

Attitudes and Behaviour of the Mobile Phones Users towards SMS Advertising: A Study in an Emerging Economy

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Abstract: Advertisement through SMS is a commonly used medium in the era of technology. Companies are utilizing this medium of advertisement quite frequently. Rapid increase of the usage of mobile phones has developed an innovative way of utilizing this marketing tool. Due to the exponential growth in telecommunication industry after introduction of SMS and MMS, this study has been conducted to investigate the consumer attitude towards SMS advertisement and its relationship with behavior. Entertainment, irritation, product involvement and appeal were used in order to investigate the attitude of the consumer. A questionnaire was used to examine the relationships among variables of the study. Overall 350 usable responses were gathered. SEM was used to obtain the results of the overall model. Results of the study indicate that (1) product involvement, appeal and entertainment have a positive impact on attitude towards advertisement. Only irritation was found to be negatively insignificant. (2) Relationship between consumer attitude towards SMS advertising and attitude was positively significant. (3) Positive and direct relationship between attitude and consumer behavior was also found. (4) Permission appeared to be significant on consumer attitude towards mobile advertisement, which confirmed that prior permission is required to gain the positive response of the consumer. (5) Consumers are attracted by rewards therefore monetary benefits was also found to be a significant factor.

Keywords: Attitude towards mobile advertising, irritation, product involvement, entertainment, appeal.

Introduction

In the recent years, drastic advancements in mobile phone technology have changed the way of sharing, accessing and creating information (Arif & Aslam, 2014). The remarkable growth of the mobile phones use has highlighted the need of addressing consumers through SMS advertising (UIHaq, 2012). In a survey conducted in Europe, it was found that 36% of the marketers had been using SMS advertising for more than a year and within six to twelve weeks, additional 39% also started to use this media for advertising purposes (Cutitta, 2005). However, this global trend is now estimated to reach 62% of the worldwide spending; a report from e-Marketer predicted that the expenditure on SMS advertisements would reach 100 billion worldwide by 2016 (2015).

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In the current era of technology, marketers have many mediums to communicate with their audience. However, due to customization and personalization features of SMS advertising, marketers consider it a better way to reach their target audience. In the past, marketers were limited to one-to-one medium of communication but the astounding advancement of technology has dramatically altered the way of traditional advertising which has resulted in new mediums of advertising for marketers (Hoffman & Novak, 1996). The spending on worldwide SMS advertising was estimated to reach \$20.6 billion by 2015 (Garner, 2011). High usage of mobile phones has created an enormous channel of advertising (Saadeghvaziri & Seyedjavadin, 2011). Digitalization also provides new means of mobile phone advertising. In order to attain maximum advantage, marketers should understand the aspect of uniqueness in it (UIHaq, 2012). Due to the consumer empowerment, marketers need to understand the ups and downs of the SMS advertising medium as the behavior of consumers is not easy to predict (Urban, 2005).

Consumers' expectations have increased and to ensure transparency, marketers cannot rely on only one way communication with their customers (UIHaq, 2012). After the emergence of SMS advertising, it has been established that the sole reliance on traditional marketing is not appropriate to attain the same positive customer response which marketers used to obtain in the past (Joachimsthaler et al., 1999; Lawer & Knox, 2006; Urban, 2005). This has led to the massive adoption of digital media in advertising campaigns (UIHaq, 2012; Izquierdo-Yusta, Olarte-Pascual, & Reinares-Lara, 2015). SMS advertising has now become a part of the media mix (Okazaki, 2005; Cuneo, 2004). Companies have realized the importance of interactive marketing and started using the new medium to interact. They send their promotional messages to their customers utilizing the information regarding their demographic and geographic profiles.

After the establishment of significance and popularity of SMS advertising, there is a need to examine the following:

1. Factors that affect attitude towards SMS advertising via appeal, entertainment, irritation and product involvement.
2. Impact of taking permission from consumers on their Attitude towards SMS advertising.
3. Impact of providing monetary benefits to consumers on their intention to receive SMS advertising.

Literature Review

Uniqueness of SMS Advertising

Prior to analyzing the variables that influence attitudes towards SMS advertisement, it is essential to discuss the uniqueness of the SMS advertising in order to establish a framework for literature review. SMS is considered to be a popular source of data service which is the most valuable and unique attribute of it (Dickinger, Haghirian, Murphy, & Scharl, 2004). Numerous studies in the past, done virtually and through telecommunication, have

empirically verified high effectiveness of spatial advertising. SMS marketing offers low-cost advertising and a new channel to generate revenue. It is also a potential channel for consumers to enjoy relevancy of the content served to them at greater convenience. Moreover, mobile marketing enables more result oriented customized messages to ensure stronger relationship between customers and businesses (Barnes & Scornavacca, 2004; D. A. Drossos, Giaglis, Vlachos, Zamani, & Lekakos, 2013).

Subscribers cannot avoid receiving SMS; at the least they are exposed to preview of the message before deciding to read it through or removing it. Forced exposure is said to have an interrupting effect on the usual viewing process of customers (Edwards et al., 2002). Additionally, customers exposed to such stimulus at times display gaugeable effects, like change of attitude. It can also potentially impact the acceptance of SMS advertising (Hovland, Janis, & Kelley, 1953; Zajonc, 1968; D. A. Drossos et al., 2013).

Factors Affecting Consumer Attitude towards SMS Advertising

Appeal

Appeal drives people to like or act towards something. Appeal and benefit of SMS advertising have two subsections: informative contents (rational appeal) and emotional appeal. Informative content is related to the benefits and features of the product, which impacts positively on the user's attitude (Haghirian, Madlberger, & Tanuskova, 2005; D. Drossos, Giaglis, Lekakos, Kokkinaki, & Stavradi, 2007). Entertainment which is related to humorous content and numerous types of interactive games, enhances involvement and creates a value in the minds of the consumers (Tsang, Ho, & Liang, 2004; Haghirian et al., 2005; Merisavo, Vesanen, Arponen, Kajalo, & Raulas, 2006; Vatanparast & Asil, 2007; Xu, Liao, & Li, 2008). Emotional appeals are effective when there is a low brand response. Comparatively, rational appeal is effective when customers are highly involved with brand and its advertisement (Baker & Lutz, 2000). It has been proposed that utilitarian appeals are effective for a utilitarian product, whereas value expressive advertisement appeals are influential for value expressive products (Johar & Sirgy, 1991).

Appeals are considered to be the most effective factor for SMS advertising (Shavitt, 1990). Product involvement, attitude towards SMS advertisement, incentives and advertising appeal have a direct impact on consumer attitude towards advertisement, brand and purchase intention (D. Drossos et al., 2007). Contests and quizzes via SMS add value to advertising campaigns and they are effective in creating a positive attitude in the consumers towards SMS marketing (Pousttchi & Wiedemann, 2006). Entertainment and information are important factors for SMS advertising (Bauer, Barnes, Reichardt, & Neumann, 2005). If advertisers and consumers enjoy a win-win situation, mobile marketing is expected to generate better results. Based on the discussed literature, the first hypothesis is postulated:

- H_1 : There is a significant impact of perceived appeal on consumer attitude towards SMS advertising.

Entertainment

Entertainment services are known to build customers' loyalty and do value addition for customers (UIHaq, 2012). When customers are offered prizes and games via short messages, it increases their participation. Entertainment is an important factor in text messages being well received and responded by the customers. Offering prizes and involving cell phone users in interactive games is a way to attract and retain customers. Entertainment also stimulates aesthetic enjoyment (Oh & Xu, 2003). Enjoyment from an advertisement develops positive attitude of customers towards SMS marketing.

A message should contain elements of fun and entertainment to catch customers' attention. These elements engage customers and make them familiar with the services or product offerings. The same strategy has been employed by Japanese mobile networks for promotion of internet to subscribers (UIHaq, 2012). The more entertaining the mobile ads are, the higher the participation rate of customers is. The options to add entertaining characteristics in mobile ads are numerous, such as puzzles, jokes, ring tones, astrology and competitions. To explore more about this factor which shapes the attitude towards SMS advertising, the following hypothesis is proposed:

- H_2 : Entertainment has a significant impact on consumer attitude towards SMS advertising.

Irritation

The phenomenon of irritation explains negative reaction of customers to too intrusive messages. Customers' perception of irritation from SMS ads has a negative relationship with their attitude towards SMS advertisement (Van der Walddt, Rebello, & Brown, 2009). It is believed that customers have a negative attitude towards mobile advertisement and marketers need to adopt a cautious approach when employing SMS to gain potential customers' attention, especially the younger segment of target population (Ducoffe, 1996; D. A. Drossos et al., 2013).

The attitude model supports relationship between customers' attitude towards advertisement and their perception of irritation from advertisements. Furthermore, it explains a negative correlation between the perception and attitude of customers towards SMS ads. In this regard, irritation is defined as the tactics that annoy, offend, insult, or are over-manipulative (Tsang et al., 2004). Advertisements designed and crafted by marketing experts, if sent too frequently, may be irritating for customers who have subscribed to such messages (Bruner II & Kumar, 2007).

SMS advertisement may be confusing for customers when ads begin to distract customers by flooding them with information (Stewart & Pavlou, 2002), which may lead to negative reaction of customers towards advertisement. Unwanted messages known as SPAM, are another reason to annoy potential customer (Dickinger et al., 2004). SPAM violates customers' privacy and may gather their personal information, without proper permission. Incentives and rewards influence attitude and intention towards SMS advertisement. While credibility, irritation, informativeness and entertainment also have a

significant influence on customers' attitude (Tsang et al., 2004). In contrast, entertainment and informativeness influence consumer attitude more significantly as compared to irritation (Haghirian et al., 2005). This leads to the hypothesis proposed below:

- H_3 : Irritation has a significant impact on consumer attitude towards SMS advertising.

Product Involvement

Product involvement is defined as the commitment of consumers towards a particular brand or product type. Products vary by their nature of 'think' or 'feel' (UIHaq, 2012). Individuals purchase decisions are usually based on how they think or feel about the product (Ratchford, 1987). An argument has been made by Laurent and Kapferer (1985) that product involvement is a deciding factor for level of information given to customers and their active or passive response to advertisement. Product involvement influences the amount of motivation in customers on the basis of information provided in the advertisement. The higher the product involvement, the higher is the likelihood for customers to process product-related information. Flow theory explains why people extend massive energy towards the activities of their own interest (Petty & Cacioppo, 2012). The theory describes flow to be the holistic sensation that people feel when they act with full involvement (Csikszentmihalyi, 1975). The significance of factors related to SMS advertisement has been investigated in an experimental study (D. Drossos et al., 2007). The study concludes that product involvement, interactivity, advertisement appeal and attitude towards SMS advertising are general factors that affect attitude towards advertisement and intention of purchase. According to it, below is the suggested hypothesis:

- H_4 : Product involvement has a significant impact on consumer attitude towards SMS advertising.

Permission

In relation with SMS advertisement, consumer permission is described as giving consent to receive SMS ads. Based on the previous theories, it is established that permission of users, wireless service providers control and brand trust primarily shape the users' acceptance of SMS advertisement (Barnes & Scornavacca, 2004). A two factor model includes message and media. The message refers to the content of the message i.e. advertisement type such as competitions, polling, special offers, message personalization and the time and frequency of an advertisement. The message also relates to location such as, location targeted offers, preferences of consumers, permission, consumer control and privacy. Privacy has been found to have the strongest negative impact on the attitude of consumers toward SMS advertisement. Furthermore, media factors consist of transmission, device, media cost and product fit (Dickinger et al., 2004). A model was tested (Bauer et al., 2005) on the basis of the Theory of Reasoned Action (Ajzen, 1991), which identified most important influences over the attitude of consumers towards SMS advertising. Also, the control of end users over the frequency of advertisement messages and time affect the attitude of consumers.

A general positive behavior towards mobile advertisement of Iranian customers was witnessed, however they prefer to be contacted after the prior permission (Keshtgary & Khajehpour, 2011). A significant positive impact of permission has been observed on the attitude of end users in SMS advertisement (Tsang et al., 2004). This concludes that SMS advertisements are considered to be valuable if prior permission has been granted from the receivers. Thus mobile advertising agencies enable consumers to opt in or opt out of the mobile ads (Muk & Babin, 2006; Carroll, Barnes, Scornavacca, & Fletcher, 2007; D. Drossos et al., 2007).

The proposed model of the study was empirically verified by succeeding researchers (Carroll, Barnes, & Scornavacca, 2005). A strong preference has been discovered for the network operators to function as media owners and hold permission to send SMS advertisement (Enpocket, 2002). Obtaining permission of SMS advertisement is a fundamental aspect for SMS advertisement to be effective and successful (Andersson & Nilsson, 2000; Kavassalis et al., 2003). Rationally, receiving SMS advertisement from a trusted source has a higher chance of being accepted (Leppäniemi, Sinisalo, & Karjaluoto, 2006). Empirically, permission causes a positive and significant impact on the attitude of end users and the attitude has been found to be positively related to the intention of end users to receive ads through SMS (Tsang et al., 2004). Advertisement through SMS will be deemed valuable if they are sent after taking approval of the receiver (Muk & Babin, 2006; Carroll et al., 2007; D. Drossos et al., 2007; Demarneffe, 2008; Tsang et al., 2004; Vatanparast & Asil, 2007).

As per the reviewed literature, the hypothesis is postulated as:

- H_5 : Permission-based advertising has a significant impact on consumer attitude towards advertising.

Monetary Benefits

Customers like to derive monetary rewards from marketing efforts targeted to them (Milne & Gordon, 1993). A survey conducted in the United States found out 59% of the participants agreed to receive mobile ads if they are paid \$1. While around 66% of the participants agreed to receive mobile ads if they are rewarded (Hanley, Becker, & Martinsen, 2006).

Monetary benefits for SMS advertisement refer to people agreeing to receive ads on their mobile phones for a promised or expected financial incentive (Pietz, 2007). This approach offers an attractive advantage of serving mobile users with a tangible reason to receive SMS advertising. To offer the reward various means such as, coupons or mobile raffle can be used, which can be presented at a store or a shop for discount on purchase of services or products. Deriving monetary rewards for direct marketing has been of interest for mobile users (Milne & Gordon, 1993). Shi and Cheung (2005) have effectively identified price discounts influencing buyers for product trial and purchase acceleration. Promotional efforts alter consumer purchase decision, hence retailers actively utilize this option to boost sales (Chen, Monroe, & Lou, 1998). Positive attitude and purchase intentions have also been found to be positively correlated with incentives for mobile ads (D. Drossos et al., 2007). A study has identified monetary benefits to be amongst the key factors that impact

mobile advertisements (Krishnamurthy, 2001). With reference to the studied literature, the following underlying hypothesis is suggested:

- H_6 : Monetary benefits have a significant impact on consumer intentions to receive SMS advertisements.

Attitude and Intention Lead to Consumer Behavior

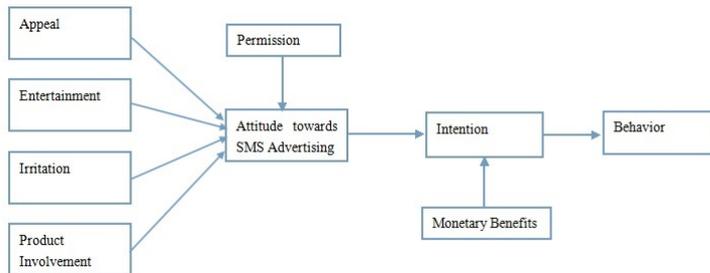
After a thorough review of the literature on consumer behavior models and their attitude towards advertising, a framework of research has been constructed to present the factors influencing the attitude of consumers toward SMS advertisement. The research framework also attempts to illustrate association among attitude, intention and actual behavior of the consumers towards SMS advertising. The theory of reasoned action (TRA) presented three major constructs which are attitude, intention and behavior. The model constitutes the psychological process in relation with a person's beliefs, attitude and intention (Fishbein & Ajzen, 1975; Fishbein, Middlestadt, & Hitchcock, 1994), and explains the relationship between attitude and behavior. Permission is deemed to be a major element contributing to attitudes amongst three types of SMS advertisement (Barwise & Strong, 2002; Kavassalis et al., 2003). Monetary benefits such as, free talk time and SMS are also assumed to affect customers' intentions to accept mobile ads, followed by intention that influences the real behavior to receive advertisement. Attitude can be defined as the extent of favorable or unfavorable response to a given behavior. For instance, an individual with a positive attitude toward SMS advertisement will have a higher probability i.e. intention to accept SMS ads. Contrary to this, an individual with a negative attitude will not have an intention to accept SMS ads (Olofsson & Pietz, 2009). It can be further explored with the help of the hypotheses postulated below:

- H_7 : Attitude towards SMS advertising has a significant impact on consumers' intention to receive SMS advertisement.
- H_8 : Consumer intention to receive SMS advertisement affect consumer behavior after receiving SMS advertisement.

Empirical Study

The study has been carried out in Karachi, Pakistan in year 2015. An adapted questionnaire comprising three parts has been used to gather data for analysis. The first part of the questionnaire, which aimed to measure consumer attitude towards SMS advertising through appeal, entertainment, irritation and product involvement, was adapted from Ducoffe (1996) and Schlosser, Shavitt, and Kanfer (1999). The second part has questions related to the intention to receive SMS advertisement and the behavioral change after receiving SMS advertisement, adapted from (UlHaq, 2012). Third part of the questionnaire is designed to get the demographic profile of the respondents. Figure 1 demonstrates the model of the study.

Figure 1: Model of the Study



Data Analysis and Findings

Data Profile

A total of 370 responses were gathered from the mobile phone users in which only 350 responses were usable at the percentage rate of 94.6%. 350 questionnaires were distributed in person and 50 questionnaires were sent via email to collect online responses from the potential respondents in a five-week survey period from May, 2015 to June, 2015. The usable responses consisted of male (226) and female (124) respondents with a percentage of 64.6 and 35.4 respectively. The age of respondents ranged between 25 years to 50 years, while 55.1% of the respondents were from the age group 25 to 30 years. Most of the respondents were graduates (39.4%) and post graduates (37.4%). The respondents with the monthly income of PKR 40,000 and above were 28.9% of the sample population. Table 1 depicts descriptive profile of the respondents.

Data Analysis

The data was initially tested for the reliability. The value of Cronbach's alpha represents the reliability of data which should be greater than 0.6 (Hu & Bentler, 1999). After ensuring sufficient reliability of the data which should be 0.50, it was used for further analysis. Exploratory factor analysis was employed by using varimax rotation with the help of SPSS 22. Table 2 represents the overall factor loadings of the individual items. After making the constructs, confirmatory factor analysis was done by using Amos 22. Table 3 represents the CFA loadings and reliability.

Table 1
Summary of Demographic Profile of the Data

	Frequency	%
Gender		
Male	226	64.6
Female	124	35.4
Age		
25-30	193	55.1
31-35	82	23.4
36-40	31	8.9
40-45	22	6.3
46-50	22	6.3
Education Level		
Primary	29	8.3
High School	34	9.7
Graduate	138	39.4
Postgraduate	131	37.4
Other	18	5.1
Income		
PKR 10000 - 20000	91	26
PKR 20000 - 30000	89	25.4
PKR 30000 - 40000	69	19.7
PKR 40000 and Above	101	28.9

Source: Authors' Estimation

Table 2
Exploratory Factor Loading

Items	Factor Loadings
Appeal Cronbach's = 0.849	
I feel that mobile advertising is good source for timely information.	0.713
Mobile advertising provide the information I needed.	0.750
Through advertising messages via the MOBILE phone I receive exclusive information.	0.731
Entertainment (Cronbach's a = 0.840)	
I feel that receiving mobile advertisement is enjoyable and entertaining.	0.688
To me it is amusing to receive mobile advertising.	0.744
I feel that receiving mobile advertisement is pleasant.	0.758
I enjoy reading different advertising for the sake of comparison.	0.658
The advertising messages customized to my profile are fun.	0.761
I find advertising messages via the mobile phone exciting.	0.742
Irritation (Cronbach's a = 0.831)	
Mobile marketing does not fit with my shopping style.	0.761
I feel that mobile advertising is irritating.	0.821
Content in mobile advertising is often annoying.	0.798
Marketing messages received on my mobile phone annoy me.	0.787

Table 2 (Cont.)
Exploratory Factor Loading

Items	Factor Loadings
Product Involvement(Cronbach's a = 0.804)	
Mobile marketing helps me keep up-to-date about products and services that I am interested in.	0.637
I am interested in buying the product or service mentioned in the text message or taking part in the event.	0.607
I am interested in getting more information concerning the product, service or event mentioned in the text message.	0.658
Monetary Benefits(Cronbach's a = 0.787)	
Redeeming coupons makes me feel good.	0.684
I am more likely to buy brands for which I have a coupon.	0.840
When I use coupons, I feel that I am getting a good deal.	0.785
I enjoy using coupons, regardless of the amount of money I save by doing so.	0.745
Some features of this coupon can be changed by me.	0.670
Intention(Cronbach's a = 0.858)	
I intend to use mobile advertisement for shopping after I receive.	0.563
I will use mobile advertising whenever I have a chance.	0.674
I expect to use mobile advertising after receiving it.	0.645
I would be willing to receive information on where to buy certain products or services on my cell phone.	0.691
It is likely that I am going to use mobile advertising to purchase.	0.674
Permission(Cronbach's a = 0.779)	
I am willing to give my mobile phone number to a company that practices mobile marketing.	0.686
I would feel more comfortable with mobile marketing if I knew the marketer.	0.708
I am willing to provide my background information (e.g. gender, age) to a company practicing mobile marketing.	0.734
Behavior(Cronbach's a = 0.859)	
Marketing messages received on my mobile phone help me make better shopping decisions.	0.652
Marketing messages received on my mobile phone help to reduce the time it takes me to search for products and services.	0.632
Marketing messages received on my mobile phone help to improve my shopping efficiency, especially when I am in a hurry or in a new city.	0.623
Attitude(Cronbach's a = 0.876)	
I like the idea of using mobile advertising.	0.709
My attitude toward using mobile advertising is positive.	0.694
Compared to with the time (e.g., searching time) I need to spend, the use of mobile marketing is worthwhile to me.	0.634
Compared to with the effort (e.g., learn how to use) I need to put in, the use of mobile marketing is beneficial to me.	0.546

Sources: (Ducoffe, 1996) and (Schlosser et al., 1999)

Correlation Analysis

Correlation analysis was done in order to study the relationship between the factors affecting consumer attitude towards mobile advertisement. Table 4 represents the overall values. The findings indicate that product involvement, appeal and entertainment have a

positive correlation with attitude. Only irritation is found to be negatively correlated with attitude towards SMS advertising.

Table 3
Reliability & Confirmatory Factor Loading

Constructs	Items	Standardized Loadings	Composite Reliability
Entertainment	Ent 1	0.65	0.712
	Ent 2	0.72	
	Ent 3	0.70	
	Ent 4	0.55	
	Ent 5	0.52	
	Ent 6	0.56	
Appeal	App 1	0.55	0.860
	App 2	0.75	
	App 3	0.55	
Irritation	Irr 1	0.50	0.890
	Irr 2	0.72	
	Irr 3	0.60	
	Irr 4	0.35	
Product Involvement	PI 1	0.52	0.710
	PI 2	0.61	
	PI 3	0.60	
Attitude towards Mobile Advertising	Atma 1	0.65	0.720
	Atma 2	0.65	
	Atma 3	0.69	
	Atma 4	0.54	
Intention	Int 1	0.47	0.700
	Int 2	0.61	
	Int 3	0.60	
	Int 4	0.50	
	Int 5	0.61	
Consumer Behavior	CB 1	0.69	0.752
	CB 2	0.76	
	CB 3	0.63	

Source: Authors' Estimation

Structural Equation Modeling

Model Fit

To analyze the simultaneous effects of the variables included in the final construct, the model was further studied by structural equation modeling. From the results of various indices, model showed good fitness. The value of Chi- Square (CMIN/DF) was (2.23) which is between the acceptable range of 3:1(Kline, 2011) and CMIN is (754.672), df (338) and Probability level is (0.000). While Goodness of Fit Index(GFI) is (0.863) and possible good range of GFI is 0-1, however high values show better fit, previously values greater than 0.90 were considered good (Hair, Black, Babin, & Anderson, 2010). Trucker Lewis

Index (TLI) is found to be (0.922) which also lies in the acceptable range of 0 to 1 (Byrne, 2013; Arif, Afshan, & Sharif, 2016) for better model fitness. Root Mean Square Error of Approximation is (.059) which is less than 0.07 shows good fit (Byrne, 2013). The result showed that the overall model was a good fit at 95% level of confidence. Table 5 represents the overall values of model fitness.

Table 4
Correlations Analysis

	1	2	3	4	5
(1) Attitude towards SMS Advertising	1				
(2) Entertainment	.581**	1			
(3) Irritation	-.310**	-.340**	1		
(4) Product Involvement	.647**	.609**	-.263**	1	
(5) Appeal	.641**	.570**	-.292**	.604**	1
Mean	3.26	2.907	3.22	3.16	3.15
Std. Deviation	0.90	0.93	0.87	0.89	0.96

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

Source: Authros' Estimation

Table 5
Model Fit

Model	Recommended Model Fit	Model Value
x2 (chi-square)		754.672
df (degrees of freedom)		338
Chi-square/df (x2/df)	<3 ^a	2.23
GFI (Goodness of Fit Index)	>0.9 ^a	0.91
RMSEA (Root Mean Square Error of Approximation)	<0.08 ^b	0.059
TLI (Tucker-Lewis index or NNFI ? non-normed fit index)	>0.90 ^a	0.922
CFI (Comparative Fit Index)	>0.90 ^a	0.930
IFI (Incremental Fit Index)	>0.90 ^a	0.931
PCFI (Parsimony Comparative of Fit Index)	>0.50 ^a	0.832
PNFI (Parsimony Normed Fit Index)	>0.50 ^a	0.788

Sources: ^aBagozzi and Yi (1988); ^b Browne and Cudeck (1993)

Path Analysis

Table 6 shows the relationship between the constructs. According to the results appeal, entertainment and product involvement have a positive and significant impact on attitude towards SMS advertisement, while only irritation has an insignificant negative impact on attitude towards SMS advertisement. Consumer attitude towards SMS advertisement also has a significant impact on consumers' intention to receive SMS advertisement and consumers' intentions affect the behavior after receiving SMS advertisement. Hence H7 and H8 are supported along with H1, H2 and H4 for appeal, entertainment and product involvement.

Table 6
Hypothesis Testing

Path	β	S.E.	C.R.	P	Results
Attitude ← Entertainment	0.166	0.071	2.331	0.020	Supported
Attitude ← Appeal	0.277	0.067	4.144	0.000	Supported
Attitude ← Irritation	-0.064	0.042	-1.514	0.130	Not Supported
Attitude ← Product Involvement	0.477	0.087	5.503	0.000	Supported
Intention ← Attitude	0.682	0.057	11.981	0.000	Supported
Behavior ← Intention	1.023	0.087	11.809	0.000	Supported

Source: Authors' Estimation

Consumer Attitude and Permission

For analyzing the impact of permission on consumer attitude towards SMS advertising, simple linear regression analysis was performed. According to the findings, permission based model has a significant impact on consumer attitude towards SMS advertising and is found significant ($t= 12.563$, $p=0.000$). Table 7 represents the overall values.

Table 7
Consumer Attitude and Permission

Factor	beta	t- Stat	Prob.	Adj. R- Square	F-Stats
Permission	0.559	12.563	0.000	0.310	157.829

Note: Significant at the 0.05
Source: Authors' Estimation

Intention and Monetary Benefits

In order to study the relationship, monetary benefits have been regressed on intention to receive SMS advertisement. According to the findings, it is established that monetary benefits have a significant ($t= 11.659$, $p= 0.000$) and positive impact on consumers' intention to receive SMS advertisement. Table 8 represents the values of the results found after the regression analysis.

Table 8
Intention To Receive SMS Advertisement

Factor	beta	t- Stat	Prob.	Adj. R- Square	F-Stats
Monetary benefits	0.511	11.659	0.000	0.279	135.928

Note: Significant at the 0.05
Source: Authors' Estimation

Conclusion

The purpose of this study was to investigate consumer attitude towards SMS advertising as well as to check the relationship among consumer attitude, intention and their behavior. It also aimed to investigate the impact of permission on consumer attitude towards SMS advertising and to analyze whether consumers prefer monetary benefits to receive SMS advertising.

Empirical analysis showed that there is a positive attitude of consumers towards SMS advertising because of the factors like entertainment, product involvement and appeal. Product involvement has been found to be the most important factor to inculcate positive attitude towards SMS advertisement followed by appeal and entertainment. The findings related to the factor appeal are consistent with many of the previous researches (D. Drossos et al., 2007), which reassures that appeal is the most significant factor having a direct impact on consumer attitude and purchase intention. Only, irritation is found to be negatively insignificant and this finding is also similar with the previous studies (UIHaq, 2012; Chowdhury, Parvin, Weitenberner, & Becker, 2010; Tsang et al., 2004). Insignificant nature of irritation showed that consumers do not get annoyed from SMS advertising and this is quite possible that they get involved in the advertisement, if companies make more appealing and entertaining advertisements. Negative sign of irritation represents that if the consumers get annoyed or irritated, positive attitude will be low towards SMS advertising and vice versa. The attitude of the consumers can become favourable by taking prior permission from them. This confirmed that prior permission should be made an obligatory factor in future SMS advertisements. These results are similar with the findings of many previous researchers who have found permission to be an essential factor for achieving positive results in advertising via mobile phones (Andersson & Nilsson, 2000; Kavassalis et al., 2003; UIHaq, 2012). A positive relation has also been found between attitude and intention to receive SMS advertisement. Intention is affected by monetary benefits. People like to receive benefits based SMS advertisements. Finally, it was also found that intention has a significant impact on the behavior of the respondents. These results are consistent with TRA model and the literature discussed earlier (Fishbein & Ajzen, 1975; Fishbein et al., 1994).

Limitations and Future Research Recommendations

This study has certain limitations as the data was collected by using the method of convenience sampling and only from the metropolitan city Karachi, Pakistan which roots sample biases. Secondly, majority of the respondents were below the age of 35, that is why the practical implications only apply in the context of young people. For getting more holistic and generalized results, a similar study can be carried out by covering major cities of Pakistan. The study has implications for the direct marketers, practitioners and researchers. Marketers can get assistance form the findings in reducing the negative effects of SMS advertising and creating a positive impact of SMS advertising in the minds of the customers. For further classification, the same study can be undertaken on gender basis which will help the practitioners in creating customized plans for females and males.

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