

# The Effects of Malaysian Consumer's Emotions on Attitude Towards Mobile Advertising of Cosmetic Products

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## Abstract

The purpose of this paper is to examine the relationship between positive emotions (happiness, contentment, pride), negative emotions (sadness, fear, shame), and the attitudes of consumers towards positive and negative appeals in mobile advertising of cosmetics. Two stages of experiments were conducted. Firstly, selecting and validating two advertisements that emit positive and negative emotions. Secondly, examining the effects of positive and negative emotions on consumer attitudes towards positive and negative appeals in advertising. Quantitative analysis was used to test the hypotheses. A total of 338 respondents participated in an online survey, and data were quantitatively analysed via PLS-SEM. The findings show that positive emotions have significant positive effects on attitudes towards the positive appeal. Meanwhile, the negative emotions have significant negative effects on attitudes towards the negative appeal. This study also revealed negative emotions influence positive attitudes towards negative appeals. Advertisers may enhance their advertising effectiveness by embedding positive and negative emotions.

**Keywords:** attitude toward mobile advertising, contentment, emotions, fear, happiness, pride, sadness, shame

## 1.0 Introduction

The rapid development of electronic commerce (e-commerce) and mobile commerce (m-commerce) opened a great opportunity for the growth of mobile marketing (See & Goh, 2020). According to Statista (2021), it was estimated the number of smartphone users in Malaysia to reach 29 million by 2021, and that number is expected to increase another 1.74 million by 2025. With the rapid growth of smartphone penetration nowadays (Osman & Leng, 2020), the number

of smartphone users is projected to reach up to 6.841 billion users in 2023, globally (Statista, 2021). Online marketing is becoming more of an attractive channel for information distribution that led to mobile marketing (Jan *et al.*, 2019). Mobile marketing is a form of interactive marketing in which the marketers use software applications, advertisements, and text notifications to communicate with consumers through tablets, smartphones, and other mobile devices, etc (Jan *et al.*, 2019; Liu *et al.*, 2019). Therefore, due to the increase in the penetration of mobile devices, a new marketing channel of mobile advertising was created (Lu *et al.*, 2019).

Mobile advertising is referred as the new business platform to engage with consumers using mobile platforms to deliver the promotional advertisement to purchase the products and services (Wong *et al.*, 2015). Mobile advertising is also known as the advertising media for goods, services, and ideas that can be sent through and/or received by smartphones, Personal Digital Assistants (PDA), and other portable mobile devices (Soroa *et al.*, 2010; Disastra *et al.*, 2019). Mobile advertising has different characteristics from other advertising media, such as providing sufficient content, good interactivity, precise positioning, and low operating costs; therefore, businesses focus on mobile advertising (Jan *et al.*, 2019; Disastra *et al.*, 2019). In addition, since consumers usually carry their mobile devices with them anytime and anywhere, mobile advertising provides information directly to consumers by delivering advertisements in a personalised manner (Disastra *et al.*, 2019; Lu *et al.*, 2019). Marketers use this advantage to better reach their target audience.

Advertising is intended to influence behaviour and elicit a response (Jan *et al.*, 2019). Consumer attitudes towards advertising are determined by their behaviour and response, thus attitude is one of the most commonly used variables to study advertising effectiveness (Jan *et al.*, 2019; Martins *et al.*, 2019). Emotions play a vital role in consumer attitudes and decision-making towards advertising, and perhaps, a key intermediary to explain the relationship between cognitive responses and behavioural responses to advertising stimuli (Kapoor *et al.*, 2019). Emotions influence consumer attitudes and responses towards advertising, which then influence the decision making (Hamelin *et al.*, 2017). The individual's emotional response caused by the advertisement will affect the attitude towards the advertisement itself, which in turn, will affect the behavioural intention. The emotional response to the advertisements will also have a greater

impact on consumers' intentions to purchase products or services (Kapoor *et al.*, 2019). According to Hamelin *et al.* (2017), emotions are the response to stimuli that will influence a human's immediate sensory environment and human function; therefore, emotions are strongly correlated to human attention, decision making, and memory.

Positive appeals evoke positive emotions such as happiness, contentment, pride, and love that can change people's effective experience on attitude, motivation, creativity, decision-making, and problem-solving abilities; which will, in turn, influence their purchase intention (Kujur & Singh, 2018). Negative appeals evoke negative emotions such as sadness, fear, shame, guilt, and anger that can influence consumer attitudes toward advertising; which will, in turn, influence their purchase intention (Erlandsson *et al.*, 2018; Kujur & Singh, 2018). According to Wu *et al.* (2018), both positive emotions (happy, passionate, comfortable) and negative emotions (sad, anxious, scared) are precursors to behavioural development toward online advertising in Taiwan's insurance industry. Although strong negative emotions can negatively affect attitudes, it can stimulate cognition then raises consumer's awareness when the exchanged information is related to personal interests, for example, when inspiring threats and fears, consumers will purchase insurance to prevent accident losses. In a similar view, Kemp *et al.* (2013) stated that negative emotions have a significant impact on higher purchase intentions towards hedonic products. In contrast, some past studies stated that negative emotions are more likely to cause negative attitudes and negative purchase intention (Brennan *et al.*, 2010; Pochun *et al.*, 2018). The findings from previous studies are still inconclusive.

In advertising literature, as compared to other factors, emotions in mobile advertising have received less attention (Liu *et al.*, 2019). Some of the previous studies focused on emotions from the insurance industry's online advertising (Wu *et al.*, 2018) and hedonic product advertisements (Kemp *et al.*, 2013). Therefore, another framework in a different setting is necessary, thus this research came up with mobile advertising from the cosmetic industry. In developed and developing countries, the cosmetics industry is ever growing (Hassali *et al.*, 2015). In Malaysia, cosmetics have the largest market share, with a total import value of US\$292 million (Cheong *et al.*, 2016), and it contains numerous competitive companies and well-known brands, such as Procter & Gamble, L'Oréal, Shiseido, Estee Lauder, Maybelline, Lancôme, Avon, Amway, Mary Kay, and more. Currently, consumer attitudes towards the

use of cosmetics are changing. Women, especially working women, attach a great importance to personal beauty, by which, women with higher income usually purchase higher-quality personal care products (Azmi *et al.*, 2015). Today, Malaysian men also tend to view personal grooming as a necessity rather than a luxury (Azmi *et al.*, 2015). Consumers seem ready to pay higher prices for high-quality and high-yield products. The continuous growth and development of the cosmetics industry open a good opportunity for those interested in this business to promote cosmetic products (Azmi *et al.*, 2015). Consumer interest is affected by a lot of advertising, marketing, and growing prosperity, thereby increasing their interest in high-end brands (Hassali *et al.*, 2015).

The objective of this research is to examine the relationship between positive emotions (happiness, contentment, pride) and consumer attitudes towards positive appeals of mobile advertising. In addition, this research also intends to examine the relationship between negative emotions (sadness, fear, shame) and consumer attitudes towards negative appeals of mobile advertising. To achieve this research objective, the Cognitive-Affective-Behaviour Model (C-A-B model) by MacKenzie *et al.* (1986) will be used to support the research framework. The content structure of this article is as follows: Section 2 is the literature review (related concepts and hypotheses development), Section 3 is the methodology (data collection and sampling procedures), Section 4 is the findings (data analysis), Section 5 is the discussion, Section 6 is the implications, Section 7 discusses about recommendations for future studies, and Section 8 consists of the conclusions.

## **2.0 Literature Review**

### **2.1 C-A-B Model**

The Cognitive-Affective-Behaviour (C-A-B) model is widely used in consumer behaviour research (MacKenzie *et al.*, 1986; Liu *et al.*, 2019). C-A-B posits that the cognitive components will influence the affective components, which will then affect the behavioural components. In other words, the consumer's beliefs or cognitive predispositions determine the attitudes, which will then influence the behaviour (MacKenzie *et al.*, 1986; Liu *et al.*, 2019). The cognitive component refers to personal thoughts and perceptions on the given object, the affective component refers to personal feelings that correspond to the given object, and the behaviour component refers to the intentions and/or real actions on the given object (MacKenzie *et al.*,

1986; Ariffin *et al.*, 2016; Liu *et al.*, 2019). In other words, it refers to consumers' beliefs about the objects. For the affective components, it refers to the way a consumer feels about the object (like/dislike). Consumer attitudes towards advertising often influence their attitudes towards specific advertisements (Le & Nguyen, 2014). Consumer's preferences on the advertisement will eventually influence their intention to purchase (Ariffin *et al.*, 2016).

Therefore, to investigate the effect of emotions evoked by mobile advertising on consumers' attitudes towards mobile advertising conducive to their purchase intention, this study will implement the C-A-B model to support the research framework. Additionally, in this study, the C-A-B model was chosen due to reasons that it observes the cognitive process (emotions), determines the affective component (attitudes toward mobile advertising), which in turn affects consumer behavior (purchase intention).

## 2.2 Emotions

Emotions are defined as a physiological process that arose from the cognitive appraisal of someone or something of events, thoughts, postures, gestures, and facial expressions physically (Bagozzi *et al.*, 1999). There are different ways for emotions to be reflected by such as physiological change, expressive and/or spontaneous behaviour, and subjective experiences that include the feelings of anger, joy, fear, sorrow, envy, and pride (Mai & Schoeller, 2009). Emotions play a vital role in responding to advertisements by measuring consumers' emotional reactions (Kapoor *et al.*, 2019). The emotional reaction of consumers influences the attitude towards the advertisement and attitude towards the brand (Mai & Schoeller, 2009). An emotional appeal in advertisement can enhance the attractiveness of the delivered message, brand recall, and product; and grab the attention of consumers (Mai & Schoeller, 2009). Emotional appeal is an approach to attract consumers' attention, change consumers' perceptions of products, create an emotional impact on specific products or services, and stimulate their buying intentions by stimulating their positive or negative emotions (Kamran & Siddiqui, 2016). There are two types of emotional appeals: positive appeals and negative appeals.

Positive emotions are defined as thoughts that lack any feelings of discomfort and pain (Bagozzi *et al.*, 1999). Positive emotions comprise of pride, love, hope, joy, happiness, gratitude, serenity,

contentment, and amusement (Laros & Steenkamp, 2005). This study will use happiness, contentment, and pride for the research. Happiness is defined as sought feelings and responses that are enjoyed, relaxed, and joyful (Lewis *et al.*, 2008; Ekman & Cordaro, 2011). Contentment is defined as the feelings and responses that encourage people to savour and satisfy current living conditions, and integrate them into having new perspectives of themselves and the world (Lewis *et al.*, 2008; Ekman & Cordaro, 2011). Pride is defined as the feelings and responses of superiority that arise when people compare or evaluate their behaviour to a standard, rule, or goal, and find that they have succeeded (Lewis *et al.*, 2008; Ekman & Cordaro, 2011).

A previous study by Mai *et al.* (2009), indicated that positive emotional responses such as happiness had a more positive attitude toward advertising. While Wu *et al.* (2018), showed that positive emotions have a direct relationship with consumer attitudes towards advertising. According to Wu *et al.* (2018), positive emotions; namely, happiness, passion, and comfortable are evoked by a positive image from advertisements. Previous studies revealed that positive emotions strongly influence and significantly relate to consumer attitudes toward advertising. Hence, this study proposes the following hypotheses for positive emotions:

- H1. There is a positive and significant relationship between happiness and consumer's attitude towards the positive appeal of mobile advertising.
- H2. There is a positive and significant relationship between contentment and consumer's attitude towards the positive appeal of mobile advertising.
- H3. There is a positive and significant relationship between pride and consumers' attitude towards the positive appeal of mobile advertising.

Negative emotions were defined as thoughts of feelings that causes someone to feel pain, sorrow, and discomfort (Brennan & Binney, 2010). These emotions will make someone dislike themselves and lower their self-esteem, thus deteriorating their own confidence. The negative emotions include disgust, hate, fear, anger, sadness, shame, and jealousy (Laros & Steenkamp, 2005; Brennan & Binney, 2010; Poels & Dewitte, 2019). Sadness, anger, and fear are all

emotions elicited by situations caused by others, while shame is caused by the negative behaviour of consumers themselves (Laros & Steenkamp, 2005). This study will use sadness, fear, and shame to conduct the research. Sadness is defined as the feelings and responses of a depressed mood when someone is associated with an assessment of permanent loss of an object or person they are attached to (Lewis *et al.*, 2008; Ekman & Cordaro, 2011). Fear is defined as the feelings and responses to a threat of physical or psychological harm. It comes from a lack of motivation that can trigger impulse escapes, and can turn into anger, aggression, and combat response (Lewis *et al.*, 2008; Ekman & Cordaro, 2011). Shame is defined as the feelings and responses elicited when someone is judged as a failure to their standards, rules, and goals; and wishes to hide and disappear from themselves and others. (Lewis *et al.*, 2008; Ekman & Cordaro, 2011).

According to Wu *et al.* (2018), although strong negative emotions such as sadness and fear can negatively affect attitudes, negative emotions can raise the consumer's awareness, because when the exchanged information is related to personal interests, it stimulates cognition; for example, when inspiring threats and fears, consumers will purchase insurance to prevent accident losses. Wu *et al.* (2018) indicated that negative emotions of sadness, anxiety, and fear evoked by an advertisement are significantly related to consumer attitudes towards the advertising. Meanwhile, Brennan *et al.* (2010) stated that negative emotions such as shame are more likely to cause negative attitudes and/or behaviour. Similarly, a study by Pochun *et al.* (2018), stated that negative emotional appeal can cause consumers to experience negative emotions and lead to negative behavioural responses to advertising. Therefore, this study proposed the following hypotheses for negative emotions:

- H4. There is a negative and significant relationship between sadness and a consumer's attitude towards the negative appeal of mobile advertising.
- H5. There is a negative and significant relationship between fear and a consumer's attitude towards the negative appeal of mobile advertising.
- H6. There is a negative and significant relationship between shame and a consumer's attitude towards the negative appeal of mobile advertising.

### 2.3 Attitude Towards Mobile Advertising and Purchase Intention

An attitude is defined as a mental state inhibited by individuals to structure the way they perceive some objects and/or environments (Le & Nguyen, 2014). In general, attitude towards advertising was defined as learning tendencies to respond in a consistently favourable or unfavourable manner towards some object (Cheng *et al.*, 2009). It has been found that consumers' attitudes towards advertising will affect the effectiveness of advertising, and consumers who are more positive about advertising are more likely to be persuaded by advertising and also affect their willingness to accept mobile advertising (Soroa-Koury & Yang, 2010; Sigurdsson *et al.*, 2017; Wu *et al.*, 2018).

Attitudes towards advertising may be a determinant to enhance consumer behaviour (Martins *et al.*, 2019). A study by Wu *et al.* (2018) indicated that attitudes and intentions are positively related, and attitude is the prerequisite to elicit intention. When consumers receive advertisements on their mobile devices, they will evaluate the information based on that assessment. If the consumer's attitude towards the mobile advertising is positive, they might develop an intention to click on and/or observe the advertisement, then they will decide to plan to buy or reject the product or service that is promoted by mobile devices and vice versa (Soroa-Koury & Yang, 2010). According to Erlandsson *et al.* (2018), the study indicates that when the advertisements contained negative appeals, the consumer will perceive negative emotions from the ads and consumer feelings will become more intense, thus, leading to a negative attitude towards the advertisement, as well as a negative intention to donate less for charity. When the advertisements contained positive appeals, consumers will perceive positive emotions from the ads; thus, leading to a positive attitude towards the advertisement that leads to a positive intention to donate more for charity. A previous study by Martins *et al.* (2019), indicated that consumers who perceived negative feelings and attitudes towards the negative appeals of mobile advertising will indicate a negative intention to purchase. Similarly, Pochun *et al.* (2018) indicated that negative appeals can cause consumers to experience negative emotions and lead to negative responses towards advertising. Hence, this study proposes the following hypotheses:

H7. There is a positive and significant relationship between a consumer's attitude towards the positive appeal of mobile advertising and purchase intention.



H8. There is a negative and significant relationship between a consumer's attitude towards the negative appeal of mobile advertising and purchase intention.

**Conceptual Framework**

Figure 1 illustrates the conceptual framework and its hypotheses for the current study. In this study, independent variables consist of happiness, contentment, pride, sadness, fear, shame that will influence positive and negative attitudes towards mobile advertising of cosmetic products as the antecedent. In turn, the antecedent will influence the consumer's purchase intention towards cosmetic products.

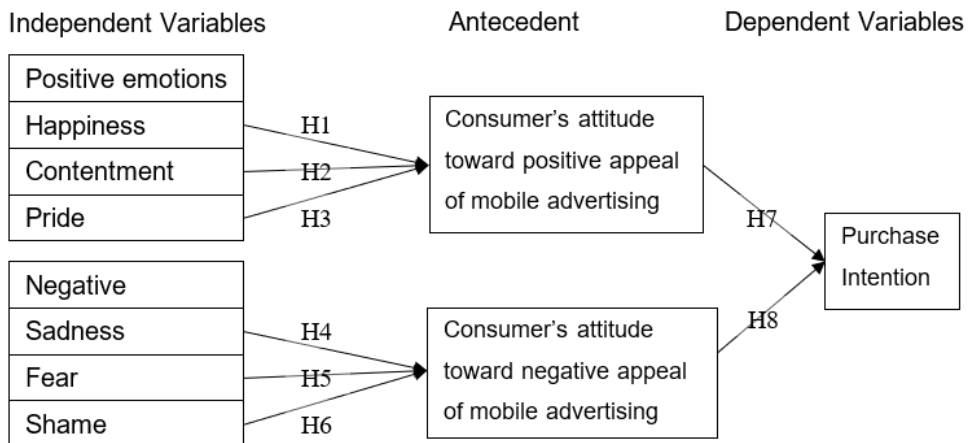


Figure 1 : Conceptual Framework

**3.0 Methodology**

**3.1 Data Collection and Sampling Procedures**

Data were collected using face-to-face and online survey tools such as using Google Forms through the convenient sampling method. A self-administered survey was distributed to a total of 420 respondents, consisting of Malaysian consumers from 16 March 2020 to 5 April 2020. According to Sekaran (2016), the rule for determining the sample size is between 30 and 500. Sample sizes larger than 30 and less than 500 are appropriate for most research (Sekaran & Bougie, 2016). Electronic surveys are the most convenient way to collect necessary information quickly and conveniently (Sekaran & Bougie, 2016) throughout Malaysia. The link to the online survey was

sent out through social media platforms, such as Facebook, WhatsApp, and WeChat.

### First Stage

There are two experimental stages in this study. For the first stage, the aim is to validate and select two advertisements that represent positive and negative emotions. Thirty (n=30) respondents were involved in the first stage. The survey was conducted through face-to-face means, using a mobile device at a physical cosmetic store. Respondents' information was gathered as well, and respondents who had participated in this survey are excluded from participating in this survey's second stage.

Respondents were presented with eight selected real mobile advertisements (2x2 design = subject (positive and negative emotions) and object (positive and negative appeals)) that contained positive and negative appeals from the same domain and brand of cosmetic products. After viewing the eight advertisements, respondents were asked to choose the best advertisement that represents positive and negative emotions, such as happiness, contentment, pride, sadness, fear, and shame. The image with the highest votes will be used in the final stage of the survey. Based on Table 1, respondents selected images: BLUE, PURPLE, RED, and ALADDIN, as those that represented positive emotions. Meanwhile, images: FLAMINGO, LOVE ME, PUPPY, and PINK, represented negative emotional ads. The results showed that the image; namely, RED scored the highest value (100%) for representing positive emotions, with 43.3 percent of respondents favouring the advertisement. While the image; namely, PUPPY scored the highest value (73.3%) for representing negative emotions, with 26.7 percent of respondents favouring the advertisement. Therefore, the images, RED and PUPPY, will be used in the final stages of the survey representing positive and negative appeals (refer to Figure 2).

Table 1 : First Stage Results (n=30)

Ads Image	Description	Frequency	Percentage (%)	Like (%)	Dislike (%)
Red	positive emotions	30	100	43.3	56.7
	negative emotions	0	0		
Purple	positive emotions	27	90.0	36.7	63.3
	negative emotions	3	10.0		

Ads Image	Description	Frequency	Percentage (%)	Like (%)	Dislike (%)
Aladdin	positive emotions	24	80.0	33.3	66.7
	negative emotions	6	20.0		
Blue	positive emotions	17	56.7	20	80
	negative emotions	13	43.3		
Puppy	positive emotions	8	26.7	26.7	73.3
	negative emotions	22	73.3		
Love Me	positive emotions	9	30.0	6.7	93.3
	negative emotions	21	70.0		
Pink	positive emotions	10	33.3	23.3	76.7
	negative emotions	20	66.7		
Flamingo	positive emotions	12	40.0	10	90
	negative emotions	18	60.0		

## Second Stage

For the second stage, the aim is to show the match-up effects of positive and negative emotions, and positive and negative appeals within the advertisement. The respondents were presented with two images of mobile advertisements (2x2 design = subject (positive and negative emotions) and object (positive and negative appeals)) that were placed side by side in the survey, as shown in Figure 2. The survey was distributed through social media platforms and other online channels. Participants involved in the first stage of the survey were excluded in this stage. Respondents were advised to examine the advertisement carefully. After viewing the advertisement, respondents were asked to fill out a questionnaire that included measures for positive and negative emotions, attitudes toward positive and negative appeal advertising, and purchase intention.



Figure 2 : Positive and Negative Emotions Ads

The questionnaires comprise four sections. Section A gathers the demographics of respondents. Section B measures the independent variables of positive emotions; nine items were used to measure the variable adapted from Laros *et al.* (2005) and Schoefer *et al.* (2005). In the same section, item measurement for consumers' attitudes towards positive appeals of mobile advertising is measured; six items were used to measure the variables adapted from Soroa *et al.* (2010) and Wu *et al.* (2018). Section C measures the independent variables of negative emotions; nine items were used to measure the variables adapted from Laros *et al.* (2005) and Schoefer *et al.* (2005). In the same section, item measurement for consumers' attitudes towards negative appeals of mobile advertising is measured; six items were used to measure the variables adapted from Soroa *et al.* (2010), Gao *et al.* (2009), and Martins *et al.* (2019). Meanwhile, Section D measures the purchase intention; six items were used to measure the variables adapted from Alalwan (2018) and Martins *et al.* (2019). The questionnaires used to measure items in section B to section D used a five-point Likert scale ranging from one to five (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree). Measurement items that reflect the definition of each variable are developed from past studies. After completing the data collection process, the collected data will be inputted and analysed through various statistical techniques, using Partial least square structural equation modelling (PLS-SEM).

## 4.0 Results

### 4.1 Respondent Profile

By April 2020, the number of returned questionnaires accumulated to 338 responses. After the screening process was carried out, all 338 responses were considered complete and valid for data analysis. The response rate was 80.48%. The nationality of most respondents were Malaysians (93.5%) and non-Malaysians (6.5%) residing in Malaysia. A majority of the respondents were females (54.4%), the remaining are males (45.6%). Most respondents aged between 31 and 40 years old (46.4%). A significant portion of the respondents were of Chinese (80.2%) ethnicity. Sixty-three-point three percent (63.3%) of the respondents were married. The majority of the respondents had high school (SPM and STPM) level education (46.2%). Most respondents were employed (60.4%). The results show that females within the age group of 31 – 40, married, and employed; were more focused on their appearance and can afford the cosmetics (Hassali *et al.*, 2015).

### 4.2 Descriptive Analysis

The descriptive statistics for all variables consisting of the mean and standard deviation were analysed. The mean values ranged from 2.29 to 4.26. The lowest mean value was scored by “Too much screen space and memory are devoted to ads on the mobile phone” from attitudes towards mobile advertising, while the highest mean value was scored by “Happy” from positive emotions. The standard deviation for all variables ranged from 0.66 to 1.14. The lowest standard deviation was scored by “A good idea”, while the highest was scored by “Interrupt my normal use of the mobile phone”. Both derived from the attitude towards mobile advertising.

### 4.3 Goodness of Data

In this study, both validity and reliability tests were used to measure the goodness of data. This study will use the reflective measurement model to evaluate the PLS-SEM results. Based on Hair *et al.* (2011), there are several guidelines to adhere in using PLS-SEM. The first step is to construct the validity of the indicator loadings, outer loadings will be used to examine the validity. Based on Hair *et al.* (2011), the significant value of indicator loadings was at 0.4 to 0.7

and/or above. Thus, if the loading value was less than 0.4, the items should be deleted. The value for negative emotions of fear “When I see these picture ads, I feel fearful” was below 0.4, therefore, these items will be deleted.

The second step is to construct the internal consistency reliability; Cronbach's alpha (CA) and composite reliability (CR) are used to examine the evaluation. The value for CA and CR should be at least 0.7. Table 2 shows that all the values of CA and CR for all variables exceed 0.7, therefore, all the measurements were reliable and sufficient.

The third step is to assess the convergent validity. The average variance extracted (AVE) will be used for measuring. Table 2 shows that the value of AVE for all constructs exceed 0.5. Overall, all the measurement models for this study obeys the rule of thumb mentioned in Hair *et al.* (2011) and have sufficient convergent validity. The final step is to assess the discriminant validity where the Fornell-Larcker criterion will be used. The square root of the average variance extracted (AVE) for each latent variable should be greater than the correlation between latent variables. For the intercorrelations between each latent variable, the value was greater than the correlation between latent variables. Thus, the measurement model for discriminant validity was sufficient. Therefore, all the measures are fulfilled, and the measurement model results indicated that all the constructs can be used to test the conceptual model.

Table 2 : Construct Reliability and Convergent Validity

Construct and items	CA	CR	AVE	Factor Loadings
<b>Happiness</b>	0.954	0.967	0.880	<b>0.938</b>
When I see these picture ads, I feel happy				<b>0.941</b>
When I see these picture ads, I feel joyful				<b>0.938</b>
When I see these picture ads, I feel pleased				<b>0.946</b>
When I see these picture ads, I feel enthusiastic				<b>0.926</b>
<b>Contentment</b>	0.927	0.954	0.873	<b>0.934</b>
When I see these picture ads, I feel contented				<b>0.953</b>
When I see these picture ads, I feel fulfilled				<b>0.968</b>

<b>Construct and items</b>	<b>CA</b>	<b>CR</b>	<b>AVE</b>	<b>Factor Loadings</b>
When I see these picture ads, I feel peaceful				<b>0.880</b>
<b>Pride</b>	0.878	0.943	0.891	<b>0.944</b>
When I see these picture ads, I feel pride				<b>0.943</b>
When I see these picture ads, I feel proud				<b>0.945</b>
<b>Sadness</b>	0.794	0.798	0.581	<b>0.762</b>
When I see these picture ads, I feel unhappy				<b>0.594</b>
When I see these picture ads, I feel guilty				<b>0.648</b>
When I see these picture ads, I feel nostalgia				<b>0.985</b>
<b>Fear</b>	0.949	0.965	0.933	<b>0.966</b>
When I see these picture ads, I feel panicky				<b>0.934</b>
When I see these picture ads, I feel nervous				<b>0.997</b>
<b>Shame</b>	0.975	0.983	0.952	<b>0.975</b>
When I see these picture ads, I feel ashamed				<b>0.979</b>
When I see these picture ads, I feel embarrassed				<b>0.980</b>
When I see these picture ads, I feel humiliated				<b>0.967</b>
<b>Attitude toward positive appeal of mobile ads</b>	0.947	0.958	0.790	<b>0.889</b>
I think the advertising is a source for timely information				<b>0.879</b>
I think the advertising is credible				<b>0.838</b>
I think the advertising is useful for my daily life				<b>0.864</b>
I think the advertising is enjoyable				<b>0.925</b>
I think the advertising is positive for me				<b>0.925</b>
I think the advertising is a good idea				<b>0.898</b>
<b>Attitude toward negative appeal of mobile ads</b>	0.949	0.959	0.797	<b>0.893</b>
I think the advertising is likely to invade personal privacy				<b>0.854</b>
I think the advertising is intrusive				<b>0.890</b>
I think the advertising is annoying				<b>0.939</b>
I think the advertising is irritating				<b>0.936</b>

Construct and items	CA	CR	AVE	Factor Loadings
I think the advertising is interrupting my normal use of the mobile phone				<b>0.919</b>
I think the advertising is too much screen space and memory are devoted to ads on the mobile phone				<b>0.813</b>
<b>Purchase intention</b>	0.972	0.977	0.878	<b>0.937</b>
I will tend to purchase the products or services that are advertised on advertising				<b>0.945</b>
I will desire to purchase the products or services that are promoted in advertising				<b>0.958</b>
I will plan to purchase the products or services on advertising				<b>0.927</b>
I will frequently purchase the products or services on advertising in future				<b>0.948</b>
I will strongly recommend others to purchase products or services on advertising				<b>0.918</b>
I will find that purchasing products or services advertised on advertising is worthwhile				<b>0.924</b>

#### 4.4 Assessment of Structural Model

After completing the measurement model evaluation, the structural model will be tested. The first step is to assess the collinearity issue where the variance inflation factor (VIF) assessment will be used for examination. The ideal value of VIF should be less than 3.3 (Hair *et al.*, 2011). All constructs achieved a VIF value less than 3.3. Thus, the collinearity between the constructs is sufficient, and the analysis is relevant.

The second step is to review the R-squared ( $R^2$ ) value for all endogenous constructs.  $R^2$  values range from 0 to 1, where the higher value indicates a greater explanatory power. An  $R^2$  value of 0.75 is substantial, 0.50 is moderate, and 0.25 is weak (Hair *et al.*, 2011). The results of this study showed that the  $R^2$  values for both positive attitude (0.235) and negative attitude (0.052) are satisfactory and weak, while the  $R^2$  value for purchase intention (0.697) has moderate explanatory power to measure the variance.

The third step is to assess the effect sizes ( $f^2$ ), the  $f^2$  values of 0.02 have small effects, 0.15 has medium effects, and 0.35 has large effects (Hair *et al.*, 2011). If the effect size is less than 0.02, it indicates



that there are no effects. In this study, the  $f^2$  values for contentment (0.018) and pride (0.002) have no effects on a positive attitude, while happiness (0.040) has small effects on positive attitude. Fear (0.010) has no effects on a negative attitude, whereas sadness (0.025) and shame (0.037) have small effects on a negative attitude. A positive attitude (0.546) has large effects on purchase intention, while a negative attitude (0.153) has medium effects on purchase intention.

The fourth step is to assess the predictive relevance ( $Q^2$ ) using the blindfolding approach.  $Q^2$  values greater than zero indicate the path model's predictive accuracy and relevance (Hair *et al.*, 2019). The  $Q^2$  values greater than 0, 0.25, and 0.5 indicate small, medium, and large predictive accuracy, respectively (Hair *et al.*, 2011). In this study, positive attitude (0.181) and negative attitude (0.039) indicated small predictive relevance, while purchase intention (0.605) indicated large predictive relevance.

The final step is to assess the significance and relevance of the structural model relationships using bootstrapping to test the hypotheses. This study used a bootstrapping of 2000 resamples to estimate the statistical significance of path coefficients, because the sample size for this study is not too large (338 sample). Hence, 2000 resamples is enough to calculate the estimation. The hypotheses results are illustrated in Table 3. There are three parts in the explanation for measuring variance. First, the research explains 23.5% of the positive attitude towards mobile ads in the conceptual model. Happiness ( $\beta = 0.279$ ,  $p < 0.01$ ) and contentment ( $\beta = 0.202$ ,  $p < 0.05$ ) are positive and statistically significant, whereas pride ( $\beta = 0.049$ ,  $p > 0.1$ ) is statistically insignificant. Hence, H1 and H2 are supported, but H3 is not. Second, the research explains five-point two percent (5.2%) of negative attitudes towards mobile ads in the conceptual model. Sadness ( $\beta = -0.167$ ,  $p < 0.1$ ) and fear ( $\beta = -0.122$ ,  $p < 0.1$ ) are negative and statistically significant, while shame ( $\beta = 0.235$ ,  $p < 0.01$ ) is positive and statistically significant. Hence, H4 and H5 are supported, but H6 is not. Third, the research explains 69.7% of purchase intention in the conceptual model. Positive attitude ( $\beta = 0.584$ ,  $p < 0.01$ ) is positive and statistically significant, while negative attitude ( $\beta = -0.310$ ,  $p < 0.01$ ) is negative and statistically significant. Hence, H7 and H8 are supported. In summary, six hypotheses are supported (H1, H2, H4, H5, H7, and H8), and two hypotheses are not supported (H3 and H6).

Table 3 : Path Coefficients and Hypotheses Testing

H	Relationships	Path coefficients	T-value	P-value	Decision
H1	Happiness -> Att twd Positive Appeal	0.279***	3.504	0.000	Supported
H2	Contentment -> Att twd Positive Appeal	0.202**	2.254	0.012	Supported
H3	Pride -> Att twd Positive Appeal	0.049	0.770	0.221	Not supported
H4	Sadness -> Att twd Negative Appeal	-0.167*	1.423	0.077	Supported
H5	Fear -> Att twd Negative Appeal	-0.122*	1.375	0.085	Supported
H6	Shame -> Att twd Negative Appeal	0.235***	3.333	0.000	Not supported
H7	Att twd Positive Appeal -> Purchase intention	0.584***	13.683	0.000	Supported
H8	Att twd Negative Appeal -> Purchase intention	-0.310***	6.836	0.000	Supported

Note: \*p<0.1, \*\*p<0.05, \*\*\*p<0.01 (one-tailed)

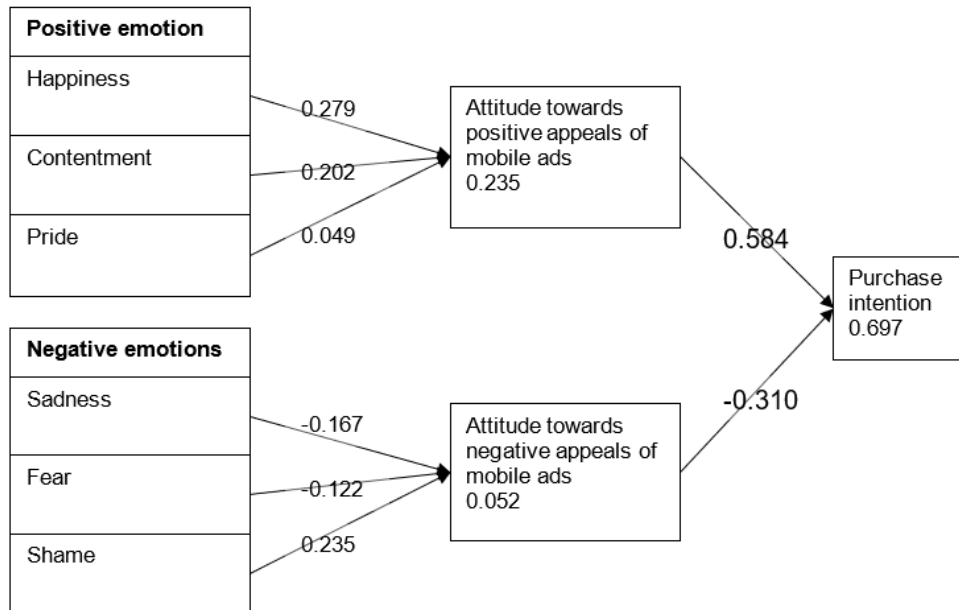


Figure 3 : Hypotheses Testing Results

## 5.0 Discussion and Implications

### Discussion

This study aims to examine the relationship between the positive emotions (happiness, contentment, pride), the negative emotions (sadness, fear, shame), and consumer's attitude towards positive appeals and negative appeals of mobile advertising, and purchase intention. This study developed H1 to H8 for the relationship between positive emotions, negative emotions, and consumer attitude towards mobile advertising, and purchase intention.

The findings of H1 and H2 aligned with previous studies that revealed positive emotions, such as happiness and contentment, positively and significantly influence attitudes towards positive appeals of mobile advertising. Hence, hypotheses 1 and 2 are supported. The findings are consistent with a previous study that stated positive emotions positively and significantly influence consumer's attitudes when browsing positive picture ads, i.e., positive emotions are evoked by advertising that has a positive attitude towards the advertising (Wu *et al.*, 2018; Mai *et al.*, 2009). Therefore, it can be concluded that Malaysian consumers will evoke happiness and/or contentment when browsing mobile advertising of cosmetic products that contain positive emotions.

On one hand, the finding of H3 is contrary to the previous study that revealed pride has a positive and significant relationship with attitudes towards positive appeals of mobile advertising. The findings of this study revealed that pride is unrelated to attitudes towards positive appeals of mobile advertising. Thus, hypothesis 3 was not supported. The finding was not consistent with a previous study, that stated pride is a pro-social emotion that inspires individuals to excel towards a positive behaviour (Coleman *et al.*, 2019). The possible reason for this finding is that when Malaysian consumers feel proud of the cosmetic ads, they will not show any attitude towards the advertising and will tend to be motivated to achieve goals and sustain their feeling of pride. For example, when people feel proud about the ads; some of them will favour the ads, some will not, and some will hold a neutral opinion; thus, pride is insignificant with attitudes towards the ads.

The findings of H4 and H5 were consistent with previous studies that revealed negative emotions, such as sadness and fear, negatively

and significantly influence attitudes towards negative appeals of mobile advertising (Brennan *et al.*, 2010; Pochun *et al.*, 2018). In other words, the more negative emotions consumers perceived from the advertisements, the less attitude they have towards advertising that contained negative appeals. Hence, hypothesis 4 and hypothesis 5 are supported. The results showed that when the cosmetic advertisement induced sadness, people will feel sad about the ads, causing them to dislike the ads, and trying to skip the feelings of sadness. In addition, when the cosmetic advertisement induces fear, people will feel afraid about the ads, causing them to dislike the ads in response to avoid the feelings of fear.

Meanwhile, the finding of H6 was also consistent with previous studies that revealed negative emotions, shame in particular, positively and significantly influence attitudes towards negative appeals of advertisement (Kemp *et al.*, 2013; Wu *et al.*, 2018). The results showed that shame positively and significantly influences attitudes towards negative appeals of mobile ads. In other words, the more negative emotions they perceived from the advertisements, the more positive the attitude they show towards advertisements that contained negative appeals. However, hypothesis 6 is not supported in this study. It is possible to say that Malaysian consumers will feel shame when browsing mobile advertisements that contained negative emotions, which will increase their positive attitudes towards negative appeals of mobile advertising and purchase intention.

The finding of H7 is in line with a previous research that stated attitudes towards positive appeals of mobile advertising positively and significantly influence purchase intention (Jiménez & San-Martin, 2017; Wu *et al.*, 2018). Hence, hypothesis 7 is supported. It can be deduced that when Malaysian consumers have a positive attitude towards the positive appeals of mobile advertising, they will generate a positive feeling that leads to a positive response on purchase intention towards cosmetic products.

Finally, the finding of H8 is aligned with previous research that claimed attitudes towards negative appeals of mobile advertising negatively and significantly influence purchase intention. In other words, negative emotions will lead to a negative attitude towards the advertisement, which in turn, leads to a negative intention to purchase (Kemp *et al.*, 2013; Erlandsson *et al.*, 2018; Pochun *et al.*, 2018; Martins *et al.*, 2019). Hence, hypothesis 8 is supported. It can be concluded that when Malaysian consumers have a negative attitude

towards mobile advertising of cosmetics that contained negative appeals, it will lead to a negative intention to purchase the cosmetic products. Cosmetic products represent beauty; therefore, advertisements that contain negative appeals may demotivate the respondent to have favourable feelings for the ads, as well as purchase the products.

### **Theoretical Implications**

In this study, it was newly discovered that, besides the negative emotion influencing negative attitudes towards negative appeals, negative emotions could also influence positive attitudes towards negative appeals. The results showed that the emotion, shame, influences attitudes towards negative appeals of mobile advertising positively and significantly. According to a previous study by Wu *et al.* (2018), negative appeals can raise awareness because when the information exchanged is related to personal benefits, it stimulates awareness.

Moreover, this present study successfully extended and strengthened the use of C-A-B to investigate the effects of positive and negative emotions on consumers' attitudes towards positive and negative appeals mobile advertising in the framework model. First, positive and negative emotions were assessed as the cognitive attributes. For example, consumers will show feelings and/or emotions (positive and negative) that are evoked from the picture advertising. The results show that the emotions of happiness, contentment, sadness, and fear evoked from the picture advertising have a direct effect on attitudes towards mobile advertising and purchase intention (Kemp *et al.*, 2013; Jimenez *et al.*, 2017; Wu *et al.*, 2018).

Secondly, attitude towards mobile advertising was assessed as the affective attribute; for example, after browsing the advertising images, consumers have favourable and unfavourable feelings towards the advertisement that will affect consumers' intentions and behaviours. When consumers feel positive emotions from the advertising, they will have a positive attitude towards the advertisement, and it will lead to a positive effect on consumer's purchase intention (Jimenez *et al.*, 2017; Wu *et al.*, 2018). For example, when a respondent from this study views the ads, they might feel happy and will think the ads are enjoyable, hence he/she will perhaps intend to purchase the product. On the other hand, when the consumers feel

negative emotions, such as annoyance from the advertisement, they will have a negative attitude towards it which will lead to a negative effect on purchase intention (Kemp *et al.*, 2013; Wu *et al.*, 2018).

## **Practical Implications**

The findings of this study provided some practical implications for the advertisers and marketers to consider in using several types of emotions in their advertising appeals such as happiness, contentment, pride, sadness, fear, and shame to create and design an effective mobile advertisement to attract consumer attention and purchase intention. The use of different products and pictures in advertising and other marketing programs may have different results on consumer emotions and attitudes, which in turn, will influence their purchase intentions.

### **5.1 Limitations and Recommendations for Future Studies**

Although this study presented significant results of the effects of emotions on attitudes towards mobile advertising and purchase intention, it has several limitations. This study does not examine any moderating and mediating variables, future researchers can determine the available moderating and mediating variables to conduct future studies such as involvement, flow experience, and brand awareness. Future researchers can focus on using other products/industries of mobile advertising to conduct future studies.

## **6.0 Conclusion**

There are several factors that Malaysian consumers in this study agreed upon such as happiness, contentment, sadness, and fear. Pride and shame were found to be insignificant. Two factors of positive emotions have a significant positive influence on consumer attitudes towards positive appeals of mobile ads. Among these factors, happiness is the main contributor for consumers to favour mobile advertising. Two factors of negative emotions have a significant negative influence on consumer attitude towards negative appeals of mobile ads. Among these factors, sadness is the main contributor for consumers to dislike mobile advertising. The findings show that it is crucial to understand the effects of positive and negative emotions that influence consumer attitudes towards mobile advertising, as it provides

useful information for online retailers in m-commerce activities to create effective mobile advertising that will lead to purchase intention.

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