

Factors Affecting Consumers' Attitudes Towards SMS Advertising

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Abstract

This paper aims to investigate the factors that have positive effects on the attitudes of the Palestinian consumers towards SMS advertising. The questionnaire was distributed randomly to 475 students of Islamic University of Gaza (IUG). The results show that Entertainment, relevancy, non-irritation and credibility have significant positive effects on consumers' attitudes towards SMS adverts. Yet, credibility is the strongest factor. However, informativeness doesn't have a significant effect on the consumers' attitudes towards SMS advertising. Furthermore, gender affects the consumers' attitude towards SMS advertising. In fact, Male students are more affected by the SMS adverts. The results can help marketers to effectively design the SMS advertising campaigns. Associations can use the results to develop the interactions with the society and the targeted groups.

Keywords: Mobile marketing, SMS advertising, consumers' attitude, Palestine

1. Introduction

Mobile device is identified as the most used personal device for approximately 47% of consumers. As well, the use exceeded the time spent on laptops, tablets, or desktop PCs. Therefore, Companies are trying to adopt this technology development and start tailoring their adverts to suit customers' needs to attract their attention and to reach them wherever they are (Panie, Ahmed & Kasuma, 2014; Cisco, 2014; Upstream, 2013). The high penetration of those mobile devices expanded using different methods mobile advertising since it has been successful (Tsang, Ho & Liang, 2004). Mobile marketing offers many possibilities such as affording customers with time and location tailored data that promotes products, services and ideas (Friman, 2010, Yamamoto, 2009). Since consumers hold their mobile phones almost wherever they go, mobile adverts can be sent deprived of limitations. Possible direct contact with consumers is without restrictions of time or location (Vatanparast, 2010; Friman, 2010; Dickinger, Haghirian, Murphy & Scharl, 2004).

Mobile marketing is defined as a set of practices that allow organizations to contact and engage with their audiences in an interactive and relating way using any mobile devices or networks (Mobile Marketing Association, 2010). Besides, Leppäniemi et al. (2008) define mobile advertising as "Any paid message transferred by mobile media with the intent to influence the attitudes, intentions and behaviors of those addressed by the commercial messages". Consequently, Short message service (SMS), multimedia message service (MMS), Application based ads, Pop Up ads when using mobile internet and various gaming mobile adverts are the main ways of mobile advertising (Dawar & Kothari, 2014). However, the word mobile advertising is a substitution of SMS advertising since mobile advertising is the most popular (Scharl, Dickinger & Murphy, 2005) and would still dominate other methods until 2016 (Informa, 2014). Consequently, many associations are using mobile advertising through SMS, voice over the internet (VoIP) and WhatsApp. Companies try to reach them directly to gain their attention and loyalty. Yet, the wide use of SMS adverts increases irritation as well as it develops negative attitudes towards them. Still, marketers can easily send SMS adverts without permission to consumers (waldt et al, 2009, Jawwal, 2015)

2. Literature review and hypotheses development

2.1. Attitudes towards SMS Advertising

The Technology Acceptance Model by Davis (1989), which is an adaptation of the Theory of Reasoned Action (TRA) by Fishbein and Ajzen (1975), hypothesizes that system use is directly determined by behavioral intention of use, which in turn is affected by users' attitudes toward using and usefulness of the system. As attitude is a cornerstone in the field of information system research, the relationships between attitudes, intention and behaviors have been considered and confirmed in numerous studies (Tsang et al, 2004). Therefore, Consumers' Attitudes (CA) towards advertising have been largely inspected because of its relation to consumer responses towards adverts and its impact on behavioral intentions (McMillan, Hwang & Lee, 2003; Schlosser et al 1999).

Additionally, CA towards advertising through mobile devices relate to CA towards advertising in general, not to one specific method (Wang et al., 2002). Friman (2010) believed that attitude towards adverts can be thought of as an indicator of advertising effectiveness. According to Fishbein's Attitude Theory, a stimulus, such as SMS adverts of a certain brand, has an effect on a consumer's belief system which in turn influences and leads to the consumer evolving a specific attitude towards the advertised brand, that, with regards to a brand, has an effect on a consumer's intention to purchase this brand offerings (Waldt et al, 2009).

Attitudes as the mental conditions are used by individuals to shape the way they perceive their environment and guide their response towards it (Aaker et al., 1996). Accordingly, Lutz (1985) defines attitude towards advertising as “a learned predisposition to respond in a consistently favorable or unfavorable manner to advertising in general”. Moreover, Kotler (2000) states it as a person’s enduring favorable or unfavorable evaluations, emotional feelings, and action tendencies towards some object or idea. For instance, Stevenson et al. (2000) find that a negative attitude towards advertising is related to negative consumer behavioral responses towards the adverts. Likewise, Wolin et al. (2002) find that consumers with positive attitudes towards Internet advertising are more likely to respond favorably towards the adverts. Indeed, Mehta (2000) argue that consumers who had positive attitudes towards advertising were more likely to be persuaded by advertising. Thus, they are supposed to gain quite positive attitudes toward advertising (Shavitt et al, 1998). However, different studies have found that they hold negative attitudes towards advertising in general (Tsang et al, 2004),

2.2. Factors Affecting Attitudes

2.2.1. Relevancy

Advertising relevancy has been defined as the degree to which the adverts and its message content are pertinent, applicable, and related to consumers’ needs (Lastovicka, 1983). Researchers have evaluated relevance content of SMS adverts from two viewpoints: first, sending SMS adverts relevant to end users’ fields of interest will have a significant influence on perceiving SMS advertising as valuable service (Xu, Liao & Li, 2008; Merisavo et al., 2007; Vatanparast, 2007; Haghirian et al., 2005). Second, SMS adverts will deliver extra value for end users when it is received at the proper times and locations (Xu et al., 2008; Merisavo, et al., 2007; Carroll et al., 2007; Vatanparast, 2007). Campaigns which depended on the customers’ database create positive attitudes, yet no prior permission. In fact, the relevancy and usefulness of the message are what create this positive attitude (Taylor, 2009; Choi & Rifon, 2002). It has been noted that relevancy is a key concept in understanding the adverts. To consumers, SMS Adverts are more valuable when location-sensitive and/or time critical events (Friman, 2010; Barwise & Strong, 2002). Tripathi & Siddiqi (2008) and Merisavo et al. (2007) argue that marketers should pay attention to sending relevant SMS ads consisting of useful information or time saving benefits based on consumers’ location or situation.

Accordingly, we hypothesize that:

H1: The perceived Relevancy has a significant positive effect on CA towards SMS advertising.

2.2.2. Entertainment

Entertainment is the ability to fulfill the audience’s needs for escapism, diversion, aesthetic enjoyment, or emotional enjoyment (Ducoffe, 1996). While Shukla et al. (2011) specify entertainment as being enjoyable, exciting, imaginative, and flashy. Thus, entertainment services can raise customers’ loyalty and add value for the customer. Because human has a natural playfulness, offering games and prizes through SMS generates high participation and keeps customers (Dickinger et al, 2004). Furthermore, these characteristics are suitable to comprise customers more and attentive them to the advertised goods or services (Taniar, 2009).

Since entertainment is considered as a promotional factor to encourage mobile marketing communication (Alhrezat, 2013), Robinson suggests that messages should be amusing and brief to capture the respondent favorable attention. Then, it can be used for almost every product as less information required (Haider, 2012). Young people are supposed to use telephone services for entertaining and enjoyment (Williams et al., 1998). Therefore, they positively respond towards the entertainment adverts. The very nature of texting, with its special form of shortened language and the casual form of messaging (such as text flirting) seems to be entertaining in its own right (Grant & O’Donohoe, 2007). Moreover, Bauer et al. (2005) add that entertainment utility of mobile advertising influences the whole value of mobile advertising to the customers. Entertainment seems to be an essential factor of SMS advertising (e.g. Tsang et al, 2004). The SMS is expected to be concise and amusing so as to capture attentions. It strongly connected with the attitude towards advertising when done through customary media (Ducoffe, 1996; McMillan et al, 2003, Haghirian et al, 2005).

Therefore, we hypothesize that:

H₂: The perceived Entertainment has a significant positive effect on CA towards SMS advertising.

2.2.3. Informativeness:

Informativeness is the ability of advertising to inform consumers of product alternatives so that purchases yielding the greatest possible satisfaction can be made (Ducoffe, 1996). According to Shukla et al (2011) informativeness refers to sharpness, being information source and update. The first aim of adverts is to generate awareness of products and to let consumers understand how products are different and to inform the audience of new products and new features among old products, besides any changes in price (Kotler and Keller, 2009). Consequently, Siau & Shen (2003) have revealed that information delivered to customers via mobile device needs to show qualitative features like accuracy, timeliness, and usefulness for the consumer. Thus, Information is an essential predictor of the value of adverts (Ducoffe, 1996). Petrovici & Marinov (2007) find that product information acquisition is the primary personal use of advertising, and have suggested that marketers should

utilize the informative power of advertising. Varshney (2003) assumes that information is considered to be a very valuable incentive in SMS adverts that recipients react positively. Merisavo (2007) proves that consumers develop positive attitudes towards mobile advertising when the message creatively deliver crucial information. Flores and Salaun have found that adverts which contain superiority information elicit positive responses from the consumer. Besides, informativeness impacts general attitudes to advertising (Petrovici & Marinov, 2007) even if it is delivered by traditional media (Ducoffe, 1996).

Thus, we hypothesize that:

H3: The perceived Informativeness has a significant positive effect on CA towards SMS advertising.

2.2.4. Non-Irritation

SMS adverts may deliver a range of overlapping information that may confuse or distract the receivers and overwhelms the consumers with information (Pietz and Storbacka, 2007; Xu et al, 2008). Thus, Ducoffe (1996) defines irritation as employing tactics used by marketers in the advertising which annoy, offend, insult, or are overly manipulative or may insult consumers' dignity. Consequently, Consumers can feel annoyed towards irritating messages thus respond negatively (Panie, 2014; Chowdhury, 2006). Moreover, the unwanted messages such as spam are also annoying (Scharl et al, 2005). Spam messages intrude into the consumers' privacy without permissions. According to Haghirian et al. (2005) findings, complex mobile advertising messages can decrease the value of the advertising and cause irritation to consumers who may react negatively. Tsang et al. (2004) have found that consumers' perceptions of irritation of SMS adverts are negatively correlated to CA towards them. Various different methods are available to reduce the irritation of SMS advertising. The first method can be the permission-based advertising. This means people control over when, where, what and how much adverts to receive into their mobiles (Carroll et al., 2007) and sent only to persons who have clearly specified their willingness to receive advertising messages (Tsang et al., 2004).

Thus, we hypothesize that:

H4: The perceived non-Irritation has a significant positive effect on CA towards SMS advertising

2.2.5. Credibility

Mackenzie and Lutz (1989) define credibility of advertisement as "the extent to which the consumer perceives claims made about the brand in the adverts to be truthful and believable". While, Daugherty et al. (2007) refer to credibility as consumer's expectations regard fairness and factuality of advertising. Moreover, Keller (1998) describes advertisers' credibility as "the degree to which consumers believe the company can shape and deliver products or services that can satisfy the customers' needs and wants". Panie (2014) has mentioned the view of (Goldsmith et al, 2000) that credibility of an advert is influenced by different factors; especially by the corporation own credibility and the carrier of the adverts. Additionally, Haider (2012), Yang (2007) state that credibility also prejudiced by the medium by which the message is sent. For example, the email messages do not have much credibility unless the message is communicated by a powerful brand in printed form. In Wiedemann and Poustchi's research (2008) about 70% of the 44 experts approved that consumers getting mobile adverts from familiar brands participate more repeatedly in a campaign as initial contacts (Saadeghvaziri & Hosseini, 2010). It is found that consumers' perceptions of the credibility value of SMS adverts are positively correlated to consumers' overall attitudes towards SMS adverts (Friman, 2010; Tsang et al., 2004; Waldt et al., 2009). However, when consumers do not ascertain that the adverts are credible, this will negatively impact their attitude towards it (Dahlén & Nordfält, 2004).

Therefore, we hypothesize that:

H5: The perceived Credibility has a significant positive effect on CA towards SMS advertising.

2.3. IUG Background

Palestine has a young community in general. 73.1% of the population are under the age 29 in the Gaza Strip and 67.7% in West Bank. About 30% of Palestinian community is from 15 to 29 years old (PCBS, 2015). Therefore, this paper focuses on the students of the Islamic University of Gaza (IUG) with about 16,500 students more than half of them are female students. In fact 61.5% are female students (Islamic University of Gaza, 2015).

Therefore, we hypothesize that:

H6: There is no significant differences among IUG students regard the factors affecting their attitudes towards SMS advertising due to their genders.

2.4. The Study framework

Based on the existing literature and Brackett and Carr (2001) theory, and relies on the models developed by Tsang et al. (2004), Chowdhury et al. (2006), and Khasawnah & Shuhaiber (2013), there are different factors affect the CA towards mobile advertising. The factors include the entertainment, informativeness, irritation, relevancy, and credibility. Beside these four variables, the model includes the gender variable. Therefore, the research framework is constructed so as to illustrate the factors that have effects with CA towards SMS advertising.

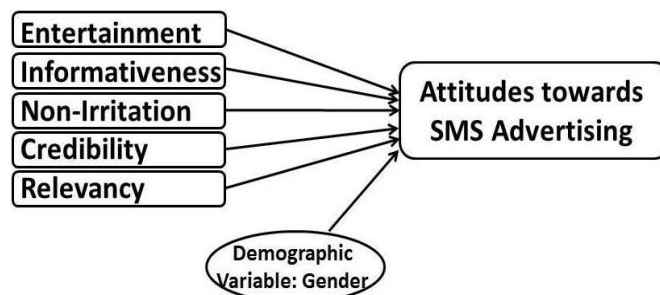


Figure 1. Conceptual Model of consumers' attitudes towards mobile advertising
 Adapted Source: Adapted from Tsang et al. (2004), Chowdhury et al. (2006), and Khasawnah & Shuhaiber (2013)

3. Research Design & Methodology

The analytical-descriptive method has been used. For that reason, not only on studying the reality or the phenomena, but also on analyzing the collected data through questionnaire and justifying the results to understand the real situation and improve it (Obaidat et al, 2003).

3.1. Questionnaire

The questionnaire is adapted from Tsang et al. (2004), Waldt et al. (2009) in the parts related to informativeness, entertainment, non-irritation and credibility. Besides, relevancy part is adapted from Panie et al, (2014), Khasawnah & Shuhaiber (2013). Beside the demographic factors of gender.

Sampling Method

The random sampling method was applied. The sample was collected from Islamic university of Gaza (IUG) students who attend classes during the second term 2014 - 2015. The sample size is counted according to (Moore et al., 2003). Here are the formulas used to determine the Sample Size:

$$n = \left(\frac{Z}{2 m} \right)^2$$

Where: Z = Z value (e.g. 1.96 for 95% confidence level)
 m = confidence interval (margin of error), expressed as decimal (e.g., .05 = ±5)

Therefore, the minimum sample size required is at least 375. The sample size decided when the confidence level is 95%, and the confidence interval is 5 while the population is 16,596. Five hundred questionnaires were distributed to the research population while 475 questionnaires were received.

Data Collection and analysis Methods

The quantitative data was collected through the conduction of a questionnaire. The questionnaire was paper based and it was handed to students form IUG. The Data analyzed either by using a statistical analysis program SPSS. Secondary data was collected from different international references such as books and papers. These mainly used in the background.

Data Measurement

An ordinal scale is a ranking data that normally uses integers in ascending or descending order. Based on a Likert scale from 1 (strongly disagree) to 5 (strongly agree).

Test of Normality

The One-Sample Kolmogorov-Smirnov Test procedure, which compares between the observed cumulative distribution function for a variable and a specified theoretical distribution. From Table.1, the p-value for each variable is greater than (0.01) level of significance.

Table.1: Kolmogorov-Smirnov test

| Field | Kolmogorov-Smirnov | |
|-------------------------------------|--------------------|---------|
| | Statistic | P-value |
| Relevancy | 1.35 | 0.053 |
| Entertainment | 0.67 | 0.767 |
| Informativeness | 1.21 | 0.106 |
| Non-Irritation | 0.85 | 0.459 |
| Credibility | 0.96 | 0.312 |
| - SMS Advertising Factors | 0.48 | 0.974 |
| Attitudes | 1.04 | 0.227 |
| All paragraphs of the questionnaire | 0.50 | 0.966 |

Statistical Analysis Tools

The Data analysis made utilizing (SPSS version 22). The following statistical tools were utilized:

1- Kolmogorov-Smirnov test of Normality. 2- Pearson correlation coefficient for Validity. 3- Cronbach's Alpha for Reliability Statistics. 4-Frequency and Descriptive analysis. 5-Multiple linear regression. 6-Parametric Tests (One-sample T test, Independent Samples T-test and Analysis of Variance).

Statistical Validity of the Questionnaire

3.2. Internal Validity

Internal validity of the questionnaire is measured by a pilot sample, which consisted of 50 questionnaires done by measuring the correlation coefficients between each paragraph in one field and the whole field. Table.2 presents the correlation coefficient for each paragraph of a field and the total of the corresponding field. The p-values (Sig.) are less than 1%, so the correlation coefficients of all paragraphs are significant at 1%, so it can be said that all paragraphs of each field are consistent and valid to measure what it was set for.

Table.2: The correlation coefficient of each paragraph and the total of its field

| Field | No. | Paragraph | Pearson Correlation Coefficient |
|----------------|-----|---|---------------------------------|
| Relevancy | 1. | I like to receive SMS advertising which is relevant to my needs | .882* |
| | 2. | I like to receive SMS advertising which is relevant to my job and activities | .902* |
| | 3. | I like to receive SMS advertising which is relevant to my location | .782* |
| Entertainment | 1. | I feel that receiving SMS adverts is enjoyable and entertaining | .774* |
| | 2. | I find SMS advertising is pleasant | .706* |
| | 3. | I find entertainment services (video, game, images,) positive | .591* |
| Informative. | 1. | I feel that receiving SMS advertising is a good source of timely information | .738* |
| | 2. | SMS adverts provide the information on a product or service that I am looking to use & need | .853* |
| | 3. | Through advertising messages via mobile phone, I receive exclusive information | .721* |
| Non-irritation | 1. | I don't feel that SMS advertising is irritating | .751* |
| | 2. | I don't feel that SMS adverts are everywhere | .686* |
| | 3. | Contents in SMS adverts aren't annoying. | .780* |
| | 4. | I am comfortable with accepting advertising messages on my mobile phone | .773* |
| Credibility | 1. | I use SMS advertising as a reference for purchasing | .781* |
| | 2. | I think it is that SMS will become an effective advertising tool in the future | .630* |
| | 3. | I trust SMS advertising | .707* |
| | 4. | I like to receive SMS advertising which has information about new product and service | .774* |
| | 5. | I like to receive SMS advertising which has information about changes in product's prices | .681* |
| Attitude | 1. | I like to look at SMS advertising. | .690* |
| | 2. | On average, brands that are advertised on mobiles are better in quality. | .702* |
| | 3. | Most of the products perform as well as the mobile ads claim. | .745* |

* Correlation is significant at the 1% level

3.4. Structure Validity

Structure validity is the second statistical test that used to test the validity of the questionnaire structure by testing the validity of each field. Table.3 clarifies the correlation coefficient for each field and the whole questionnaire. The p-values (Sig.) are less than 1%, so the correlation coefficients of all the fields are significant at 1%, so it can be said that the fields are valid to be measured what it was set to achieve the main aim of the research.

Table.3: The correlation coefficient of each field and the whole of the questionnaire

| No. | Field | Pearson Correlation Coefficient |
|-----|---|---------------------------------|
| 1. | Relevancy | .659* |
| 2. | Entertainment | .803* |
| 3. | Informativeness | .786* |
| 4. | Non- Irritation | .793* |
| 5. | Credibility | .864* |
| 6. | SMS Advertising Factors (independent variables) | .994* |
| 7. | Attitude | .783* |

* Correlation is significant at the 1% level

3.5. Cronbach's Coefficient Alpha

Cronbach's alpha (George D. & Mallery P, 2006) is designed as a measure of internal consistency. Table.4 shows the values of Cronbach's Alpha for each field of the questionnaire and the whole questionnaire.

Table.4: Cronbach's Alpha for each field of the questionnaire

| No. | Field | Cronbach's Alpha |
|-----|--|------------------|
| 1. | Relevancy | 0.818 |
| 2. | Entertainment | 0.438 |
| 3. | Informativeness | 0.663 |
| 4. | Non-Irritation | 0.722 |
| 5. | Credibility | 0.752 |
| 6. | 6 SMS Advertising Factors(independent variables) | 0.898 |
| 7. | 7 Attitude | 0.507 |
| 8. | 8 All paragraphs of the questionnaire | 0.912 |

4. Data Analysis & Hypotheses Testing

SMS Advertising factors effects on CA towards SMS advertising.

Table.5: The result of multiple linear regression analysis

| Variable | B | T | Sig. | R | R-Square | F |
|------------------|-------|-------|--------|-------|----------|-----------|
| (Constant) | 0.300 | 2.684 | 0.008* | 0.734 | 0.538 | 109.382** |
| Relevancy | 0.130 | 3.564 | 0.000* | | | |
| Entertainment | 0.120 | 2.760 | 0.006* | | | |
| In formativeness | 0.019 | 0.405 | 0.686 | | | |
| Non-Irritation | 0.218 | 4.562 | 0.000* | | | |
| Credibility | 0.349 | 6.976 | 0.000* | | | |

* The variable is statistically significant at 1% level (one tailed test)

** The relationship is statistically significant at 1% level

Multiple linear regression method is used (Table.5) and the following results were obtained: First, the Multiple correlation coefficient $R = 0.734$ and adjusted $R\text{-Square} = 0.538$. This means 53.8% of the variation in consumers' attitude is explained by "Credibility, non-Irritation, Relevancy and Entertainment". In addition, the Analysis of Variance for the regression model $F=136.93$, $\text{Sig.} = 0.000$, so there is a significant relationship between the dependent variable CA and the independent variables "Credibility, Irritation, Relevancy and Entertainment", though credibility appears to be the strongest factor among others. However, based on multiple linear regression method, the variable "Informativeness" has an insignificant effect on consumer attitude.

The estimated regression equation is:

$$\text{Consumer attitude (CA)} = 0.300 + 0.349* (\text{Credibility}) + 0.218* (\text{non-Irritation}) + 0.130* (\text{Relevancy}) + 0.120* (\text{Entertainment}) + 0.019* (\text{informativeness})$$

The estimated regression equation is used to predict the value of CA for any given values (responses) to the independent variables of perceived "Credibility, Irritation, Relevancy, Entertainment and Informativeness". Consequently those results demonstrate the existence of significant positive effects of SMS advertising factors "Credibility, Relevancy and Entertainment" and a significant negative effect of "Irritation" on CA towards SMS advertising.

In terms of *Relevancy*, it is significant at level (1%). Thus, H1 can't be rejected indicating that perceived relevancy has a significant positive effect on CA towards SMS advertising. This is consistent with the expectation that most of the university students agreed with the first factor which is relevancy. In fact, they love to receive SMS adverts that are relevant to their needs, jobs or activities. Generally, needs and wants are the most important to students. Moreover, they like to receive SMS adverts related to their location - where they live or work. These findings are consistent with the previous literature of the field. For example, it was found the consumers like messages that are related to their location, preference and with content that is relevant to them (Khasawnah& Shuhaiber, 2013). While others cogitate that SMS advertising should be personalized according to customers' personal profiles (Saadeghvaziri& Hosseini, 2011) that is suitable for interests and matches places or location.

In terms of *Entertainment*, it is significant at level (1%). Thus, H2 can't be rejected indicating that perceived entertainment has a significant positive effect on CA towards SMS advertising. This is consistent with the expectation. Students like to receive entertainments or pictures via mobiles. These findings are in consistence prior studies. For instance Tsang et al. (2004) indicate that entertainment seems to be the major factor that influences the overall attitude towards SMS adverts. Moreover, Delivering games and prizes to the customer's cell phone is a successful way to attract and keep customers (Zabadi, 2012). For example, some advertisers offer prizes like music if consumers buy a product and replied with its serial number, or answers for questions

delivered.

In terms of *Irritation*, it is significant at level (1%). Thus, H4 can't be rejected indicating that perceived irritation has a significant negative effect on CA towards SMS advertising. This is consistent with the expectation. Irritation holds negative impact towards CA towards SMS. Therefore, students feel annoyed when receiving SMS adverts without permission but the enforce nature of SMS advertising makes reading it unavoidable. This is persistent with prior researches. For example, Panie et al. (2014) indicate that non-irritation is the most significant attribute affecting CA towards SMS advertising. Others find that irritation caused by unwanted SMS advertising affected negatively the attitude towards SMS advertising (Waldt et al, 2009; Xu, 2006; Tsang et al., 2004). They state that the main reason why people convict advertising is associated with annoyance occurs or irritation caused by unsolicited mobile advertising messages. As a result, Tsang et al. (2004) emphasis the importance of permission of the target audiences because permission-based advertising concentrating on reducing irritation. Besides, direct short messages with appreciated information can reduce annoyance, discounts and free offers can work well also.

In terms of *credibility*, it is significant at level (1%). Thus, H5 can't be rejected indicating that perceived credibility has a significant positive effect on CA towards SMS advertising. The B value is (0.354) indicating that credibility is the strongest factors among the others. This is consistent with the expectation as well as the result is consistent with prior research findings. In fact, the credibility of SMS adverts has a direct positive effect on attitudes towards SMS adverts (Chowdhury, 2006; Friman, 2010; Waldt, 2009). It means consumers consider credibility as an influencing factor (Haider, 2012). Khasawnah & Shuhaiber (2013) stated that credibility involves the truthful and realistic of the advertiser and the medium. The result implies that the message content must be carefully designed to support a high level of credibility. In brief, recipients should feel that SMS advertising is credible or trustful. Indeed, they can use the SMS adverts as a reference for purchasing products or services if it is reliable.

In terms of *Informativeness*, it is insignificant based on multiple linear regression model. Thus, *H3 can be rejected indicating that the perceived informativeness doesn't have a significant positive effect on CA towards SMS advertising*. The result shows that the respondents (Do not know, neutral) to the field of "Informativeness". This is inconsistent with the expectation.

In one hand, university students don't have a concrete answer about informativeness in general. The result is controverted with most of the previous studies within the SMS advertising context such as Khasawnah & Shuhaiber (2013), Haider (2012), Bauer et al. (2005), Haghirian et al. (2005), Tsang et al. (2004). For instance, Haider (2012) and Tsang et al. (2004) found that perceived informativeness of SMS adverts has a direct positive influence on attitude towards SMS advertising. On the other hand, although they think that information is timely received through this channel, they don't think of this information is important or exclusive. They expected to learn about the product in general. Then, he can reach the organization or use websites or phone calls to have greater information about the product or services. This result is consistent with Chowdhury (2006), who finds that the direct effect of the factor perceived informativeness on attitudes toward mobile advertising is negative and insignificant; he assumes that consumers may not receive essential information in Bangladesh. The direct effect of perceived informativeness on attitude toward mobile advertising is negative and insignificant. Additionally, Tripathi & Siddiqi (2008) added that SMS adverts are less informative (in the current format).

The result could be justified for different reasons. Firstly, consumers don't expect to receive a lot of information from 142/70-character message limited of visualization. As well as, marketers don't offer much information but references for details such as phone numbers to call or web links to check and that can be reasonable in the new cheap methods of telecommunications. Secondly, Different new methods available to reach the specific information such as modified websites for customers with comparative details about different products or services and easiness of reaching the information help reducing the importance of informativeness factor and its impact on CA towards SMS adverts. Thirdly, the competitive advantage and irritation force the companies not to give extra information as well as to attract the consumers' attentions to follow them through different methods of direct or indirect communication from phone calls to web-search and visiting the company offices.

Demographic factors (Gender differences)

**Table.6: Independent Samples T-test
 Test of the fields and their p-values for Gender**

| Field | Means | | Test Value | Sig. |
|--------------------------------|-------|--------|------------|--------|
| | Male | Female | | |
| Relevancy | 3.62 | 3.47 | 1.718 | 0.043* |
| Entertainment | 2.87 | 2.67 | 2.351 | 0.010* |
| Informativeness | 3.02 | 2.94 | 0.879 | 0.190 |
| Irritation | 2.60 | 2.46 | 1.706 | 0.044* |
| Credibility | 2.88 | 2.71 | 2.275 | 0.012* |
| SMS advertising factors | 2.96 | 2.81 | 2.187 | 0.015* |
| Attitude | 2.74 | 2.61 | 1.667 | 0.048* |
| All fields together | 2.93 | 2.78 | 2.173 | 0.015* |

* The mean difference is significant a 5% level

Table.6 shows that the p-value (Sig.) is greater than the level of significance 5% for the field “Informativeness”, then there is an insignificant difference among the respondents towards this field due to gender. It can be concluded that the personal characteristics’ gender has no effect on this field. For the other fields, the p-value (Sig.) is smaller than the level of significance 5%, and then there is a significant difference among the respondents towards these fields due to gender. It can be concluded that the personal characteristic gender has an effect on the other fields so that H_0 can be rejected. The mean for "Male" respondents have the higher than "Female" respondents. The result is justified as male like to have things directly; plain information about product or services is enough for them, while female like to visualize the products before purchasing. The needs and wants differ between males and females because they have different attitudes towards products (Kotler and Keller, 2009).

5. Conclusion

In the light of the total findings, the empirical data shows that mobile is a new channel of advertising attracts the attention of marketers due to the unique characteristics of mobile such as personality and force exposure. In addition, the factors (relevancy, entertainment, non-irritation and credibility) positively influence the CA towards SMS advertising. In fact, Credibility is the strongest factor that positively affects the CA towards SMS advertising. However consumers may feel SMS advertising is not credible or trustful; they like to receive SMS adverts if they offer new information or any changes in prices. Respondents agreed to receive SMS adverts that are relevant to their needs, jobs or their location. Moreover, the entertainment services like images and pictures are found to have positive. Additionally, non-irritation positively influences the CA, while Informativeness doesn't affect the CA towards SMS advertising. Consumers do not think of the information as important or exclusive. Finally, About 54% of respondents hold negative attitudes towards SMS adverts in general. Additionally, the personal characteristics "gender" has an effect on SMS advertising factors and attitudes towards it. This means those males are more affected by the SMS advertising.

Based on the research findings, we recommend that the message characteristics have to be carefully developed. Practitioners may use the findings to design advertising campaign via mobile that creates positive attitudes and avoid possible negative effects. Moreover, marketers should take into consideration the strong relationship between factors of SMS advertising and consumers’ attitude so as to improve the factors and increase its power. They have a lot of work to do to make SMS advertising more popular and attractive. Furthermore, Marketers need to find out ways of increasing the entertainment and the level of enjoyment consumer’s associate with the receiving of SMS adverts.

6. Scope and Limitations

The purpose of this research was to study the factors that have positive effects on the attitudes of Palestinian consumers towards SMS advertising. However, the sample was collected from one university. Besides, these students, who are (primarily) aged from 18 to 22, are part of the society. Therefore any generalizations should be made with caution.

Appendix 1: List of references

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