CONSUMER ATTITUDE TOWARDS MOBILE ADVERTISING IN MALAYSIA

BY

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DECLARATION

We hereby declare that:

- (1) This undergraduate research project is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.
- (2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.
- (3) Equal contribution has been made by each group member in completing the research project.
- (4) The word count of this research project is 9,821 words.

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DEDICATION

This research we would like to dedicate to beloved supervisor, Dr. Krishna Moorthy Manicka Nadar, Research Methodology and Project lecture, Ms. Shirley Lee Voon Hsien, our team members, family, friends, respondents and others for giving us support in the evolution of completing the research. Thank You.

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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
PLS	Partial Least Square
SAS	Statistical Analytical Software
SMS	Short Messaging Service
US	United States
BC	Brackett and Carr
EN	Entertainment
IN	Informativeness
CR	Credibility
IR	Irritation
PE	Personalization
AT	Attitude towards mobile advertising

PREFACE

Mobile advertising is a new channel that can be used to deliver promotion of goods and services directly to the consumers. This form of advertising allowed the consumer to enjoy one on one engagement with the advertisers without involving a third party. Thus, advertisers can personalized their advertisement to suit and each advertisement can be designed differently for the consumer, with the added touch of personalization. However, the consumer attitude towards advertising needs to be studied to be able to determine the determinants that influence their attitude.

ABSTRACT

The high penetration of mobile phones usage has resulted rapid growth in mobile advertising (m-advertising). The purpose of this research is to investigate the elements affecting the consumer attitude towards m-advertising in Malaysia. This study has been mainly adopted from Brackett and Carr (2001) model. The focused factors will entertainment, informativeness, credibility, irritation and personalization. The total numbers of 450 survey questionnaires will be collected data from mobile users in Malaysia. The result of this study will be valuable for the marketers in exploring knowledge and experiences on the relationship between consumer attitude and m-advertising. This present research will form an evaluation for the factors affecting m-advertising, and approaches that analyzed the consumer attitude towards m-advertising. The data analysis techniques that will be used in this research are reliability test, normality test, pearson correlation test and multiple regression analysis.

Keywords: Consumer, Attitude, Mobile, Advertising, Brackett and Carr, entertainment, informativeness, credibility, irritation, personalization

Paper type: Research paper

CHAPTER 1: INTRODUCTION

1.0 Introduction

This chapter is presented with the background and the purpose of this research paper. It is comprised of six sub sections. Lastly, the chapter is ended in brief.

1.1 Research Background

In Malaysia, high mobile phone penetration has allowed a new type of advertising to target a higher volume of potential prospect known as mobile advertising (m-advertising. Kavassalis, Spyropoulou, Drossos, Mitrokostas, Gikas, and Hatzistamatiou (2003) defined m-advertising as the practices of using mobile devices as an intermediary for promotion of product and services to cultivate value to the stakeholders. One of the most popular media of m-advertising is Short Messaging Services (SMS) which is the foundation of m-advertising (Waldt, Rebello, & Brown, 2009).

The method of using m-advertising via SMS has been successful where the number of messages sent was more than 100 million messages globally (Chowdhury, Parvin, Weitenberner, & Becker, 2006). In Malaysia, the 86.3 percent of the citizen are mobile phone users (Malaysian Communications and Multimedia Commission, 2013). This allows a huge opportunity for advertisers to adopt m-advertising as m-advertising is the best personalized platform compared to other marketing channel (Vatanparast, 2010). In Malaysia, the business industry pushed the usage of SMS to advertise their product and services in order to remain competitive (Ismail, Nazri, Noor, & Sreenivasan, 2013).

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The introduction of m-advertising is significant because advertisers nowadays have the ability to directly contact the consumers using mobile phones (Blanco, Blasco, & Azorín, 2010). Advertisers have higher tendency to adopt m-advertising when the Internet consumption in the society increases (Greene, 2009) because the society have higher acceptance towards m-advertising (Rogers, 2013).

1.2 Problem Statement

Pricewaterhousecoopers (2013) has conducted a research about the forecasted consumer and advertising spent data in Malaysia which revealed that there was a rapid expansion for M-commerce in Malaysia. Pricewaterhousecoopers researchers predicted that there will only 6 % of advertising spend form m-advertising by year 2017 which will creates a gap from the global trends of 31 % during the similar year. This clarifies that there is a need for genuine advertising alternative to be developed in Malaysian mobile channel. Ismail et al. (2013) concluded that business should take the opportunities to change traditional advertising with m-advertising in Malaysia. This is to maintain the success of business in this rapid hypercompetitive market.

Abdullah, Bohari, Warokka, and Abdussalam (2013) indicated that there is a necessity for future researchers to examine the factors associated with the adoption of m-commerce to provide continuous efforts to understand the m-commerce in Malaysia. Malaysian business advertising need more research related to current m-advertising in order to develop the advertising industry in the country (Abdullah et al., 2013). Bauer, Barnes, Reichardt, and Neumann (2005) stated that customer perceived mass advertisement as a spam so more personalized advertising is needed. Moreover, Malaysian Communications and Multimedia Commission (2009) stated that m-advertising became a major channel for advertising which creates avenue for advertiser to interact with consumer. Therefore, there should be more researches to overcome key challenges regarding consumer willingness towards the acceptances of m-advertising.

Present research has adapted conceptual foundation from Brackett and Carr (2001) and extended model of Ducoffe (1995) to examine the independent variables of entertainment, informativeness, irritation, advertising, credibility, and personalization. The value obtained from the models had been used to anticipate the attitude of the users in advertising. Furthermore, the success or downfall of m-advertising is essentially depends on whether personalization is implemented effectively or not (Xu, Liao, & Li, 2008). The model used in this research will be validated from the perspective of Malaysian consumer. Therefore, this research intends to advance past researches by investigating the variables of entertainment, informativeness, credibility, irritation and also personalization in the Malaysian context.

In this modern world, consumers have the supremacy to control on how they are getting information or exposure regarding their purchases information. Almost all of the previous researches on consumer attitude on m-advertising have been carried out in other countries such as China, Iran and India (Lin & Hung, 2009; Keshtgary & Khajehpour, 2011; Lee, Hsieh, & Huang, 2011; Ahmadi, Masrour, & Khaksar, 2013; Chandra, Goswami, & Chouhan, 2013). Besides, Abdullah et al. (2013) stated that m-advertising for the goods and services in Malaysia is still remain unclear, so it is needed to gain a well understanding about the underlying factors such as customer attitude. So, this research will contribute to the perception from Malaysian consumer attitude. Hence, with the rapid growth of mobile penetration in Malaysia, there is a greater need on finding the consumer attitude towards m-advertising field that will open a new avenue for many people.

1.3 Research Objectives

1.3.1 General Objective

Table 1.1 shows the general research objectives.

General Research Objective	To determine the factors affecting the consumer			
	attitude towards m- advertising.			

Table 1.1: General Research Objective

1.3.2 Specific Objective

Table 1.2 shows the specific research objectives.

Specific research objectives	To investigate whether entertainment will affect the
	consumer attitude towards m-advertising.
	To determine whether informativeness will affect the
	consumer attitude towards mobile advertising.
	To examine whether credibility will affect the
	consumer attitude towards m-advertising.
	To investigate whether irritation will affect the
	consumer attitude towards m-advertising.
	To determine whether personalization will affect the
	consumer attitude towards m-advertising. To examine as to which factor affects the consumer
	attitude towards m-advertising the most.

Table	1.2:	Sp	pecific	Research	Ob	jective

1.4 Research Questions

1.4.1 General Questions

Table 1.3 shows the general research questions.

General Research Questions	What are the factors affecting the consumer attitude
	towards m-advertising?

Table 1.3: General Research Questions

1.4.2 Specific Questions

Table 1.4 shows the specific research questions.

Specific research questions	Will entertainment influence the consumer attitude
	towards m-advertising?
	Will informativeness influence the consumer attitude
	towards m-advertising?
	Will credibility influence the consumer attitude
	towards m-advertising?
	Will irritation influence the consumer attitude
	towards m-advertising?
	Will personalization influence the consumer attitude
	towards m-advertising?
	Which factor affects consumer attitude towards m-
	advertising most?

Table 1.4: S	pecific	Research	Questions

1.5 Hypothesis of the Study

H1: There is a relationship between entertainment and consumer attitude towards m-advertising.

H2: There is a relationship between informativeness and consumer attitude towards m-advertising.

H3: There is a relationship between credibility and consumer attitude towards madvertising.

H4: There is a relationship between irritation and consumer attitude towards madvertising.

H5: There is a relationship between personalization and consumer attitude towards madvertising.

1.6 Significance of the Study

Brackett and Carr (2001) model was adopted in this research. In terms of theoretical contributions, this research will retest Brackett and Carr (2001) model that contribute to establish the factors affecting the consumer attitude in Malaysia context. This research will also reexamine the extended construct with the additional variable of personalization under Brackett and Carr (2001) model. The result of this study is significant because this study can used to measure the consumer attitude towards m-advertising and will further validate the extended Brackett and Carr (2001) model.

This research is able to contribute to the advertising industry in Malaysia. The top spenders in Malaysia media advertising were government institutions, telecommunication and consumer products companies (Malaysian Communications and Multimedia Commission, 2009). The findings allow advertisers to recognize the factors affecting consumer attitude towards m-advertising in order to design the most appropriate advertising strategy or campaign for their companies. According to Pricewaterhousecoopers (2013), m-advertising is a good advertising alternative compared to other digital channels such as internet advertising. Therefore, the

knowledge gained by the advertisers in this research can help them to explore more advertising opportunities in the Malaysia advertising market.

1.7 Chapter Layout

The first chapters discussed the outline of the research, problem statement, research purpose and objective, significance of study and outline of study.

The second chapter illustrated the literature review including theoretical foundation, review of the prior empirical studies, proposed conceptual framework, and hypothesis development.

The third chapter discussed regarding research design, procedures of sampling, method of data collection, research variables, and data analysis technique.

The data is examined using descriptive analysis, inferential analysis and scale measurement in the fourth chapter.

The last chapter analyzed the relationship between the independent variables and dependent variable, limitation, recommendation of the study.

1.8 Conclusion

Chapter one provides a clear understanding of factors that influence the consumer attitude towards m-advertising. It presents a brief guideline to the reader before proceed to chapter two literature review.

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CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

The past studies in second chapter were used to explain the conceptual foundation which related to the dependent variable and theory. Furthermore, the dependent variable was related to each of the independent variable with the understanding of past studies. In the end, hypothesis regarding the relationship between dependent and independent variable are generated.

2.1 Review of the Literature

2.1.1 Consumer Attitude towards Mobile Advertising (Dependent Variable)

Mobile Marketing Assocciation (2008) defined m-advertising as a communication channel for advertiser to maintain a sense of friendliness with consumers via mobile devices. Since m-advertising is free from mobility constraint, it is easily to establish an effective two way communication in order to build strong relationship with customers. The content of advertising messages considered as one of significant message factor to influence consumer attitude towards m-advertising (Ma, Suntornpithug & Karaatli, 2009). It indicated that there are linkages between m-advertising and consumer attitude.

According to Solomon, Bamossy, Askegaard, and Hogg (2006), consumer attitude was defined as a long term common evaluation of people. It also referred as an expression of favorable or unfavorable toward a specified target

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(Keshtgary & Khajehpour, 2011). Attitude towards advertising has been studied in the context of Ducoffe (1996) and Brackett and Carr (2001), which is used to anticipate the attitude of the user in advertising.

Many studies have been conducted to determine the attitude while consumer receiving an advertising (Tsang, Ho, & Liang, 2004; Waldt et al., 2009; Lin & Hung, 2009; Lee et al., 2011; Zabadi, Shura, & Elsayed, 2012; Raines, 2013; Ahmadi et al., 2013). For instance, study of Lee et al. (2011) investigated the factors affecting attitude towards m-advertising and concluded that those factors had a significant relationship with consumer attitude towards m-advertising.

In this study, consumer attitude comprise the assessment on the m-advertising. In short, consumer attitude towards mobile advertising serve as the dependent variable in this study.

2.1.2 Entertainment (Independent Variable)

Ducoffe (1996) (as cited in Waldt et al., 2009; Gao & Wu, 2010; Karthik, 2014) define entertainment as satisfaction of a user's desire for distraction, virtual and affective pleasure. In addition, entertainment is important as a platform for advertising as Zabadi et al. (2012) found that entertainment is the most significant element that affects consumer attitude. Therefore, this dimension should be developed by marketers to improve their effectiveness in m-advertising (Blanco et al., 2010).

Bauer et al. (2005) investigated the relationship between entertainment and consumer attitude towards m-advertisement. In this study, mobile users were distributed 1028 questionnaires in the Internet via email and websites. Linear structural relation was used to test the hypothesis. The research found that

entertainment in m-advertisements has positively correlated with the attitude towards m-advertising.

Koo (2010) studied the factors and its relationship on consumer attitude towards m-advertising in United States and South Korea. In this research, 407 questionnaires were handed out to young mobile users in a university in United States and another university in South Korea. Multiple linear regressions were used to test the hypothesis. The researcher found that entertainment is one of the factors that affect the consumer attitude towards m-advertising.

Ahmadi et al. (2013) examined the attitude of mobile users on receiving madvertising in Iran. In this study, 330 questionnaires were collected from students of Sanandaj Azad University and the hypothesis was tested using multiple linear regressions. The result showed that entertainment is the key role in m-advertising.

2.1.3 Informativeness (Independent Variable)

Gao and Koufaris (2006) defined informativeness as the satisfaction of consumers which can be maximized when marketers introduce a substitute goods and service by distributing the information via advertising. Oh and Xu (2003) stated that informativeness is ability to effectively present appropriate information. The effectiveness of m-advertising depends on informativeness, which an important predictor for advertisers to understand consumer preferences to improve their marketing strategies (Bauer et al., 2005).

Blanco et al. (2010) examined impact of informational aspects to consumer attitude towards m-advertising in Spain. In this research, 429 surveys were accumulated from websites, mobile social networks and well-known electronic forums. Structural equation model was applied to test the hypothesis. This research found that consumer attitude towards m-advertising is positive and influenced by perceived informativeness.

Kwek, Tan, and Lau (2010) studied whether informativeness influences consumer attitude towards m-advertising among tertiary students in Malaysia. In this study, 267 questionnaires were responded by full time undergraduate students in University 'A'. The hypotheses in were tested using multiple regression analysis. The researchers found that informativeness of an advertising message is positively correlated to consumer attitude towards m-advertising.

Keshtgary and Khajehpour (2011) explored the relationship between informativeness and the consumer attitude of m-advertising among Iranian users. In this study, 167 young Iranian cellular phone users responded to the questionnaires. The first hypothesis was tested using analysis of variance (ANOVA) and step-wise regression while the rest of hypotheses were tested with correlation coefficient. The result showed that informativeness has positive relationship in consumer attitude towards m-advertising in Iranian.

2.1.4 Credibility (Independent Variable)

Mackenzie and Lutz (1989) (as cited in Drossos, Giaglis, Lekakos, Kokkinaki, & Stavraki, 2007) defined advertisement credibility as how truthful and realistic it can be as per the consumer distinguish privileges regarding certain brand in the advertisement. Credibility is consumers' confidence in the honesty and plausibility of the advertisement (Chowdhury et al., 2006).

Javid, Namin, and Noorai (2012) studied the relationship between credibility and consumer attitude of m-advertising. In this research, 384 surveys were collected from Iranian citizens while the data analysis method used was multiple linear regression. The result showed that credibility and consumer attitude of m-advertising is positively correlated.

Waldt et al. (2009) studied the credibility and mobile users in accepting madvertisement. In this research, 200 questionnaires received from undergraduate students in a university in South Africa. Data analysis method used was Spearman's Rank Order Correlation. This research found that credibility in m-advertising has positively correlated with the attitude towards m-advertising.

Drossos et al. (2007) made a research on the university students to investigate the connection between credibility and the attitude of m-advertising among the students in Greece. Data are collected from 97 students in a university located in Greece and the hypothesis was analyzed using analysis of variance (ANOVA) test. The researchers found that credibility is one of the factors that affect the consumer attitude towards m-advertising.

2.1.5 Irritation (Independent Variable)

Lee, Tsai and Jih (2006) defined irritation in advertising as mobile users frequently view advertising as an annoyance that intervenes with the m-advertising messages. When consumers receive a m-advertising message, they may feel irritated and ignored it (Altuna & Konuk, 2009). Dickinger (2005) indicated that unwanted m-advertising messages or "spam" is another possible annoyance and irritation. Amin, Amin and Patel (2011) stated that consumers lost interest when they are overwhelmed with the irritable messages.

Zabadi et al. (2012) discovered that there is a relationship between consumer attitude of the irritation of m-advertisement and consumer attitude towards m-

advertisement in Jordan. In this study, 150 surveys were collected from Jordan mobile users. The finding indicated that m-advertising are irritating the consumers.

Muzaffar and Kamran (2011) found that there is a relationship between irritation and young consumer attitude towards m-advertisement. In Pakistan, 250 questionnaires were distributed to 18 to 23 years old participants. The result revealed that young consumer attitude towards the SMS advertisements is positive and they are not irritated to receive SMS advertising.

There is a relationship between perceived irritation of generation Y and its attitude towards apparel m-advertising in United States and Korea (Koo, Knight, Yang, & Xiang, 2012). In this research, 204 and 226 questionnaires were distributed in US and Korea to generation Y mobile consumers. The hypothesis was tested using analysis of variance (ANOVA). The finding showed that there is a negative correlated culture on perceived irritation of apparel m-advertising.

2.1.6 Personalization (Independent Variable)

According to Barkhus and Dey (2003) personalization is defined as progression which allows the user to specify their own settings for application process in a given situation. Besides, personalization can also be defined as customization and tailoring the common features in an applications. Khasawneh and Shuhaiber (2013) delineate personalization as a very personal relationship that incurred between mobile users and their devices.

In Jordan, Khasawneh and Shuhaiber (2013) investigated the factors that influence consumer attitude and acceptance of SMS advertising. In this research, 238 online surveys were collected from mobile users in the Internet.

The hypothesis is analyzed using multiple regression analysis. The result proves that personalization has positive significant influence on consumer attitude and acceptance of SMS advertising.

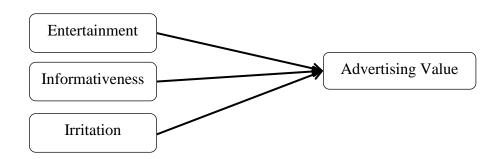
Xu et al. (2008) conducted research on approach for personalized madvertising application which takes place in a university in China. The total of 143 usable samples was collected using convenience sampling. The researchers used the Partial Least Square (PLS) to perform data analysis. The result revealed that a well-designed system to personalized m-advertising did improve the user attitude towards m-advertising.

Saadeghvaziri and Hosseini (2011) examined the factors involved in creating positive attitude towards m-advertising. In this research, 652 survey questionnaires were collected from Iranian mobile users. The result proved that a personalized customer profile does influence the customer attitudes towards mobile advertising.

2.2 Review of Relevant Theoretical Models

This study utilized the conceptual foundation by Brackett and Carr (BC) model. It is originated by Ducoffe (1995). Brackett and Carr (2001) extended Ducoffe (1995) model to anticipate the attitude of the user in advertising. The BC is derived from exchange theory, theory of reasoned action, technology acceptance theory, and the diffusion of innovation theory (Suher & Ispir, 2008).

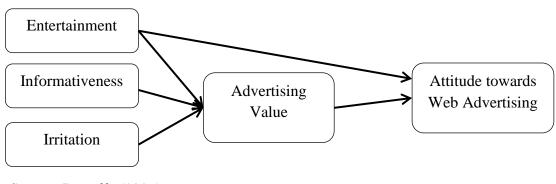




Source: Ducoffe (1995)

Figure 2.1 shows Ducoffe (1995) model. It is introduced in 1995 and improvised in 1996 by Robert H. Ducoffe. Initially, Ducoffe (1995) developed the model to study the relationship between entertainment, informativeness and irritation on advertising value. Ducoffe (1995) defined advertising value as users' perceived worth of the advertising. The model was developed because there was a need to comprehend how advertising can be used to meet its objective as a tool of communication with the consumers. In this study, Ducoffe (1995) confirmed that entertainment, informativeness and irritation are the determinants in understanding how consumers evaluate the advertising value.

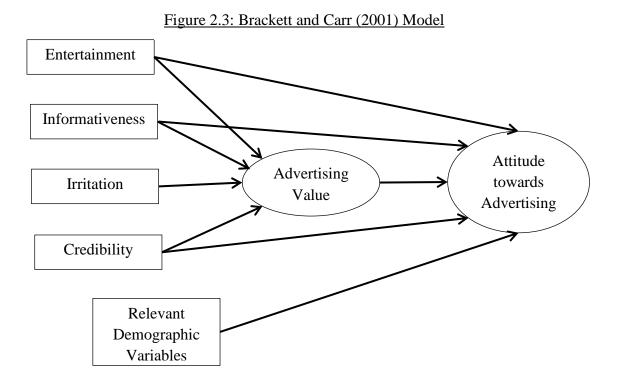




Source: Ducoffe (1996)

Figure 2.2 shows Ducoffe (1996) model. Ducoffe (1996) extended the original model to study how web advertising value influences the consumer attitude towards web

advertising in order to understand how the evaluation of advertising value by the consumers affects their attitude. The extended model studied how entertainment, informativeness and irritation influences advertising value and subsequently influences the attitude toward web advertising. The results confirmed that consumers who perceived high web advertising value inclined to have positive attitude towards web advertising.



Source: Brackett & Carr (2001).

Figure 2.3 shows Brackett & Carr (2001) model (BC model). The BC model further extended Ducoffe (1996) model to incorporate two more elements which are credibility and consumer demographic by Brackett and Carr (2001). The researchers found that both credibility and consumer demographic are linked to consumer attitude on advertising. However, relevant demographic is not used as one of the independent variable in this study because the demographic profile of the targeted respondents are varied compared to the targeted respondents in Brackett and Carr (2001) research.

In Brackket and Carr (2001) research, the targeted respondents were college students. In their research, the relevant demographic were courses taken by the students and gender while non-relevant demographic were age and position. Age is non-relevant because the college students mostly fall within same age category. The respondents were students which mean that they have the same position.

With limited resources and time constraint, relevant demographic was undoable because there are many demographic profiles which are relevant such as age, gender, education and income level. Furthermore, many researchers do not consider demographic as an important determinant in their studies (Khanh, 2013).

In BC model, the definition of each IV is as follows:

Variable	Definition	Source
Entertainment	"its ability to fulfill audience needs for	Ducoffe,
	escapism, diversion, aesthetic enjoyment, or	(1995)
	emotional release"	
Informativeness	"the ability of advertising to <i>inform</i> consumers	Ducoffe,
	of product alternatives so that purchases yielding	(1996)
	the greatest possible satisfaction can be made."	
Irritation	"tactics advertisers employ that make the	Ducoffe,
	experience of processing advertising negative."	(1996)
Credibility	"the extent to which consumers believe that a	Brackett &
	firm can design and deliver products and	Carr,
	services that satisfy customer needs and wants"	(2001)

Table 2.1: Definition of Each Variables in BC (2001) model

Many researchers used BC model by adding or removing variables and merging with other models to use as their foundation in their study. For instance, Tsang et al. (2004) combined Theory of Reasoned Action (TRA) by added permission and incentive variable in BC model to predict attitudes, intentions and behaviors of SMS

advertisement users. Raines (2013) included interactivity in her research on in-app mobile advertising. Besides, mobile self-efficacy was added in Lee et al. (2011) study to explore the mobile users' attitude towards mobile advertising.

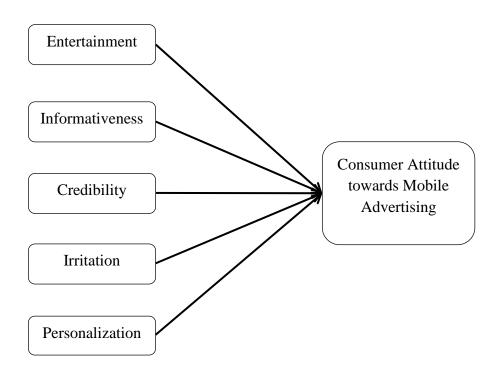
This research extended Brackett and Carr (2001) model by studying the relationship between irritation and attitude toward mobile advertising as the BC model only studied the relationship between irritation and advertising value. In the past studies, other researchers studied the relationship between irritation and their attitude on advertising (Tsang et al., 2004; David, 2007). Prior studies showed that irritation was significantly correlated with the attitude towards advertising (Tsang et al., 2004). In addition, previous studies also shown similar result with consumers had negative attitude towards a brand due to the company's annoying advertisement (Chakrabarty & Yelku, 2005).

In this research, BC model is extended to include one more element which is personalization. The purpose of adding personalization as one of the determinant is because personalization provides relevant information to the consumers as it caters to consumers individually, leading to entertainment and informativeness (Rietbergen, 2010). Personalized advertising also increased the credibility of the advertisement because it avoids mass advertisement where credibility is low as consumers perceived mass advertisement as spam (Bauer et al., 2005). Other researchers also included personalization in their research model (Jingjun, 2006; Mir, 2011; Alsamydai & Khasawneh, 2013).

BC model has been applied in studies related to advertisement in traditional or modern media. For example, Lin and Hung (2009) applied BC model evaluate the value and attitude of internet users towards sponsored links. Waldt et al. (2009) used BC model to determine the consumer attitude towards SMS advertisement. Khanh (2013) investigate the audiences' attitude regarding television advertising of fresh milk products which was based on BC model. BC (2001) model is also used in information technology area to identify the attitude of consumer in social media (Chandra et al., 2013). Nel, Crous, and Human (2000) used this model to improve websites contact efficiency.

2.3 Proposed Conceptual Framework

Figure 2.4: Model for Consumer Attitude towards Mobile Advertising



Adapted from: Brackett & Carr (2001); Tsang, Ho, & Liang (2004); David (2007)

2.4 Hypothesis Development

Based on the discussion from 2.1.1 to 2.1.6, the following hypotheses are proposed.

Hypothesis 1:

Previous research by Bauer et al. (2005), Koo (2010) and Ahmadi et al. (2013) shown that entertainment is positively correlated with attitude towards m-advertising. Therefore, the first hypothesis, H1 is developed.

H1: There is a relationship between entertainment and consumer attitude towards m-advertising.

Hypothesis 2:

Blanco et al. (2010), Kwek et al. (2010) and Keshtgary and Khajehpour (2011) pointed out that informativeness positively influences attitude towards m-advertising. The result from these past studies led to the development of second hypothesis, H2.

H2: There is a relationship between informativeness and consumer attitude towards m-advertising.

Hypothesis 3:

Javid et al. (2012) and Waldt et al. (2009) concluded that credibility significantly affect the consumer attitude towards mobile advertising. These two results from past researches helped to develop the third hypothesis, H3.

H3: There is a relationship between credibility and consumer attitude towards m-advertising.

Hypothesis 4:

Zabadi et al. (2012) and Koo et al. (2012) indicated that irritation have a significant relationship in determining consumer attitude towards mobile advertising. Therefore, the fourth hypothesis, H4 is formulated.

H4: There is a relationship between irritation and consumer attitude towards m-advertising.

Hypothesis 5:

Past studies of Khasawneh and Shuhaiber (2013) and Xu et al. (2008) revealed that personalization has a significant relationship in conclude the consumer attitudes towards mobile advertising. Hence, the fifth hypothesis, H5 is formulated.

H5: There is a relationship between personalization and consumer attitude towards m-advertising.

2.5 Conclusion

This chapter provides overall elements related to the consumer attitude towards madvertising with literature reviews and theoretical models. The hypothesis was generated using the proposed conceptual frame while the research methodology is discussed in the next chapter.

CHAPTER 3: METHODOLOGY

3.0 Introduction

Research design, data collection methods and sampling design has been carried out in third chapter. Then, the variables and measurements are illustrated. Lastly, the data processing and technique used to analyze are explained.

3.1 Research Design

Survey approach is used in this research to study consumer attitude towards madvertising. The rationale of using a survey is that it is easier to collect information from various locations without allocating excessive time and financial resources. Quantitative study is adopted because this study generates or uses numerical data in the data analysis procedure and data collection method.

This research is categorized as exploratory study as there is slight or no information in previous studies with similar problem. This research is characterized as crosssectional which was used to study one phenomenon at one point of time (Saunders, Lewis, & Thornhill, 2009).

3.2 Data Collection Method

Information and statistics are used for analysis and can be further divided into primary and secondary data (Schindler & Cooper, 2001). Hypothesis and research questions are answered using the data collected.

3.2.1 Primary Data

Questionnaires are designed and distributed to target respondents. Questionnaire survey is a cost-effective tool that allows researcher to collect large amount of fresh data in a short periods.

3.3 Sampling Design

3.3.1 Target Population

The targeted population was Malaysian mobile users. According to Mobile Users (2014), there were 27.33 million of the mobile users in Malaysia. Mobile users are the mobile phone users and the smartphone users (Mobile Users, 2014). They were chosen for this study because this study focused on consumer attitude towards m-advertising.

3.3.2 Sampling Frame and Sampling Location

Non-probability sampling was used in this research as there is no sampling frame for a huge number of mobile users in Malaysia (Saunders et al., 2009). The sampling locations were Selangor, Johor, Wilayah Kuala Lumpur and Sabah as these states were categories as the top four of highest number of mobile users in 2012 (Malaysian Communications and Multimedia Commission, 2013). Since there were 56.7% of mobile users in these four states, it represented more than half of the mobile users in Malaysia. Table 3.1 shows the mobile users base by states in Malaysia in 2012.

States	Percentage (%)
Selangor	22.8
Johor	11.6
W.P. Kuala Lumpur	9.1
Perak	7.2
Pulau Penang	6.0
Total	56.7

Table 3.1: Mobile User Base by State, Malaysia, 2012

Source: Malaysian Communications and Multimedia Commission. (2013).

3.3.3 Sampling Elements

Mobile users in Malaysia were the targeted respondents. The targeted respondents are mobile users who have experienced in receiving m-advertisement.

3.3.4 Sampling Technique

A convenience sampling is used in order to distribute the questionnaires to targeted respondent. It is easy to execute and it allows the researchers to obtain basic data and to conduct a pilot study (Joseph, 2009).

3.3.5 Sampling Size

Sample sizes were determined using items-to-response ratios ranged from 1:4 to a minimum 1:10 for each factor to be analyzed (Hinkin, 1998). In this research, there was a total of 26 items to be measured for determine the

sample size. 20 items were measured for entertainment, informativeness, credibility, irritation and personalization whereas 6 items measured for attitude towards m-advertising. Hence, the sample size ranged from (1:4; 26x4) 104 to (1:10; 26x10) 260 would be considered adequate for factor analysis. However, the greater sample size will produce more reliable and accurate results (Comrey & Lee, 2013). Therefore, sample size of this study was 450 respondents to achieve meaningful estimate.

3.4 Research Instrument

The questionnaire was self-administrative by using online method. According to Zikmund (2003), online questionnaires reduce the processing time, provide quick distribution and response, and it is easier for researches to send the questionnaires to target respondents in different areas.

In this research, Internet-hosting questionnaire is used because it increases responses compared to the physical form of questionnaire (Tourangeau & Yan, 2007). Tourangeau and Yan (2007) recommend researchers to use internet as intermediary. Schonlau, Fricker, and Elliott (2002) stated that the data collected from the internet are more complete and more quality compared to the data collected from traditional methods such as post mail. Besides, electronic surveys generated higher response-rates, completeness and quality of data (Schonlau et al., 2002).

In this research, the online questionnaire is hosted in https://docs.google.com/forms/d/1nlNuMgwHtThnsmf4uG-

p4DkAv5tm63uulq20A1gyEGY/viewform. A total of 450 online questionnaires are distributed to the mobile users via social networking sites. The questionnaires are distributed from 3rd May 2014 to 3rd June 2014.

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A pilot test is conducted to test the reliability and validity of the questionnaire among the mobile users in University Tunku Abdul Rahman (Perak Campus). The pilot test enables researchers to detect any errors or weaknesses for further modification on the questionnaire before it is distributed to the masses (Kvale, 2007). Normality test and reliability test are conducted to ensure the questions are valid and reliable. According to Monette, Sullivan, and Dejong (2013), 30 respondents were sufficient for a pilot test to check validity of the questionnaires. Hence, 30 respondents are selected for a pilot test in this research.

3.5 Constructs Measurement

3.5.1 Scale of Measurement and Scaling Technique

In Section A, demographic data such as gender, age and education were measured using nominal and ordinal scales. Section B adopted five-point Likert Scale from 1=strongly disagree to 5=strongly agree to measure five independent variables which are entertainment, informativeness, credibility, irritation and personalization, and a dependent variable which is attitude toward m-advertising. Each independent variable consists of four items whereas dependent variable consists of six items. Respondents can indicate their agreement level based on a five-point Likert scale.

3.5.2 Operational Definitions of Constructs

3.5.2.1 Entertainment

Entertainment means the enjoyment of consumers when receiving mads as it generates pleasure.

Items	Description	Source (s)	Measurement
EN 1	Mobile advertising is	(Jingjun, 2006)	
	enjoyable.		
EN 2	Mobile advertising is	(Wong, 2011)	5 noint Likort goolo
	interesting.		5-point Likert scale (Interval)
EN 3	Mobile advertising is	(Unal, Ercis, &	(intervar)
	entertaining.	Keser, 2011)	
EN 4	Mobile advertising is	(Koo, 2010)	
	fun to receive.		

Table 3.2: The Measurement for Entertainment

3.5.2.2 Informativeness

Informativeness is the ability of marketers introduces a substitute goods and service by distributing the information via advertising.

Items	Description	Source (s)	Measurement
IN 1	Mobile advertising is good source sales information.	(Jingjun, 2006)	
IN 2	Mobile advertising supplies relevant sales information.	(Koo, 2010)	5-point Likert scale (Interval)
IN 3	Mobile advertising make sales information	(Jingjun, 2006)	

Table 3.3: The Measurement for Informativeness

	immediately		
	accessible.		
IN 4*	Mobile advertising	(Koo, 2010)	
	do not provide		
	timely information.		

3.5.2.3 Credibility

Credibility is the degree to which consumers believe that the advertisement provided by firms is truthful and reliable.

Items	Description	Source (s)	Measurement
CR 1	Mobile advertising is reliable.	(Wong, 2011)	
CR 2	Mobile advertising is believable.	(Wong, 2011)	5-point Likert scale
CR 3	Mobile advertising is trustworthy.	(Jingjun, 2006)	(Interval)
CR 4	I use personalized mobile advertising as a reference for purchasing.	(Unal et al., 2011)	

Table 3.4: The Measurement for Credibility

Source: Developed for the research.

3.5.2.4 Irritation

Irritation means the feel of annoyance that occur that intervenes with the m-advertising messages.

Items	Description	Source (s)	Measurement
IR 1	Mobile advertising is	(Jingjun, 2006)	
	irritating.		
IR 2	Mobile advertising is	(Unal et al.,	
	annoying.	2011)	5-point Likert scale
IR 3	Mobile advertising is	(Wong, 2011)	(Interval)
	unpleasing.		
IR 4	Mobile advertising is	(Unal et al.,	
	excessive and out of	2011)	
	control.		

Table 3.5: The Measurement for Irritation

Source: Developed for the research.

3.5.2.5 Personalization

Personalization allows the user to specify their own settings for application process according their preference.

Items	Description	Source (s)	Measurement
PE 1	Contents in mobile	(Jingjun, 2006)	
	advertising are		
	personalized.		5-point Likert scale
PE 2	Mobile advertising is	(Wong, 2011)	(Interval)
	available for my		
	preference.		

Table 3.6: The Measurement for Personalization

PE 3	Mobile advertising displays personalized message to me.	(Wong, 2011)	
PE 4	Mobile advertisement provides me with personalized deals/ads according to my activity context.	(Xu, Luo, Carroll, & Rosson, 2011)	

3.5.2.6 Consumer Attitude towards Mobile Advertising

Attitude means a long term common evaluation of consumer towards mobile advertising.

	Advertising			
Items	Description	Source (s)	Measurement	
AT 1	I will consider reading mobile ads.	(Wong, 2011)		
AT 2	I think mobile advertising is good.	(Bauer et al., 2005)	5-point Likert scale (Interval)	
AT 3	I like to receive and read mobile advertisements.	(Wong, 2011)		

Table 3.7: The Measurement for Consumer Attitude towards Mobile

AT 4	I will receive and read mobile advertisements in future.	(Wong, 2011)	
AT 5	I appreciate receiving mobile advertising messages.	(Bauer et al., 2005)	
AT 6	I have positive attitude towards mobile advertising.	(Wong, 2011)	

3.6 Data Processing

The data processing for the research purpose was carried out before the data is being analyzed which included data checking, coding, entering and transcribing. The data processing has been accomplished before the data is being analyzed.

3.6.1 Data Checking

Data checking process is essential phase of data preparation. It involves checking the validity and completeness of the data. A total of 450 sets of questionnaires were distributed to the mobile users in Selangor, Kuala Lumpur, Johor and Sabah. However, out of 450 sets of returned questionnaires, 53 sets were rejected before proceed for further processing due to missing data and unqualified respondents. As a result, only 397 sets of

returned questionnaires can be used for data processing. This is to avoid any misrepresentation in the data analyzing process.

3.6.2 Data Coding

This technique is used to allocate unique numbers or symbols for each item in the questionnaires (Morgan, Leech, Gloeckner & Barrett, 2012). Before entering the raw data into SAS software, all data were coded into numerical forms so that it will useful for statistical purpose when all response options are diversified into smaller groups. There were two sections in the questionnaire which are Section A and B. For example, the demographic profile of gender in the Section A, male was numbered as "1" and female was numbered as "2" whereas the options in Section B were coded according to 5-point Likert Scale, such as the strongly disagree was coded as "1", disagree coded as "2" and so on.

3.6.3 Data Entering

397 completed questionnaires were entered into the Statistical Analysis System (SAS) Enterprise Guide version 5.1 to generate the results. The data entered was checked to ensure evenness with the actual data in the questionnaire and to make sure the data entered free from mistakes.

3.6.4 Data Transcribing

All the coded data were transcribed using the data analysis software, SAS Enterprise Guide 5.1 in order to analyses the data as well as generate the result. The data will be used in Pearson's Correlation and Multiple Linear

Regression analysis after the data were transcribed into average summated score.

3.7 Data Analysis

The raw data is entered digitally to detect error and present it in a graphical form such as tables and charts is the definition of data analysis (Burns & Bush, 2008). In this research, the raw data collected will be analyzed using SAS Enterprise 5.1.

3.7.1 Descriptive Analysis

The raw data will be processed to be transformed and categorized into descriptive information. Descriptive information included targeted respondent demographic can be presented using frequency and percentage .Independent variable and dependent variable is presented using mode, mean, median and standard deviation. Thus, descriptive analysis will be executed to analyze the data and their characteristic.

3.7.2 Scale Measurement

3.7.2.1 Reliability test

According to Tavakol and Dennick (2011), reliability test was used to ensure results are generated using measurement that able to measure consistently. Reliability is measured via Cronbach's Alpha coefficient. The range of Cronbach's Alpha reliability coefficient normally is between 0 and 1. George and Mallery (2003) recommended that the acceptance level of reliability should greater than 0.70.

Range	Strength of Association
< 0.5	Unacceptable
≥ 0.5	Poor
≥ 0.6	Questionable
≥ 0.7	Acceptable
≥ 0.8	Good
≥ 0.9	Excellent

Table 3.8 Cronbach Alpha Coefficient Range

Source: George & Mallery (2003)

3.7.2.2 Normality test

According to Sekaran and Bougie (2010), normality test will be used to test the distribution of values for variables containing numerical data. The skewness and kurtosis test will be executed to test the normality of data, and the acceptable range for skewness and kurtosis is \pm 3.0. If the value falls within \pm 3.0, it means the data is normally distributed.

3.7.2.3 Inferential Analysis

Inferential analysis is defined as inferences of the larger population based on the sample. A sample is used to generalize the populations of which the sample was drawn. Inferential analysis is performed to conclude a result and to test the hypothesis of the research. It depends on the use of a random sampling technique which ensures that the sample can represent the population.

3.7.2.4 Pearson Correlation Coefficient Analysis

In this research, this analysis is chosen to evaluate the direction and strength between the five independent variables with the consumer attitude towards m-advertising. Stanton (2001) stated that the coefficient (r) shows the strength and direction of the relationship of a linear relationship. The correlation coefficient ranges from +1.0 is known as perfect positive relationship to -1.0 which is known as perfect negative relationship. This significantly proves the independent variable have direct relationship with the dependent variable and vice versa. Multicollinearity problem exists when the independent variables are strongly correlated to each other. The value of the correlation should not be more than 0.9 (Hair, Black, Basin, & Anderson, 2010).

3.7.2.5 Multiple Linear Regression

Multiple linear regression is to test the value of dependent variable with more than one independent variable (Malhorta & Peterson, 2006). Multiple linear regressions is used as the data analysis technique to determine the relationship strength of the independents variables and dependent variable.

The multiple regression equation in this research as below:

 $Y = \alpha + \beta 1(X1) + \beta 2(X2) + \beta 3(X3) + \beta 4(X4) + \beta 5(X5)$ where, Y = Consumer attitude towards m-advertising (AT) $\alpha = \text{a constant, the value of Y when all X values are zero}$ $\beta i = \text{the slope of the regression surface}$ X1 = Entertainment (EN)X2 = Informativeness (IN)X3 = Credibility (CR)X4 = Irritation (IR)X5 = Personalization (PE)

3.8 Conclusion

Chapter three presented the method of used to collect the data and the targeted respondents as well as the research methodology. The data gained was processed by SAS software. The next chapter, will be discussing the results obtained based on the adopted methodologies.

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

In order to derive the conclusion and further understanding on this research, the results were analyzed by using software. The software applied for the research purpose is SAS Enterprise Guide 5.1. Dependent variable and independent variables relationships were concluded using the obtained results.

4.1 Pilot Test

4.1.1 Reliability and Normality Test on Pilot Test

Variables	Number of Item	Reliability Test
EN	4	0.8579
IN	4	0.7630
CR	4	0.8430
IR	4	0.7480
PE	4	0.7236
AT	6	0.7197

Table 4.1: Reliability Statistics (Pilot Test)

Source: Developed for the research.

Variables	Skewness	Kurtosis
EN	0.2343	1.6169
IN	0.6091	2.9283

Table 4.2: Normality Test (Pilot Test)

CR	0.4189	1.9928
IR	0.5733	1.3395
PE	0.3889	0.2990
AT	-0.3367	1.0952

Table 4.1 and 4.2 shows the result of reliability test and normality test derived from pilot test and the number of samples collected were 30 samples. The value of Cronbach's Alpha is ranged from 0.7197 to 0.8579. The Cronbach's Alpha value for EN is 0.8579, which is the highest Cronbach's Alpha value. The Cronbach's Alpha for AT is 0.7197. The Cronbach's Alpha of IN (0.7630), CR (0.8430), IR (0.7480), and PE (0.7236) are above the acceptable level which is 0.70 and the measurement scales are considered reliable. Thus, in this research, all independent variables are able to produce consistent output (George & Mallery, 2003).

Table 4.2 shows the result of the normality test. From the table, all the skewness and Kurtosis's values of all IVs are within the range of +3 to -3. Therefore all of these variables are assumed normality (Sekaran & Bougie, 2010).

4.2 Descriptive Analysis

4.2.1 Demographic Profile of the Respondents

		Frequency	Percentage (%)
Gender	Male	194	48.87
	Female	203	51.13

Table 4.3: Demographic Profile

Age	15 - 19 years	84	21.16
	20 - 24 years	127	31.99
	25 - 29 years	75	18.89
	30 - 34 years	59	14.86
	\geq 35 years old	52	13.10
Race	Malay	109	27.46
	Chinese	147	37.03
	Indian	113	28.46
	Others	28	7.05
Education	High School	84	21.16
	Diploma	130	32.75
	Degree	153	38.54
	Master	26	6.55
	Others	4	1.01
Personal monthly	RM 0 – 1000	96	24.18
average income level	RM 1001 – 3000	158	39.80
level	RM 3001 – 5000	93	23.43
	≥ RM 5001	50	12.59
Do you own any	Yes	397	100.00
mobile devices?	No	0	0
Did you receive	Yes	397	100.00
mobile advertisement in past 3 month?	No	0	0

The genders of targeted respondents are 194 male or 48.87 % and 203 female or 51.13 % from the total of 397 respondents. The difference between both genders is 9 responses or 2.27 %. Thus, the number of male and females in this research are almost equally divided.

The highest percentages of respondents aged from 20 to 24 years old with 127 respondents or 31.99% while the next majority is aged from 15 to 19 years old with 84 respondents or 21.16%. Respondents aged from 25 to 29 years old consist of 75 respondents or 18.89%.

Most of the respondents are Chinese with 147 respondents (37.03%), following with Indian with 113 respondents (28.46%), Malay with 109 respondents (27.46%) and others with 28 respondents (7.05%). Therefore, the ethic group between Malay, Chinese and Indian are fairly balance in number. Examples of other races are Dayak, Kadazan, and Iban.

The majority of the respondents have Bachelor's Degree with 153 respondents or 38.54% while respondents who have Diploma in education consist of 130 respondents or 32.75%. The sum of respondents who have Degree and Diploma are 285 respondents from the total 397 respondents which show that most of the respondents are well educated.

The highest number of respondents has personal monthly average income of RM 1001 to RM 3000 with 158 respondents (39.80%). Next, personal monthly average income of RM 0 to RM 1000 is 96 respondents (24.18%) while RM 3001 to RM 5000 is 93 respondents (23.43%). Lastly, RM 5001 and above is 50 respondents (12.59%).

The data collected shown that 397 respondents or 100% own mobile devices and had experience receiving m-advertisement in the past 3 months. Therefore, the possibility for the respondents to receive m-advertisement is very high and all the 397 respondents have good judgment for judging the madvertisement received in order to complete the survey questionnaire.

4.2.2 Central Tendencies Measurement of Constructs

Variable	Mean	Standard Deviation		
EN	2.1555	0.9701		
IN	2.9125	0.8377		
CR	2.3155	0.8131		
IR	3.6297	1.0171		
PE	2.5963	0.8247		
AT	2.3854	0.9112		

Table 4.4: Central Tendencies

The mean ranges from 2.1555 to 3.6297 while the standard deviation ranges from 0.8131 to 1.017. Most of the respondents disagree that m-advertisement is entertaining with the mean of 2.1555 and standard deviation of 0.9701. Therefore, when the respondents perceive m-advertisement as less attitude will entertaining. their be negatively affected. Besides. informativeness yielded result with mean of 2.9125 and standard deviation of 0.8377. Respondents slightly disagree that m-advertisement provides reliable and timely information to them. The mean of credibility of 2.3155 and standard deviation of 0.8131 shows that respondents disagree that madvertisement is credible and not trustworthy. Then, irritation with mean of 3.6297 and standard deviation of 1.0171 indicate that respondents strongly agree that m-advertisement are irritating and annoying. Next, personalization having mean of 2.5963 and standard deviation of 0.8247 show that madvertisements are not designed to cater the respondents specifically. Lastly, attitude towards m-advertising with mean of 2.3854 and standard deviation of 0.9112 indicate that the respondents perceive negatively towards madvertising in general.

4.3 Scale Measurement

4.3.1 Normality Test

Variable	Skewness	Kurtosis
EN	0.5181	-0.3490
IN	-0.2578	0.0780
CR	0.1299	-0.3205
IR	-0.3845	-0.4393
PE	0.0522	0.2662
AT	0.2997	-0.2772

Table 4.5: Normality Test

Source: Developed for the research.

The normality level of dependent variable and independent variables were tested using Skewness and Kurtosis test. Skewness measures the degree to which a statistical distribution is not symmetry around the mean whereas kurtosis is used to measure the normality of the distribution (Cisar & Cisar, 2010).

The lowest skewness was irritation (-0.3845) whereas the highest skewness was entertainment (0.5181). On the contrary, the lowest kurtosis also was irritation (-0.4393) and personalization was the highest kurtosis (0.2662). From the result, all variables in the value of skewness and kurtosis fulfilled the acceptable range of ± 3.0 and it can be concluded that the variables were normally distributed (Saito, 2003).

4.3.2 Reliability Test

Variable	Items	Cronbach's Alpha
EN	4	0.9330
IN	4	0.7722
CR	4	0.8819
IR	4	0.9394
PE	4	0.8434
AT	6	0.9396

Table 4.6: Reliability Test

The coefficient range of Cronbach's Alpha for the variables is between 0.7722 and 0.9396. According to George and Mallery (2003), entertainment, irritation and attitude are regarded as excellent reliable with Cronbach's Alpha value higher than 0.9. Credibility and personalization were reliable because the value of Cronbach's Alpha was above 0.8. Only informativeness variable is considered acceptable reliable with values above 0.7. In short, all of the items have achieved Cronbach's Alpha generally agreed lower limit of 0.7 (Hair, Anderson, Tatham, & Black, 2006). Therefore, the items of the questionnaire for this study are reliable.

4.3.3 Multicollinearity Test

	EN	IN	CR	IR	PE
EN					
Pearson	1				
Correlation					
Sig (2-tailed)					
Ν					

Table 4.7: Multicollinearity Test

IN					
Pearson	0.5584	1			
Correlation	<.0001				
Sig (2-tailed)	397				
Ν					
CR					
Pearson	0.6199	0.5300	1		
Correlation	<.0001	<.0001			
Sig (2-tailed)	397	397			
Ν					
IR					
Pearson	-0.5286	-0.4188	-0.4074	1	
Correlation	<.0001	<.0001	<.0001		
Sig (2-tailed)	397	397	397		
Ν					
PE					
Pearson	0.4108	0.3373	0.4175	-0.2202	1
Correlation	<.0001	<.0001	<.0001	<.0001	
Sig (2-tailed)	397	397	397	397	
Ν					

Entertainment and credibility have the highest value of the correlation (0.6199) whereas irritation and personalization have the lowest value of the correlation (0.2202). As the correlation ranged from 0.2202 to 0.6199, which is less than 0.9, therefore this research did not encounter any multicollinerarity problem (Hair, Money, Samouel, & Page, 2007).

4.4 Inferential Analysis

	EN	IN	CR	IR	PE	AT	
AT							
Pearson	0.6368	0.5362	0.5777	-0.4517	0.5093	1	
Correlation	<.0001	<.0001	<.0001	<.0001	<.0001		
Sig (2-tailed)	397	397	397	397	397		
Ν							

4.4.1 Pearson's Correlation Analysis

Table 4.8: Pearson Correlation

Source: Developed for the research.

Entertainment has the strongest relationship with attitude (r = 0.6368) compare to remaining 4 IVs which are informativeness (r = 0.5362), credibility (r = 0.5777), personalization (r = 0.5093). However, irritation is negatively correlated (r = -0.4517). The result also revealed that credibility is negatively correlated compared to other 4 IVs.

4.4.2 Multiple Linear Regressions

Model	Root MSE	Dependent Mean	Coefficient Variance	R Square	Adjusted R Square
5	0.6229	2.3854	26.1109	0.5386	0.5327

Table 4.9: Model Summary

Source: Developed for the research.

Parameter Estimates								
Variable	Label	DF	Parameter	Standard	t	Pr > t	Tolerance	Variance
			Estimate	Error	Value			Inflation
Intercept	Intercept	1	0.5353	0.2353	2.28	0.0234	-	0
EN	EN	1	0.2657	0.0478	5.64	<.0001	0.4697	2.1289
IN	IN	1	0.1722	0.0477	3.61	0.0003	0.6144	1.6276
CR	CR	1	0.1915	0.0523	3.66	0.0003	0.5410	1.8483
IR	IR	1	-0.1008	0.0370	-2.73	0.0066	0.6935	1.4419
PE	PE	1	0.2690	0.0429	6.27	<.0001	0.7815	1.2795

Table 4.10: Parameter Estimates

Notes: Overall model F = 76.88

Sig. of F (p< 0.0001)

 $R^2 = 0.5386$

Adjusted $R^2 = 0.5327$

a. Dependent Variable: Attitude

Source: Developed for the research.

F-statistic was used to detect overall statistical significance of the regression model. The result indicated that F-value was significant at 76.88. The large F-value shows that the model is good and well fit. The p-value was equal to <0.0001 which was less than 0.05. It was an indication that the dependent variable which was the consumer attitude was predictable by using the independent variables.

The value of R-square at 0.5386 indicated that 53.86% of the consumer attitude towards m-advertising was significant by entertainment,

informativeness, irritation, credibility, and personalization. In other words, the result shows that 53.86% of consumer attitude towards m-advertising were explained by the five independent variables. The remaining 46.14 % of consumer attitude towards m-advertising would be explained by the other factors which are not taken into account in this study.

Consumer attitude towards m-advertising are strongly related to EN (p<0.0001), IN (p=0.0003), CR (p=0.0003), IR (p=0.0066) and PE (p<0.001). PE was the strongest determinant among these IVs while IR was found to be the least important among these IVs.

The model summation adopted can be derived based on: $Y = \alpha + \beta 1 \text{ EN} + \beta 2 \text{ IN} + \beta 3 \text{ CR} + \beta 4 \text{ IR} + \beta 5 \text{ PE}$ Where Y = Consumer attitude towards m-advertising, X1 = Entertainment (EN) X2 = Informativeness (IN) X3 = Credibility (CR) X4 = Irritation (IR) X5 = Personalization (PE) $Y = \alpha + \beta 1 \text{ EN} + \beta 2 \text{ IN} + \beta 3 \text{ CR} + \beta 4 \text{ IR} + \beta 5 \text{ PE}$ = 0.5353 + 0.2657EN + 0.172IN + 0.1915CR - 0.1008 IR + 0.2690PE

This equation shows that entertainment, informativeness, credibility and personalization was positively correlated with consumer attitude towards m-advertising. Irritation was negatively related to consumer attitude towards m-advertising.

4.5 Conclusion

Chapter 4 revealed the different results obtained from the data analysis. The results from Pearson Correlation Analysis also show that multicollinearity problem did not exist while the strength between variables was examined through Multiple Linear Regression. The next last chapter will discuss regarding implication and recommendation of this entire research.

CHAPTER 5: DISCUSSIONS, CONCLUSION AND IMPLICATIONS

5.0 Introduction

The data has been analyzed and discussed thoroughly to derive this research's conclusion. Moreover, the implication of the research from the managerial perspective and theoretical perspective was clarified. Future research can be improved by implementing the recommendation which was based on the limitation.

5.1 Summary of Statistical Analysis

5.1.1 Summary of Descriptive Analysis

A total of 450 respondents took part in the survey, but only 397 are useful cases. Thus, the total respond rate yielded was 88.22%. It was found that majority of the respondents were Chinese females aged from 20 to 24. Result also indicates that 38.54% of the respondents were pursuing their degree. The result shows that the majority income level was within RM1001 to RM3000. It also showed that 100% of them own devices and receive advertisement past 3 months.

The mean of all the variables are within the range of 2.1555 to 3.6297 whereas the standard deviations of all of the variables range from 0.8131 to 1.017. The critical values of skewness of all the variables, including dependent variables, are ranged from -0.3845 to 0.5181, while their critical values of kurtosis were ranged from -0.4393 to 0.2662. These results indicate that the normality assumption of the data has been met. The Cronbach's Alpha coefficient of the

variables ranged from 0.7722(IN) to 0.9396(AT). Thus, the variables have satisfied the required minimum level of reliability.

5.1.2 Summary of Inferential Analysis

Hypotheses	Pearson	Multiple Linear Regression					
	Correlation	(R-square: 0.5386)					
	Result	Statistic	Beta	P-value	Hypotheses		
H1: There is a positive	0.6368	MLR	0.2657	0.0001	Accepted		
relationship between	(Moderate,						
entertainment and	Positive)						
consumer attitude							
towards m-advertising							
in Malaysia.							
H2: There is a positive	0.5362	MLR	0.1722	0.0003	Accepted		
relationship between	(Moderate,						
informativeness and	Positive)						
consumer attitude							
towards m-advertising							
in Malaysia.							
	0.5555		0.1017	0.0000			
H3: There is a positive	0.5777	MLR	0.1915	0.0003	Accepted		
relationship between	(Moderate,						
credibility and	Positive)						
consumer attitude							
towards m-advertising							
in Malaysia.							

Table 5.1: Summary of Hypothesis and Pearson Correlation

H4: There is a	-0.4517	MLR	-0.1008	0.0066	Accepted
negative relationship	(Moderate,				
between irritation and	Negative)				
consumer attitude					
towards m-advertising					
in Malaysia.					
H5: There is a positive	0.5093	MLR	0.2690	0.0001	Accepted
relationship between	(Moderate,				
personalization and	Positive)				
consumer attitude					
towards m-advertising					
in Malaysia.					

Entertainment, informativeness, credibility and personalization were significantly positive correlated with the consumer attitude while irritation is negatively correlated. Therefore, all hypotheses are supported by the result.

5.2 Discussion of Major Findings

5.2.1 The relationship between Entertainment and Attitude towards mobile advertising

The multiple linear regression test shows that entertainment are significantly correlated with the attitude towards m-advertising with p-value less than 0.05 (p<0.0001). Thus, entertainment significantly affect consumer attitude towards m-advertising and the alternative hypothesis was accepted.

Entertainment was the strongest influence on attitude towards madvertisement which was congruent with research by Bauer et al. (2005). Koo (2010) found that entertainment was one of the determinants affecting attitude towards m-advertising. Ahmadi et al. (2013) showed that entertainment was vital in m-advertising. The questionnaire collected shown that respondents did not perceive m-advertisement as entertaining which led to negative attitude towards m-advertising.

This is due to the m-advertising did not provide enjoyment and emotional experience to the consumers (Waldt et al., 2009). The advertisement received were not comical resulting in the loss of attention by the consumer (Waldt et al., 2009). Furthermore, the advertisements provided consist of low entertainment value and low involvement of the consumers due to lack of puzzle and games in the advertisement (Nel et al., 2000).

Therefore, it is essential that the m-advertisement must be entertaining to attract consumers and encourage them to receive promotion and advertisement positively in future. Consumers will be more willingly to accept m-advertising when the level of perceived entertainment from the m-advertisement is increased. Zabadi et al. (2012) recommend marketers to send games and rewards to the consumer to keep them entertained.

5.2.2 The relationship between Informativeness and Attitude towards mobile advertising

The result generated for this study indicates that the relationship between informativeness and Malaysian's attitude towards m-advertising was positively correlated as the p-value was 0.003, which is less than 0.05. In other words, Hypothesis 2 was accepted and this means consumers' attitude can be positively influenced when m-advertising provide high information

value. The statement was in line with past researches findings (Blanco et al., 2010; Kwek et al., 2010; Keshtgary & Khajehpour, 2011; Punyatoy & Durgesh, 2011).

Information in m-advertising has becoming an important factor to consider especially in helping consumers to explore the mobile commercial world. However, advertisers should pay attention to the content, relevant, timing and quality of information as these are crucial factors that may lead to negative attitude towards m-advertising (Gao & Koufaris, 2006; Keshtgary & Khajehpour, 2011). Blanco et al. (2010) found that consumers recognize only a very low level of informativeness in m-advertisement due to information provided that does not meet their needs and interests.

As consumers with dissimilar interests and preferences towards m-advertising, a well understanding of consumer attitude is necessary even they pays little concerns for the information (Scharl, Dickinger, & Murphy, 2005). Once the advertisement tailored to the interest and needs of the consumers, it will positively affect their attention and attitude towards m-advertising. Therefore, m-advertising must be designed to fulfill Malaysian consumers' interests so that they will be more likely to accept it.

5.2.3 The relationship between Credibility and Attitude towards mobile advertising

Based on the multiple linear regression test, it could be concluded that there was a positive relationship between credibility and consumer attitude towards m-advertising. Besides that, the p-value for this variable was 0.0003 (p-value<0.05). Thus, credibility is significant in affecting consumer attitude. Hence, the hypothesis was accepted.

This result was consistent with previous past studies on m-advertising (Javid et al., 2012; Waldt et al., 2009) which also concluded that credibility had significant and positive relationship with consumer attitude towards m-advertising. Javid et al. (2012) found that credibility is important in m-advertising to create trust among the consumers. It is important to maintain credibility to increase the trust of consumers. M-advertising should provide customers with correct information so that customers can depend on the advertisement and feel satisfied (Waldt et al., 2009).

In the study of Koo et al., (2012), the research shows that consumers who are familiar with m-advertising will create confidence in them to trust the advertisement. Lack of protecting customers' privacy in the m-advertising will lead to perceived uncertainty whereby consumers feel not secured of m-advertising (Drossos et al., 2007). Consumers will believe m-advertising when they feel secured to receive m-advertising.

5.2.4 The relationship between Irritation and Attitude towards mobile advertising

In this research, irritation was found to be negative related to consumer attitude towards m-advertising and significantly correlated with the p-value less than 0.05 (p=0.0066) in multiple linear regression test. This result was consistent with most of the previous research findings such as Koo et al. (2012), Ul (2012) and Zabadi et al. (2012).

This is probably due to consumers feel that m-advertisement are too intrusive, irritation, annoyance and offensive and they tend to refuse advertisements. In other words, irritating, offending, insulting or manipulative advertising techniques cause consumers to perceive advertisements as undesirable and irritation (Ducoffe, 1996; Ul, 2012; Zabadi et al., 2012).

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Besides, it was bothersome if they receive too many messages from the advertisers (Bruner & Kumar, 2007). As a result, this may cause consumers to delete them without reading them (Carrol, Barnes, & Scornavacca, 2007). Scharl et al. (2005) emphasized that unwanted m-advertising messages or "spam" is another possible annoyance and the fear of spam is the strongest negative attitude of consumers towards m-advertising. This past studies proved that overwhelmed m-advertising messages has influence the consumer attitude being irritable.

To sum up, when consumers felt that m-advertisement is irritating or disturbing, their attitude towards the product advertised change in a negative way.

5.2.5 The relationship between Personalization and Attitude towards mobile advertising

Based on analysis of the result, this research can conclude there was a positive relationship between personalization and consumer attitude towards m-advertising. The p-value showed for this variable was 0.0001 (p-value<0.05). This summarized that personalization significant in affecting consumer attitude. Therefore, the hypothesis was accepted.

The result obtained for this research was consistent with the previous study of Khasawneh and Shuhaiber (2013) stated that consumer attitude towards SMS advertising have been positively influence by the personalization of SMS. Besides, Xu et al. (2008) findings showed that the personalized m-advertising do effect the consumer attitudes. The users of mobile phone do emphasis significantly on the feature for personalized m-advertising. In addition,

Saadeghvaziri and Hosseini (2011) stated that by developing a database, madvertising would be personalized by compiling to the customer's profiles.

According to Scharl et al. (2005), advertisers should have an authorization and convince an option before sending advertisement. It is to make sure sending a personalized method of advertising to an interested group of audience. Once, the advertiser able to provide consumer with personalized information it will positively affect their attitudes towards m-advertising. Thus, the result obtained giving a base for the m-advertising field in Malaysia to create a well personalized m-advertising to attract more consumers.

5.3 Implications of the Study

5.3.1 Managerial Implication

The result reflected the importance of entertainment in influencing Malaysian consumer attitude towards m-advertising. Therefore, this study suggests that advertisers need to ensure the content of m-advertising messages is entertaining and fun by providing more enjoyment such as games and puzzle in order to increase the entertainment value in m-advertising.

Furthermore, the findings of this research showed the importance of informativeness in influencing Malaysian consumer attitude towards m-advertising. So, advertisers should ensure that content of m-advertising messages provide relevant and valuable information to consumers (Blanco et al., 2010). Advertisers may also incorporate tailor-made information to the consumers in order to improve their attitude towards the m-advertising.

Besides, credibility is one of the important factors for advertisers to consider seriously in affecting the Malaysian consumer attitude towards m-advertising.

Hence, advertisers are suggested to ensure the customers' privacy in madvertising are strictly controlled and protected so as to increase the trust and credibility in m-advertising. For instance, advertisers may request for permission before sending any advertisement to the consumers (Pietz & Olofsson, 2009).

The result of this study showed that advertisers should ensure that the content of messages are not irritating and annoying before sending m-advertising to consumers. In addition, the number of m-advertising messages sent to consumers should be adequate and tolerable at the suitable time, so that consumers are not irritated. For example, advertisers should avoid delivering the advertising messages to customers during their working hours.

As the personalization is another factor that influences the Malaysian attitude towards m-advertising, it is important for advertisers to emphasis more on the personalized m-advertising. This is to increase the positivity of the consumer attitude toward the personalized m-advertising which may influences the acceptances of m-advertising among the consumers. Moreover, personalized m-advertising is an important mobile commerce application to deliver advertising message according to consumers' preference and habits (David, 2007).

This research is important for advertisers for better understanding of the determinants that significantly affect the consumer attitude towards m-advertising in Malaysia especially entertainment and personalization as both determinants were proven to be the strongest determinants in this research. Thus, advertisers will be able to make the right decision on how they present their advertisement in the consumers' mobile devices.

5.3.2 Theoretically Implication

The validity of Ducoffe model and Brackett and Carr model are proven to in this study as the previous studies are conducted in the past. This research will provide a valuable contribution to both models and a better understanding on the factors affecting consumer attitude towards m-advertising in Malaysia.

Besides, this research further extended both models by adding one more variable which is personalization in determining consumer attitude towards M-advertising. This study proved that personalization via m-advertising are another factor to affect consumer attitude. This study provides a foundation for future researcher in creating a new model in the field of marketing and advertising area.

5.4 Limitations of the Study

Cross-sectional study technique is used in this research. Therefore, the result of this data will not include the changes of the targeted respondent characteristic over time. Future studies are recommended to use longitudinal study as it includes the changes of the respondent over time (Hedeker & Gibbons, 2006). Researchers may conduct a research on the changes of the attitude of consumers before and after exposed to m-advertising.

Selangor, Sabah and Kuala Lumpur were chosen as the sampling location. This considered as one of the major resistant for the research because researchers unable to collect sample from all the states of Malaysia due to cost and time constrains.

This research is used to study the consumers only in Malaysia specifically which may resulted in different conclusion when it is conducted in other countries. The diversity of consumers around the world may vary as mobile users in other country may perceive m-advertising differently compared to Malaysia. Waldt et al. (2009) recommended researchers to study consumers that consist of various cultures and emphasize the impact of culture towards their attitude on m-advertising.

Lastly, the targeted respondents may provide unreliable data due to the intention of respondents to satisfy the researchers. Further risk might occur as respondents may hastily answer the questionnaires without giving further thoughts in their answers. Respondents may also do not understand the questions in the survey although instructions were given. They may answer the questionnaire lightly as they do not understand the questionnaire lightly as they do not understand the questions clearly.

5.5 Recommendation for Future Research

The research on consumer attitude towards m-advertising in Malaysia is still a fairly new area. Carefully thought-out procedure and processes have to been carried out in order to investigate and obtaining reliable information. Hence, some recommendations have been suggested for future studies.

The suggestion to be given for the future researches is they should aim respondents from all states of Malaysia since this research has only focused on few states. Therefore, it will help the researchers to obtain a better result through targeted population for their future studies.

Moreover, future researchers are encouraged to use face-to face form of distribution of the survey questionnaire. This is because receiving questionnaire through social networks might impose insecurity to the respondent due to spam. Besides, researcher not able to verify the actual group of targeted respondent. Moreover, method of delivering the survey questionnaire directly will ensure the researchers to maintain the targeted number of sample size. Furthermore, the variables in determining the consumer attitude towards madvertising can be altered. This give opportunity for other variables to be tested in the future studies. This will allow the researcher to determine which variables strongly affect the consumers' attitude.

Lastly, the futures researchers can narrow down their targeted population to perform a better analysis. For instant, the researchers can focus on young generation or tertiary student as their targeted respondent. This will help the marketer to develop their marketing strategies accordingly.

5.6 Conclusion

The research has successfully obtained the main purposes in examining the determinants that influence the consumer attitude towards m-advertising. The five independent variables that have been tested in this research are entertainment, informativeness, credibility, irritation, and personalization. The results obtained from this study shows that all the independent variables affect the consumer attitude towards m-advertising. Hence, all the research questions and objectives have been achieved and answered.

Wholly, the research conducted had provided very useful information for future researches to conduct further investigation on the consumer attitude towards m-advertising in from the perspective of Malaysian buyers.

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Study	Country	Data	Major Findings
(Bauer,	Germany,	A total number of	This research found that
Barnes,	United	1028 mobile user in	entertainment in m-
Reichardt, &	Kingdom	the Internet	advertisement has positively
Neumann,		participated in this	correlated with the attitude
2005)		research.	towards m-advertising.
(Koo, 2010)	United	407 surveys of young	The researcher found that
	States and	mobile users who	entertainment is one of the
	South	accustomed to the	factors that affect the
	Korea	usage of mobile	consumer behavior towards
		devices in a	mobile marketing.
		university in United	
		States and another	
		university in South	
		Korea are analyzed.	
(Ahmadi,	Iran	330 questionnaires	The result showed that
Masrour, &		were distributed to	advertising mails are
Khaksar,		the students of	entertaining from the
2013)		Sanandaj Azad	consumers' perspective.
		University in this	
		research.	
(Blanco,	Spain	Mobile users in the	This research found that
Blasco, &		Internet with the total	consumer attitude towards m-
Azorín,		number of 429	advertising is positive and
2010)		participated in the	direct influenced by
		research.	perceived informativeness.

APPENDIX A: SUMMARY OF PAST EMPIRICAL STUDIES

& Lau, 2010)collected from 267 full time advertising is positive and direct influenced by informativeness. 'A'.consumer attitude towards m- advertising is positive and direct influenced by informativeness. 'A'.(Keshtgary & Iran167 young Iranian cellular phone users participated in the study.The researchers found that informativeness has positive towards m-advertising in Iranian.(Javid, Noorai, 2012)Iran384 citizens in Rasht (capital city of Guilan province in north of this study.Researchers discovered that there is a positive relationship between credibility and consumers' perceived value this study.(Waldt, Rebello, & AfricaStudents at a large university in Gauteng contributed to the advertising.This research found that teres analysis.(Drossos, GreeceGreece97 questionnaires university located in university located in consumer behavior towards m-advertising.	(Kwek, Tan,	Malaysia	The data was	This research found that
Arianundergraduate students in University 'A'.direct influenced by informativeness.(Keshtgary & (Keshtgary)Iran167 young Iranian cellular phone users participated in the study.The researchers found that informativeness has positive impact in consumer attitude towards m-advertising in Iranian.(Javid, Noorai, 2012)Iran384 citizens in Rasht (capital city of Guilan this study.Researchers discovered that there is a positive relationship between credibility and consumers' perceived value of m-advertising.(Waldt, Rebello, & 2009)South AfricaStudents at a large university in Gauteng contributed to the advertisement has positively correlated with the attitude towards m-advertising.(Drossos, Greece97 questionnaires students from a large university located in consumer behavior towards m-advertising.(Drossos, Kokkinaki, & Kokkinaki, & Kokkinaki,Greece.97 questionnaires m-advertising.	& Lau,		collected from 267	consumer attitude towards m-
students in University 'A'.informativeness.(Keshtgary & (Kajehpour, 2011)Iran167 young Iranian cellular phone users participated in the study.The researchers found that informativeness has positive impact in consumer attitude towards m-advertising in Iranian.(Javid, Namin, & 2012)Iran384 citizens in Rasht (capital city of Guilan province in north of this study.Researchers discovered that there is a positive relationship between credibility and consumers' perceived value of m-advertising.(Waldt, Rebello, & 2009)South AfricaStudents at a large university in Gauteng contributed to the advertisement has positively correlated with the attitude towards m-advertising.(Drossos, GreeceGreece97 questionnaires university located in credibility is one of the factors that affect the university located in consumer behavior towards m-advertising.	2010)		full time	advertising is positive and
'A'.(Keshtgary & Khajehpour, 2011)Iran167 young Iranian cellular phone users participated in the study.The researchers found that informativeness has positive impact in consumer attitude towards m-advertising in Iranian.(Javid, Namin, & 2012)Iran384 citizens in Rasht (capital city of Guilan province in north of this study.Researchers discovered that there is a positive relationship between credibility and consumers' perceived value of m-advertising.(Waldt, Rebello, & Brown, 2009)South AfricaStudents at a large university in Gauteng contributed to the advertisement has positively correlated with the attitude towards m-advertising.(Drossos, Greece97 questionnaires students from a large university located in credibility is one of the factors that affect the university located in kokkinaki, a Athens, Greece.The researchers found that credibility is one factors that affect the consumer behavior towards			undergraduate	direct influenced by
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Image: Constraint of this study.of m-advertising.(Waldt,SouthStudents at a largeThis research found thatRebello, &Africauniversity in Gautengcredibility in m-Brown,contributed to theadvertisement has positively2009)data analysis.correlated with the attitudetowards m-advertising.towards m-advertising.(Drossos,Greece97 questionnairesThe researchers found thatGiaglis,were administrated tocredibility is one of theLekakos,students from a largefactors that affect theKokkinaki,university located inconsumer behavior towards& Stavraki,Athens, Greece.m-advertising.	Noorai,		province in north of	between credibility and
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Image: Constraint of the state of the sta	Brown,		contributed to the	advertisement has positively
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Kokkinaki,university located in Athens, Greece.consumer behavior towards m-advertising.	Giaglis,		were administrated to	credibility is one of the
& Stavraki, Athens, Greece. m-advertising.	Lekakos,		students from a large	factors that affect the
	Kokkinaki,		university located in	consumer behavior towards
2007)	& Stavraki,		Athens, Greece.	m-advertising.
2007)	2007)			

(7.1.1)	T 1	150	
(Zabadi,	Jordan	150 surveys were	The finding indicated that
Shura, &		dispersed to mobile	irritation has negative
Elsayed,		users which aged	relationship in consumer
2012)		over 16 years old.	attitude towards m-
			advertising.
(Muzaffar &	Pakistan	250 survey	The finding also revealed that
Kamran,		questionnaires were	young consumers' attitude
2011)		distributed to	towards the SMS
		participants who aged	advertisements is rather
		from 18 to 23 year	positive in Pakistan and they
		old.	are not irritated from SMS
			advertising.
(Коо,	United	204 in US and 226 in	The findings also revealed
Knight,	States and	Korea of generation	that generation Y in US feel
Yang, &	Korea	Y mobile user, who	less irritating than generation
Xiang, 2012)		aged from 17 to 30	Y in Korean.
		year old.	
(Khasawneh	Jordan	220 questionnaires	The result obtain proves that
&		hosted in	personalization have positive
Shuhaiber,		SurveyMonkey	significant influence on
2013)		website were	consumer attitudes and
		analyzed.	acceptance of SMS
			advertising.
(Xu, Liao, &	China	Questionaire survey	The result revealed that a
Li, 2008).		of 143 respondents of	well-designed system to
		a large university in	personalized m-advertising
		China.	did improve the user attitude
			towards m-advertising.
1	1	1	1

(Saadeghvaz	Iran	Total number of 652	The results obtain proved that
iri &		survey questionnaires	personalization has a positive
Hosseini,		was successfully	effect on customer attitudes
2011)		collected out of 800	towards m-advertising.
		survey questionnaires	
		distributed.	

Constructs	Definition	Sources
Entertainment	The satisfaction of a user's desire for	(Ducoffe, 1996)
	distraction, virtual and affective	
	pleasure.	
Informativeness	The satisfaction of consumers can be	(Gao & Koufaris,
	maximized when marketers introduce a	2006)
	substitute goods and service by	
	distributing the information via	
	advertising.	
Credibility	Truthful and realistic to which the	(Mackenzie &
	consumer perceives claims made about	Lutz, 1989)
	the brand in the advertisement	
Irritation	Mobile users frequently view	(Lee, Tsai, & Jih,
	advertising as an annoyance that	2006)
	intervenes with the m-advertising	
	messages.	
Personalization	A progression which allows the user to	(Barkhus & Dey,
	specify their own settings for	2003)
	application process in a given situation.	
Attitude	A long term common evaluation of	(Solomon,
	people.	Bamossy,
		Askegaard, &
		Hogg, 2006)

APPENDIX B: DEFINATION OF EACH VARIABLE

APPENDIX C: OPERATIONALIZATION OF THE MODEL VARIABLE

Variables	Items	Description	Source (s)	Measurement
Entertainment	EN 1	Mobile advertising is	(Jingjun,	5-point Likert scale
		enjoyable.	2006)	(Interval)
	EN 2	Mobile advertising is	(Wong,	5-point Likert scale
		interesting.	2011)	(Interval)
	EN 3	Mobile advertising is	(Unal, Ercis,	5-point Likert scale
		entertaining.	& Keser,	(Interval)
			2011)	
	EN 4	Mobile advertising is	(Koo, 2010)	5-point Likert scale
		fun to receive.		(Interval)
Informativeness	IN 1	Mobile advertising is	(Jingjun,	5-point Likert scale
		good source sales	2006)	(Interval)
		information.		
	IN 2	Mobile advertising	(Koo, 2010)	5-point Likert scale
		supplies relevant		(Interval)
		sales information.		
	IN 3	Mobile advertising	(Jingjun,	5-point Likert scale
		make sales	2006)	(Interval)
		information		
		immediately		
		accessible.		
	IN 4*	Mobile advertising do	(Koo, 2010)	5-point Likert scale
		not provides timely		(Interval)
		information.		
Credibility	CR 1	Mobile advertising is	(Wong,	5-point Likert scale
		reliable.	2011)	(Interval)
	CR 2	Mobile advertising is	(Wong,	5-point Likert scale
		believable.	2011)	(Interval)

	CR 3	Mobile advertising is	(Jingjun,	5-point Likert scale
		trustworthy.	2006)	(Interval)
	CR 4	I use personalized	(Unal et al.,	5-point Likert scale
		mobile advertising as	2011)	(Interval)
		a reference for		
		purchasing.		
Irritation	IR 1	Mobile advertising is	(Jingjun,	5-point Likert scale
		irritating.	2006)	(Interval)
	IR 2	Mobile advertising is	(Unal et al.,	5-point Likert scale
		annoying.	2011)	(Interval)
	IR 3	Mobile advertising is	(Wong,	5-point Likert scale
		unpleasing.	2011)	(Interval)
	IR 4	Mobile advertising is	(Unal et al.,	5-point Likert scale
		excessive and out of	2011)	(Interval)
		control.		
Personalization	PE 1	Contents in mobile	(Jingjun,	5-point Likert scale
		advertising are	2006)	(Interval)
		personalized.		
	PE 2	Mobile advertising is	(Wong,	5-point Likert scale
		available for my	2011)	(Interval)
		preference.		
	PE 3	Mobile advertising	(Wong,	5-point Likert scale
		displays personalized	2011)	(Interval)
		message to me.		
	PE 4	Mobile advertisement	(Xu et al.,	5-point Likert scale
		provides me with	2011)	(Interval)
		personalized		
		deals/ads according		
		to my activity		
		context.		

			-	-
Attitude	AT 1	I will consider	(Wong,	5-point Likert scale
		reading mobile ads.	2011)	(Interval)
	AT 2	I think mobile	(Bauer et	5-point Likert scale
		advertising is good.	al., 2005)	(Interval)
	AT 3	I like to receive and	(Wong,	5-point Likert scale
		read mobile	2011)	(Interval)
		advertisements.		
	AT 4	I will receive and	(Wong,	5-point Likert scale
		read mobile	2011)	(Interval)
		advertisements in		
		future.		
	AT 5	I appreciate receiving	(Bauer et	5-point Likert scale
		mobile advertising	al., 2005)	(Interval)
		messages.		
	AT 6	I have positive	(Wong,	5-point Likert scale
		attitude towards	2011)	(Interval)
		mobile advertising.		

APPENDIX D: PERMISSION LETTER TO CONDUCT SURVEY



UNIVERSITI TUNKU ABDUL RAHMAN Wholly Owned by UTAR Education Foundation (Company No. 578227-M)

10th May 2014

To Whom It May Concern

Dear Sir/Madam

Permission to Conduct Survey

This is to confirm that the following students are currently pursuing their Bachelor of Commerce (HONS) Accounting program at the Faculty of Business and Finance, Universiti Tunku Abdul Rahman (UTAR) Perak Campus.

I would be most grateful if you could assist them by allowing them to conduct their research at your institution. All information collected will be kept confidential and used only for academic purposes.

The students are as follows:

Name of Student JAMES LO TECK LUN	Student ID 11ABB06491
LEE SIEH CJIA LIN	11ABB06572
LOO POH LUI	11ABB06327
SARINA A/P SELLVAM	10ABB0.3236
THIVIYA A/P SANDRAN	11ABB06874

If you need further verification, please do not hesitate to contact me.

Thank you.

Yours sincerely

Tel: (603) 7958 2628

Mr Fong Choong Ee Head of Department, Faculty of Business and Finance Email: fongce@utar.edu.mv

Postal Address: P O Box 11384, 50744 Kuala Lumpur, Malaysia.

Dr Krishna Moorthy Manicka Nadar Supervisor, Faculty of Business and Finance Email: krishnam@utar.edu.m Address: No.9, Jalan Bersatu 13/4, 46200 Petaling Jaya, Selangor Darul Ehsan, Malaysia Fax: (603) 7956 1923 Homepage: http://www.utar.edu.my

APPENDIX E: SURVEY QUESTIONNAIRE



BACHELOR OF COMMERCE (HONS) ACCOUNTING FINAL YEAR RESEARCH PROJECT

TOPIC: <u>CONSUMER ATTITUDE TOWARDS MOBILE</u> <u>ADVERTISING IN MALAYSIA</u> Survey Questionnaire

Dear respondent,

We are final year undergraduate students of Bachelor of Commerce (Hons) Accounting, from Universiti Tunku Abdul Rahman (UTAR). The **purpose** of this survey is to study whether entertainment, informativeness, credibility, irritation and personalization will affect the consumer attitude towards mobile advertising in Malaysia.

Thank you for your participation.

Instructions:

- 1) There are **TWO** (2) sections in this questionnaire. Please answer ALL questions in ALL sections.
- 2) Completion of this form will take you approximately 5 to 10 minutes.
- 3) Please feel free to share your comment in the space provided. The contents of this questionnaire will be kept **strictly confidential**.

Section A: Demographic Profile

Please place a tick " $\sqrt{}$ " or fill in the blank for each of the following:

1. Gender:

 \Box Male \Box Female

2. Age:

- □ 15 19 years
- □ 20 24 years
- □ 25 29 years
- □ 30 34 years
- \Box 35 years old or greater

3. Race:

- \Box Malay
- \Box Chinese
- \Box Indian
- □ Others (Please specify): _____

4. Education:

- □ High School
- \Box Diploma
- □ Degree
- \Box Master
- □ Others (Please specify): _____

5. Personal monthly average income level:

- $\Box \quad \mathbf{RM} \ \mathbf{0} \mathbf{RM} \ \mathbf{1000}$
- □ RM 1001 RM 3000
- $\Box \quad RM \ 3001 RM \ 5000$
- $\hfill\square$ RM 5001 and above

6. Do you own any mobile devices? (i.e. basic phone, smartphone, tabs and Ipad)

 \Box Yes \Box No

7. Did you receive mobile advertisement in past 3 month? (e.g SMS, pop-out ads in mobile games)

 \Box Yes \Box No

Section B:

This section is to seek your opinion regarding consumer attitude toward mobile advertising. Respondents are requested to indicate the extent to which they agreed or disagreed with each statement using 5 Likert scale [(1) = strongly disagree; (2) = disagree; (3) = neutral; (4) = agree and (5) = strongly agree] response framework. Please circle one number per line to indicate the extent to which you agree or disagree with the following statements.

Entertainment

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
EN1	Mobile advertising is enjoyable.	1	2	3	4	5
EN2	Mobile advertising is interesting.	1	2	3	4	5
EN3	Mobile advertising is entertaining.	1	2	3	4	5
EN4	Mobile advertising is fun to receive.	1	2	3	4	5

Informativeness

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
IN1	Mobile advertising is good source of sales information.	1	2	3	4	5
IN2	Mobile advertising supplies relevant sales information.	1	2	3	4	5
IN3	Mobile advertising make sales information immediately accessible.	1	2	3	4	5
IN4*	Mobile advertising do not provides information on time.	1	2	3	4	5

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
CR1	Mobile advertising is reliable.	1	2	3	4	5
CR2	Mobile advertising is believable.	1	2	3	4	5
CR3	Mobile advertising is trustworthy.	1	2	3	4	5
CR4	I use personalized mobile advertising as a reference for purchasing.	1	2	3	4	5

Credibility

Irritation

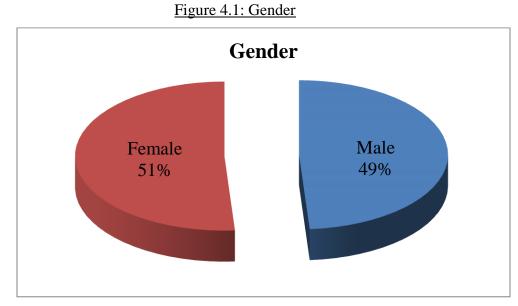
No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
IR1	Mobile advertising is irritating.	1	2	3	4	5
IR2	Mobile advertising is annoying.	1	2	3	4	5
IR3	Mobile advertising is unpleasing.	1	2	3	4	5
IR4	Mobile advertising is excessive and out of control.	1	2	3	4	5

Personalization

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
PE1	Contents in mobile advertising are personalized.	1	2	3	4	5
PE2	Mobile advertising is available for my preference.	1	2	3	4	5
PE3	Mobile advertising displays personalized message to me.	1	2	3	4	5
PE4	Mobile advertisement provides me with personalized deals/ads according to my activity context.	1	2	3	4	5

Attitud	Attitude						
No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
AT1	I will consider reading mobile ads.	1	2	3	4	5	
AT2	I think mobile advertising is good.	1	2	3	4	5	
AT3	I like to receive and read mobile advertisements.	1	2	3	4	5	
AT4	I will receive and read mobile advertisements in future.	1	2	3	4	5	
AT5	I appreciate receiving mobile advertising messages.	1	2	3	4	5	
AT6	I have positive attitude towards mobile advertising.	1	2	3	4	5	

Thank you for your time, opinion and comments. ~ *The End* ~



APPENDIX F: FIGURES FOR DEMOGRAHPIC PROFILES

Source: Developed for the research.

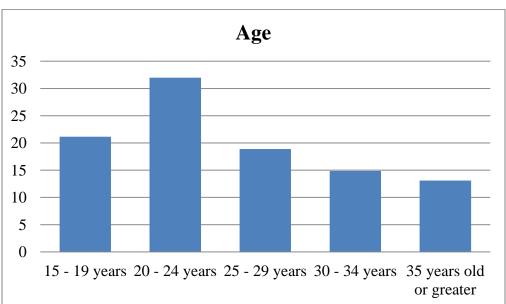


Figure 4.2: Age

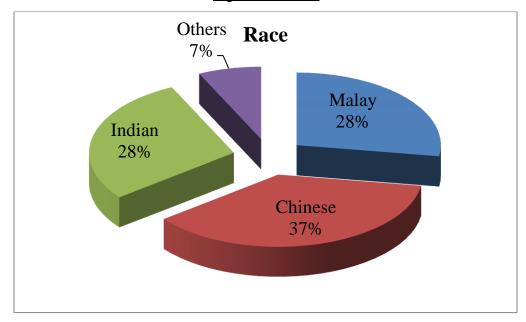


Figure 4.3: Race

Source: Developed for the research.

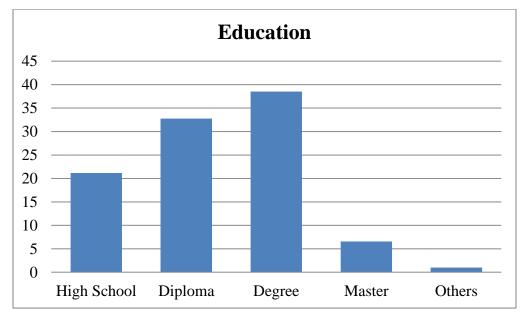


Figure 4.4: Education

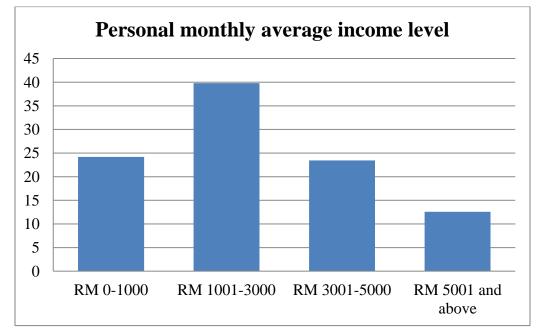


Figure 4.5: Personal monthly average income level

Source: Developed for the research.

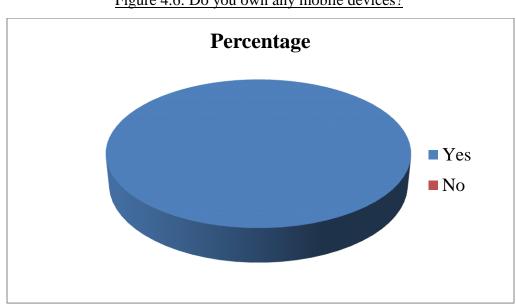


Figure 4.6: Do you own any mobile devices?

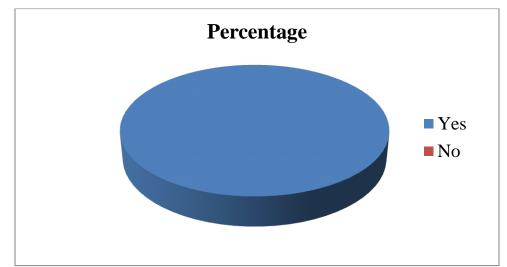


Figure 4.7: Did you receive mobile advertisement in past 3 month?

State	Percentage (%)					
Johor	11.6					
Kedah	6.2					
Kelantan	4.6					
Melaka	3.2					
Negeri Sembilan	4.0					
Pahang	5.5					
Perak	7.2					
Perlis	0.9					
Pulau Pinang	6.0					
Sabah	7.6					
Sarawak	7.0					
Selangor	22.8					
Terengganu	3.8					
W.P. Kuala Lumpur	9.1					
W.P. Labuan	0.2					
W.P Putrajaya	0.2					
	100.00					

APPENDIX G: MOBILE USER BASE BY STATE, MALAYSIA, 2012

Source: Malaysian Communications and Multimedia Commission (2013).