Ruth, N., Bolton, A., Parasuraman, A. H., Nanne, M., Sertan, K., Thorsten, G., & David, S. (2013). Understanding Generation Y and their use of social media: A review and research agenda. *Journal of Service Management*, 24(3), 245-267. <https://doi.org/10.1108/09564231311326987>
- Shavitt, S., Lowrey, P., & Haefner, J. (1998). Public attitudes towards advertising: More favourable than you might think. *Journal of Advertising Research*, 38(4), 7-22.
- Shaw, M. E., & Wright, J. M. (1967). *Scales for the Measurement of Attitude*. New York: McGraw-Hill.
- Shaw, S., & Fairhurst, D. (2008). Engaging a new generation of graduates. *Education+Training*, 50(5), 366-378. <https://doi.org/10.1108/00400910810889057>
- Sinderen, M. V., & Almeida, J. P. A. (2011). Empowering enterprises through next generation enterprise computing. *Enterprise Information Systems*, 5(1), 1-8. <https://doi.org/10.1080/17517575.2010.528802>
- Smith, K. T. (2012). Longitudinal study of digital marketing strategies targeting Millennials. *The Journal of Consumer Marketing*, 29(2), 86-92. <https://doi.org/10.1108/07363761211206339>
- Solka, A., Jackson, V. P., & Lee, M. (2011). The influence of gender and culture on Generation Y consumer decision making styles. *The International Review of Retail, Distribution and Consumer Research*, 21(4), 391-409. <https://doi.org/10.1080/09593969.2011.596554>
- Steenkamp, & Raisinghani, M. (Eds.). (n.d.). *Research Methodologies, Innovations and Philosophies in Software Systems Engineering and Information Systems* (pp. 193-221). Hershey, PA: Information Science Reference.
- Suh, J. C., & Yi, Y. (2006). When brand attitudes affect the customer satisfaction-loyalty relation: The moderating role of product involvement. *Journal of Consumer Psychology*, 16(2), 145-155. https://doi.org/10.1207/s15327663jcp1602_5
- The Nielsen Report. (2010). *Paid Social Media Advertising; Industry update and best practices*. Vizu. Retrieved from <http://www.nielsen.com>
- The Nielsen Report. (2013). *Paid Social Media Advertising; Industry update and best practices*. Vizu. Retrieved from <http://www.nielsen.com>
- Udo, G. (2001). Privacy and security concerns as major barriers for e-commerce: A survey study. *Information Management & Computer Security*, 9(4), 165-174. <https://doi.org/10.1108/EUM0000000005808>

- Wang, Y., & Sun, S. (2010). Assessing beliefs, attitudes and behavioral responses toward online advertising in three countries. *International Business Review*, 19(4), 333-344. <https://doi.org/10.1016/j.ibusrev.2010.01.004>
- Wendy, L. F., & Statia, E. (2012). Understanding the Role of Social Media in Destination Marketing. *Tourismos: An International Multidisciplinary Journal of Tourism*, 7(1), 193-211.
- Wolin, L., Korgaonkar, P., & Lund, D. (2002). Beliefs, attitudes and behavior towards web advertising. *International Journal of Advertising*, 21(1), 87-113. <https://doi.org/10.1080/02650487.2002.11104918>
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and Truths about mediation analysis. *Journal of Consumer Research*, 37, 197-206. <https://doi.org/10.1086/651257>