
Original Article

Drivers of three SMS ad responses

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ABSTRACT This study examines the factors that influence three SMS advertising responses namely willingness to receive SMS messages, read/delete the ad, and intention to purchase (take the offer). We posited that factors that influence response to SMS ads may be different according to the measure of response. One factor that recurs, regardless of the response measure, is attitude towards the SMS ads. A second factor that influences whether an SMS ad will be accepted and then read or deleted is the credibility of the message. As the response requires more commitment from consumers, such as to purchase a product or service, the more the factors that need to be articulated by managers. In such responses, informativeness and personalisation of the message together with incentives are critical.

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INTRODUCTION

The academic and practitioner's literature on advertising has been increasingly referring to the potential of mobile communication media as the new boom for advertisers and companies. According to the Information Week website,

mobile advertising revenue will increase from US\$1.4 billion in 2007 to \$10 billion in 2013 worldwide. In the United States mobile advertising achieved \$421 million sales in 2006 and expected to reach \$5 billion in 2011.¹ Thus, it has been claimed that mobile advertising revenue makes up the largest share of mobile commerce,² however, the response or effectiveness metrics are still daunting: only 10 per cent of those who read the SMS ads intend to purchase a product or service

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and only 7 per cent report a favourable impact on the brand.³ Another source of metrics reported fairly high recall ads rates for those aged between 18 and 34 years old but these were accompanied by a low response rate.⁴ The response rate is so low and yet it is so important to increase it that some companies have started to pay consumers to read their SMS ads.⁵ Companies like Orange, Vodacom South Africa and Blyk offer their target audiences several incentives in exchange for reading SMS ads.⁶

Some companies are promising their clients that because the response rate to a SMS message is between 24 and 48 hours, sales conversions can be achieved within a short period of time. However, there are large assumptions behind this selling pitch, for example, the SMS message is read and not automatically deleted. It must also be kept in mind the fact that people have to *see* their SMS messages before deleting does not guarantee they will read them let alone take up an offer.

The research is important for advertisers that spend millions of dollars not only reaching consumers but with the hope consumers will react to the SMS ads in a particular way – perhaps visiting the store, purchasing a product or service, or at the very least, reading the message. Furthermore, considering the high price of mobile phone service, Brand in Hand CEO John Had said: ‘you have to be careful what ads you send to your users’.⁷ This study is particularly important in view of the fact that the overall advertising market in the United States has declined for two consecutive years and is expected to recuperate in 2011,⁸ thus targeting the SMS ads is crucial if companies want their SMS ads to be value for money. Finally, of the total advertising media, mobile is the one niche market that has grown more consistently in the United States⁸ and the United Kingdom.⁹ Hence, a deeper understanding in terms of what drives effective mobile advertising (SMS ads) with best effect to which responses, are needed. In this research we use the term SMS ads interchangeably with mobile ads and they are normally utilised by the advertiser.

This dearth of studies on SMS effectiveness calls for further studies to gain more insight into

consumer response and perception of SMS as an advertising medium. In addition, more studies are needed from different countries to increase the external validity of the findings.

The overall objectives of this research study are: to identify the relevant factors that affect consumer responsiveness to mobile advertising; to determine if these factors vary according to the response measure; and to determine consumers’ attitude towards mobile advertising.

The article is structured in the following way. First a brief overview of the Kuwaiti telecommunication sector background is provided to set the stage where the study was conducted. Secondly, a review of the literature is described, identifying main theories, models and factors used by researchers. A third part contains the methodology used in this study followed by the result section. Results are subdivided according to the statistical analysis used. The article concludes with managerial implications and limitations.

OVERVIEW OF THE KUWAITI TELECOMMUNICATION

The telecommunication sector in Kuwait can be described as oligopolistic in nature comprising three companies. Zain, formerly MTC and the first telecommunication company in Kuwait, Wataniya and Viva. Zain has the largest market share, followed by Wataniya and more recently by Viva with around 10 per cent market share. The current mobile penetration rate is 125 per cent. It has the second highest mobile penetration in the Gulf after its neighbour Bahrain that reached 199 per cent mobile penetration in 2009 and is said to be the most attractive mobile telecoms market, in terms of profitability, in the Gulf region.¹⁰ However, with the introduction of the third player, Viva, average revenue per user has decreased thus forcing companies to invest in the development of new Value Added Services for mobile users.

LITERATURE REVIEW

Past research on SMS advertising has aimed to predict if consumers would adopt it and the factors that drive its adoption. Not much is known about whether SMS ads are really

working and according to what outcomes or measures. We know from syndicated reports that SMS advertising achieves low response rates at around 12 per cent on average, however, this percentage is considerably better than what direct mail ads normally achieve, namely around 2–3 per cent³ and that the per cent responding to SMS ads varies from country to country, according to M-Metrics Inc., with the United States reaching the top 12 per cent, Germany 5.7 per cent, Spain 6.1 per cent, France 7.6 per cent and the United Kingdom 9.2 per cent.¹¹

Responsiveness measures to mobile marketing have taken different forms and cover factors like: brand favourability, purchase intention, ad awareness, click through, among others. Some have measured responsiveness as willingness to receive SMS messages,¹² while others use shop visits. In the latter case researchers found that mobile direct marketing coupons increase the probability of a visit to the store.¹³ Still others have considered the redemption of the coupon as the response and reported the redemption rates, through a mobile phone, is about 15–20 per cent compared with less than 1 per cent for paper coupons.¹⁴ Intention to purchase a product or service, as a result of a mobile ad, is among the ultimate responses advertisers expect, and is said to be about 12 per cent on average for mobile ads³ although this percentage varies according to the product category with restaurants and food topping the list of response rate.¹⁵ Value (for example, monetary, convenience, conditional) has also been reported to affect intention to use location-based services.¹⁶ Willingness to make referrals or viral marketing has also been studied as a response to mobile promotions with high levels of success.¹⁷ Sometimes the measures are not comparable even though they seem to refer to the same concept such as ‘SMS ads consumers are able to tolerate’ and ‘willingness to receive SMS ads’. One study reports consumers are able to tolerate a mean of 1.3 mobile ads,¹⁸ whereas others use an agree–disagree scale.¹⁹

Very few studies have compared mobile ads responses and their drivers. Three of these empirical research studies are reported next.

Li and Stoller,²⁰ in a quasi experimental study whose objective was to measure the effectiveness of mobile web ads on brand recall, brand association and purchase intention, the researchers found the likelihood of purchasing a branded product increases when consumers are exposed to five exposures of a mobile ad. Moreover, the mobile web ads manipulation increased the association of the ThinkPad brand with Lenovo manufacturer by 78 per cent, from a 9.6 per cent association level before the campaign to 17.1 per cent after the mobile web ad campaign. The brand recall also increased as a result of respondents being involved in the campaign by clicking on the mobile ad, thus emphasising the importance of making the consumer an active participant in the mobile ad.

Drossos *et al*²¹ investigated the factors that influence effectiveness of SMS ads such as attitude toward the SMS ad, attitude toward the brand, and purchase intention. The study reports that interactivity (contrary to expectation) had a negative effect on all three responses, namely attitude toward the ad, attitude toward the brand, and purchase intention, whereas incentives had a positive effect on attitude towards the ad and purchase intention but no effect on attitude towards the brand. They also reported that location and time did not affect any of the three responses. This is also an unexpected result since location and time-based ads have been considered as the most important characteristics of mobile communication.²²

More recently, Wei *et al*¹⁸ report that SMS response behaviour such as acceptance of mobile ads, passing on the message, and purchasing a product or service differs in their drivers. Acceptance of location-based SMS ads are influenced by previous consent and instrumental (utilitarian) motivation, On the other hand, the factors that predict if a message will be passed on are mainly driven by instrumental and enjoyment motivations as well as previous consent and privacy aspects. Also the longer respondents used the mobile phone for the purpose of data services, the more they pass along the SMS ads. The likelihood to purchase a product or service advertised in an SMS ad was driven by the

acceptance of the location-based SMS ads and the willingness to pass along the SMS ad, in addition to prior consent and privacy issues.

The extant literature from both practitioners and academicians illustrate that response rates or effectiveness of SMS ads vary depending on the response rate considered as dependent variable. The specific published articles have in general based their research on student samples and the common responses have been attitude toward the ad and purchase intention.

Noting some of the discrepancies and commonalities of the studies analysed previously, our study sets to research the factors that affect three SMS ads responses, namely willingness to receive SMS ads, read or delete the mobile ads, and acceptance of the offer (purchase).

The following section describes the method to achieve the research objectives.

RESEARCH METHODOLOGY

Theoretical framework

The research model illustrated in Figure 1 proposes attitude as the main influence on any of the responses to mobile ads. Attitude in turn is formed by a person's perceptions of the message characteristics, as indicated in the first box under message content, and the perception of irritability and behavioural control or permission.

It seems that attitude, a favourable or unfavourable predisposition towards an object²³ – mobile advertising in this case – affects the end response. Attitude with respect to mobile ads has

taken different forms, with some authors measuring attitude towards mobile ads in general (for example, 'All things considered, mobile advertising is a bad idea') and others assessing attitude in relation to several characteristics for example, mobile advertising is irritating/enjoyable/entertaining. In this research we have used five statements measuring the general evaluation of mobile ads. Given the importance of attitude as an influence on mobile response in particular (Drossos *et al*²¹; Wei *et al*¹⁸) and on behavioural intention in general,^{24–26} several antecedents of attitude have been identified among others: perceptions of value, usefulness, risk of the offer, relevance of the ad, credibility of the message, entertainment, consumer control, level of intrusiveness of the message, irritability and personalisation of the offer, all supported by previous literature.^{2,22,27} A survey of over 750 UK mobile phone users revealed that 70 per cent of respondents feel the offers are not relevant to them and two thirds of this percentage feel annoyed by the messages.²⁸

Intrusiveness has been viewed as one of main causes for ad avoidance^{29,30} together with irritation, with both affecting attitude towards the ad³¹ and eventually behaviour, to read the ad or delete it.³² It seems the perception of intrusiveness is somehow moderated by the level of personalisation of the offer and the situation: the more the mobile ad offer is seen as of interest to individuals, the less intrusive it is perceived³³; and the more an individual is in a state of idleness, the less intrusive it is perceived to be.³²

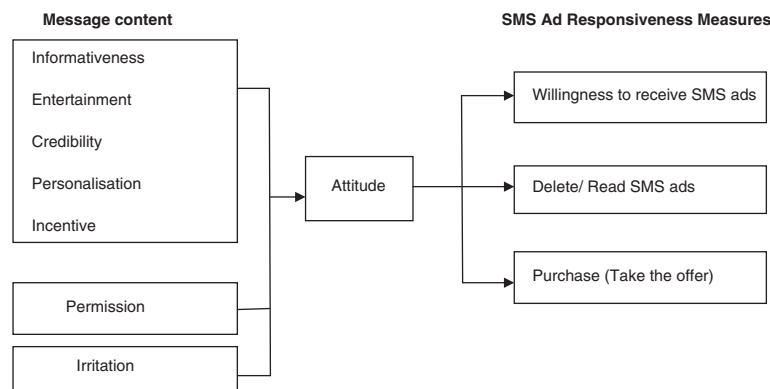


Figure 1: Research model.

Sampling, instrument, measurement and scaling

A sample of 400 individuals in Kuwait was provided with questionnaires of which 241 were returned and only 232 duly completed. The first part of the questionnaire contained demographic information about the respondent: gender, age and income. The second part contained 41 statements reflecting measures of the mobile ad content, namely, entertainment, informativeness, credibility, irritation and personalisation. Other independent variables included permission, incentives and attitude. Responsiveness to mobile ads is used as the criterion variable and was measured in three ways: (a) willingness to receive mobile ads, (b) the action taken after receiving the ad read/delete the ad, take the offer, and intention to purchase (please see the Appendix with all statements).

All statements were measured on 7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree. All statements were taken from previous studies and are reported in the Appendix. The following section reports on the statistical analysis and the findings.

RESULTS

The total sample is represented by 42 per cent male ($n=98$) and 58 per cent female ($n=134$). The age responses were distributed among five brackets: teenagers (up to 20 years old) comprise 10 per cent of the sample, young adults (between 21 and 30 years old) 47 per cent, middle age 31–40 years old 24 per cent, mature adults 41–50 years old 15 per cent, 50 years old or more only 3 per cent. Our sample seems to represent an important segment of the population with purchasing power. The young segment (<20 years old) comprises only 10 per cent of our sample.

The spread of monthly income is as follows: monthly income equivalent to \$1500 = 22 per cent, \$1501–\$3000 = 60 per cent, \$3001–\$4500 = 16 per cent and >\$4500 = 2 per cent.

Almost a quarter of the sample (24 per cent) are not willing to accept any SMS ad messages per day, 18 per cent accept one ad, 19 per cent are willing to accept two messages per day,

11 per cent are willing to accept three messages, 6 per cent accept four messages, 21 per cent are willing to accept an unlimited number of SMS ads. The above statistics are indicative of a positive behaviour towards SMS ads with only a quarter of the sample not willing to receive any ads at all.

Self-reported behaviours in relation to the action taken after the respondent receives an SMS ad are as follows: 28 per cent of the respondents delete it or ignore it, 29 per cent read it immediately, 27 per cent read when they have time and 13 per cent read after accumulating. In terms of this metric, we can say that a considerable proportion of consumers read SMS ads. This is consistent with findings reporting high readership of SMS messages²² and also our findings where 76 per cent of the sample read the SMS ads messages immediately or after they were accumulated.

Tables 1 and 2 provide descriptive statistics for the variables under study. From Table 1 we can infer that respondents perceive permission, informativeness and incentives of mobile ads positively, with values slightly above the mean. Respondents have, overall, a positive attitude towards mobile ads, but this, however, is not particularly marked (mean 4.13). This finding contrasts positively with a previous study conducted in South Africa among young people who reported a negative attitude towards mobile advertising.³⁴ Test of differences between male and female attitude towards mobile advertising (mean = 3.95 and mean = 4.26, respectively) resulted in a non-significant P value = 0.10; $t_{(230)} = -1.653$; implying there is no difference in attitude between males and females. An ANOVA test was conducted to establish any differences of attitude between four age brackets: 20 years old or less (Mean = 4.6), 21–30 years old (Mean = 4.02), 31–40 years old (Mean = 4.17) and above 41 years old (Mean = 4.09). The results ($F_{(3)} = 1.100$ $P = 0.350$) indicate that regardless of the respondents' age, there is a positive attitude towards mobile ads.

Table 2 shows the pairwise correlations between dependent and independent variables. Please note that mean attitude (MeanATT) and

Table 1: Descriptive statistics for study measures

Variable	Mean	Median	SD	No. items	α
Entertainment (Ent)	3.89	4.00	1.43	5	0.87
Informativeness (Inf)	4.38	4.60	1.20	5	0.75
Credibility (Cre)	3.89	4.00	1.12	5	0.78
Irritation (Irr)	4.15	4.00	1.68	3	0.71
Personalization (Per)	3.50	3.50	1.30	4	0.80
Permission (Perm)	4.97	5.00	1.46	3	0.68
Incentives (Inc)	4.34	4.50	1.31	4	0.78
Attitude (Att)	4.13	4.20	1.41	5	0.83
Response (Res)	3.98	4.30	1.39	3	0.69

Table 2: Pairwise correlations and constructs reliability

	Mean Ent	Mean Inf	Mean Cre	Mean Irr	Mean Pers	Mean Perm	Mean Inc	Mean Att	Mean Res
Mean Ent	0.869	—	—	—	—	—	—	—	—
Mean Inf	0.688**	0.746	—	—	—	—	—	—	—
Mean Cre	0.580**	0.643**	0.775	—	—	—	—	—	—
Mean Irr	-0.427**	-0.208**	-0.128	0.710	—	—	—	—	—
Mean Per	0.786**	0.725**	0.648**	-0.281**	0.798	—	—	—	—
Mean Perm	-0.169**	0.006	0.092	0.450**	-0.093	0.628	—	—	—
Mean Inc	0.749**	0.663**	0.529**	-0.387**	0.653**	-0.082	0.759	—	—
Mean Att	0.794**	0.648**	0.590**	-0.480**	0.675**	-0.126	0.740**	0.833	—
Mean Res	0.735**	0.719**	0.583**	-0.288**	0.756**	-0.024	0.675**	0.703**	0.685

**Correlation is significant at the 0.01 level (two-tailed). Diagonal value in bold represents the Cronbach α .

mean response (MeanRESP) are dependent variables in the hierarchical model tested in the study therefore some high correlations are expected to be found. For example, attitude is supposed to predict one of the mobile ads response: take the offer or purchase after receiving the SMS ad. All other variables are assumed to be independent variables that influence attitude. From the correlation Table 2, we can infer there are not extreme correlations between the independent variables which run the risk therefore of posing a threat of multicollinearity.

Since the correlation measures only the degree of association between two variables but not the contribution to predicting a dependent variable, the next stage was to analyse the dependent variable using linear regression and logistic regression according to the characteristic (nominal or interval) of the dependent variable.

Factors predicting the response: To take an offer or purchase

Table 3 lists statistical results from the hierarchical multiple regression. The first step in the

regression (model 1) was to observe the influence of demographic characteristics entered as dummy variables to predict mobile ad response. Three variables were created for age and income and two are used as a reference category, respectively. Response was measured as the mean values to two statements referring to taking the offer or purchase after receiving the SMS ad. Among the demographic variables only gender was statistically significant $P=0.027$, however, the model did not have a good fit to the data ($F_6=1.316$, $P=0.251$ with a negligible adjusted $R^2=0.034$).

Attitude towards mobile advertising was entered as a predictor in the second step (model 2) yielding a change (Δ) $R^2=0.484$, significant at $P=0.000$. Attitude comes up with a high un-standardised β (0.70) reflecting its high importance as a predictor. None of the demographic variables is significant at $P\leq 0.05$.

In the third step of the hierarchical regression (model 3), all other predictors were entered as a block, namely entertainment, informativeness, credibility, irritation, personalisation, permission and incentives. An additional statistically significant ($P=0.000$) $\Delta R^2=0.177$ contributed to

Table 3: Factors affecting intention to take an SMS offer

Model	Unstandardized regression coefficients		Standardized coefficients	t	Sig.
	B	Standard error	β		
3 (Constant)	0.040	0.372	—	0.107	0.915
Gender	-0.182	0.122	-0.065	-1.498	0.136
A1	-0.329	0.240	-0.072	-1.368	0.173
A2	-0.198	0.147	-0.071	-1.343	0.181
A3	-0.025	0.167	-0.008	-0.149	0.882
IN1	-0.147	0.195	-0.044	-0.751	0.454
IN2	-0.013	0.155	-0.005	-0.087	0.931
Mean Att	0.182	0.071	0.185	2.552	0.011
Mean Ent	0.119	0.079	0.122	1.515	0.131
Mean Inf	0.225	0.074	0.194	3.021	0.003
Mean Cre	-0.012	0.069	-0.010	-0.177	0.860
Mean Irr	0.001	0.041	0.001	0.019	0.985
Mean Per	0.348	0.076	0.325	4.595	0.000
Mean Perm	0.050	0.042	0.053	1.195	0.233
Mean Inc	0.131	0.069	0.124	1.912	0.057

Dependent Variable: Mean Res (Take an SMS Offer); A1=Age group 1, A2=Age group 2, A3=Age group 3; IN1=Income group 1, IN2=Income group 2.

the explanatory variation of the response to mobile ads. Personalisation, informativeness of the ad, attitude towards mobile ads and incentives are statistically significant ($P \leq 0.05$) predictors, in that order. The regression analysis (model 3) yielded a statistically significant model F (DF 14) = 35.208, $P=0.000$, that explained 68 per cent (Adj. R^2) of the variance of the response to mobile ads (that is, take offer or purchase). Durbin Watson stats = 2.230 indicates a lack of autocorrelation in the residual values of error deviations.

Factors predicting response: Willingness to receive mobile ads

In the analysis of willingness to accept mobile advertising messages originally a variable of six categories was re-coded into two categories: willingness to accept no messages; and willingness to receive one or more messages. Logistic regression was performed in a hierarchical mode. Demographic variables were entered first, followed by the attitude variable, and in a third step by the rest of the independent variables. The results are shown in Table 4.

All indicators show a good predicting model, with a reasonable pseudo explained variance (Nagelkerke $R^2=0.53$) of the dependent variable, and a statistically significant model (-2 Log Likelihood 153.097 and Hosmer and Lemeshow

test, $\chi^2=12.831$, $P=0.000$). The classification results produce 82.8 per cent of the original grouped cases as correctly classified. This classification is far from a classification by chance of 50 per cent.

Table 4 shows that attitude, credibility and irritation are the best predictors of willingness to accept one or more messages or no messages at all and attitude is the variable with the most influence. For one unit increase in the value of attitude, the odds in favour of accepting SMS ads are estimated to increase by a multiplier factor of 6.038. The rest of the highlighted statistically significant variables can be interpreted in the same manner.

Factors predicting response: Delete or read the SMS ads

The response variable was re-coded into two categories: delete/ignore an SMS ad; or read it. The log regression results are shown in Table 5. The two main predictors of the response variable are the credibility of the message and the attitude towards the ad with the latter signalling the most important predictor Exp (B) = 5.415, and thus the odds that a message will be read increases substantially when the person has a positive attitude towards ads. Note that those who delete or ignore SMS ads have a very unfavourable attitude towards the ads, mean value = 2.90,

Table 4: Factors predicting willingness to accept SMS ads

Step 1 ^a	Logistic regression coefficients					
	B	SE	Wald	DF	Sig.	Exp(B)
A1(1)	-1.390	1.069	1.691	1	0.193	0.249
A2(1)	-0.862	0.607	2.016	1	0.156	0.422
A3(1)	0.331	0.661	0.251	1	0.616	1.393
IN1(1)	1.364	0.825	2.736	1	0.098	3.913
IN2(1)	0.021	0.603	0.001	1	0.972	1.021
Gender(1)	0.750	0.519	2.091	1	0.148	2.117
Mean Att	1.798	0.368	23.817	1	0.000	6.038
Mean Ent	-0.392	0.322	1.478	1	0.224	0.676
Mean Inf	0.179	0.300	0.355	1	0.551	1.196
Mean Cre	-0.989	0.355	7.760	1	0.005	0.372
Mean Irr	-0.302	0.157	3.694	1	0.055	0.739
Mean Per	0.109	0.315	0.120	1	0.729	1.115
Mean Perm	0.116	0.169	0.471	1	0.492	1.123
Mean Inc	0.245	0.258	0.902	1	0.342	1.277
Constant	-1.533	1.970	0.606	1	0.436	0.216

^aVariable(s) entered on step 1: Mean Ent, Mean Inf, Mean Cre, Mean Irr, Mean Per, Mean Perm, Mean Inc; A1=Age group 1, A2=Age group 2, A3=Age group 3; IN1=Income group 1, IN2 income group 2.

Table 5: Factors predicting delete/read SMS Ad

	B	SE	Wald	DF	Sig.	Exp(B)
Mean Ent	-0.480	0.279	2.953	1	0.086	0.619
Mean Inf	0.122	0.271	0.204	1	0.652	1.130
Mean Cre	-0.700	0.321	4.761	1	0.029	0.497
Mean Irr	-0.235	0.166	2.021	1	0.155	0.790
Mean Per	-0.160	0.314	0.261	1	0.610	0.852
Mean Perm	-0.140	0.188	0.555	1	0.456	0.869
Mean Inc	0.383	0.280	1.866	1	0.172	1.467
Mean Att	1.689	0.327	26.761	1	0.000	5.415
Constant	-0.672	1.193	0.318	1	0.573	0.511

whereas those who read the ads have a favourable attitude, mean = 4.72.

The classification Table resulted in 80.6 per cent of original grouped cases correctly classified which is far beyond the expected level by chance of 50 per cent.

DISCUSSION

The results from our survey offer insights into the effects of attitude toward mobile ads, the message content (entertainment, informativeness, credibility and personalisation), permission, incentives and irritability. The following section summarises and discusses our findings for each of the factors mentioned above.

Three measures of response to mobile ads were studied: intention to take an SMS offer; willingness to receive SMS ads; and deletion or readership of the mobile ads.

Factors predicting the take of an SMS offer

The most important predictors of whether consumers will *take an offer or purchase*, after receiving an SMS ad, are in order of importance: personalisation, informativeness of the ad, attitude toward mobile ads and incentives. The first two can be categorised as content of the message and, consistent with previous studies^{35,36} appears to be one of the most important aspects of an SMS ad.

The ability to *personalise* ads due to the new technology has been claimed as one of the most important benefits³⁷ of mobile marketing. Our findings ratify the importance in predicting response to take an offer when messages are perceived as personalised. However, when we read the mean (3.50) and median (3.50) values of the perceived personalisation variables reflecting this construct, we can infer that, overall,

respondents do not perceive mobile ads are tailored to them or suitable to their needs. Our findings are consistent with results from a sample from Finland where only 36 per cent, of a sample of 292 individuals considered the SMS relevant to them.³⁸ Interestingly, some managers who implement SMS campaigns in New Zealand indicated that personalisation was not that important and ranked it in sixth place.³⁹

Informativeness of the SMS ad is important in influencing attitude towards mobile ads. Our findings suggest that respondents perceive SMS ads as somewhat informative, slightly beyond the neutral value. In terms of percentage, 56 per cent of the respondents somewhat agree or strongly agree that SMS ads are informative and give relevant information. Taken together, informativeness and personalisation could reflect the importance of contextualisation of the ads. Previous studies have suggested contextualisation and content as important factors contributing to successful SMS campaigns.^{12,40,41}

Attitude towards an SMS ad is a strong predictor of responsiveness in terms of accepting an offer once received via a mobile device. Our study is consistent with a study by Karjaluoto *et al*¹² where the more positive the attitude towards advertising the higher the intention to receive an SMS, and is also consistent with the study by Tsang *et al*³¹ of willingness to receive mobile ads and whether an SMS ad will be read or deleted. More recently, Jun and Lee⁴² also found that attitude was a good predictor of visiting a shop, requesting a coupon or requesting further information once they have received an SMS ad.

Incentives to accept an offer are relatively important in forming an attitude towards mobile ads. The present results are in-line with initiatives various operators in the world are pursuing to entice consumers to accept SMS ads, for example Orange offers a two-for-one ticket for a movie on specific day of the week; Coca Cola promoted its Sprite Yard where teenagers could use a platform to download and exchange content.⁴³

Furthermore, incentives can be critical in a mobile environment where SMS ads are

perceived as intrusive by nature. To the extent that consumers perceive mobile ads as relevant to them^{32,33} and of value,^{22,44} the less intrusive the SMS ad could be perceived.

Companies must be cautious about the incentives they use: incentives providing free offers have been interpreted with discontent by consumers who perceive these as having strings attached, and rarely believe in pure 'no cost' free offers.⁴⁵

Factors affecting willingness to accept SMS ads

Consistent with their negative attitude towards mobile ads about a quarter of respondents are not willing to accept any SMS ads. Respondents who feel strongly about getting their permission before receiving mobile ads are irritated by the SMS ads and are less willing to accept them. On the other hand, respondents who show a willingness to accept one or more ads seem to be more positive about SMS ads. Attitude, credibility and irritation, in that order, are the most influential predictors. The results are consistent with a study that revealed an SMS is perceived as intrusive as e-mails and more intrusive than other communication media⁴⁶ causing irritability when there is no permission sought from the consumer. As a mobile phone is considered something personal SMS messages are normally expected to come from someone close or at least from a familiar source, making a recipient more or less compelled to attend to the message thus irritating the recipients when they realise it is an SMS ad.

Factors predicting delete/read SMS ads

A similar pattern to those not willing to receive SMS ads is observed among those who *delete the messages* (28 per cent) meaning that attitude toward mobile ads and credibility of the messages are the most important predictors.

Willingness to receive messages was found to correlate substantially with what consumers do after they receive an SMS ad, namely delete it or read it occasionally or immediately. Those consumers who were not willing to receive messages were more likely to delete the messages

as they receive them, whereas those who were willing to receive one or more messages were more inclined to read the messages. Willingness to accept messages has been previously correlated with intention to visit a store¹² and read or delete SMS ads.³¹ In this sense, willingness to receive SMS ads should be treated as a predictor of a response in future studies.

Our study investigated different types of response to SMS ads, namely, purchase or take an offer after receiving the SMS ad, willingness to receive mobile ads, and delete or read the ad message. The findings suggest that attitude toward mobile ads is a common factor in influencing all responses under study (please see the summary Table 6). However, when it comes to predicting whether an ad message will be accepted, read or deleted much will depend on the credibility of the message. The rest of the factors seem to predict only one response to SMS ads.

Individual differences and mobile SMS ads responses

Cross tabulations performed between SMS ads responses and demographics namely gender, age and income did not yield any differences except for one gender and take an offer ($X^2 = 5.858$; contingency coefficient $\phi = 0.159$; $P = 0.016$). Only about 37 per cent of male – compared with 64 per cent female – agree to take an offer as a result of an SMS ad.

In relation to age, it appears that younger people (up to 30 years of age) tend to read more

rather than delete SMS ads. This conclusion must be interpreted with caution since the statistical significance is 0.07.

MANAGERIAL IMPLICATIONS

When marketers or businesses design media strategies to position their offers they must be mindful of the importance of various factors that influence acceptance of mobile ads.

SMS ads have to be relevant to consumers. This is easier said than done since to make ads more relevant, companies will require more personal information from consumers and this is not easy to obtain because of the fear this information will be misused or passed onto other companies. Another challenge is to create homogeneous groups in terms of requirements if a company wants to personalise SMS ads. Hence segmentation is critical in order to avoid consumer dissatisfaction with the content of the offer.

Managers should strive to have consumers accept (opt into) SMS offers because there is a high relationship with consumers' behaviour after they receive an SMS. If SMS ads are sent to consumers without having their explicit approval, the less likely it is that those respondents will respond to those offers and the more irritated they become. Hence, it is important that companies explicitly and clearly seek consumers' permission to send SMS ads rather than including a clause in a very small font where consent is given by consumers without them consciously agreeing to it. Also, companies sending SMS ads should give autonomy to consumers by allowing them to remove themselves from a list of recipients.

Since incentives and credibility are important factors influencing the acceptance of SMS ads, managers are well advised to provide credible and true incentives of an offer for consumers to respond. The challenge remains to identify what sort of incentive should be provided to consumers such that is noticeable and encourage consumers to act.

Finally, it is important to consider the type of response companies expect from their target market since the factors seem to vary in their

Table 6: Summary factors predicting response to SMS Ad

	Linear regression (B) Take an offer	Log regression Exp(B) Accept/or not	Log regression Exp(B) Delete/Read
Mean Ent	—	—	0.619
Mean Inf	0.225**	—	1.130
Mean Cre	—	0.372**	0.497**
Mean Irr	—	0.739**	0.790
Mean Per	0.348***	—	0.852
Mean Perm	—	—	0.869
Mean Inc	0.131*	—	1.467
Mean Att	0.182**	6.038***	5.415***
Constant	—	—	0.511
	Adj. R ² =0.68	Nagelkerke R ² =0.53	Nagelkerke R ² =0.57

* $P < 0.05$; ** $P < 0.01$; *** $P < 0.000$.

importance. If a company expects consumers to accept and at least to read the ad, creating a positive attitude towards SMS ads and the credibility of the message will play major roles. If managers expect their target audience to take an offer such offers will need to be accompanied by an incentive, and the content of the message must be informative and catered to the needs (personalised) of the target audience. Hence, sending blanket SMS ads to everyone will not create the expected response. On the contrary, the messages will create irritation and colour attitude towards future messages.

It appears that female and younger people vary in their responsiveness to SMS ads therefore advertisers may find it useful to target these groups since they appear to be more receptive to SMS. This may also have an extra positive effect – that is the message may be passed on to others because young people tend to be more sociable.

LIMITATIONS

Despite these contributions, we acknowledge the limitations of this research. One main limitation is the potential presence of common method bias introduced by asking respondents for their beliefs, attitudes and behaviour in the same instrument. Although items measuring the various concepts were scrambled in the questionnaire, respondents may naturally feel the need to be consistent with their behaviour thus influencing the correlation we find between the constructs.

Another limitation is the sample size and the risk that it is not representative of the population of Kuwait. That being said, the results from our research study do not seem to deviate from similar research in other parts of the world.

Further studies could develop more knowledge as to what constitutes an incentive for consumers and to what extent they are willing to provide additional information provided they receive an attractive offer.

Another avenue for research is to study whether and to what extent the perception of intrusiveness and irritation can be moderated by incentives.

Given the importance of attitude towards SMS ads, it is important to determine what drives a positive attitude to a mobile ad.

CONCLUSIONS

Mobile ads are becoming more and more a part of companies' media strategy since mobile devices have reached increasing penetration levels, running at more than 100 per cent in some countries in the Gulf region.

Our current study among a sample who receive an SMS ads in Kuwait indicate that respondents are not really excited about receiving SMS ads nor do they respond to them highly positively, as shown in their attitude towards SMS ads and with a purchase intention slightly above the neutral value. Attitude is an important construct influencing behaviour in the Theory of Reasoned Action and has been confirmed in this study of Kuwait mobile phone users. This in turn confirms the need to create positive attitudes towards mobile ads if companies want to create a positive behavioural response in regard to the mobile ads.

We posited that factors that influence response to SMS ads may be different according to the measure of response, purchase intention, acceptance of SMS ads or deletion or readership of the SMS ads. One of the factors that recur, regardless of the response measure, is attitude towards the SMS ad. The demographic variables such as age, gender and income did not seem to have a moderating influence in any of the predictions of SMS response to ads. Message credibility influences two of the SMS responses, namely acceptance of SMS ads and the inclination to delete or read the ads. Finally, the response to take an SMS offer by purchasing a product or service seems to be influenced by the message content (informativeness and personalisation) and the incentives provided.

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APPENDIX

	<i>Resources</i>
<i>Entertainment statements</i>	
1. I feel that mobile advertising content is enjoyable	Tsang <i>et al</i> ³¹
2. I feel that mobile advertising content is entertainment	Tsang <i>et al</i> ³¹
3. I find mobile advertisements are more entertaining than traditional advertisements	Barutcu ⁴⁷
4. I find advertising messages via the mobile phone exciting	Bauer <i>et al</i> ²⁷
5. Mobile advertising content is fun	Bauer <i>et al</i> ²⁷
<i>Informativeness statements</i>	
1. I think mobile advertisements are informative	Merisavo <i>et al</i> ⁴⁸
2. I feel that mobile advertising is a good source for timely information	Tsang <i>et al</i> ³¹
3. Mobile advertisements provide the information I need	Tsang <i>et al</i> ³¹
4. The messages received through mobile advertising give me relevant information	Karjaluo <i>et al</i> ¹²
5. Mobile advertising is a good source for up-to-date information	Suher and Ispir ⁴⁹
<i>Credibility statements</i>	
1. I think mobile advertising is truthful	Karjaluo <i>et al</i> ¹²
2. Promises in mobile advertising of various services are mostly true	Karjaluo <i>et al</i> ¹²
3. The content provided by mobile advertising is credible	Xu ⁵⁰
4. I find mobile advertisements are believable to use as a reference for purchase	Self created
5. I think mobile advertisements are more true than traditional advertisements	Self created
<i>Irritation statements</i>	
1. When receiving mobile advertising I feel annoyed	Tsang <i>et al</i> ³¹
2. I feel that mobile advertising is irritating	Tsang <i>et al</i> ³¹
3. Contents in mobile advertisements are often annoying	Tsang <i>et al</i> ³¹
<i>Personalization statements</i>	
1. I feel that mobile advertising was tailored to me	Xu <i>et al</i> ²
2. I find mobile advertisements are suitable to my needs	Barutcu ⁴⁷
3. I think advertisers take their customers' interests into account in their mobile advertising	Karjaluo <i>et al</i> ¹²
4. I feel that mobile advertising displays personalized message to me	Xu ⁵⁰
5. Contents in mobile advertising are personalized	Xu ⁵⁰
<i>Permission statements</i>	
1. I would only be prepared to receive mobile advertising if I had provided my permission	Merisavo <i>et al</i> ⁴⁸
2. It is important for me that I can refuse to receive mobile advertising	Merisavo <i>et al</i> ⁴⁸
3. The biggest problem related to receiving mobile advertising that I cannot control receiving it.	Merisavo <i>et al</i> ⁴⁸
4. I find it important that I can easily stop receiving messages	Karjaluo <i>et al</i> ¹²
5. The ability to accept or cancel mobile advertising anytime is important to me.	Leek and Christodoulides ¹⁹
<i>Incentives statements</i>	
1. I think mobile advertisements contain important incentives	Self created
2. Mobile advertise contains incentives to save money	Merisavo <i>et al</i> ⁴⁸
3. Sales promotions are important incentives when deciding to receive mobile advertising	Leek and Christodoulides ¹⁹
4. I can benefit from advertising messages via the mobile phone	Bauer <i>et al</i> ²⁷
5. I am willing to mobile advertising if I had monetary incentives	Self created
<i>Attitude toward mobile advertising statements</i>	
1. I feel positively about mobile advertising	Merisavo <i>et al</i> ⁴⁸
2. Overall, I like mobile advertising	Tsang <i>et al</i> ³¹
3. I like receiving advertisements on my mobile phone	Leek and Christodoulides ¹⁹
4. Receiving mobile advertising is a good idea	Xu ⁵⁰
5. I find receiving advertising messages via the mobile phone positive	Bauer <i>et al</i> ²⁷
<i>Response to mobile advertising statements</i>	
1. After receiving the mobile advertising I go to purchase products/services	Karjaluo <i>et al</i> ¹²
2. Mobile advertising motivate me to consume whenever I have a chance	Xu <i>et al</i> ²
3. I normally use the mobile advertising to take advantages of offers	Self created

Source: Tsang *et al*.³¹

How willing are you to receive mobile advertising messages?

- I am not willing to receive any message at all.
- I am willing to receive one message a day.
- I am willing to receive two messages a day.
- I am willing to receive three messages a day.
- I am willing to receive four messages a day.
- I am willing to receive unlimited number of messages.

What do you do when you receive a mobile advertising message?

- Delete it as soon as I receive it.
- Ignore it completely.
- Read it occasionally.
- Read it after accumulating several of them.
- Read it when I get time.
- Read it right away.